

# Brazil needs transformational investments: is BNDES ready?

(initial thoughts for a forthcoming paper)

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# Structure of the presentation

- Part I – Transformational investments and the role of national development banks
- Part II – Brazil: infrastructure investments, the growth challenges, and productivity and competitiveness gaps
- Part III – BNDES as an agent of structural transformation: strengths and challenges (the case of sustainable infrastructure)

# Part I - transformational investments and NDBs

NDBs should be seen as mission-oriented institutions that can promote transformational investments and help overcoming development bottlenecks and other social challenges

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We will build on the findings of a recent  
Brooking/GEGI study

- to what extent are NDBs playing a significant role in domestic development finance?
- to what extent they are involved in infrastructure ?
- to what extent are they committed to sustainability ?

# We looked at NDBs 6 cases

**Table 1 Diversity in the size and infrastructure contribution of prominent NDBs**

Country	NDB	Total Assets USD billions	Total Loans USD billions	GDP 2014 USD billions	Total Assets % of GDP	Total Loans % of GDP	Infrastructure financing priority
China	China Development Bank	1664	1281	10357	16.07 %	12.37 %	Limited; 9% of loans
Brazil	BNDES	373	80	2347	15.89 %	3.40%	Yes; 36.7% of loans
India	IFCI Limited	6	3	2051	0.27%	0.17%	Yes
	Industrial Credit and Investment Corporation of India (ICICI)	106	31	2051	5.15%	1.49%	No
	Industrial Development Bank of India (IDBI)	58	20	2051	2.84%	0.96%	No
	Infrastructure Development Finance Company (IDFC)	14	8	2051	0.69%	0.38%	Yes; >85% of loans
	India Infrastructure Finance Company Limited (IIFCL)	6	4	2051	0.31%	0.22%	Yes; 100% of loans
	Total 5 (for India)	190	66	2051	9.27%	3.21%	
South Africa	Industrial Development Corporation (IDC)	10	2	350	2.86%	0.51%	Yes; 34% of new loans
	Development Bank of Southern Africa (DBSA)	6	5	350	1.66%	1.40%	Yes; >90% of loans
Korea	Korea Development Bank	263	136	1410	18.67 %	9.66%	No
Germany	KfW	650	585	3874	16.77 %	15.10 %	Limited; through KfW-IPEX Bank
Algeria	Algeria Fonds National d'Investissement	9	7	214	4.43%	3.22%	Yes; >90% of loans
Angola	Angola Banco de Poupanca e Credito	2	1	129	1.78%	0.73%	No
Nigeria	Bank of Industry	3	3	574	0.59%	0.52%	Limited to Telecommunication sector

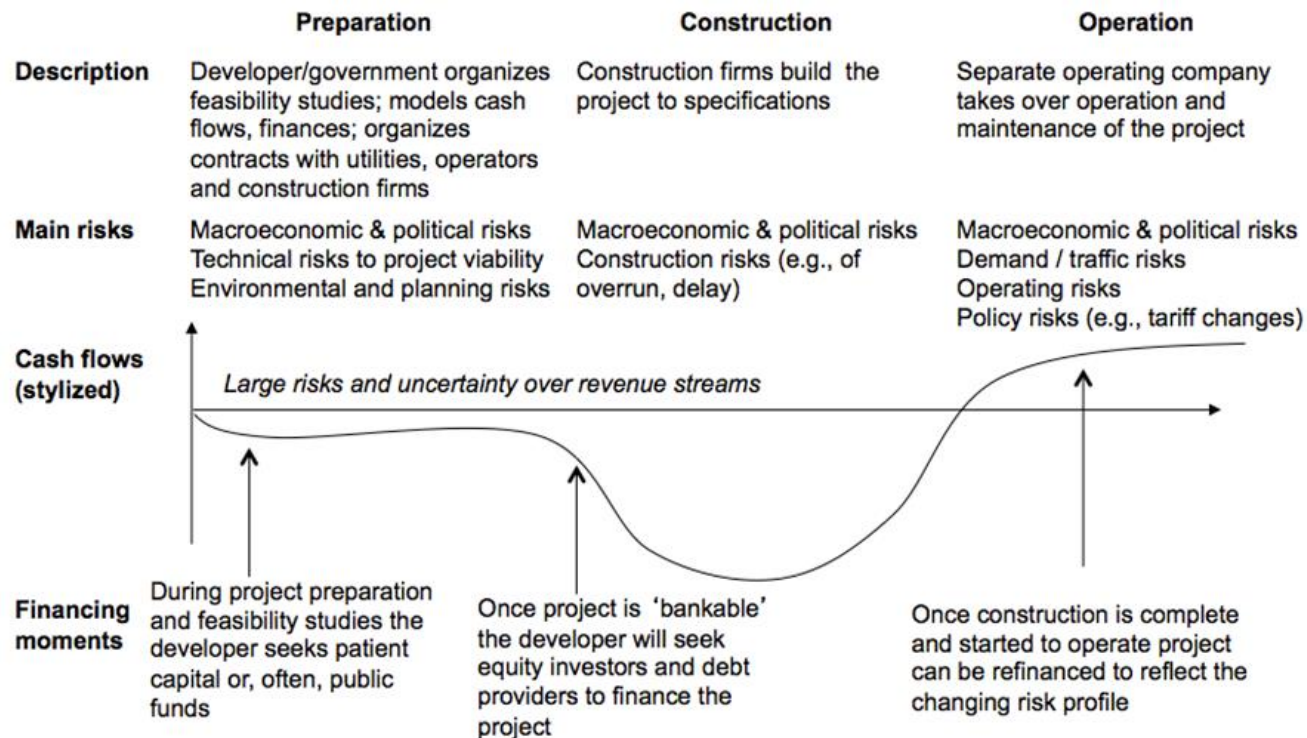
*Source: Authors' computation using respective NDB Annual Reports*

