

# Incentives and challenges for Foreign Direct Investment in Infrastructure and Strategic Sectors in Brazil

Wilson Center

Washington – May. 2013

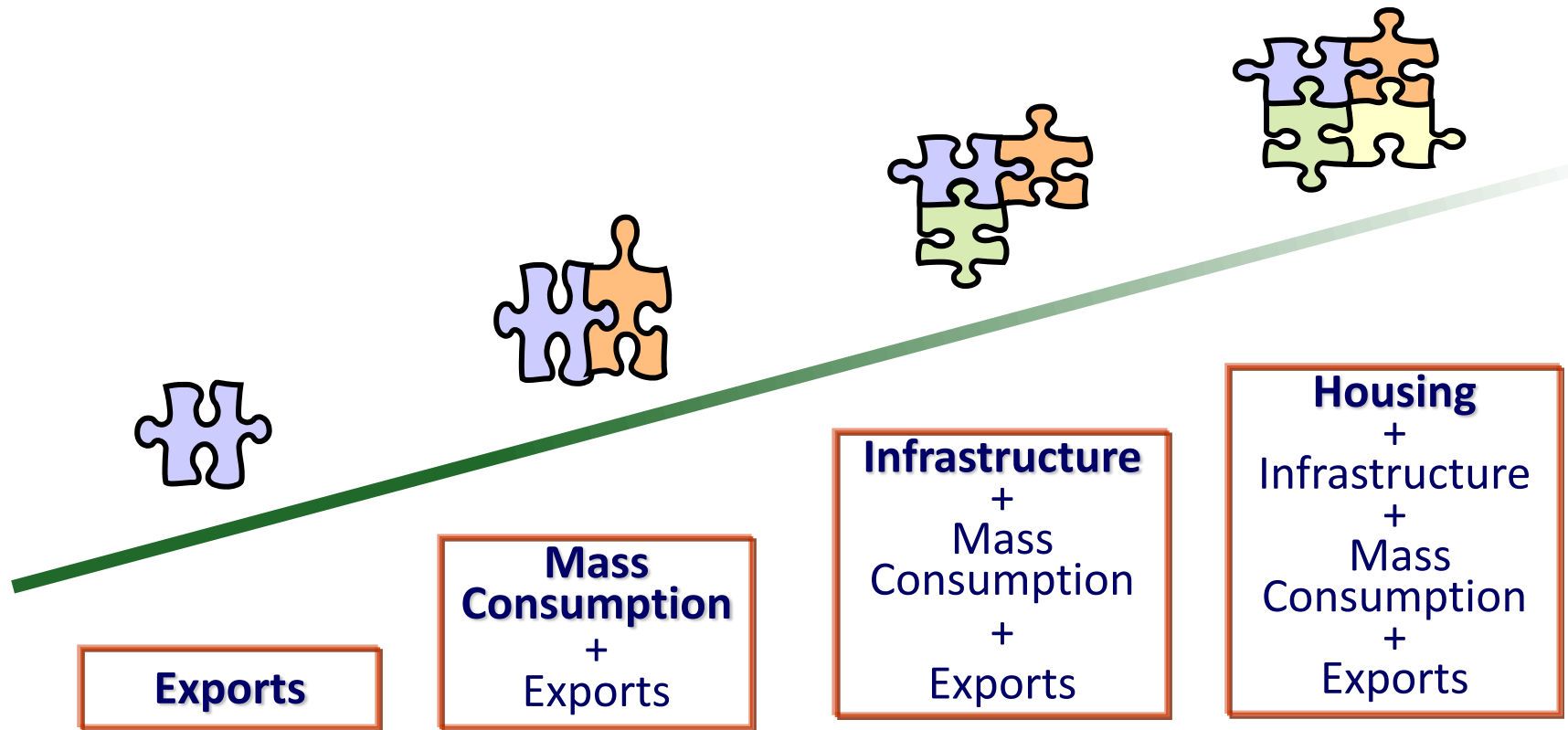


*João Carlos Ferraz*

- Sources of dynamism and competences
- Innovation: what is coming up?
- Infrastructure: what has been delivered?
- Investments: what is coming up?
- Financing infrastructure
- Concluding remarks

## Sources of dynamism and competences

# A demand led perspective: sources of dynamism are diversifying...



Starting around...

