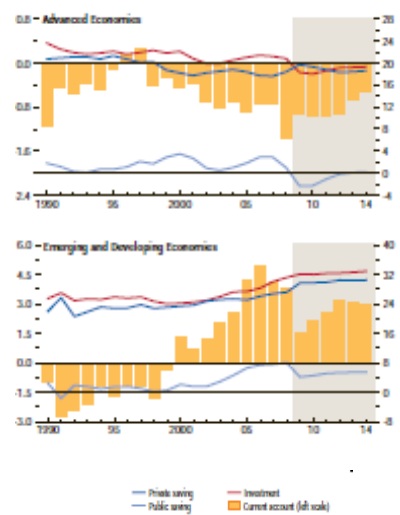


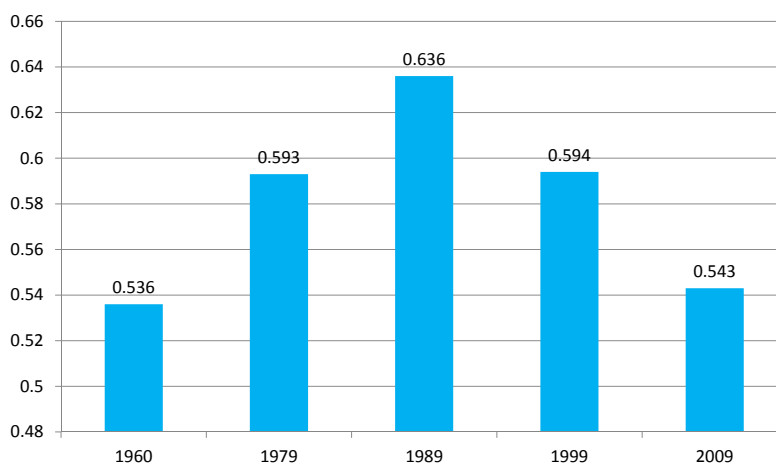
# José E Cassiolato

Local Innovation and Production  
Systems Seminar  
TUT, Tshwane, 02-04-2012

## Global savings, investment and current account

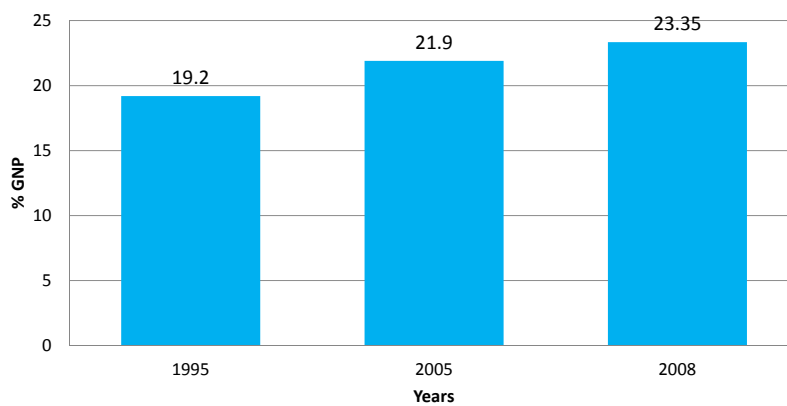


## Inequality in Brazil: Gini Index



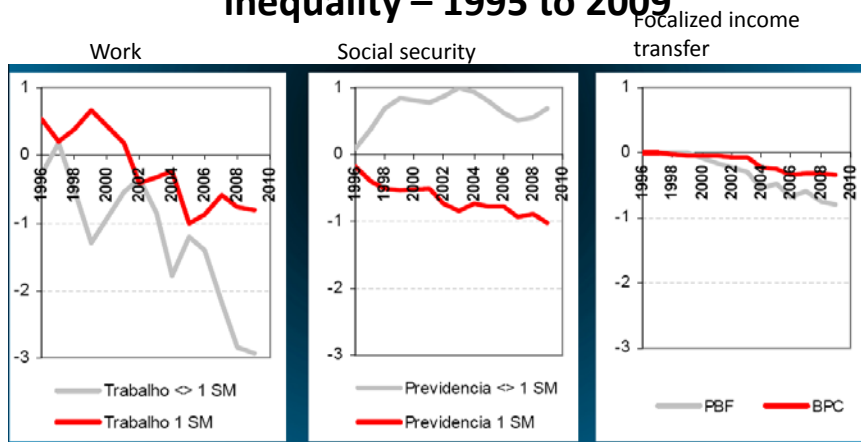
Source: CPS/FGV for 1960; IPEA for other years

