Bye, Bye Financial Repression, Hello Financial Deepening:
The Anatomy of a Financial Boom

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UNIVERSAL BANKING CONFERENCE

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Plan of the Presentation

1. Introduction;
2. Description of the Brazilian Banking System;
3. Banking under Hyperinflation;
4. The Real Plan, Banking Crisis and Bail-out;
5. Macroeconomic Turbulence: 1997-2002;
6. The Financial Boom: 2003-today
7. Stability during the Boom and during the 2008 crisis
8. The 2008 International Financial Crisis;
9. Conclusion.

The Brazilian Banking System

- Universal Bank system;
- different types of banks;
- diverse ownership structure;
- important presence of government-owned banks;
- strong intervention of the federal government, in the form of :
  - prudential regulation (as in most banking systems),
  - price regulation (not so common), and
  - direct quantity regulation (through earmarked loans).

The Brazilian Banking System

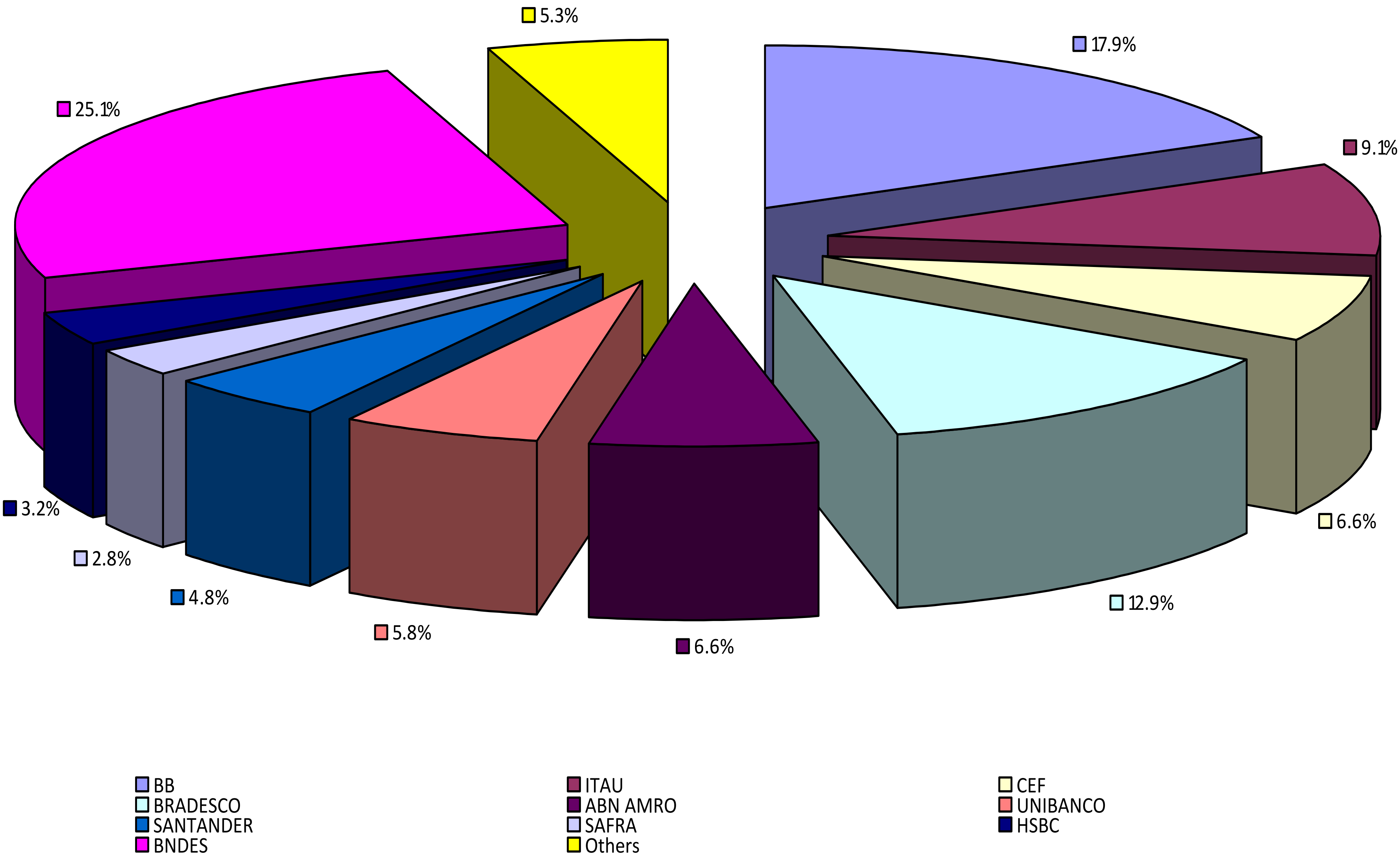
1. The players:
    1. Deposit receiving institutions:
        1. Commercial Banks;
        2. Multiple (i.e. Universal) Banks;
        3. CEF;
        4. Credit Cooperatives;
        5. Investment banks;
        6. Development banks;
            1. BNDES.

The Brazilian Financial System

Segmento	Número de Instituições
Banco Múltiplo	137
Banco Comercial	19
Caixa Econômica Federal	1
Banco de Desenvolvimento	4
Banco de Investimento	16
Banco de Câmbio	1
Sociedade de Arrendamento Mercantil	32
Sociedade de Crédito, Financiamento e Investimento	61
Sociedade de Crédito Imobiliário e Associação de Poupança e Empréstimo	14
Sociedade Corretora de Títulos e Valores Mobiliários	103
Sociedade Corretora de Câmbio	45
Sociedade Distribuidora de Títulos e Valores Mobiliários	125
Agência de Fomento	15
Companhia Hipotecária	7
Cooperativa de Crédito	1.376
Sociedade de Crédito ao Microempreendedor	46
Sociedade Administradora de Consórcio	300