# Focus on sustainable infrastructure as a transformational investment

1. Infrastructure investments have one of the **highest income and job multipliers** among all the potential investments
2. Sustainable infrastructure investments are **technology-intensive**, creating a frog-leaping effect on several parts of industries
3. Help overcome **known development bottlenecks** - in energy provision, transportation and urban mobility, increase productivity and competitiveness
4. Are considered to be a key element to accomplish the **17 sustainable development goals**



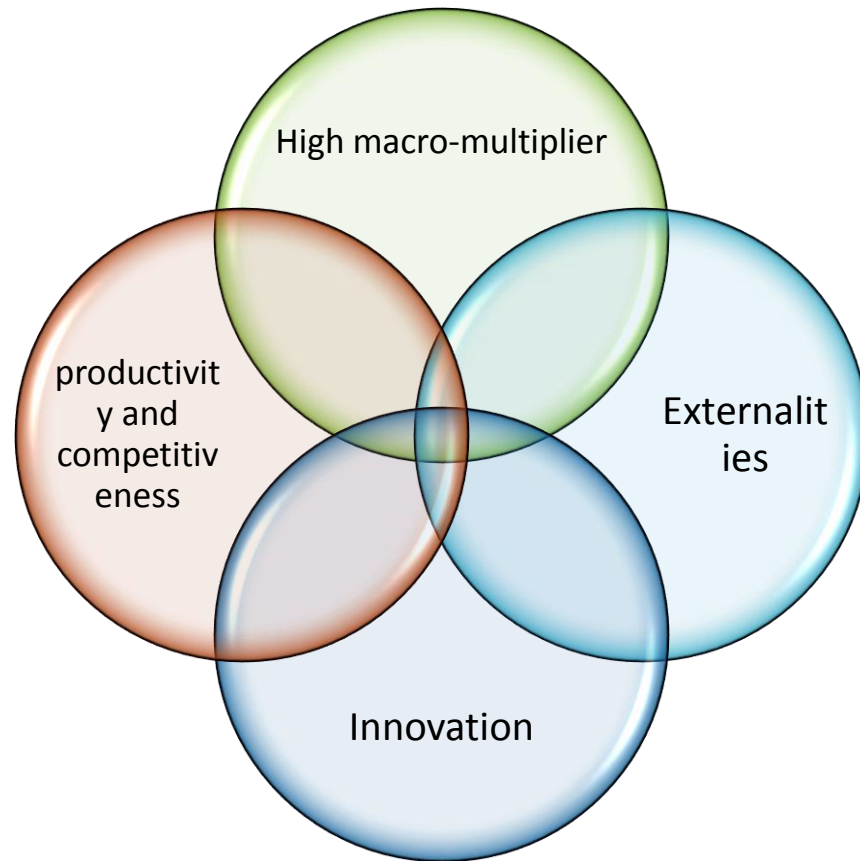
# These investment carry significant risk-management challenges in life cycle



Source: Bhattacharya, Romani, and Stern (2012)

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# But the analysis can be applied to other transformational projects





# Conclusions that can be extrapolate to our analysis of BNDES (1); NDBs

- 1. Ate mission-oriented institutions; therefore their strategies and policies should be integrated into a national development strategy, articulating with focal ministries and agencies
- 2. Should have significant comparative advantages in:
  - Project origination and development
  - Better understanding potential social and environmental risks
  - Understanding technological and financing constraints
  - Promoting projects that that greater local social and development impacts

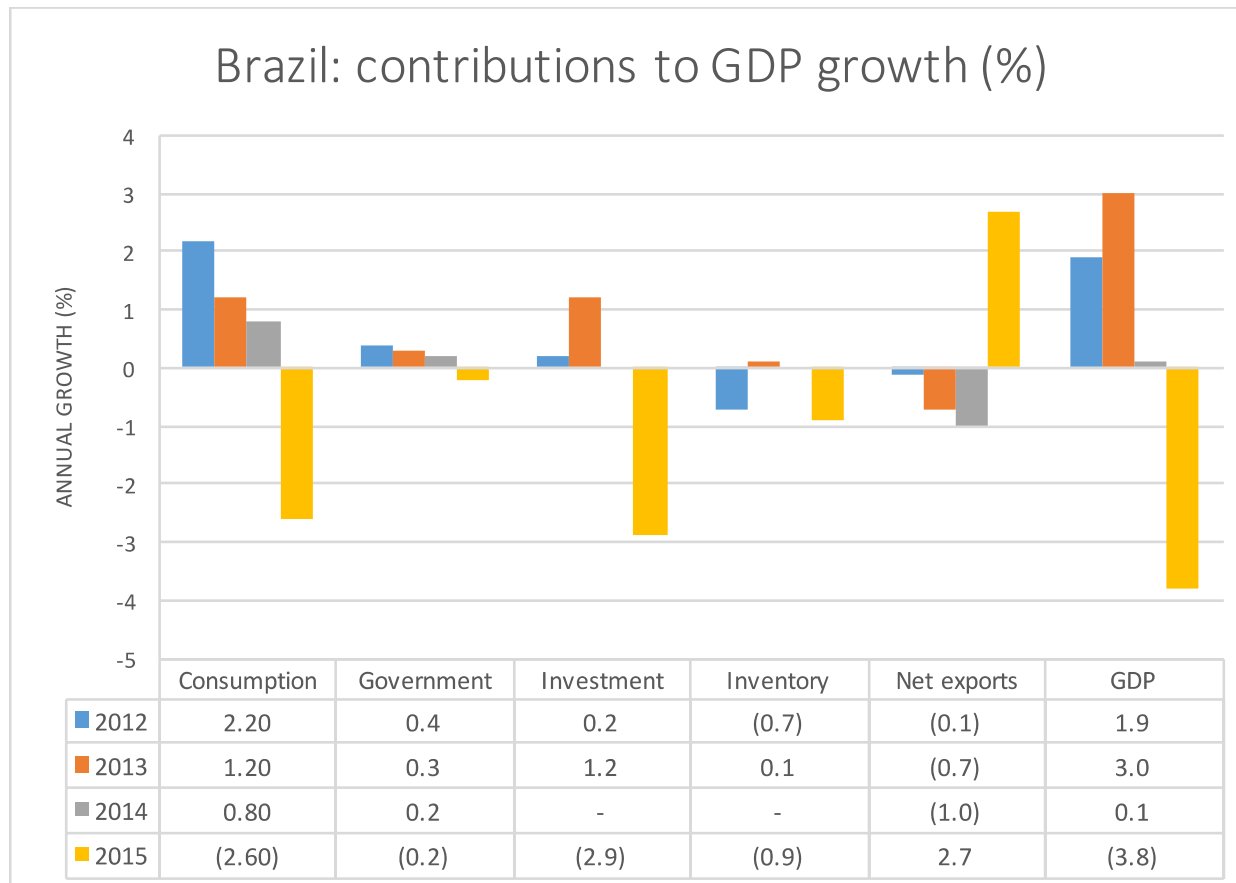
# Conclusions that can be extrapolate to our analysis of BNDES (2); NDBs