## Brazil - Public Social Expenditures (Federal, states and municipalities)



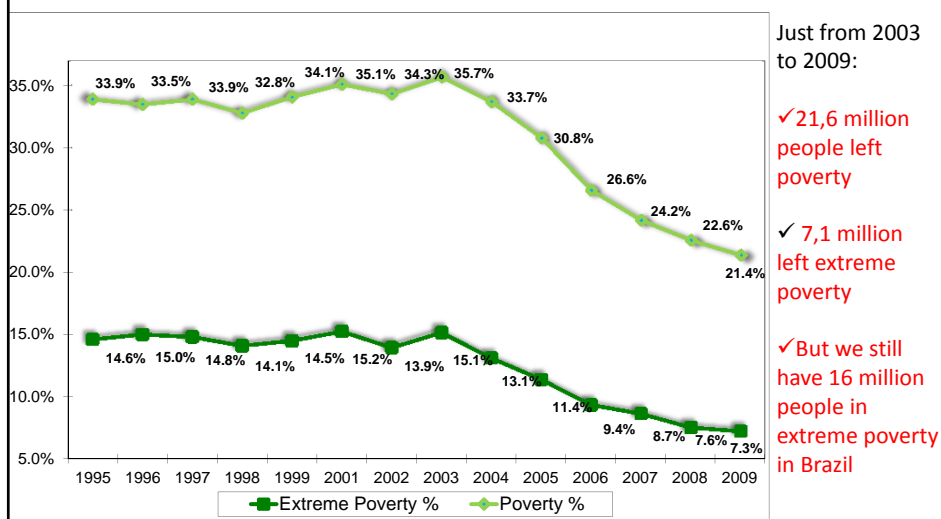
Sources: For 1995 Fernandes et alli (1998); for 2005 & 2009 IPEA.

### Cumulative contribution to the fall on inequality – 1995 to 2009



Source: PNAD micro data 1995-2009; IPEA elaboration

### Poverty and Extreme Poverty Evolution – 1995-2009

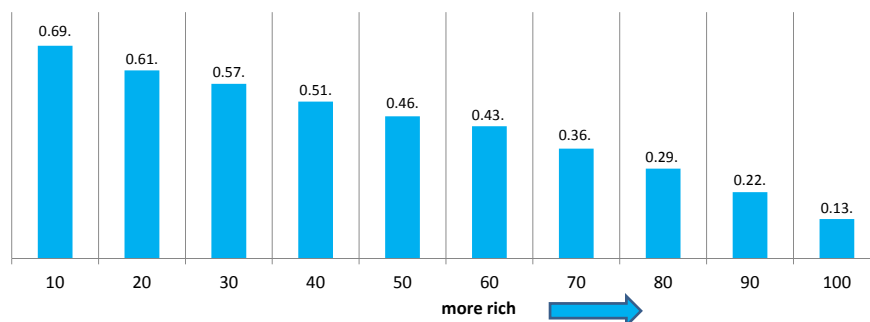


Just from 2003 to 2009:

- ✓ 21,6 million people left poverty
- ✓ 7,1 million left extreme poverty
- ✓ But we still have 16 million people in extreme poverty in Brazil

Source: IPEA

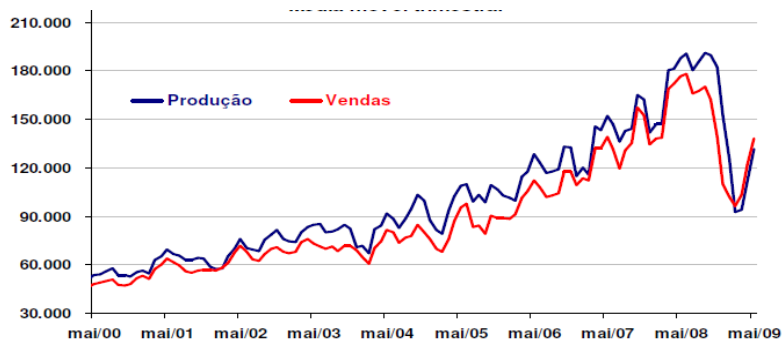
## Cumulative variation in income by tenth: 2001-2009