2000

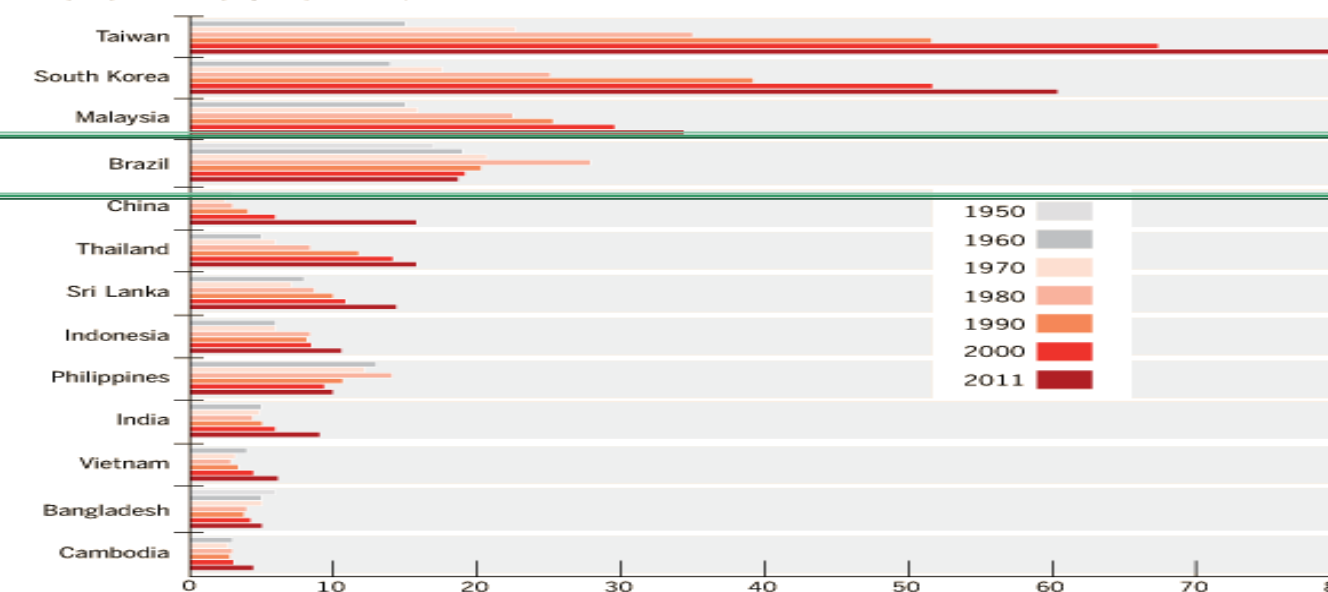
2005

2007

2009

# ... but efficiency is poor and competences a structural weakness

**Labour productivity: the gap with the US**  
GDP per person employed (US=100)



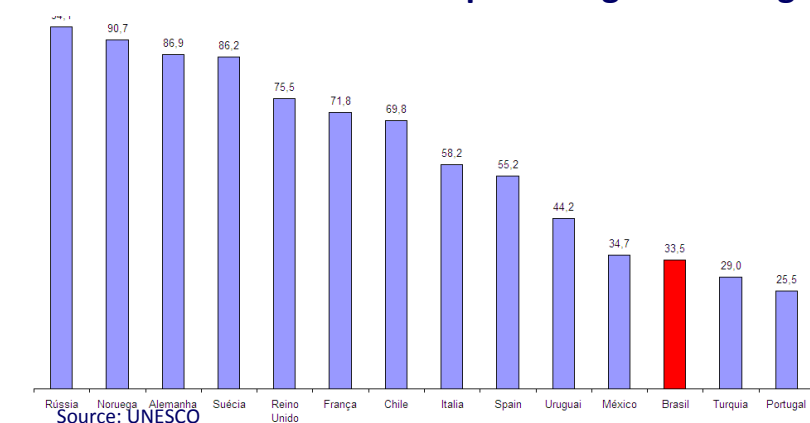
Source: The Conference Board

Average annual growth of labour productivity

Country	1991-2010
Brazil	1.3%
USA	1.8%
India	4.7%
China	8.3%

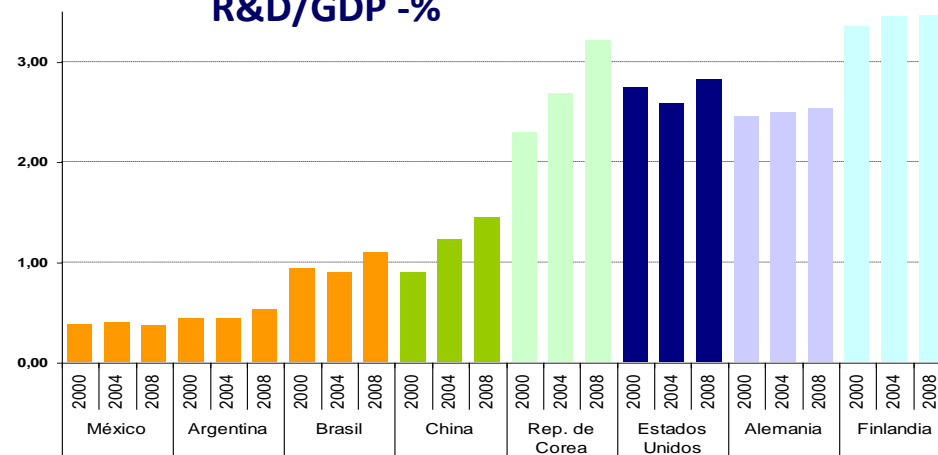
Source: Conference Board

## % Workers with at least completed high schooling



Source: UNESCO

## R&D/GDP -%



Source: UN-ECLAC

**Innovation: what is coming up?**

- Mobilization of resources from all relevant federal institution
  - Compromise to sign up contracts until December 31st, 2014
- Support for innovation plans of corporations; not projects
- Two lines of support: for non specified innovation plans and for Strategic Areas
- Within Strategic Areas, Innovation Priorities
  - Strategic Areas defined in function of potential demand or national interest
  - Intensive consultation to define Innovation Priorities
- For each Strategic Area, Open Call for Innovation Plans to be submitted by stand alone or consortium of firms and research Institutes
- Main Financing Agencies: BNDES and FINEP operate jointly up to contracting an operation