Fonte: BCB

Chart 3: Market Structure, by credit assets in June 2007



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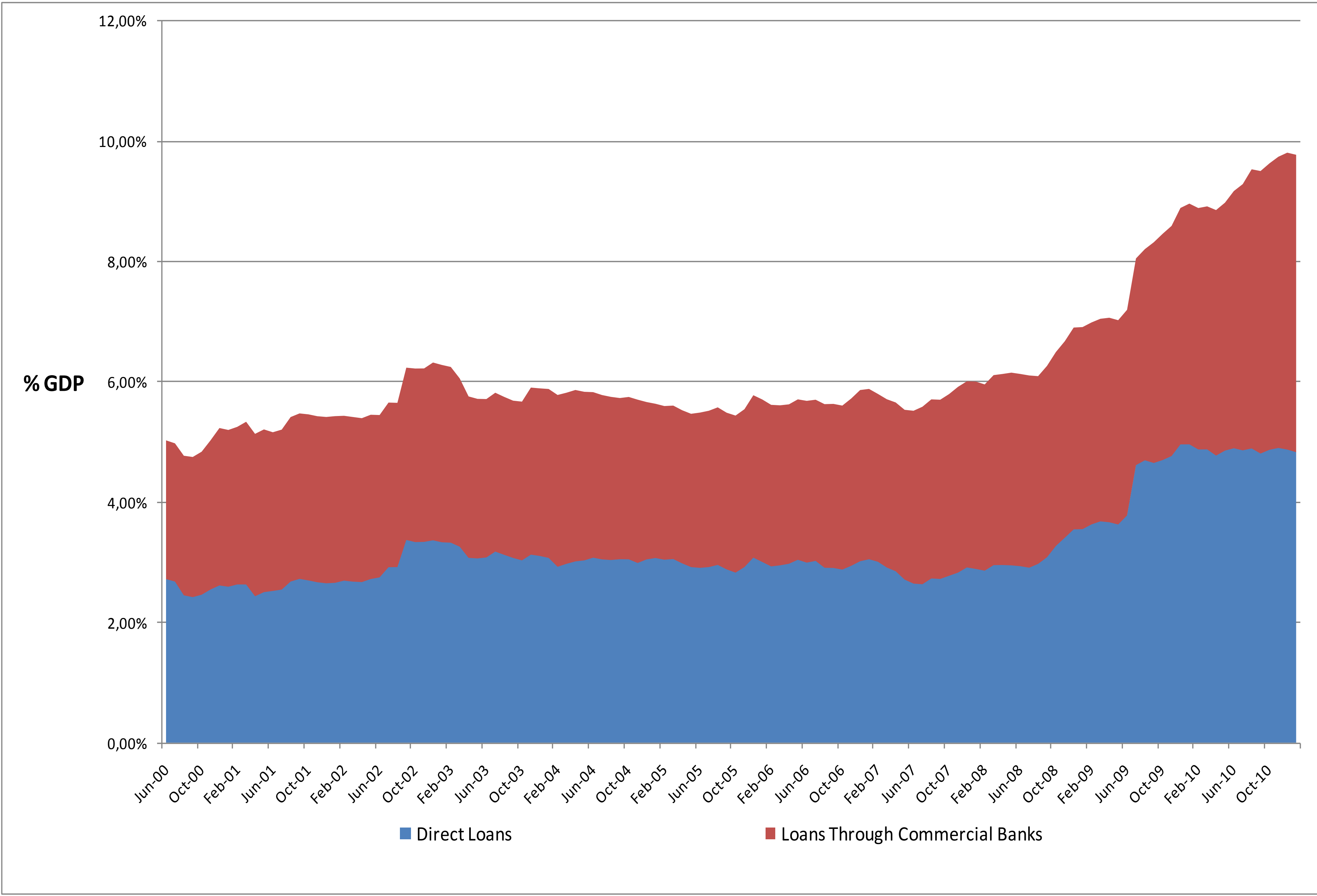
            1. BNDES.
    2. The BNDES;

Chart 9 – BNDES Credit



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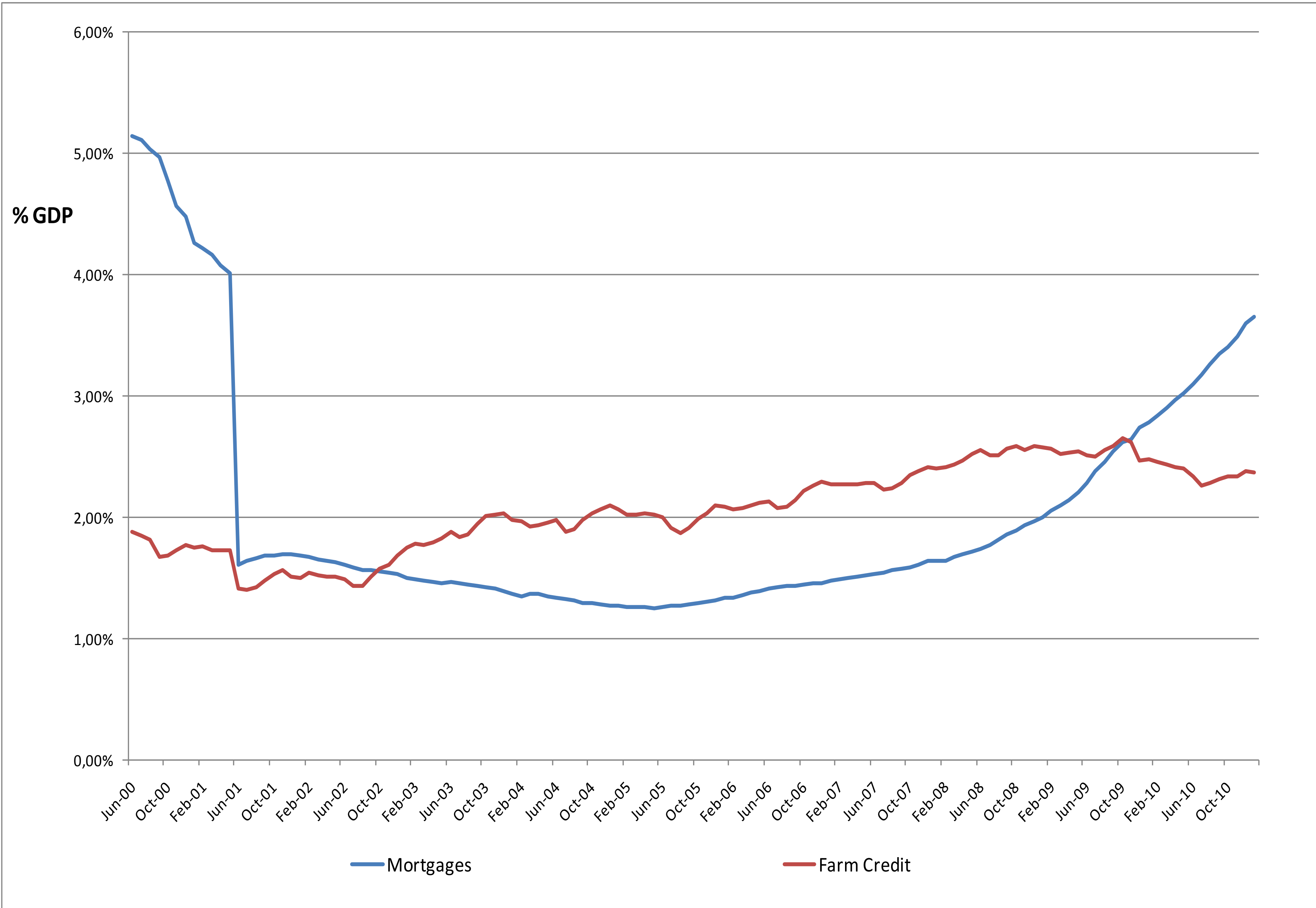
    2. The BNDES;
    3. The dual nature: Private x Public.