- 4. Normally deal with transformational investments (e.g. infrastructure) but some **recurring** market failures (e.g. SMEs)
- 5. Mandates should evolve according to changes in societal needs; need to mainstream exit and market enhancing strategies
- 3. NDBs can facilitate innovative financial engineering, coordinating with private financial institutions and promoting the development of new instruments

# Part II – Brazil: why infrastructure?

Infrastructure is only one type of transformational investment. Brazil needs other ones (e.g. education and public services).

# Brazil has significant short-term challenges

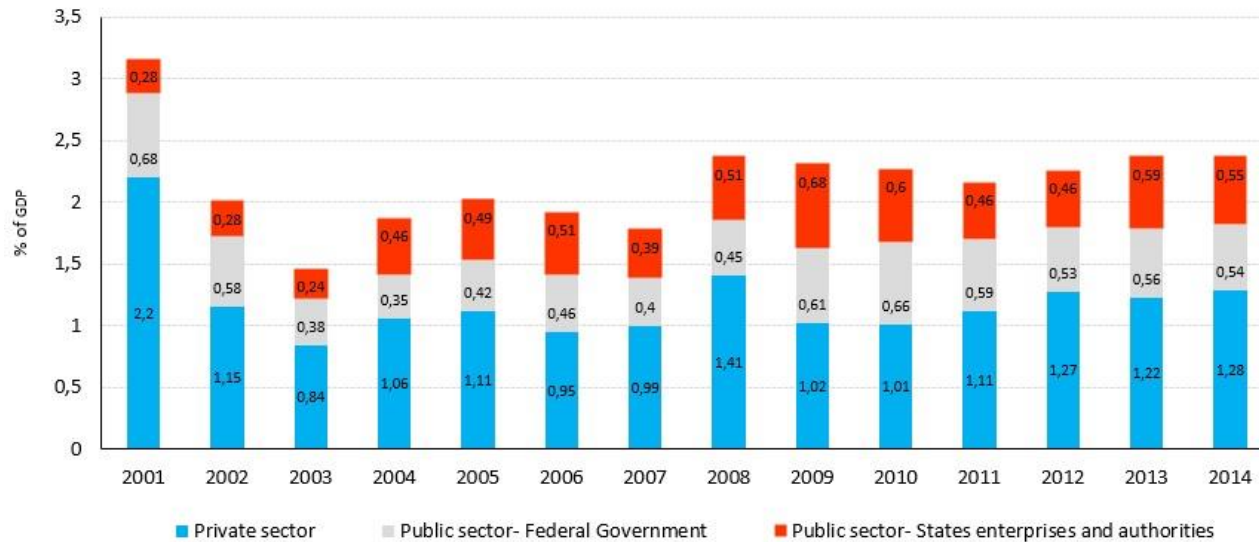


# But the crisis has long-term roots

- E.g.:
  - Downward trend of industrial investments that generates a lagging factor productivity
  - Very sophisticated, but short-termist private financial institutions; shallow capital markets; and public financial sector
  - Significant infrastructure and logistics gaps, contributing to near-to-the-ground factor productivity and low competitiveness

# The decline of public investments in infrastructure led to enormous gaps

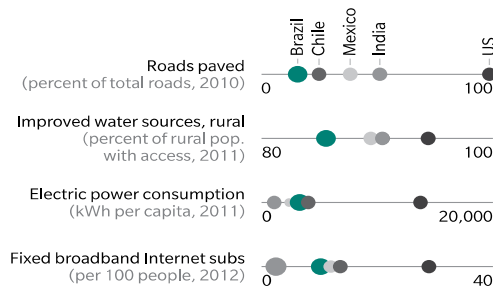
Figure 3-5: Trends in public and private infrastructure investments in Brazil.