## Resources to Strategic Areas

All launched except Environment

Energy

US\$ 2.8

Oil and Gas

US\$ 2.0

Health

US\$ 1.8

Defense and Aerospace

US\$ 1.4

ICT

US\$ 1.0

Agrobusiness

US\$ 1.5

Environment

US\$ 1.0

To be launched by July

Sub Total

US\$ 11.5

## Resources to Generic Efforts

R&D

US\$ 0.5

SME

US\$ 0.9

Tech Labs

US\$ 1.1

Sub Total

US\$ 2.5

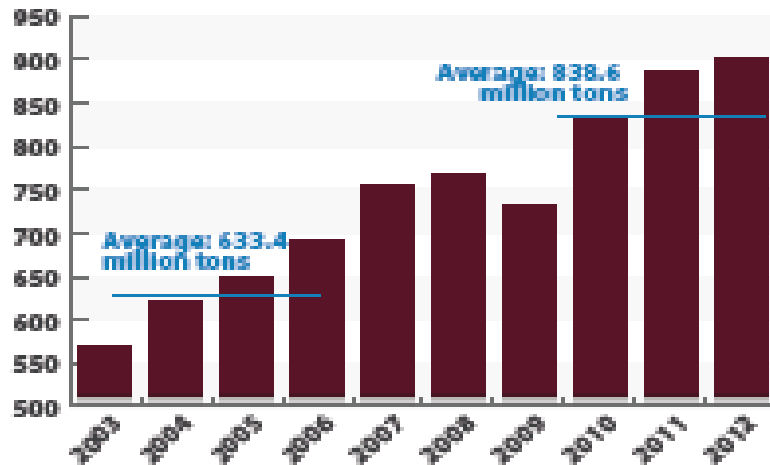
Total US\$ 14 billion

Loans US\$ 10.0  
Grants US\$ 2.8  
VC US\$ 1.2

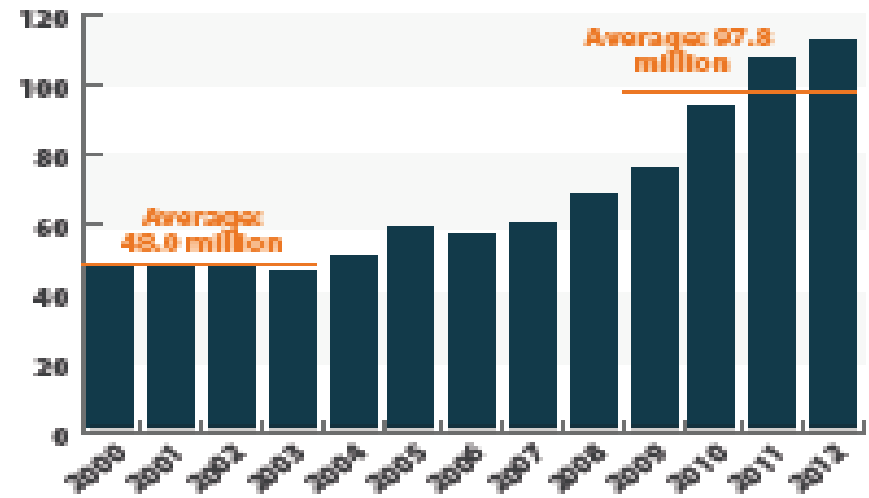
**Infrastructure: what has been delivered**

