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Investment perspectives in the Infrastructure sector in 2010-2013

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BNDES mapping foresees an injection of R$ 274 billion into the sector

The BNDES is the main financing bank for long-term investments in industry and infrastructure in Brazil. For this reason, it maintains a stable relationship with the majority of companies related to these segments, determinedly accompanying the trends of other markets. As it is a development bank, companies see it as a strategic partner, fostering a wider network of information sharing. Such a position makes the BNDES an important *locus*, pooling together a wealth of data concerning investment prospects in production in Brazil.

Based on data available at the institution, the BNDES has periodically investigated the investment perspectives within the Brazilian economy since 2006. Such research is unique as it is grounded on technical knowledge in sectorial divisions within the Bank, which, thanks to access to company investment plans, are better qualified to analyze the path to be taken in a diverse range of sectors.

Research conducted in 2006 and 2007 managed to foresee the investment cycle that was gaining momentum. Throughout the worst months of the international financial crisis, as of the

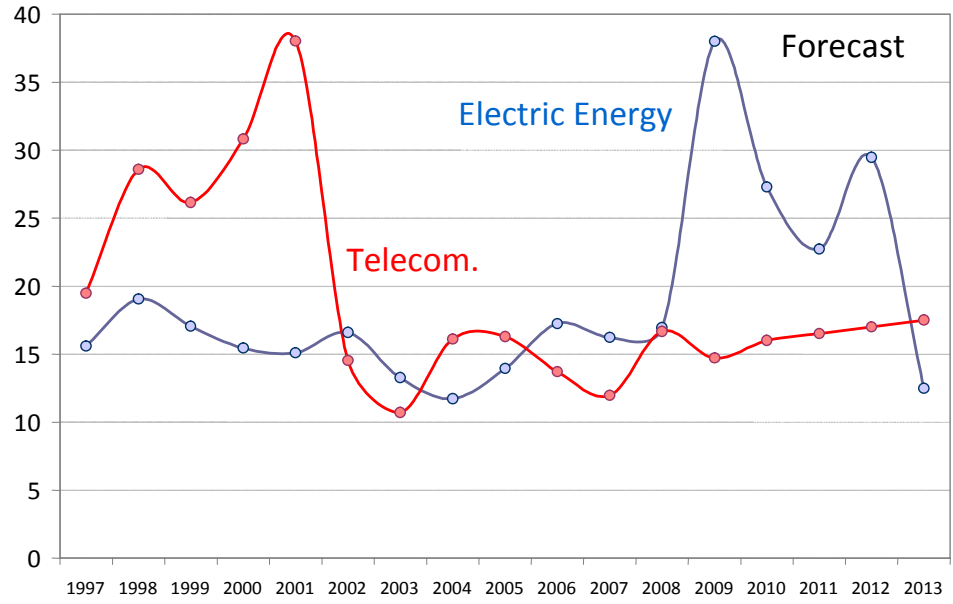
second half of 2008, more frequent follow-up of the data was carried out, revealing that the investment horizon had become more volatile. Even so, there was strong resilience in some sectors, such as oil & gas and those linked to basic infrastructure. For investments into industry, the impact of the crisis was much more severe, especially in the export segments.

Now that the peak in the international financial crisis has subsided, the aim of this edition of Brazilian Economic Insights is to present a fresh look at the investment perspectives in infrastructure, focusing, now, on the 2010-2013 period. Amounts appeared to the tune of R$ 274 billion. As in previous research, this study includes sectors such as: electric energy, telecommunications, sanitation and logistics (highways, railways and ports). This is a representative group of sectors, as it corresponds to 95% of the total investments in infrastructure in 2008, according to the BNDES' estimates.

Investments in Infrastructure

Investments in infrastructure are vitally relevant to the economy. They not only increase systemic competitiveness –

Chart 1
Evolution of investments in electric energy and telecommunications
(In R$ billions)



Source: Investment Work Team. Elaborated by APE/BNDES.

Table 1
Mapped Investments in Infrastructure 2010-2013

Sectors	R$ billion	%
Electric Energy	92	33.6
Telecommunications	67	24.5
Sanitation	39	14.2
Railway	29	10.6
Highway Transport	33	12.0
Ports	14	5.1
Infrastructure	**274**	**100.0**

Source: Investment Work Team. Elaborated by APE/BNDES.

improving transport, communications and the energy supply – but also generate dynamic and multiplying effects in other sectors, thus accelerating other investments. From a macroeconomic standpoint, their importance lies in their long-term nature and the sheer size of the resources. Besides this, they are large and indivisible and, therefore, concentrated on a specific moment, accompanying, in a general manner, the expansion cycles of sectors for which they have been earmarked.