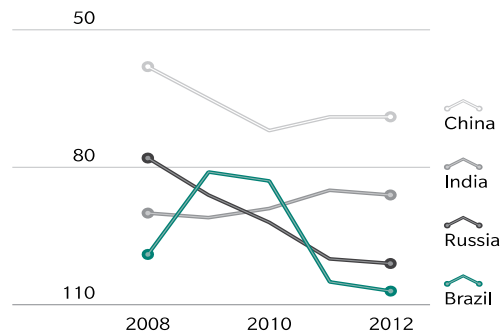
Giambiagi and Castelar Pinheiro (2012), Frischtak (2011) and Inter.B (2014)

# Infrastructure: significant bottleneck for sustained growth

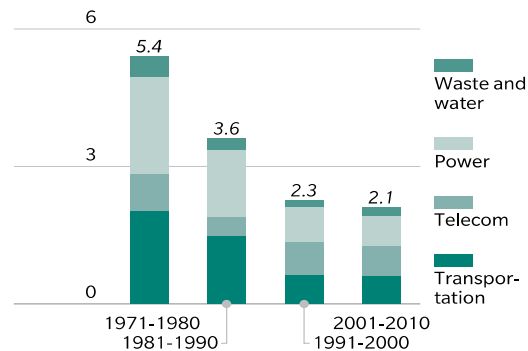
INFRASTRUCTURE INDICATORS  
PERCENT OF GDP, 2010-2012



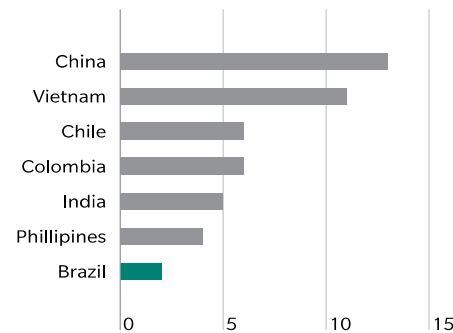
GLOBAL RANKING OF QUALITY OF INFRASTRUCTURE  
2008-2012



BRAZIL'S INVESTMENT IN INFRASTRUCTURE  
PERCENT OF GDP, 1971-2010



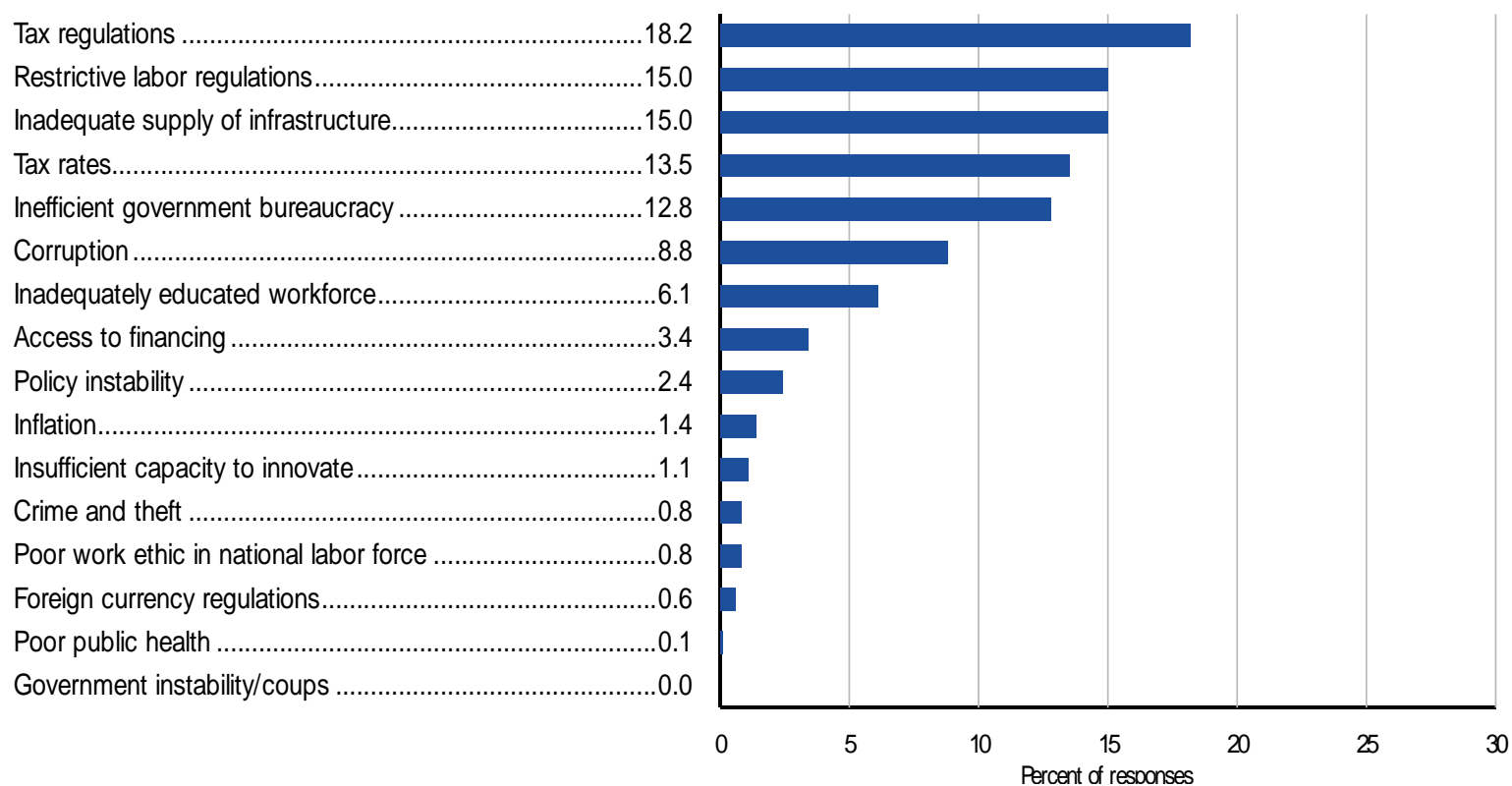
INVESTMENT IN INFRASTRUCTURE PER COUNTRY  
PERCENT OF GDP, 2011



Source World Economic Forum, *Global Competitiveness Report 2013-2014*; Brazilian Ministry of Finance; Credit Suisse

