

# Economic Development and the Functionality of the Financial System in Brazil: a Post Keynesian Approach

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# Objectives

- The paper aims at analyzing if the Brazilian financial system has (or not) been functional to economic development.
- For this purpose, we first discuss the concept of functionality of financial system from a Post Keynesian approach, and then we analyze the relationship between financial system and economic development in Brazil.

# Post Keynesian approach

- Keynes (1937) by analyzing the process of financing of capital formation, described such process as having two steps: firstly, the provision of money to allow the investment expenditure to be implemented (*finance*), and secondly, the channels through which ex-post savings can fund the debts created to finance the investment expenditures (*funding*), that is the process of transformation of short-term liabilities into long-term liabilities.

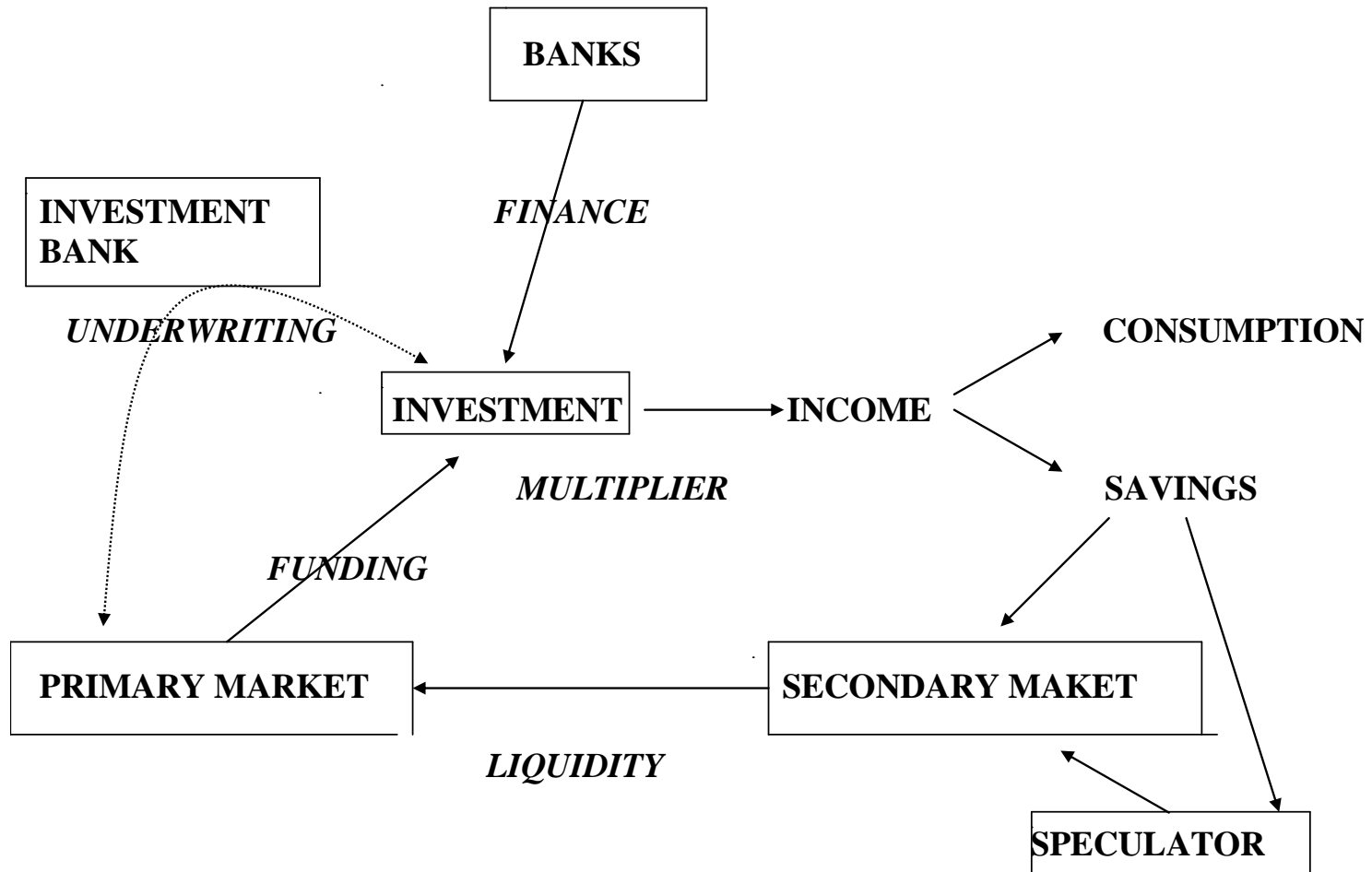
# Finance and funding

- *Finance* is a demand for money required for the purchase of investment goods in the moment that a firm decide to invest. Finance is a *revolving fund* that does not require the prior existence of savings: if the aggregate expenditures increase, it is necessary the creation of new money, that can be done by agents' dishoarding or by banks' credit expansion. Banking liquidity is restored as long as the investment expenditures generate a higher income in the economy.
- The funds for the consolidation of the short-term firms' debts into a structure of longer-term financial assets are available as the savings arise *pari passu* with the flux of investments. So, *funding* has an important role to mitigate the increase of the financial fragility typical of monetary economies in their process of growth.

# Concept of “financial system functionality”

- “A financial system is functional to the process of economic development when it expands the use of existing resources in the process of economic development with the minimum possible increase in financial fragility and other imbalances, that may halt the process of growth for purely financial reasons.” (Studart, 1995, p. 64).
- “The financial system...has to meet two criteria of efficiency: It has to provide an *elastic* supply of finance to accommodate growing investment expenditures, and it has to create the direct and indirect finance channels to allow their funding.” (Carvalho, 1997, p. 472)
- The lack of organized and developed financial markets can result that finance will tend to be very short-term and credit rationing may occur in times of growth. Consequently, the financial position of both firms and banks will become more fragile .