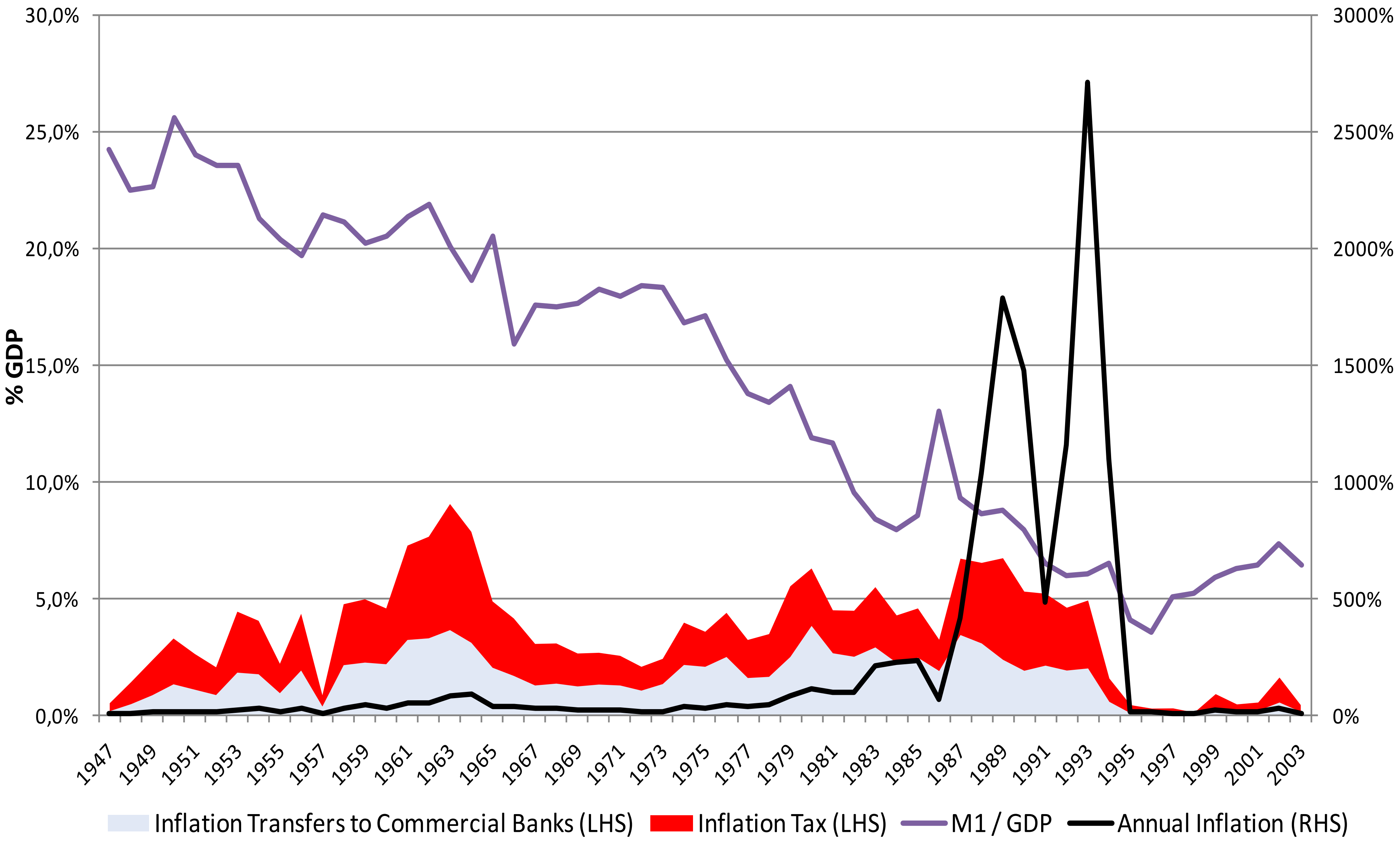
Chart 8 – Earmarked Operations (%GDP)



From Segregate to Universal Banking

- The reforms of the mid-60s: segregate banks;
- COSIF (1988): recognition of the Universal Bank (*banco múltiplo*);
- New chartering system to foster competition (end of *carta-patente*).

Banking under Hyperinflation: The Bank Float



Source: Cysne (2004)

The *Real* Plan, Banking Crisis and Bail-out

- End of bank float => banking crisis;
- PROER (0,9% of GDP):
  - Private banks;
  - Good bank, bad bank resolution;
- PROES (5,7% of GDP):
  - State-owned banks (province level);
  - Bridge bank resolution;
- PROEF (2,1% of GDP):
  - "toxic waste" assets are transferred to ENGEA;
- FCVS – Mortgages (8,7% of GDP).
- FGC, mandatory private deposit insurance.

Chart 5 – SFN/GDP credit

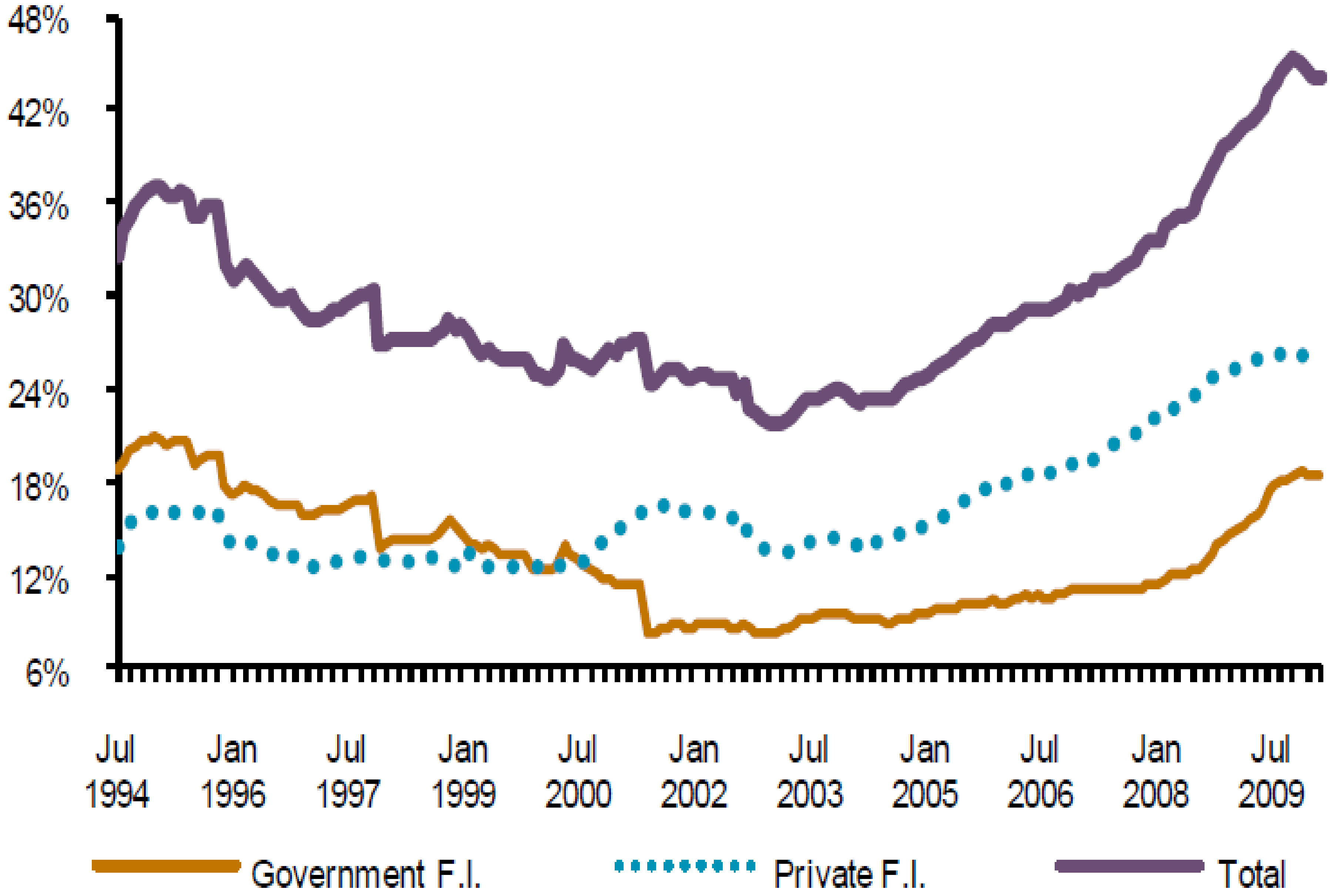


Chart 1 – Total Credit (% of GDP)