# And for productivity and business

## The most problematic factors for doing business





# And competitiveness

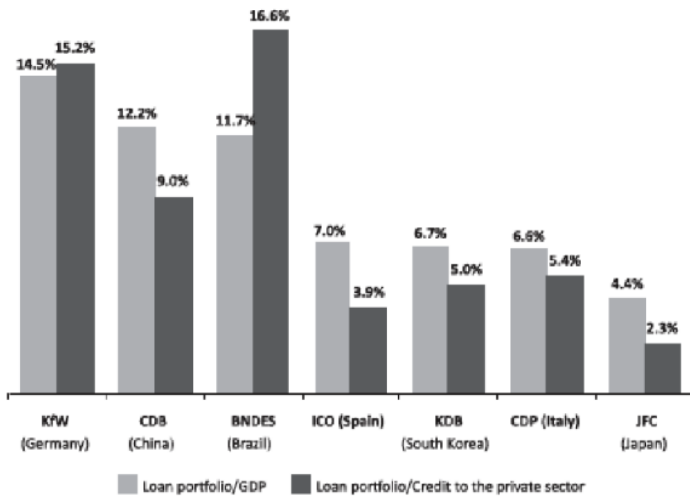
## Global Competitiveness Index

	Rank (out of 144)	Score (1–7)
GCI 2014–2015 .....	57	4.3
GCI 2013–2014 (out of 148).....	56	4.3
GCI 2012–2013 (out of 144).....	48	4.4
GCI 2011–2012 (out of 142).....	53	4.3
<b>Basic requirements (34.2%).....</b>	<b>83</b>	<b>4.4</b>
Institutions .....	94	3.5
Infrastructure .....	76	4.0
Macroeconomic environment .....	85	4.5
Health and primary education.....	77	5.7
<b>Efficiency enhancers (50.0%).....</b>	<b>42</b>	<b>4.5</b>
Higher education and training.....	41	4.9
Goods market efficiency .....	123	3.8
Labor market efficiency .....	109	3.8
Financial market development .....	53	4.3
Technological readiness.....	58	4.2
Market size.....	9	5.7
<b>Innovation and sophistication factors (15.8%).....</b>	<b>56</b>	<b>3.8</b>
Business sophistication .....	47	4.3
Innovation.....	62	3.3

# Part III – BNDES and structural transformation: strengths and challenges

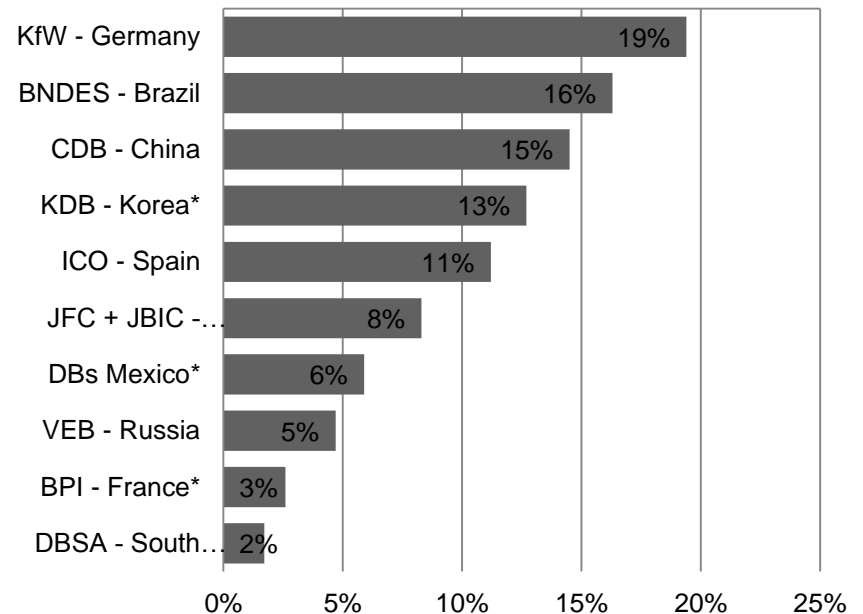
# One of the largest and most efficient NDBs

Figure 4. DFI Loan Portfolio and Representativeness – 2013 (%)