# Demand for infrastructure is rising & investments expanding – not at adequate speed, though

**Total cargo handling in ports, in million tons**

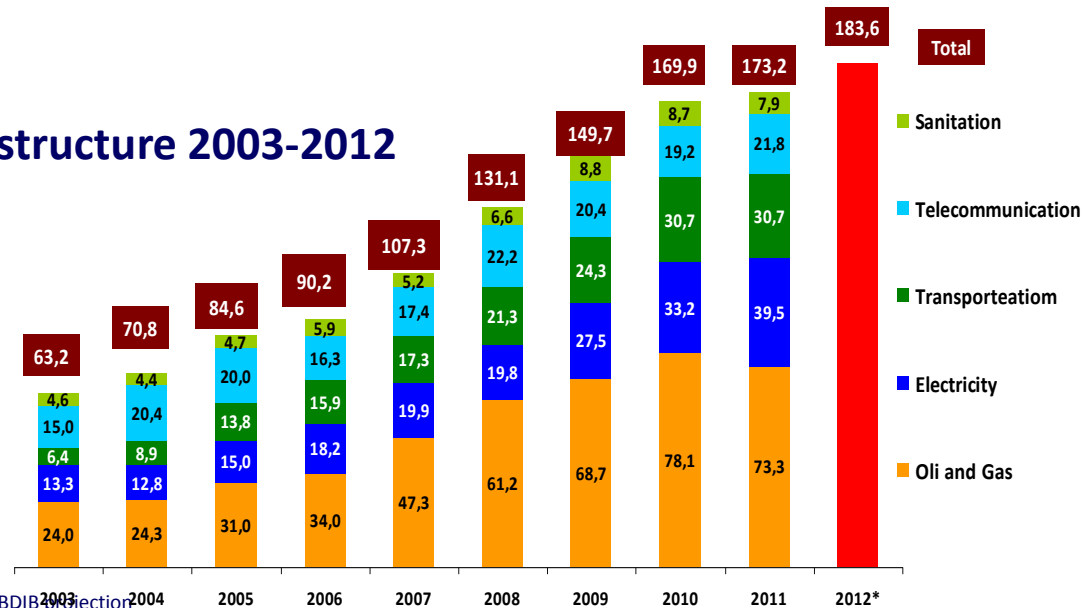


**Airline Industry, in million passengers**



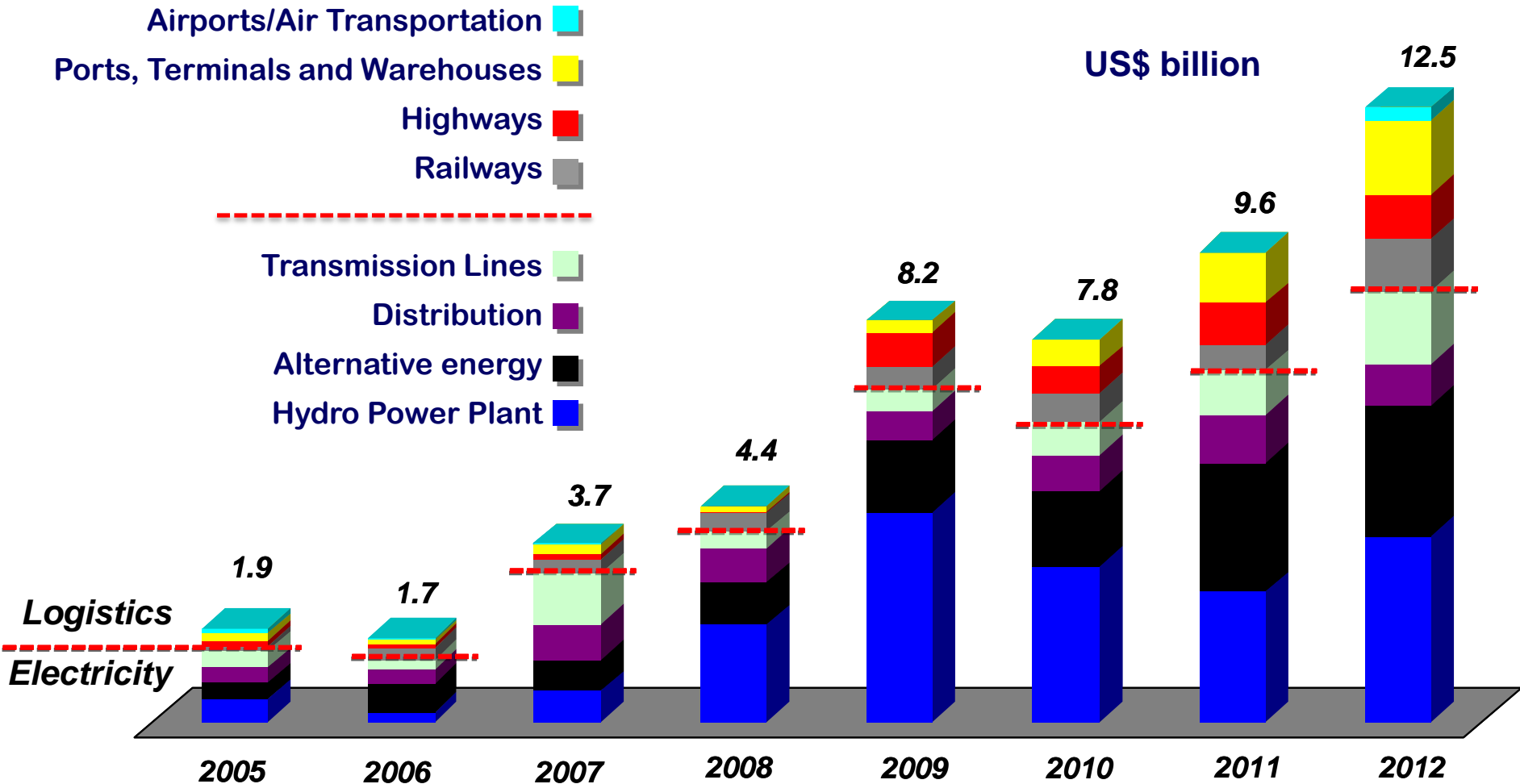
## Investments in infrastructure 2003-2012