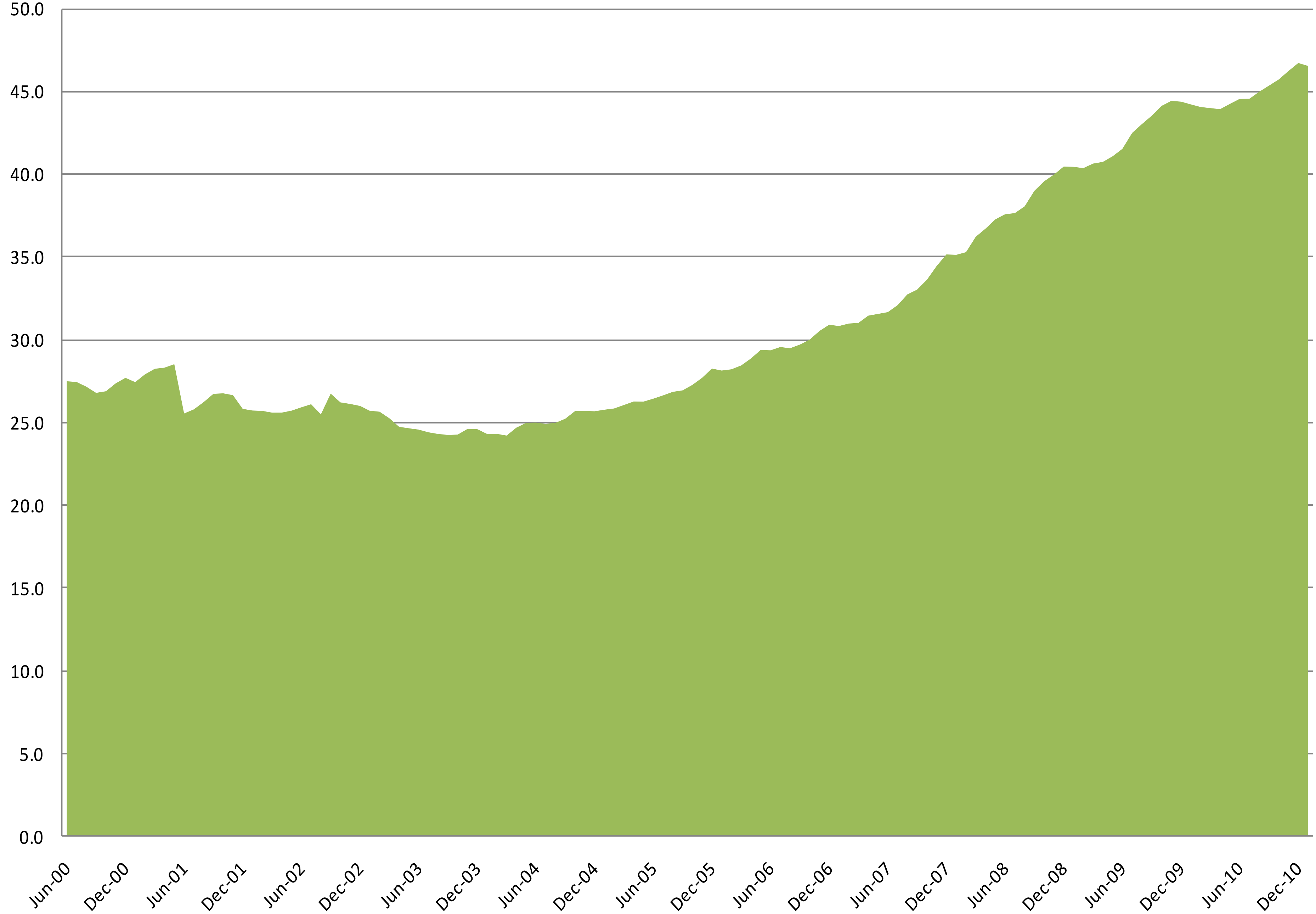
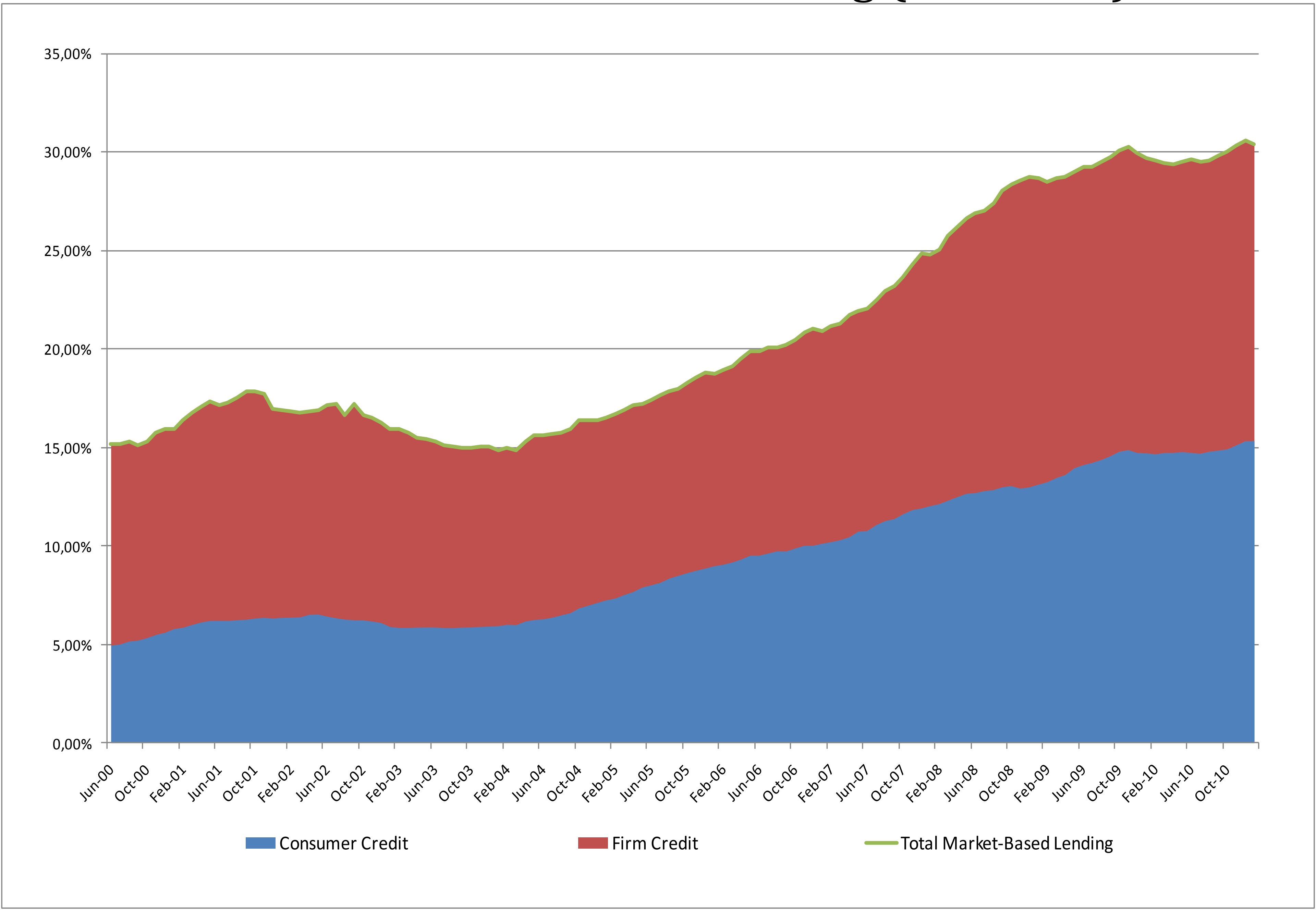


Chart 2 – Market-based Lending (% of GDP)



The Credit Boom

- The previous charts show the unequivocal increase in financial intermediation in Brazil after 2003 (Lula government).
- What explains such increase?
- Was it accompanied by an increase in risk taking by banks?
- Or was it driven by institutional improvements?
- Understanding the main driving forces behind the deepening of the Brazilian financial sector informs not only on Brazil, but on other similar and dissimilar countries facing financial booms.