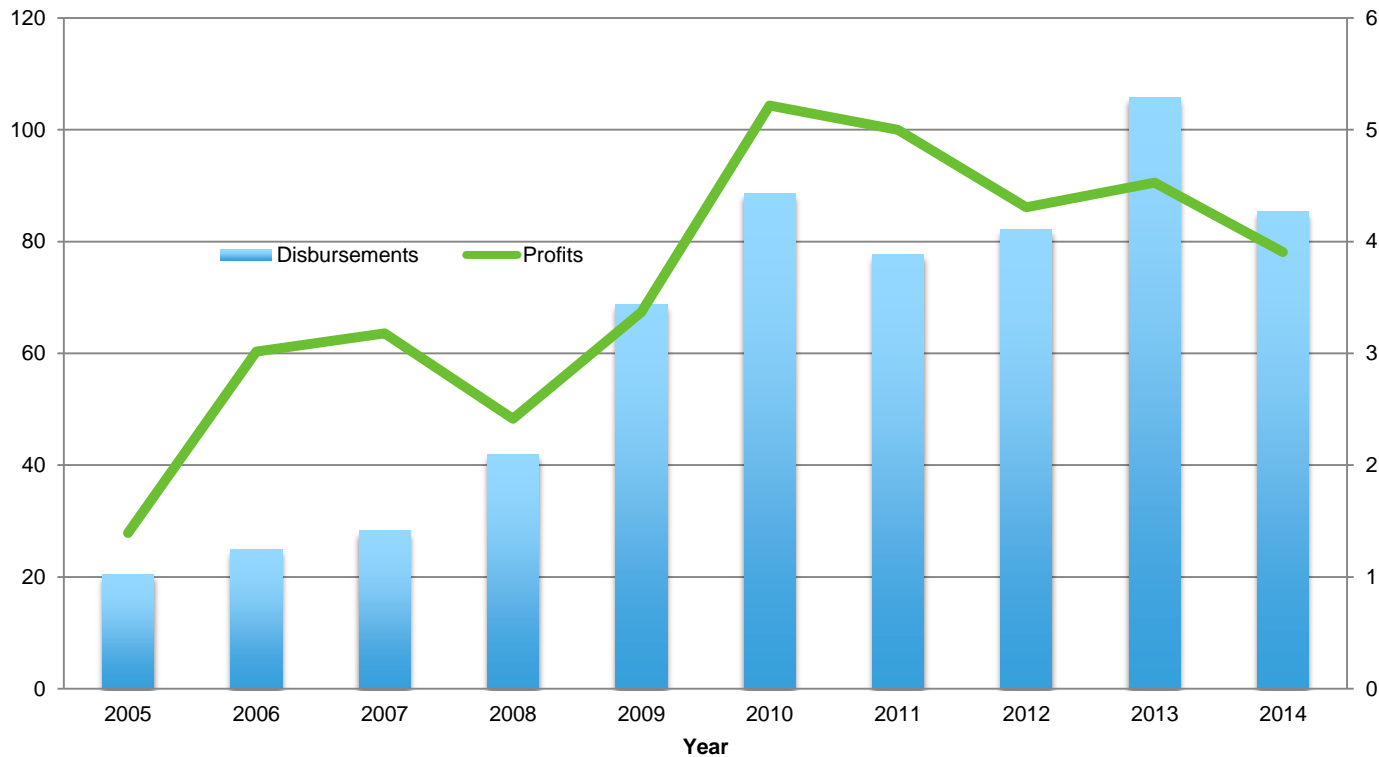


Source: Além and Madeira (2015).

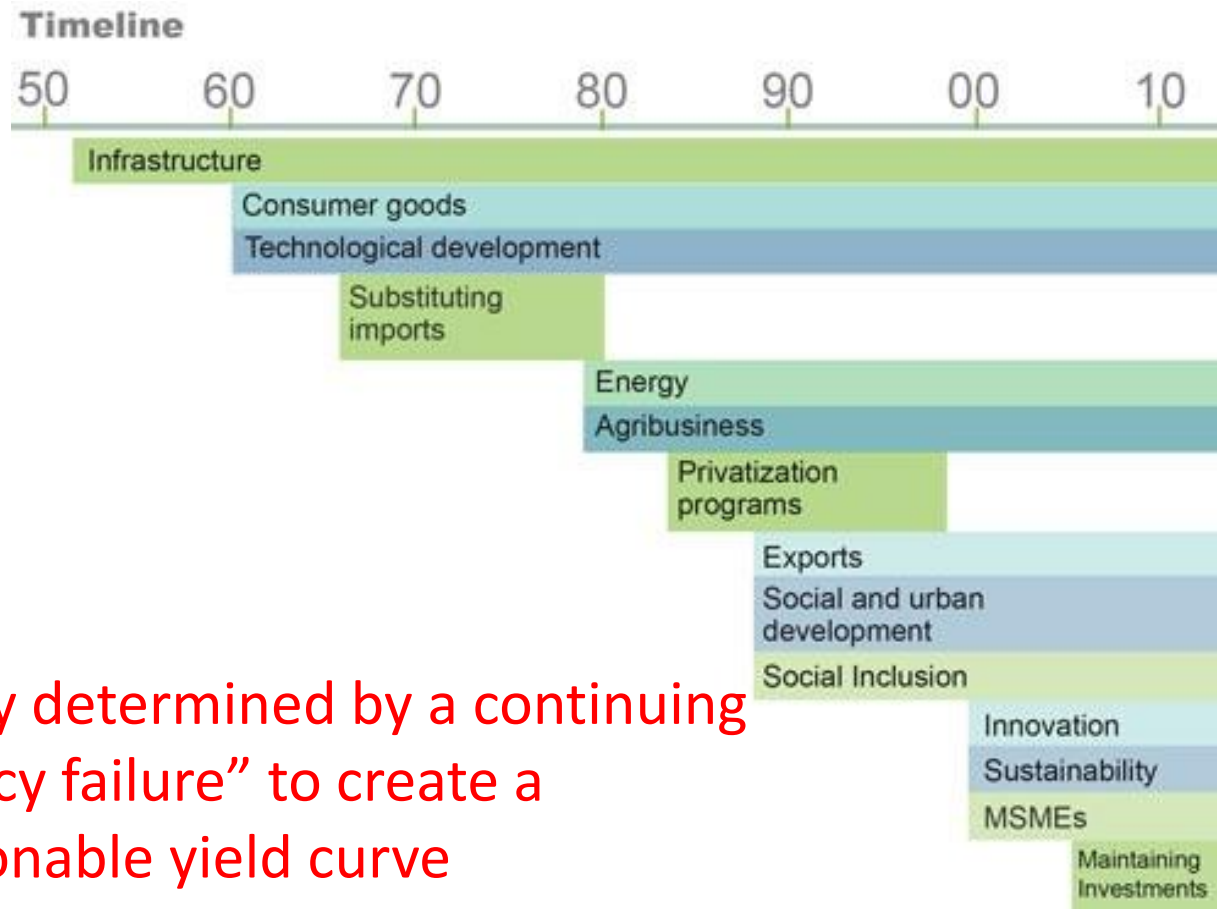
Graph 2.1 - Relative size of some of the largest NDPs (assets/GDP in 2012)