# Investments-finance-savings-funding circuit



## Financing requirements for economic development:

- a) According to Gershenkron (1962) the development of late-commer economies is not gradual and continuous process; a functional financial system and/or the presence of the State have a very important role in supporting the "catching-up".
- b) Higher macroeconomic instability in developing economies results in higher risks (market risks, interest rate risks, default risks etc) that can inhibit the development of long-term financial relationship.
- c) Zysman (1983) shows that historically speaking both capital markets and credit based systems have been successful in supporting long-term growth. However, experiences of successful catching-up shows that most economies adopted some sort of credit based-system with the financial support of State, directly (development banks) or indirectly (subsiding financing).

## Financial System and Economic Development in Brazil

- a) Brazil has a credit banking based-system, dominated by big private universal banks and big state-owned banks, such as National Economic Development Bank - BNDES (investments' financing), Banco do Brasil (rural credit) and Caixa Economica Federal (real estate credit).
- b) The lack of a private financial structure to support economic development is an old and well known limitation of the Brazilian financial system.
- c) This problem remains until today in spite of several governmental attempts to solve it, including the 1964-1967's financial reform, which tried to promote the development of a capital market based system and implemented a banking reform inspired in the North-American segmentation of financial system.





# Some structural problems

- Despite of these attempts of developing the financial system in Brazil, all stages of advance in the process of Brazilian economic development, in particular the long-term firms' financing, relied on a combination of self-financing, public credit and foreign capital.
- Structural problems that inhibit the development of long-term financing in Brazil include: very high firms' mark-ups in a very protected domestic market (that favored self-finance); abundance of external funds; increasing inflation after 1973, spread of the mechanism of indexation of financial contracts, etc.

# 1967-1980 “miracle” period

- The financial reforms succeeded in expanding and diversifying the financial system, resulting in the increase of the number of financial institutions in operation in Brazil, and at the same time the ratio total credit to private sector over GDP increased continually from 26% in 1968 to 49% on average in the 1970s.