Such features of large infrastructure projects are shown in Chart 1, which reveals two significant investment cycles this sector has experienced here in Brazil. Between 1997 and 2001, the telecommunications sector, due to its privatization, received intensive investment in capital, consolidating the universalization of land-line telephone services and implementing mobile services in the country. Currently, companies in this sector are investing in maintenance and capacity building, which require fewer resources.

On the other hand, at the beginning of the 2000s, the electric energy sector received little investment. Problems of a fiscal and regulatory nature were not sufficiently attractive to draw in large investment. Curtailing these problems, expanding the demand for electric energy – due to the recent growth in the economy – and adopting public policies aimed at the sector have prompted a return to investment projects. Large-scale hydroelectric plants under construction in the North of the country are examples of this process, placing the electric sector in the lead in terms of investments in infrastructure.

This becomes quite clear in Table 1. Of the R$ 274 billion to be invested in infrastructure in the 2010-13 period, close to one third (R$ 92 billion) is earmarked for the electric energy sector. Close behind are telecommunications –

Table 2
Growth in Mapped Investments in Infrastructure 2010-2013

Sectors	Amounts (R$ billion)		Growth	
	2005-2008	2010-2013	%	% p.a.
Electric Energy	68	92	35.7	6.3
Telecommunications	66	67	0.8	0.2
Sanitation	22	39	77.1	12.1
Railways	16	29	81.7	12.7
Highway Transport	23	33	45.4	7.8
Ports	5	14	203.0	24.8
Infrastructure	**199**	**274**	**37.3**	**6.5**

Source: Investment Work Team. Elaborated by APE/BNDES.

already basking in the post-investment boom – and sanitation, with investments to the tune of R$ 67 billion and R$ 39 billion, respectively.

In Table 2, projected investments in infrastructure for the 2010-2013 period are compared to those made between 2005 and 2008. Such figures clearly show the current phases within the cycle – acceleration, stability and deceleration – for each sector. The general data indicate an accumulated growth rate of 38.6% for investments in infrastructure, which means real growth of 6.5% p.a. throughout the 2010-2013 period.

Following is a list of the main features and determining factors for investments in infrastructure for each sector:

■ **Electric Energy**

In the electric energy sector, as previously mentioned, it is estimated that investments will reach close to R$ 92 billion, representing an average annual increase of over 6.0%. The main projects, for the 2010-2013 period, include hydroelectric plants within the scope of the federal government's Growth Acceleration Program (PAC). Highlights include the hydroelectric plants in Jirau and Santo Antônio, both on the Madeira River, estimated at more than R$ 23 billion of which a large portion is set to be used over the next four years – close to R$ 20 billion. Besides this, in the same period, the cost for the hydroelectric plant in Belo Monte is estimated at around R$ 8 billion.

Another large-scale project in the energy sector is the Angra III Nuclear Plant, with investments forecast to reach up to R$ 4 billion between 2010 and 2013.

Lastly, there are another 70 investments projects in the wind-power sector for which auctions have already been held. Together, the forecast for such investments totals almost R$ 8 billion for the next three years.

■ **Telecommunications**

Ever since its expressive cycle of investments between 1997 and 2001, the telecommunications sector has posted less intensive investment into capital. While this is because its investments are rather concentrated in time, there are two other fundamental determining factors. The first is the need to keep investments to a minimum, solely for maintenance and updating installed capacity, such as the amounts established by the Brazilian Telecommunications Regulatory Agency (Anatel). The second is related to competition, in which companies compete in specific market niches, introducing new technologies seeking to boost their market share. Examples of this include the 3G mobile telephone service, the dissemination of digital TV and the use of the Winmax service for internet access (broad band wireless and distance system). Within this scenario, the sector has relatively stable investments set for the 2013-2010 period vis-à-vis 2005-2008.

■ **Sanitation**

In the sanitation sector, between 2013 and 2010, investments totaling R$ 39 billion are projected, almost doubling the amount invested in the 2005-2008 period. Driving factors for such projects are not solely those within the federal government's PAC program; they also include: i) the release of blocked credit to the public sector (municipal and sanitation companies); ii) offering credit in appropriate amounts – Workers' Severance Pay Fund (FGTS), Workers' Support Fund (FAT) and market sources, such as Investment Funds in Federal Deposit Insurance Corporations (FDICs) due to the easy guarantees permitted in the sector; iv) non-onerous resources of the Federal Budget (OGU) (agreements with the Ministries of Cities, Integration and Health/Brazilian Foundation of Health); v) the private sector's strong investment in the sector, which aims at representing close to 30% of concessions in the next 10 years.

■ **Railways**

In the railway sector, investments are estimated at R$ 30 billion, corresponding to an average annual growth rate of 13%. These investments are the result of: (i) the expansion of the existing network, with new lines and the expansion of the Transnordestina, Norte-Sul and Ferronorte-Rondonópolis lines, among others; and (ii) the plan to implement the High-Speed Train (TAV) between Campinas and Rio de Janeiro.