2011 R\$ billion



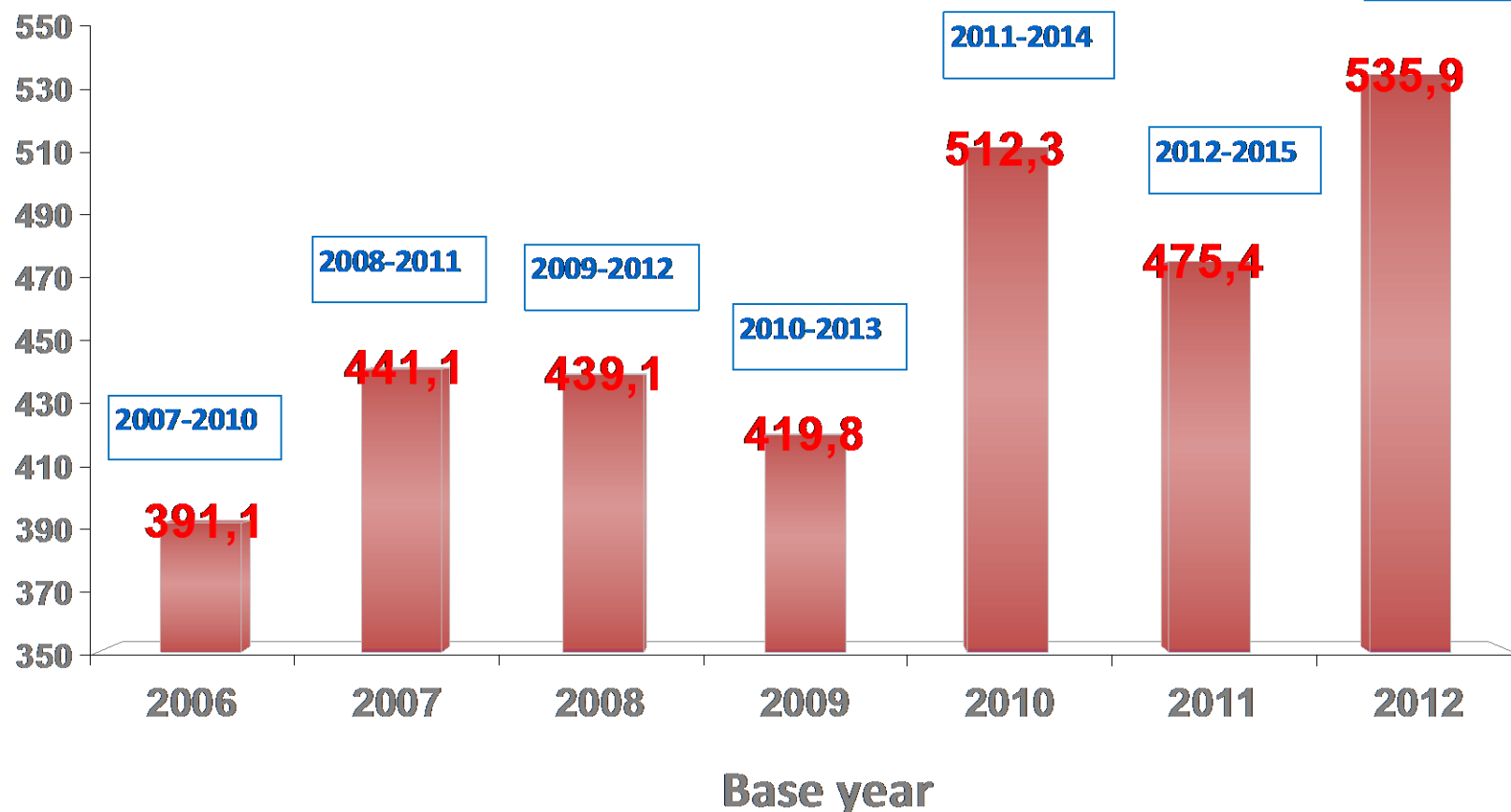
# Energy is where investment has been most prominent

## BNDES' Disbursements in Electricity and Logistics



**Investment: what is coming up**

## Investment Outlook for 4 years ahead (Comparable Sectors - US\$ billion - 2012)



# Investments to reach US\$ 1.9 trillion in the coming 4 years

Sectors	2008-2011	2013-2016	Accumulated Variation (in %)	Growth Rate Linear Average (in % per year)
	In 2012 US\$ billion			
Industry	434.4	529.7	21.9	4.0
Infrastructure	184.3	250.8	36.2	6.4
Services	81.5	111.5	36.7	6.5
Housing	305.6	394.9	29.2	5.2
Others Sectors	507.7	664.6	30.9	5.5
Total	1,513.5	1,951.5	29.0	5.2

(\*) Note: The BNDES research on the investment outlook for 2013-2016 covers 66% of the total industrial investments, and 100% of investments in infrastructure, totalizing about 58% of the investments in the economy (excluding residential construction). Agriculture and Services investments are based on queries to Sectoral entities and/or econometric forecast.

# Logistics + 123% in the coming 4 years

			(US\$ Billion)
Sectors	2008-2011	2013-2016	$\Delta(\%)$
Infrastructure	184.3	251.0	36.2
Electricity	82.2	85.1	3.6
Telecommunications	43.5	52.2	20.1
Sanitation	17.4	21.7	24.9
Highways	20.5	35.2	71.8
Railways	14.0	39.4	182.6
Harbors	5.0	12.5	150.1
Airports	1.7	4.7	170.9
Logistics	41.2	91.9	123.0