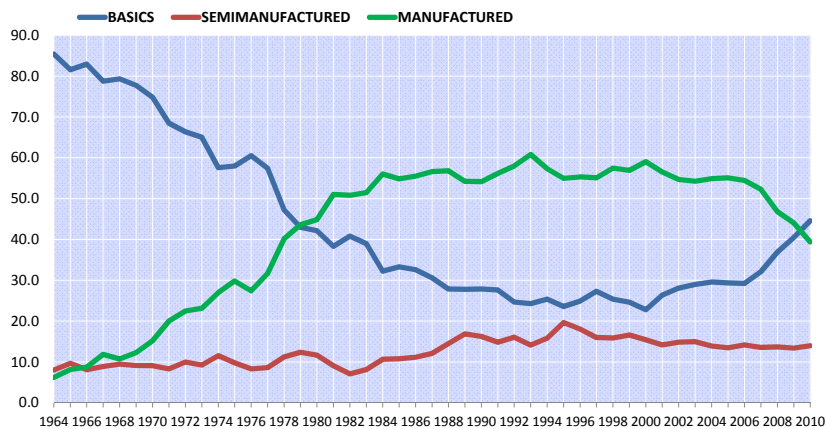
**The income of the 50% poorest increases 311% more than the richest 10% (52,6% x 12,8%) in the period**

Source: Elaboration CPS/FGV; micro data PNAD/IBGE

## Brazil –Production and Sales of Motorbikes – May 2000 – May 2009

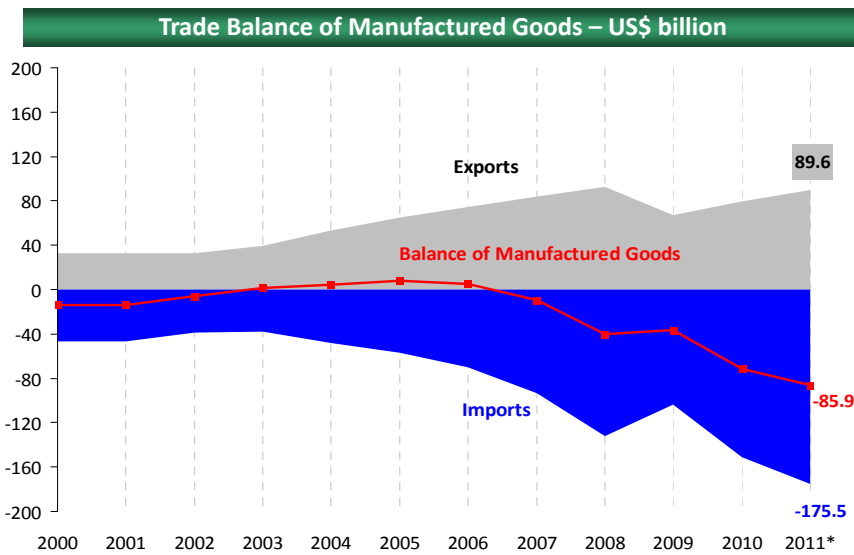


### The Integration in the world economy Brazilian Exports by Aggregate Factor 1964 to 2010 - participation %/total



Source: SECEX-MDIC

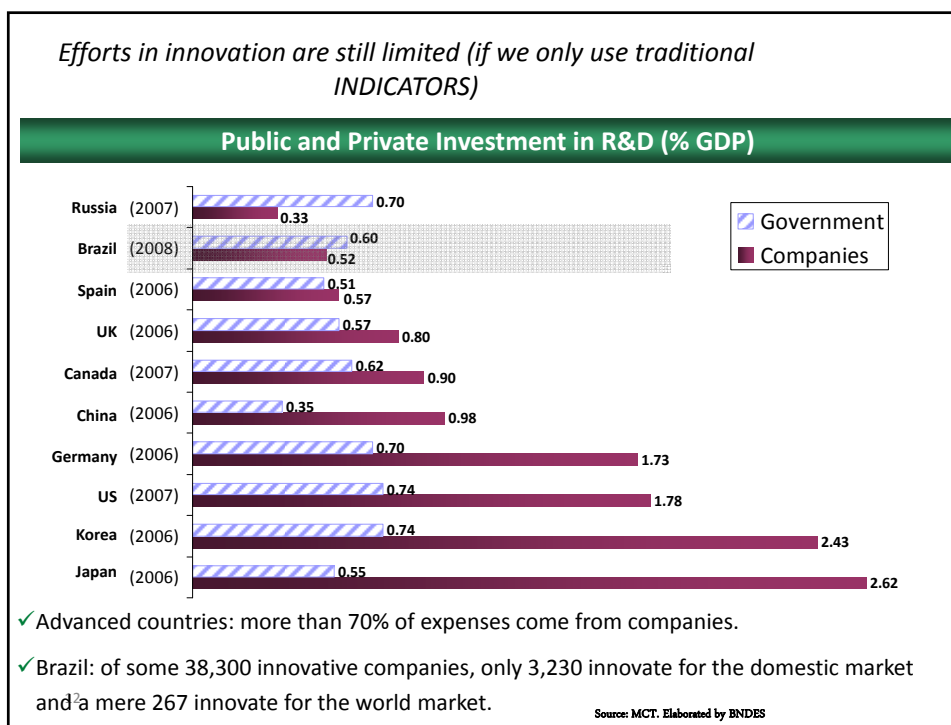
### Imports of manufactured goods is on the rise and affecting local industrial production