The Mechanisms behind the Credit Boom

1. banks had been deprived of inflationary float from the pre-stabilization period, and had to look for other sources of revenue;
2. through the banking lending, decreases in basic interest rates reduced cost of funding for banks, i.e., a reduction in marginal costs (see Chart 7);
3. institutional improvements that reduced both the fixed and sunk costs of banking operations, as well a marginal costs;
4. potential improvements in credit market competition, as banks moved their intermediation business away from government bonds to consumer and banks credit.

Chart 6 – Bank Spreads

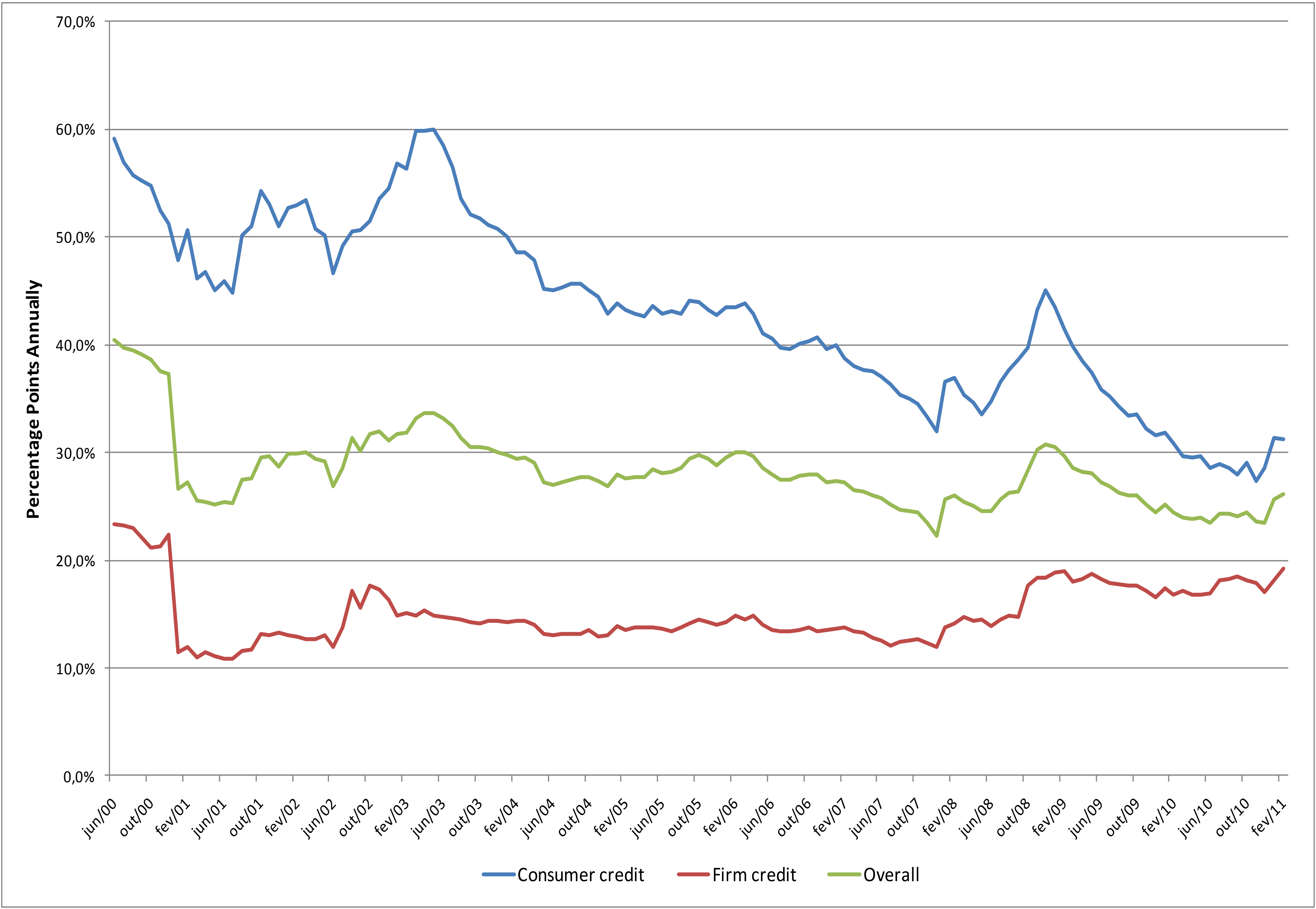
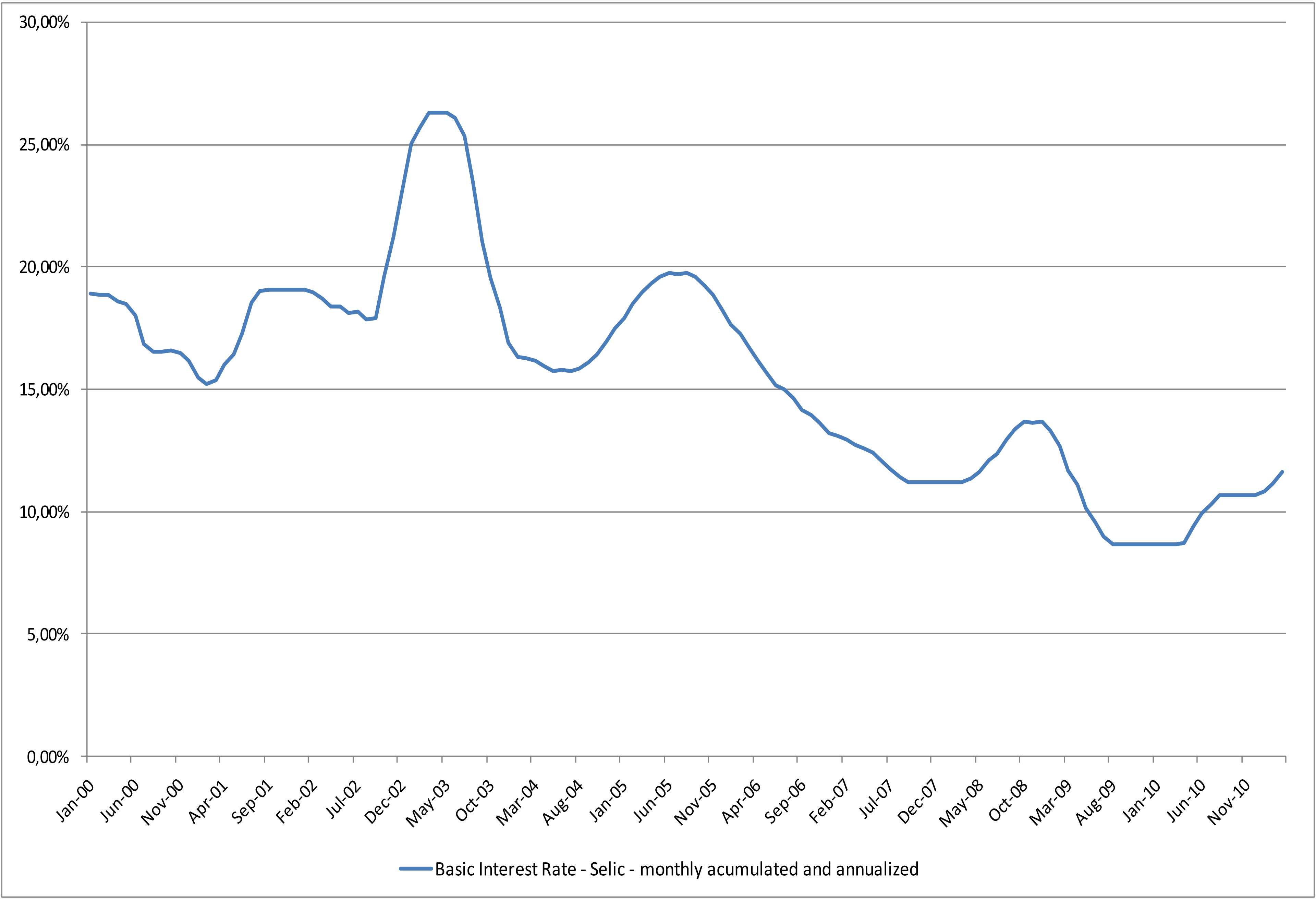