# 1980s -1994:

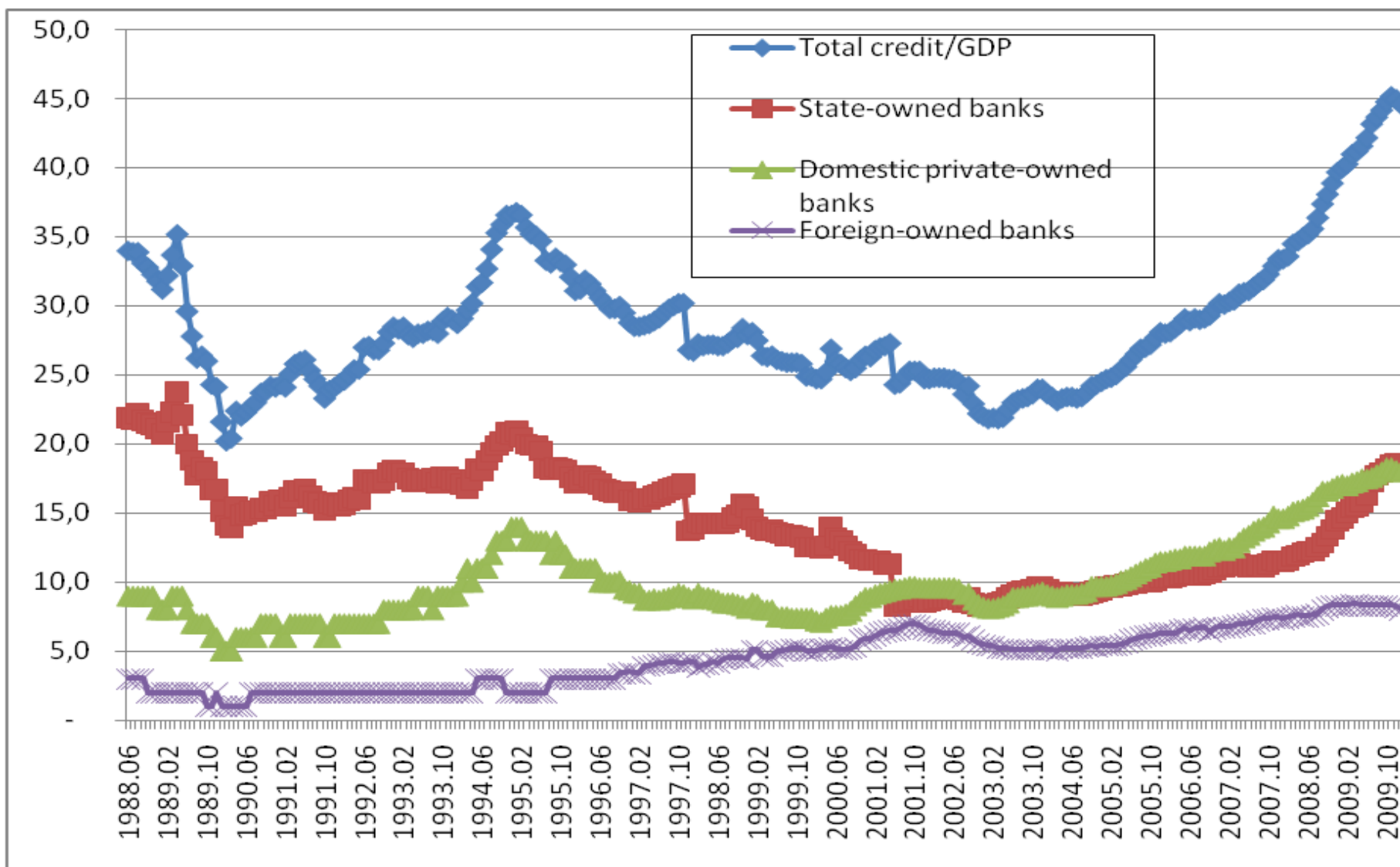
## disfunctionality of the financial system

- External debt crisis and high inflation (sometimes more than 1,000% p.y.) defined a period of stagnation of the Brazilian economy.
- Credit supply declined sharply after 1986 in consequence of macroeconomic instability environment.
- Brazilian government rolled-over domestic public bonds providing interest-rate indexed bonds with high liquidity.
- This allowed the creation of "indexed money" (domestic quasi-money) that avoided the dollarization of the economy and the shrink of the financial system.
- Economy could work with a widespread of indexation, including financial indexation.
- Banking sector not only survived, but also had high profitability with inflation revenues, applying their funds in public bonds.