# BNDES expansion in the recent past has been extraordinary

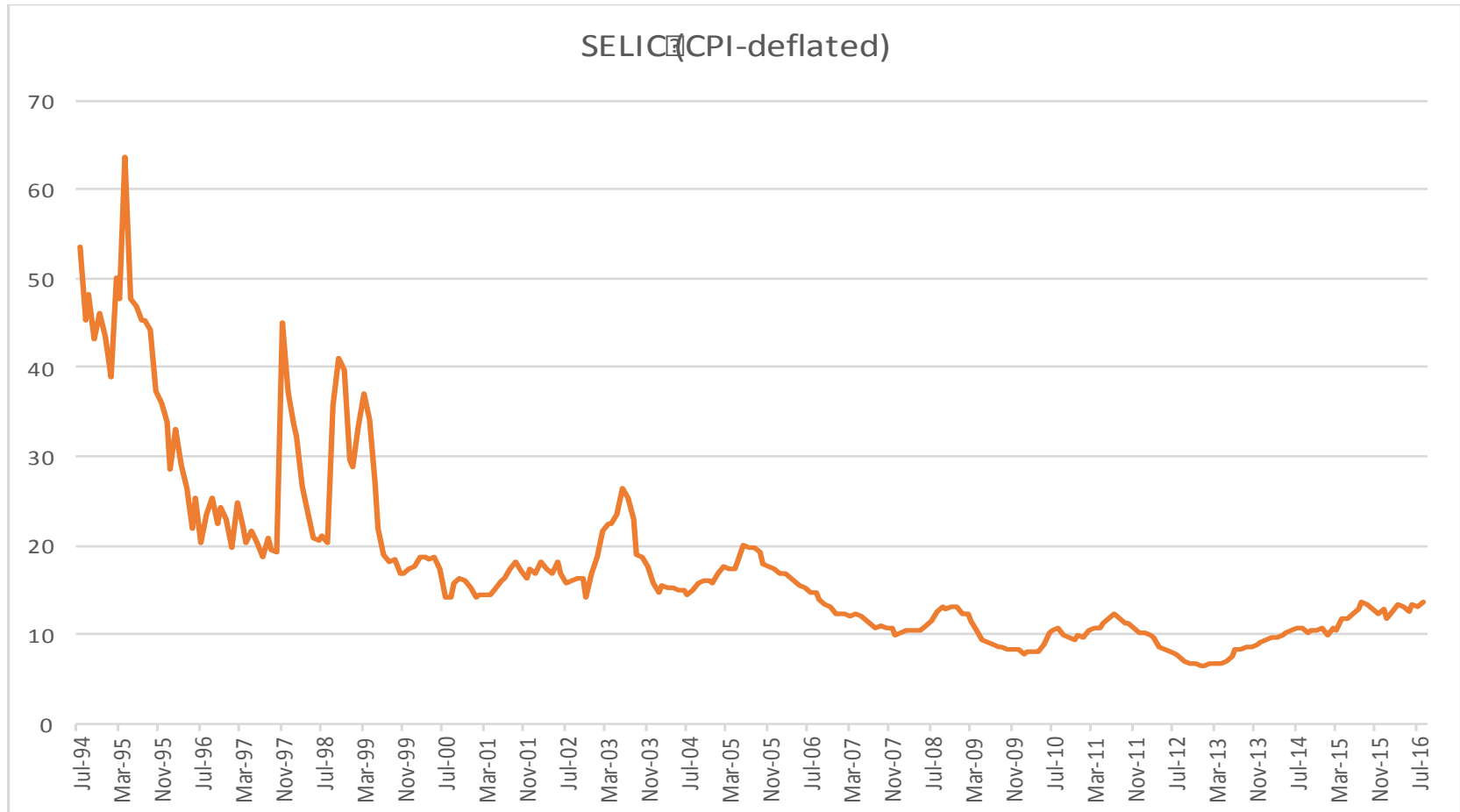


# BNDES: overlapping mandates



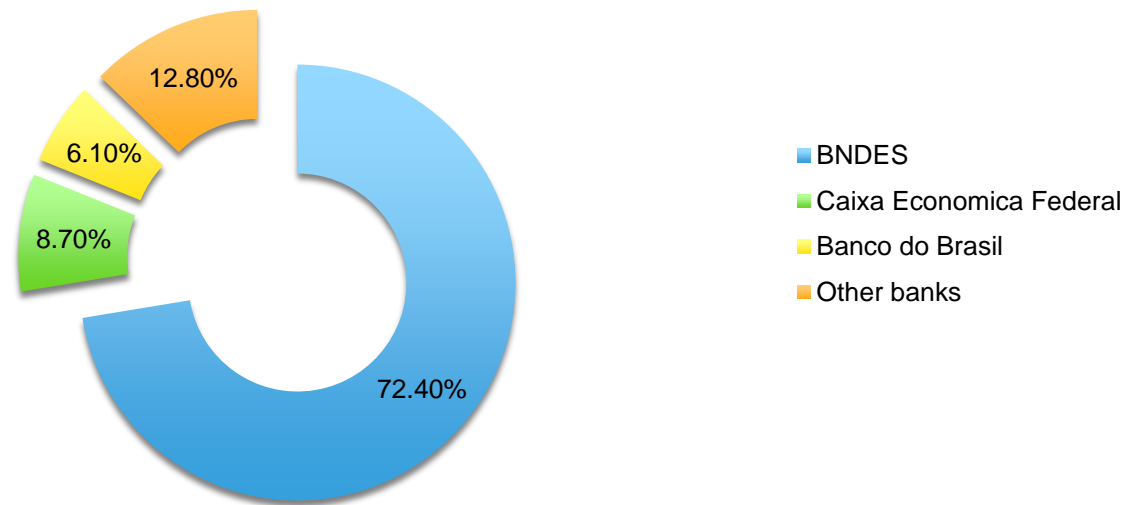
Partly determined by a continuing “policy failure” to create a reasonable yield curve