Chart 7 – Basic Rate

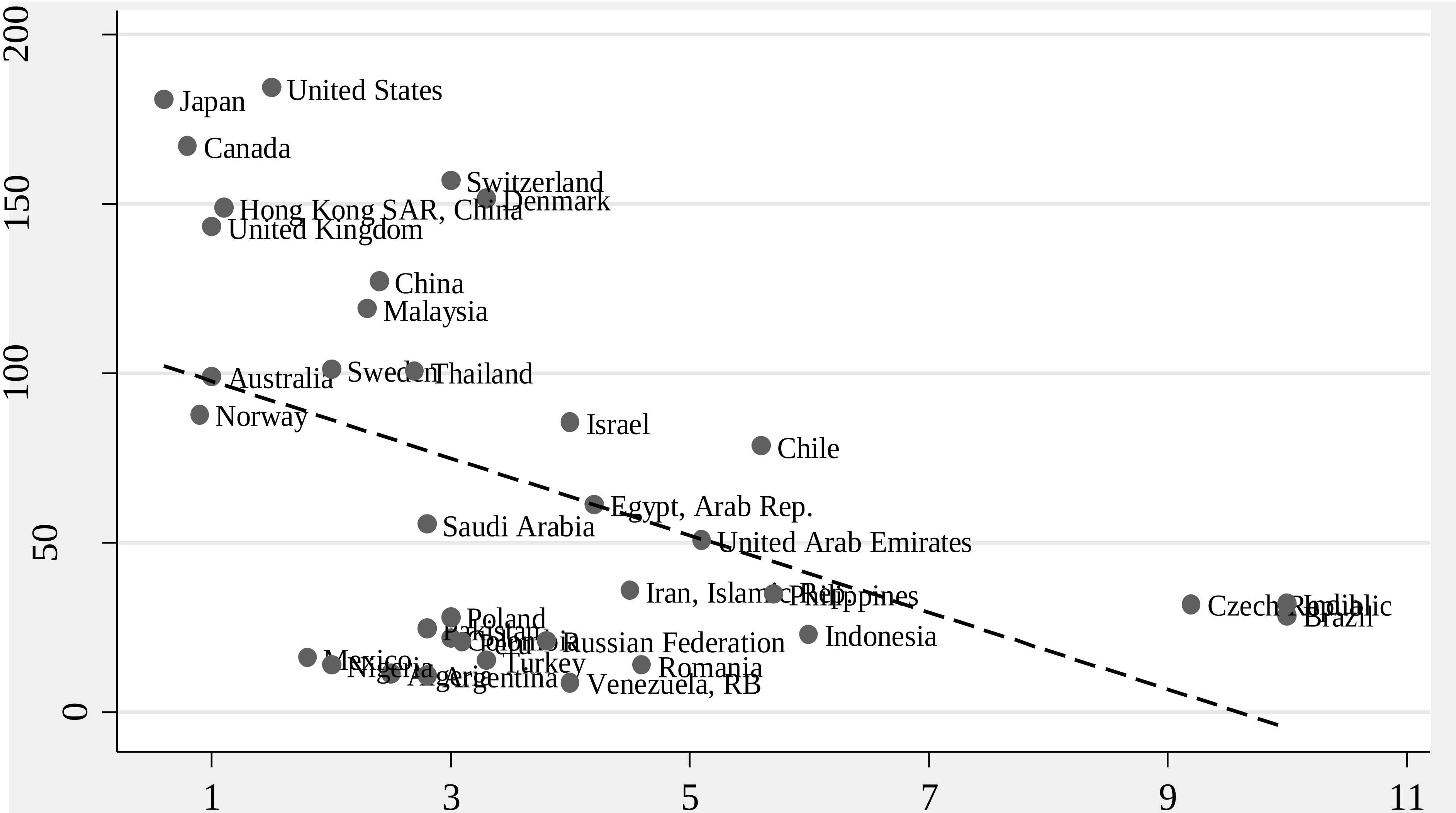


Brazil vis-à-vis the World

Table 1 – Domestic Credit by the Banking Sector (% of GDP)