# After the Real Plan (1994)

- In the beginning of the Real Plan's stabilization program there was a credit mini-boom, that suffered a sudden reversal due to the adoption of the tightened monetary policy after the contagious of Mexican crisis.
- Succession of external crises (Mexican, Asian, Russian, Argentinean) resulted in macroeconomic instability that caused a sharp decline in the credit supply (from 35% of GDP in 1995 to 23% in 2003).
- However, external crises did not result in banking crises!
- Brazilian government implemented some banking restructuring programs, and once again offered public bonds indexed to interest rate and exchange rate, providing a hedge against increases in the interest rate and exchange rate devaluation.

## Credit supply in Brazil (% GDP) 1988-2010



## Economic growth with some macroeconomic stability (2004-2010)

- There was a significant improvement in the external environment since 2003 with worldwide growth and commodities boom.
- Such benign environment allowed some exchange rate stability, some decline in the interest rates, and an improvement in the structure of public debt.
- Domestically, Lula's government economic policy followed the NCM script (inflation targeting regime, primary fiscal surplus, and conservative monetary policy), but with some flexibility in the second term of his government (2007-2010).

# The structure of public debt

**Table 1. Federal domestic securities by type of indexation (as % of the total)**

End of period	Foreign exchange	Reference rate*	Over-Selic	Pre-set	IGP**	IPCA***	Total
2000	22,3	4,7	52,2	14,8	5,9	0,0	100,0
2001	28,6	3,8	52,8	7,8	7,0	0,0	100,0
2002	22,4	2,1	60,8	2,2	11,0	1,6	100,0
2003	10,8	1,8	61,4	12,5	11,2	2,4	100,0
2004	5,2	2,7	57,1	20,1	11,8	3,1	100,0
2005	2,7	2,1	51,8	27,9	8,2	7,4	100,0
2006	1,3	2,2	37,8	36,1	7,2	15,3	100,0
2007	1,0	2,1	33,4	37,3	6,5	19,8	100,0
2008	1,1	1,6	35,8	32,2	5,7	23,6	100,0
2009	0,7	1,2	35,8	33,7	5,0	23,6	100,0
2010	0,6	0,8	32,5	37,9	4,8	23,3	100,0

Source: Central Bank of Brazil

Note: (\*) Reference rate (TR) is calculated using a reducer on TBF (Basic Financing Rate), that is based on the monthly average remuneration of time deposits.