# Financing Infrastructure

# Brazil has a good base of private –locally and foreign owned- and State owned operators

## Logistics

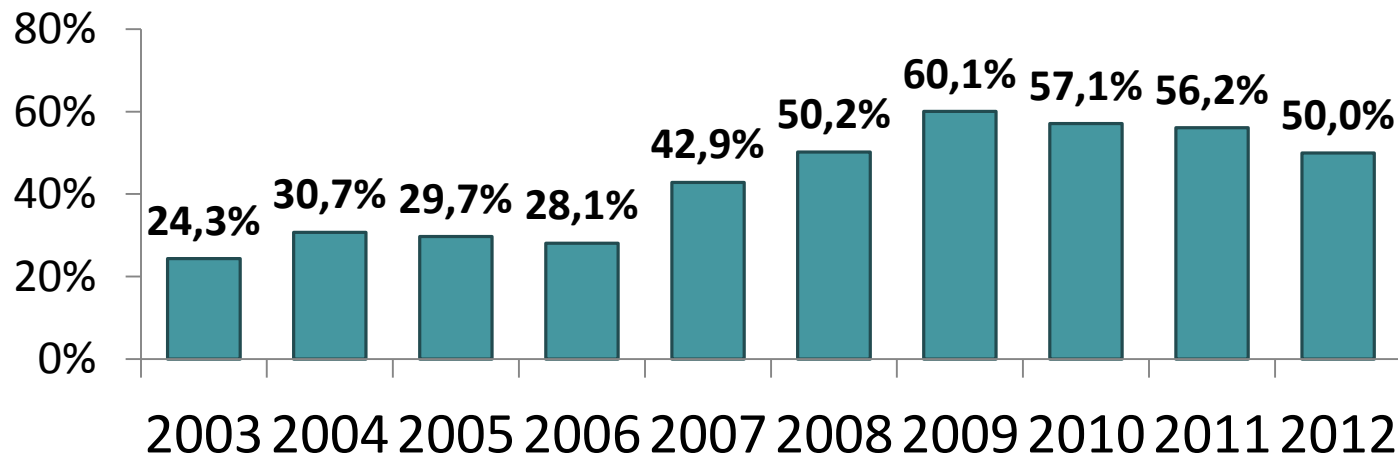


## Electricity



# The “market” for infrastructure financing: the recent past

When BNDES finances, how much it does finances?  
à Infraestrutura



Source: BNDES

How much are these players willing to  
play a more relevant role?