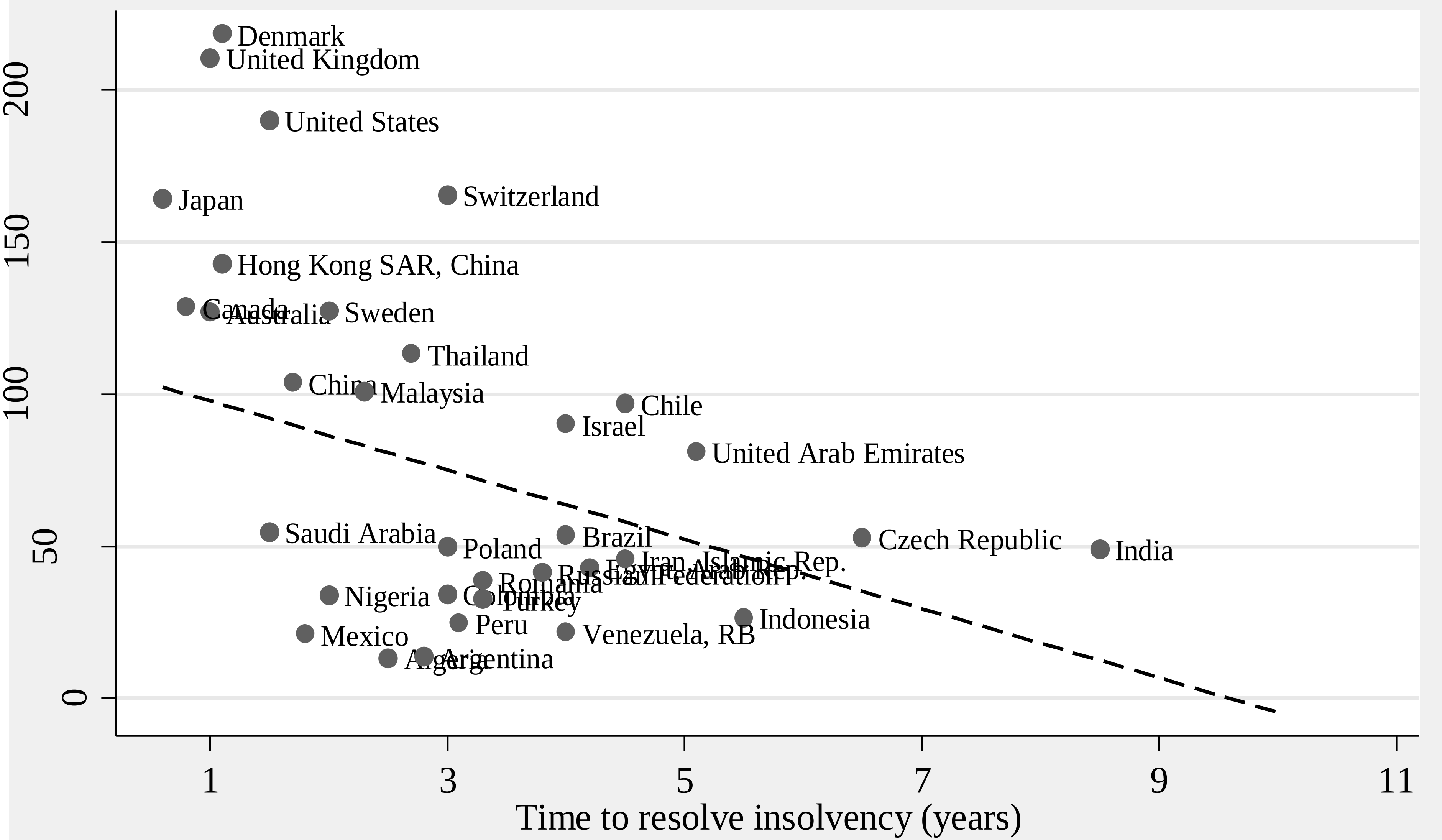
Country	Year is 2003	Ranking	Country	Year is 2008	Ranking
United States	184	1	Denmark	218	1
Japan	181	2	United Kingdom	210	2
Canada	167	3	United States	190	3
Switzerland	157	4	Switzerland	165	4
Denmark	152	5	Japan	164	5
Hong Kong SAR, China	149	6	Hong Kong SAR, China	143	6
United Kingdom	143	7	Canada	129	7
China	127	8	Sweden	127	8
Malaysia	119	9	Australia	127	9
Sweden	101	10	Thailand	113	10
Thailand	100	11	China	104	11
Australia	99	12	Malaysia	101	12
Israel	85	13	Chile	97	13
Chile	78	14	Israel	90	14
Egypt, Arab Rep.	61	15	United Arab Emirates	81	15
Saudi Arabia	55	16	Saudi Arabia	55	16
United Arab Emirates	51	17	Brazil	54	17
Iran, Islamic Rep.	36	18	Czech Republic	53	18
Czech Republic	32	19	Poland	50	19
Brazil	**29**	**20**	Iran, Islamic Rep.	46	20
Poland	28	21	Egypt, Arab Rep.	43	21
Indonesia	23	22	Russian Federation	41	22
Colombia	22	23	Romania	38	23
Russian Federation	21	24	Colombia	34	24
Peru	21	25	Nigeria	34	25
Mexico	16	26	Turkey	33	26
Turkey	15	27	Indonesia	27	27
Nigeria	14	28	Peru	25	28
Romania	14	29	Venezuela, RB	22	29
Algeria	11	30	Mexico	21	30
Argentina	11	31	Argentina	14	31
Venezuela, RB	9	32	Algeria	13	32
Mean	72			83	
Median	53			54	
Standard Deviation	59			60	