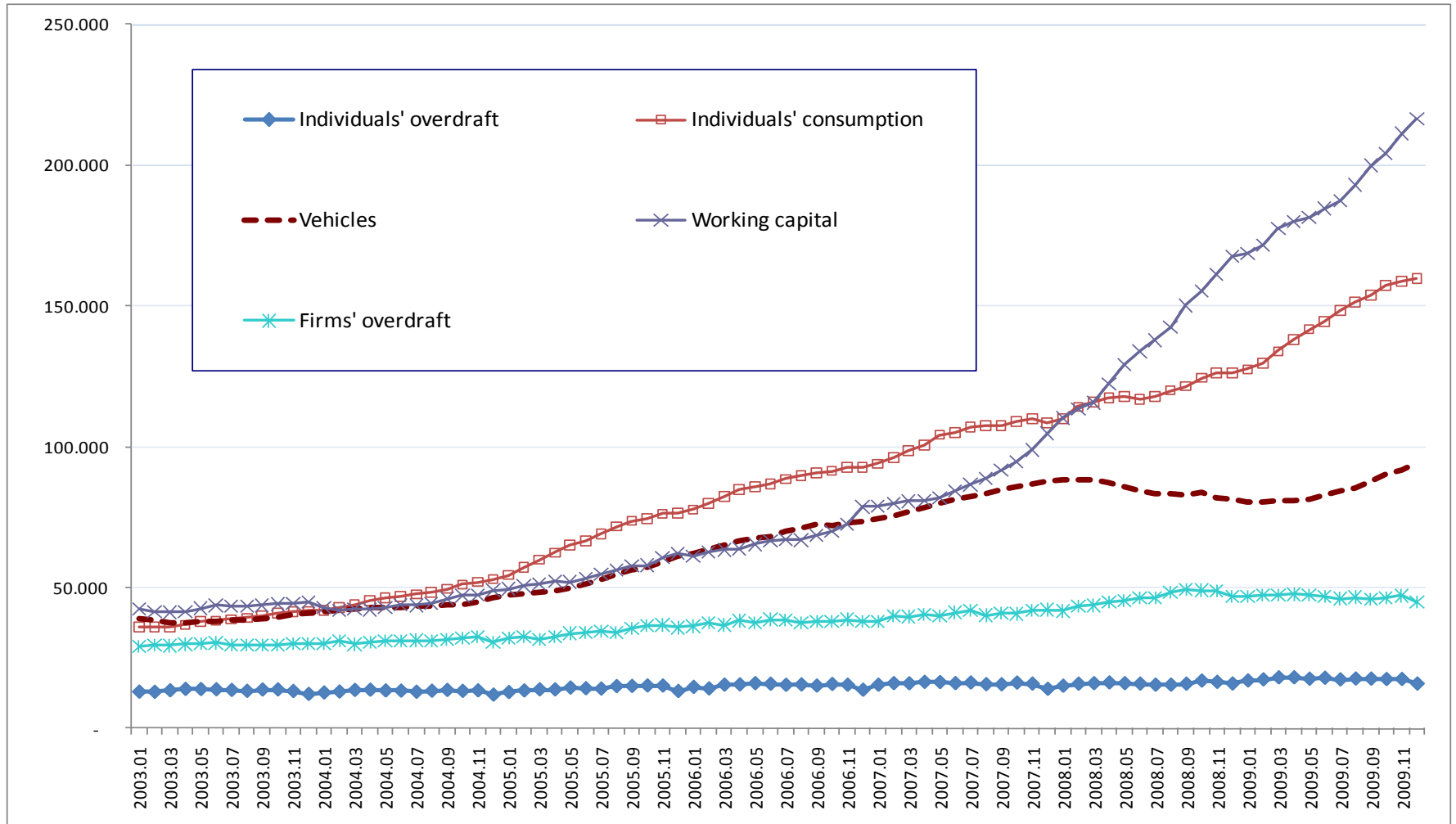
(\*\*) IGP: General Price Index; (\*\*\*) IPCA: Extensive Consumer Price Index (includes also INPC)