Large  
Private  
Banks

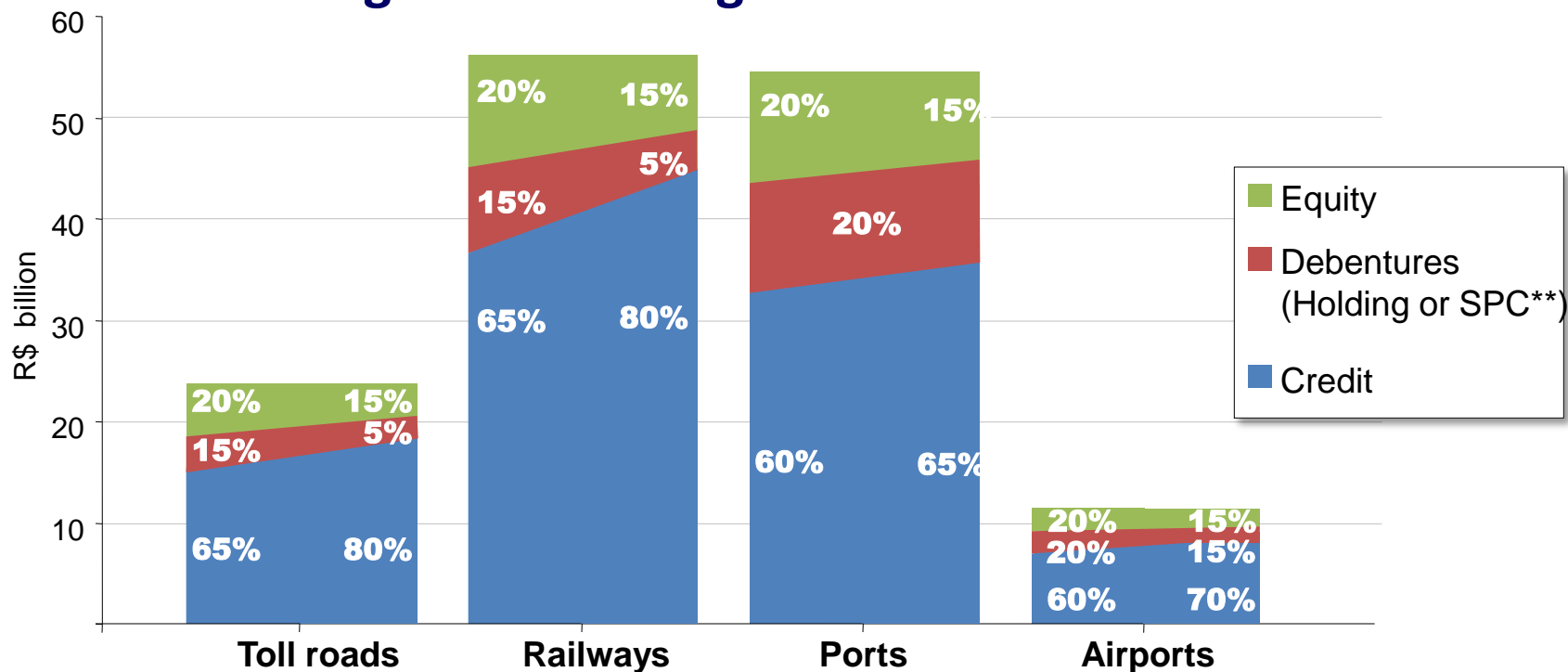
Infrastruc  
Funds

Pension  
Funds

Asset  
Managers

# The “market” for infrastructure financing: the near future

## Financing structure: Logistics \*



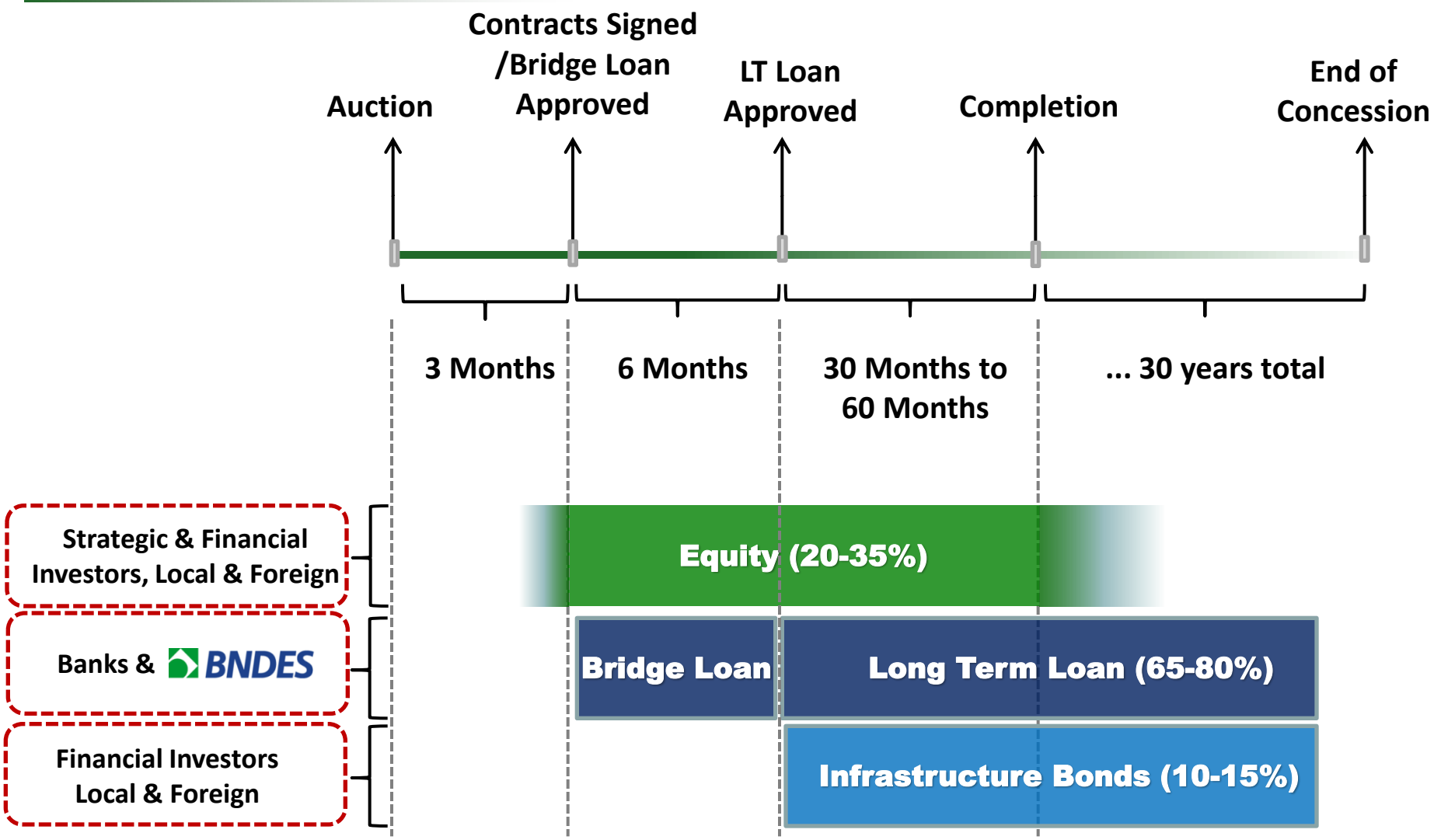
R\$ billion	23.5	56.0	54.2	11.4
US\$ billion	12.1	28.7	27.8	5.8

\* Figures according to BNDES forecast

\*\* SPC leverage ≤ 80%

Values in US\$ billion

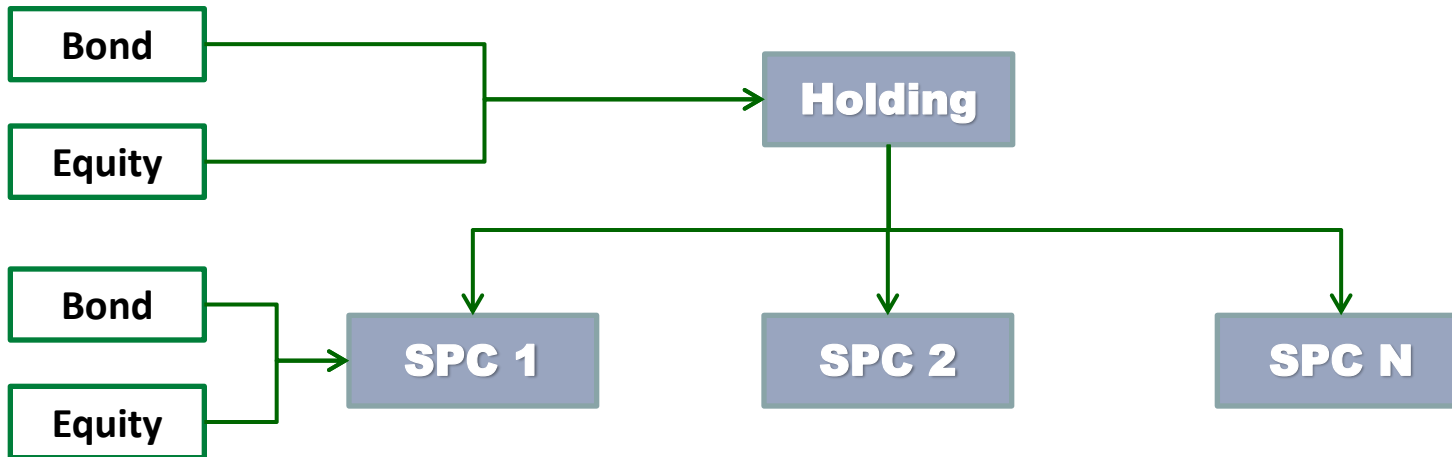
## Timeline



Source: BNDES

**Brazilian Infrastructure Bonds and infrastructure investment funds – benefits for non-resident investors:**

- (i) zero Income Tax rate
- (ii) zero IOF (Financial Operation Tax)