Source: MDIC and Finance Ministry. \*accumulated result in 12 months up to August.

Imported content/Value of production				
Sectors	2005	2008	2010	Variation p.p. 2010-2005
<b>Expressive increase in the use of imported inputs</b>				
IT and office equipment	36.5%	67.8%	83.6%	47.1
Hospital medical equipment and others	14.1%	26.4%	38.9%	24.8
Electronics and communications	27.0%	32.7%	45.8%	18.9
<b>Median increase in the use of imported inputs</b>				
Transport equipment	15.7%	30.5%	24.1%	8.4
Textiles	6.2%	12.0%	13.3%	7.1
Chemicals	15.1%	20.5%	20.5%	5.3
Electrical materials	9.9%	14.6%	14.9%	5.0

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Source: SECEX/IBGE/BCB/FGV. Elaborated by APE/BNDES



### Criticism to traditional innovation indicators

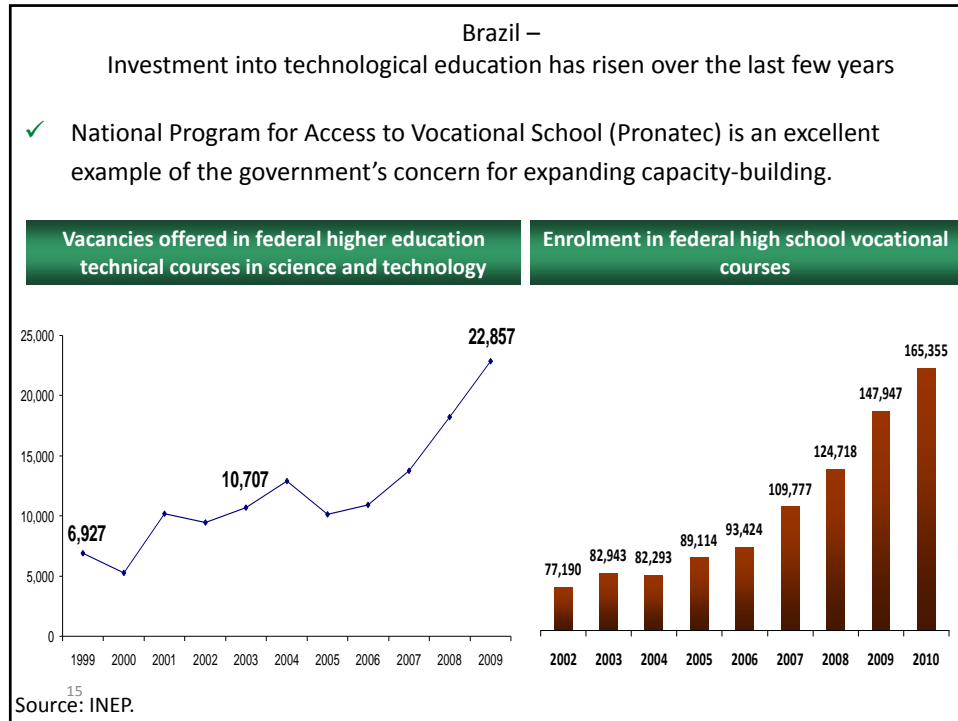
- R&D expenditures:
  - What is really R&D???
  - Results of the activity are not evaluated;
  - Other important domains of R&D activities are left out – adoption or adaptation of new equipments and the informal learning activities;
  - The very concept : R&D today is different from R&D in the time of Frascati Manual
- Indicators based on bibliographic production → self-selection problems, predominance of anglo-saxon journals in the existing databases;
- Indicators of Patents:
  - They express only the existence of an invention; pronounced inter-sectoral variance of the propensity to patent;
  - Difficulty for obtaining a patent varies a lot from country to country;
  - Patent requests have little to do with the protection of the innovation.