# Recovering of the credit since 2004

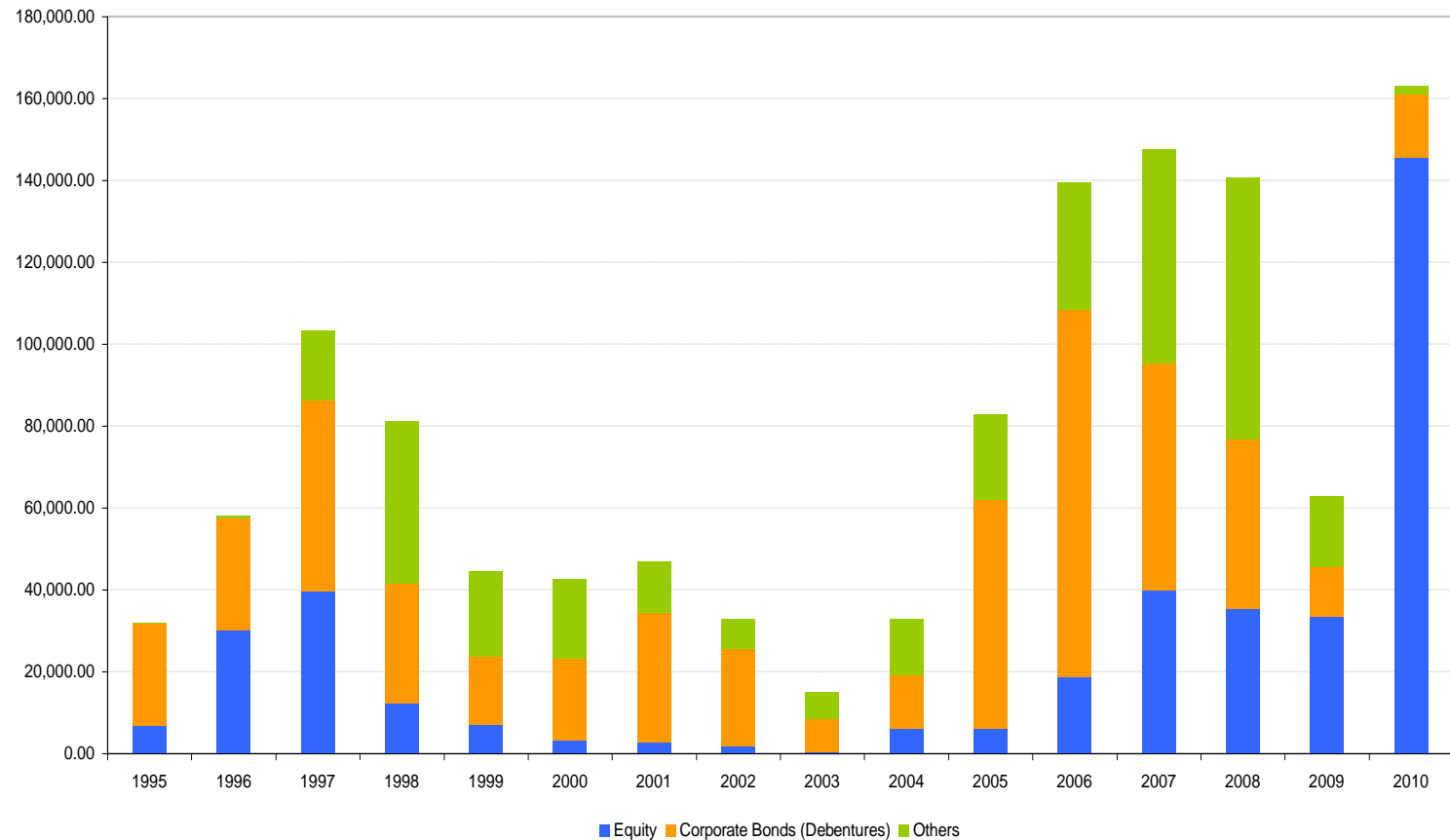
- Compared to the last phase of stagnation (1999-2003), the 2004-2010 period shows:
  - a) Continuous and strong expansion of credit, commanded mainly by private domestic banks. Creation of payroll-discount individuals' credit (2004).
  - b) Strong expansion of capital markets, and, in particular, of the stock market segment.
  - c) Significant recovery of public credit, especially in the 2009-2010, when the federal state-owned banks performed an important contra-cyclical policy in the credit market.