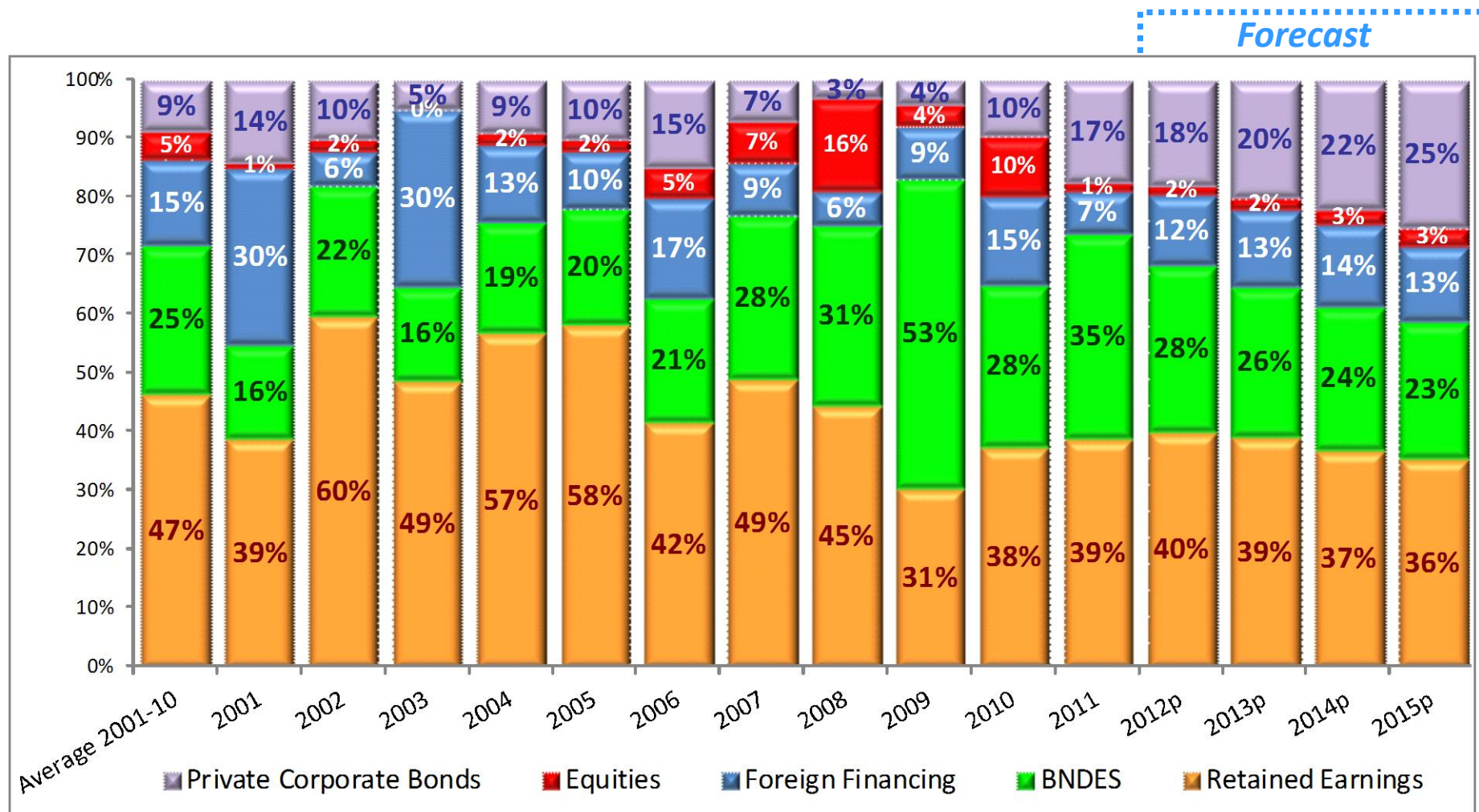


**Government Banks/Funds may co-invest with strategic and financial investors, either directly in the SPCs or through the holding company's equity, taking minority equity stake**

## Concluding remarks

# Are BNDES projections fair?

## Financing sources for Investments in Industry and Infrastructure (2012-2015)



- To understand contemporaneous Brazil is necessary to bring in Albert Hirschman: **unbalanced growth is a source of tension but, more importantly, of dynamism;**
- **Unbalanced growth in Brazil is associated with the diversification of its sources of dynamism**, each requiring the building up of specific institutional, economic and technological competences;
- **The upcoming frontier is investment:** in tangibles, especially infrastructure, and intangibles, especially innovation.
- **Opportunities for strategic and financial investors are very real. And... their contribution? To amplify local competition and sources of financing.**

# Incentives and challenges for Foreign Direct Investment in Infrastructure and Strategic Sectors in Brazil

Wilson Center

Washington – May. 2013



*João Carlos Ferraz*