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### Brazil – Key Public policies focusing on industry and innovation

- ✓ **Brasil Maior:** focus is on investment, innovation and exports.
- ✓ **Educational Development Plan (PDE):** investments in developing the capacity of Brazilian citizens;
- ✓ **Action Plan for Science, Technology and Innovation (PACTI):** scientific and technological development, as well as innovation;
- ✓ **Growth Acceleration Programs (PAC and PAC2):** investments in energy, logistics, social and urban areas, public administration.
- ✓ **My House, My Life:** credit for housing;
- ✓ **National Plan to Eradicate Poverty;**
- ✓ **National Program for Access to Technical Education (Pronatec).**

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## The Systems of Innovation Approach and Latin America Today (global crisis)

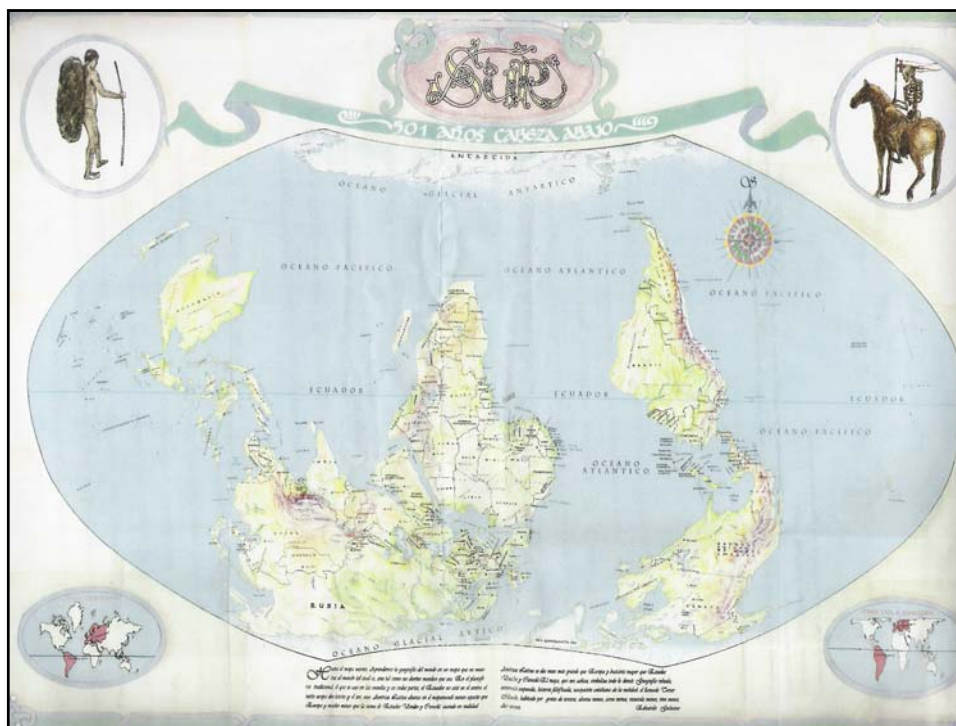
- Modern Technology and Traditional Knowledge
- What “Superior Technology” Really Means.... The Policy Dimension – the limitations of the Lisbon Strategy and its frustrated use in LA (and also elsewhere...)
  - The trap of the new policies becoming *“only in a new icing on an old cake”*
  - ‘by integrating some Schumpeterian variable to mainstream economics, we may not arrive at the root causes of development*
  - we risk applying a thin Schumpeterian icing on what is essentially a profoundly neo-classical way of thinking.’*
  - (Reinert & Reinert, Globelics, 2003)
- But..... the reality of local experiences (LIPS)
- and the tale of the man who lost his keys (Sutz)



Arocena and Sutz, 2003, invoke Weizenbaum, 1976, joke about the drunk, the light spot and the keys:  
 ‘One dark night a policeman comes upon a drunk who is searching, under a lamppost, for his keys, which tells the officer he lost "over there", pointing out into the darkness. The police officer asks him: "Why, if you lost the keys over there, are you looking for them under the streetlight?" The drunk answers, "Because the light is so much better here"’

## Final Remarks

- Global Crisis
- Policies are not autonomous from the Political Economy
- Techno-economic transitions' are not merely technical
- The Local and the Global
  - LIPS –
    - **production as a socialized process (The notion of “associated producers”)**
      - « socialised man, the associated producers, rationally regulating their interchange with Nature, bringing it under their common control, instead of being ruled by it as by the blind forces of Nature; and achieving this with the least expenditure of energy and under conditions most favourable to, and worthy of, their human nature » (KM)



- Thank you

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