# Policy failure: example 1

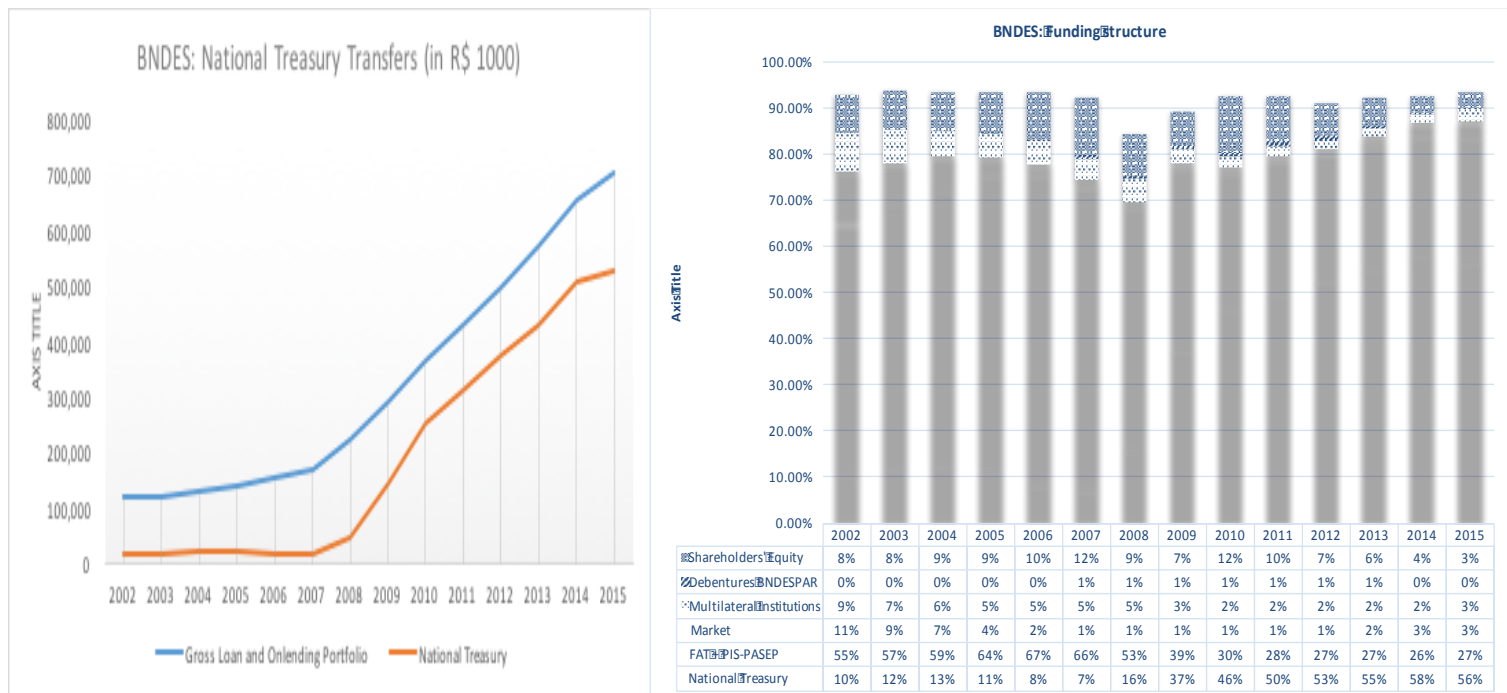


# Policy failure 2: no private long-term credit

Graph 3-2: BNDES: participation in loans to the private sector with maturity higher than 3 years



# Policy failure (3): funding became increasingly dependent on semi-fiscal sources





## Policy failure (4): attempts to crowd-in private resources moving, but slowly

- Infrastructure debentures in Brazil were created in 2011 as a way to improve funding sources for projects in an environment of widening fiscal constraints. The bonds are exempt from income taxes for retail investors.
- Infrastructure bonds have performed relatively well. Local issuers have already sold more than 15 billion reais (\$3.8 billion) of the instruments in the local market. This amount, while significant, is minor when compared to total country-wide investment needs.

Some challenges of BNDES in supporting transformational investments to be addressed in the paper (1)

- **1. Engagement in national and subnational development strategies, but**
  - National and subnational governments still to define it
  - Private sector divided, and incapable of putting together
  - Public opinion still divided
- **2. Involvement in project origination and development, but**
  - Internal capabilities challenges
  - Coordination with national and international productive investors

Some challenges of BNDES in supporting transformational investments to be addressed in the paper (2)

- **3. Funding structure and selectivity, but**
  - Dependency on semi-fiscal resources create “political economy” challenges
  - Domestic interest rate structure still inhospitable
  - Intl funding too risky given currency risk
- **4. Leveraging and “crowding-in” capacities, moving but**
  - Private long-term sources scarce
  - Institutional investors still concentrated in short-term bonds and now some in trouble
  - Regulation in Brazil extremely biased towards a risk-averse investing behavior