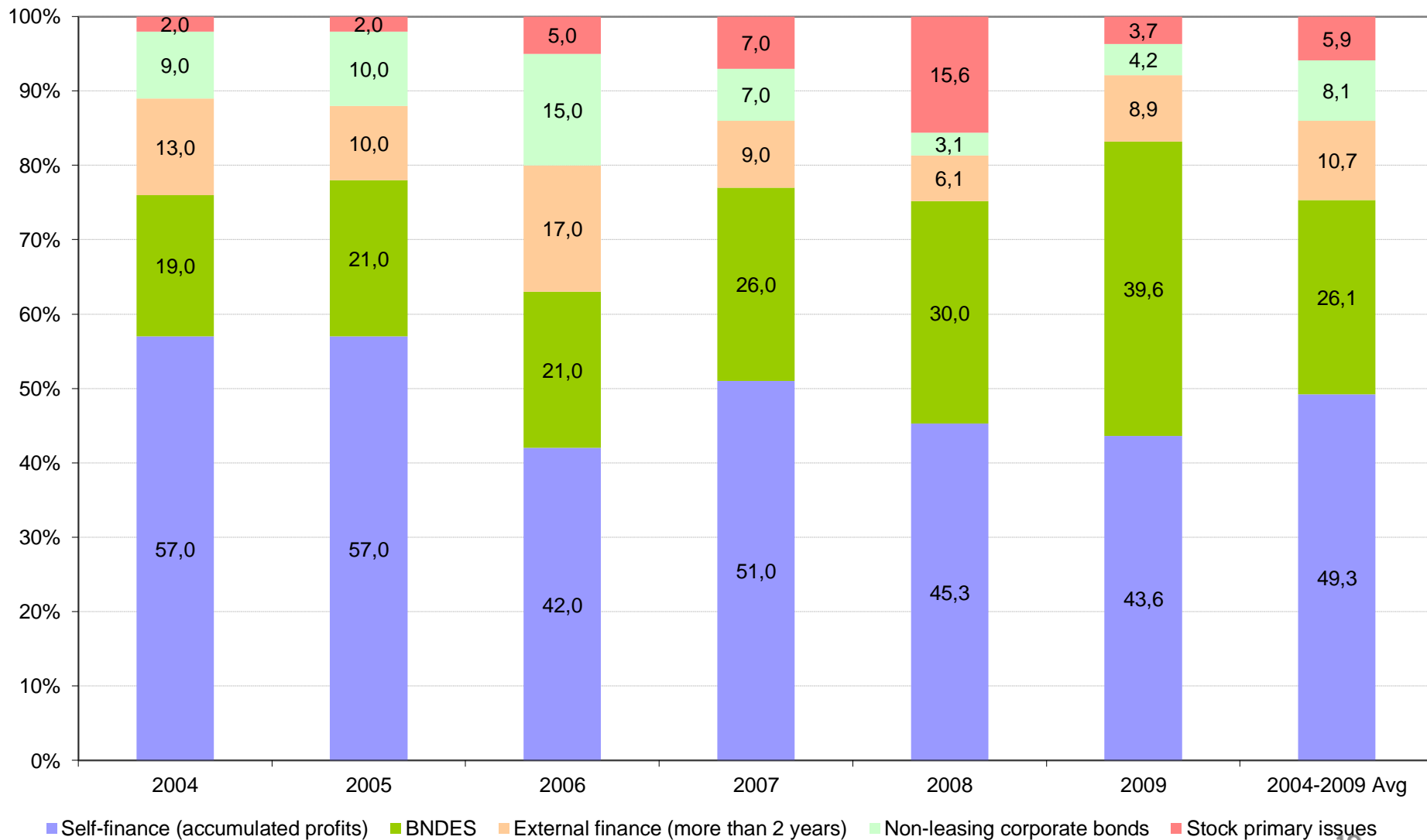
# Main modalities of credit – 2003-2009



# Capital market primary issues in Brazil (R\$ million at 2010 prices) – 1995-2010



# Sources of firms' investments financing (percentage share)



# FINAL REMARKS

- A functional financial system is that financial structure that performs well the functions of finance and funding, that is it supports financially stable growth.
- In case of developing countries, with still underdeveloped financial markets and high macroeconomic uncertainty, one cannot expect that the appropriate financial instruments are created spontaneously by the private markets.
- We showed that during the period of industrialization in Brazil the lack of private long-term financing to firms was a sort of Achilles' heel of the Brazilian capitalism.
- More recently, in spite of the recent growth in either credit or securities markets such growth it is not sufficient to characterize a situation of 'high' functionality of the financial system to economic development. There is still a predominance of a high liquidity preference of the banks, so that credit is mostly short-termist and frequently related to some collateral.
- When we have look at the capital market, we see that recent growth of stock market is associated mostly to the increasing weight of foreign investors, which exposes this market to greater volatility and vulnerability.