■ **Highway Transport**

In this sector, mapped investments reach R$ 33 billion, representing an accumulated increase of 45% in the 2013-2010 period in comparison with 2005-2008, that is, an average annual expansion rate of 7.8%. The main projects in this sector are concentrated in new concessions of the existing system – the 2nd Stage of the Federal Program and the 2nd Stage of the São Paulo state program –, which together add a further 5,000 kilometers to the existing 15,000 kilometer network.

Summary Table on Investments in Infrastructure

Sectors	Critical Factors	Perspectives	Investiments 2010-2013
Ports & Highway Transport	Regulation (Concession)	Expansion of Highway Concessions; and incentives for the private sector in Ports by consolidating the new regulation	R$ 47 billion
Railway & Sanitation	Dependent on gov´t budget	Appropriate public c/ private sources Execution and implementation of Investment projects	R$ 69 billion
Telecommunications	Competition	Investments in specific market niches: 3G Technology, WINMAX and Digital TV	R$ 67 billion
Eletric Energy	Licensing	Large hydroelectric plants in the North (Jirau, Sto. Antônio & Belo Monte), Angra III Nuclear Plant and wind-power plants	R$ 92 billion

Source: APE/BNDES

- **Ports**

For ports, investments projected for the 2010-2013 period are in the vicinity of R$ 14 billion, i.e., almost three times the amount invested in the 2005-2008 period. With this, the average annual growth rate for the sector is over 25% p.a. The main determining factors for such investment include: (i) implementing new ports under the administration of the private sector due to the regulatory improvements made at the end of 2008; and (ii) expanding the offer of terminals leased to ship containers. Even though the international crisis spawned a momentary drop in trade, alleviating the pressure on these terminals, the urgency for such expansion is mid-term. Add to this the complementary government investments in the main Brazilian ports within the scope of the Brazilian Port Dredging Program, which fall under the PAC.

Despite the fact that the perspectives for investment in infrastructure are promising, both from a global and a sectorial point of view, some critical factors may, in some way, weaken the performance expected. The Summary Table below presents a selection of factors that public policy managers should be attentive to.

Defining and improving regulation in the port sector, as well as a higher number of concessions in the highway segment, are important drawcards for investments, making it more feasible to improve logistics within the country, and, consequently, increasing systemic competitiveness.

Certainly not less important, establishing stable sources of financing for large sanitation projects is fundamental, extending the scale of the water and sewerage systems to the population. In the same vein, the 2014 World Cup in Brazil has generated perspectives that make it imperative to constantly upgrade the railway network, offering fast and flexible transport between important cities in the country.

Dynamic competition in the telecommunication sector forces large companies to make investments in specific market segments. Constant and swift technological changes intensify the cross-sectorial dispute in the quest for proportional market share gains.

The large-scale projects to build hydroelectric plants in the North of the country depend on the bureaucracy and regulation to which they are subject. The timing between obtaining the required licensing and adjusting the specific project conditions does not only reduce the cost of investment, but also makes it feasible to appropriately expand the supply of electric energy to the country.

Conclusion

Characteristics of projects in the infrastructure area include their large scale, their long-term nature and the sheer size of the resources required. Such projects are of strategic importance, both in terms of systemic competitiveness through multiplying effects and maintaining high, long-term economic growth through acceleration.

As of 2007, investment growth became routine in the Brazilian economy, having begun in the industrial segment. Sectors connected to basic infrastructure gained more importance, reaffirmed by the launch of the PAC, a federal government program aimed at expanding and sustaining public investment in the sector, while simultaneously maintaining a positive approach in terms of long-term expectations in the private sector.

Efforts to expand investments in the infrastructure segment have been rather successful. As of the worsening of the international crisis in mid-2008, investments linked to infrastructure remained practically stable. With this, the mid-term outlook for investments is positive. Project mapping in infrastructure sectors for the 2010-2013 period reveal an investment potential of R$ 276 billion, that is, accumulated growth of 38.6% compared to the 2005-2008 period. Electric energy, sanitation and logistics are the areas that stand out from the pack. Investment decisions are strongly influenced by public policies and regulations.

The positive outlook for investments simultaneously offers both significant benefits and challenges to the country. Investments in basic sanitation bring about a significant social impact, while electric energy projects, in their turn, help sustain economic growth and increase productivity in the economy. Still, the challenge to sustain growth in investments is expected to be more intense than over the last few years. As the external markets are in the initial stages of recovery, long-term structural public policies (PAC, PDP, PICTI) will most likely take on more importance. Large-scale projects in the infrastructure area will require new regulatory improvements, as well as stable, long-term financing mechanisms, coupled with integrated efforts from public and private banks and the capital market.

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