Chart 10 – Domestic Credit by the Banking Sector (% of GDP) – Year 2003



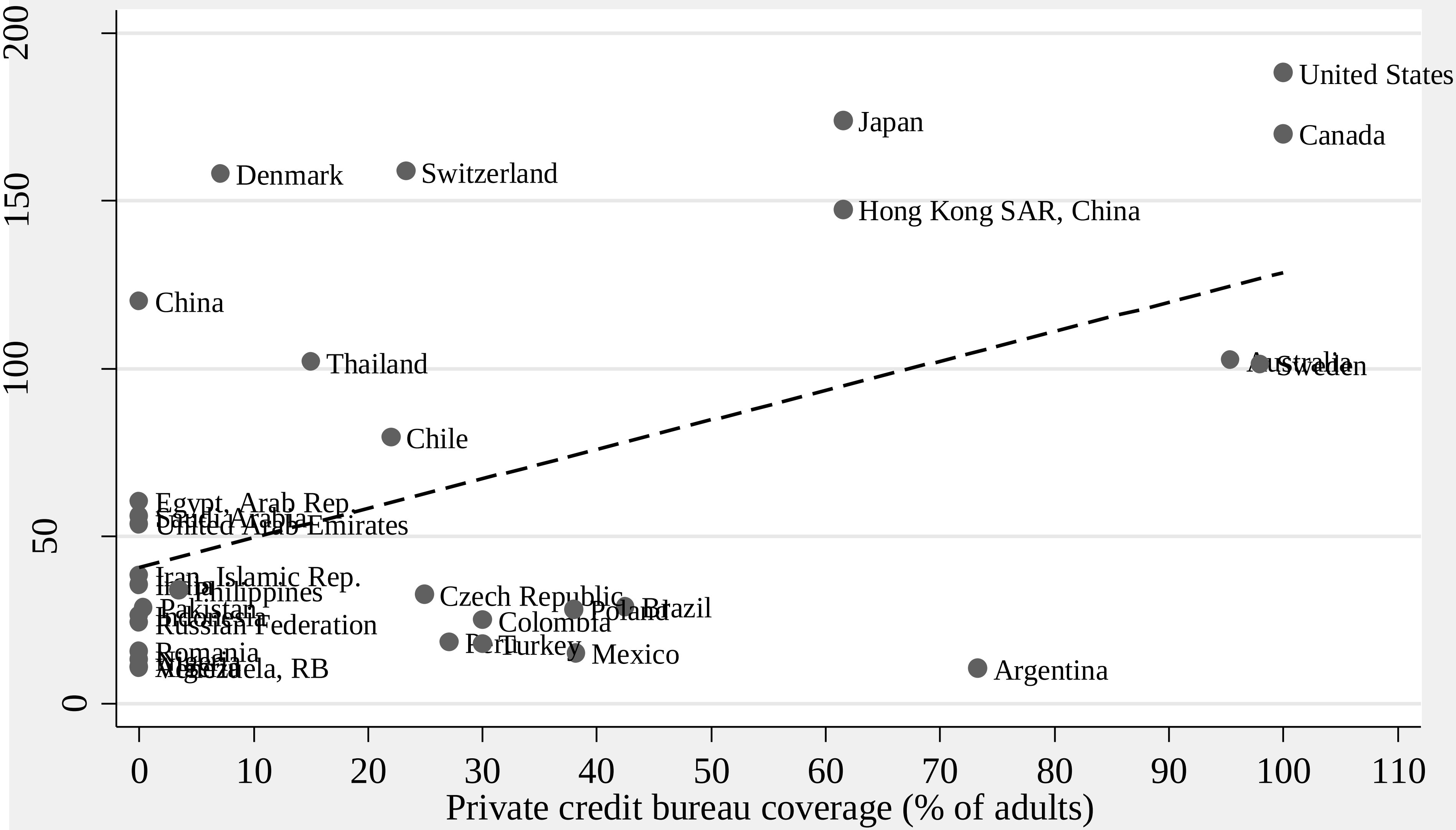
Source : World Bank

Chart 11 – Domestic Credit by the Banking Sector (% of GDP) – Year 2008



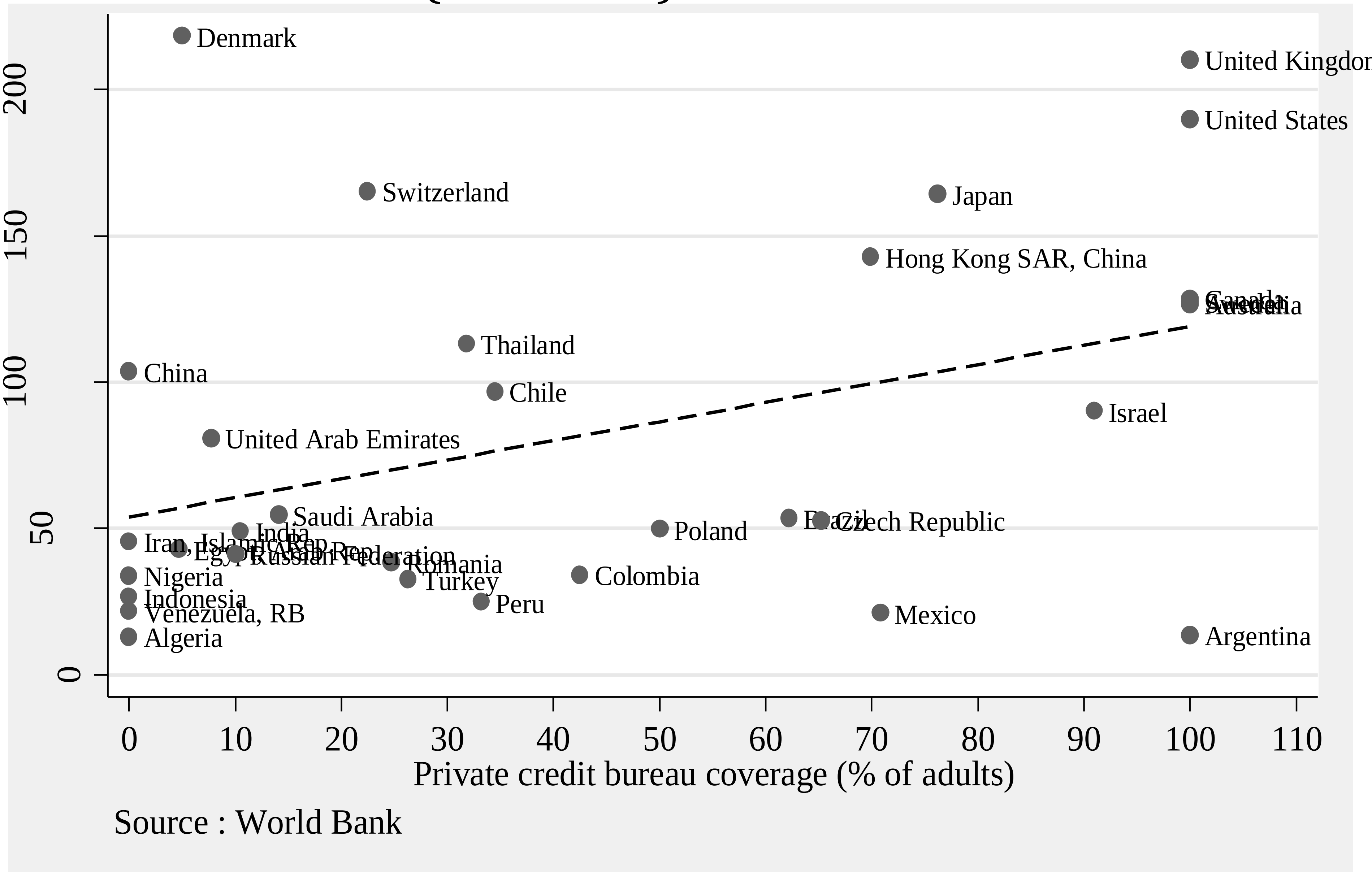
Source : World Bank

Chart 12 – Domestic Credit by the Banking Sector (% of GDP) – Year 2004



Source : World Bank

Chart 13 – Domestic Credit by the Banking Sector (% of GDP) – Year 2008



Micro-level Institutional Improvements

- Payroll Lending;

Chart 14 – Stock of Personal Loans (R$ Billions)

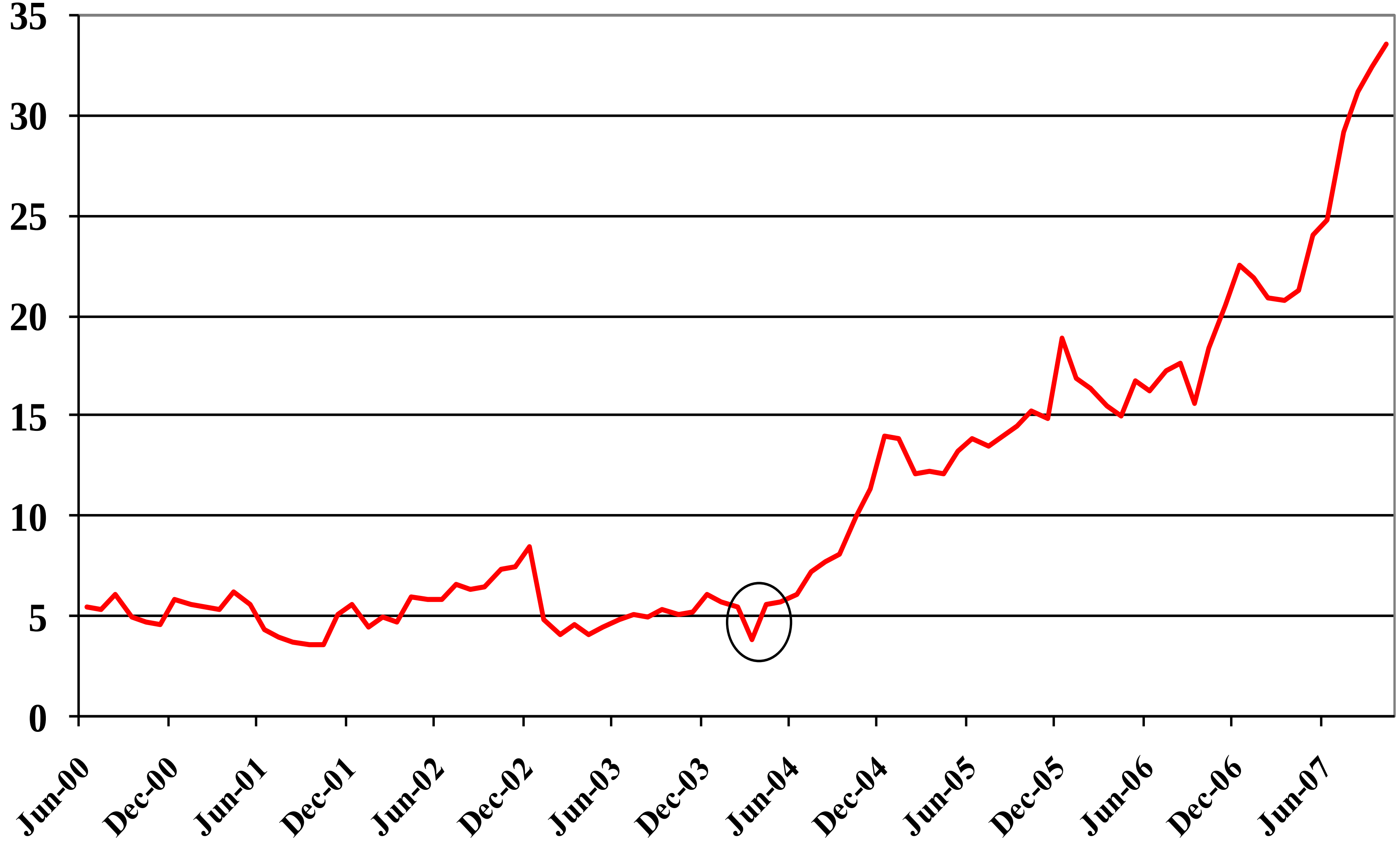
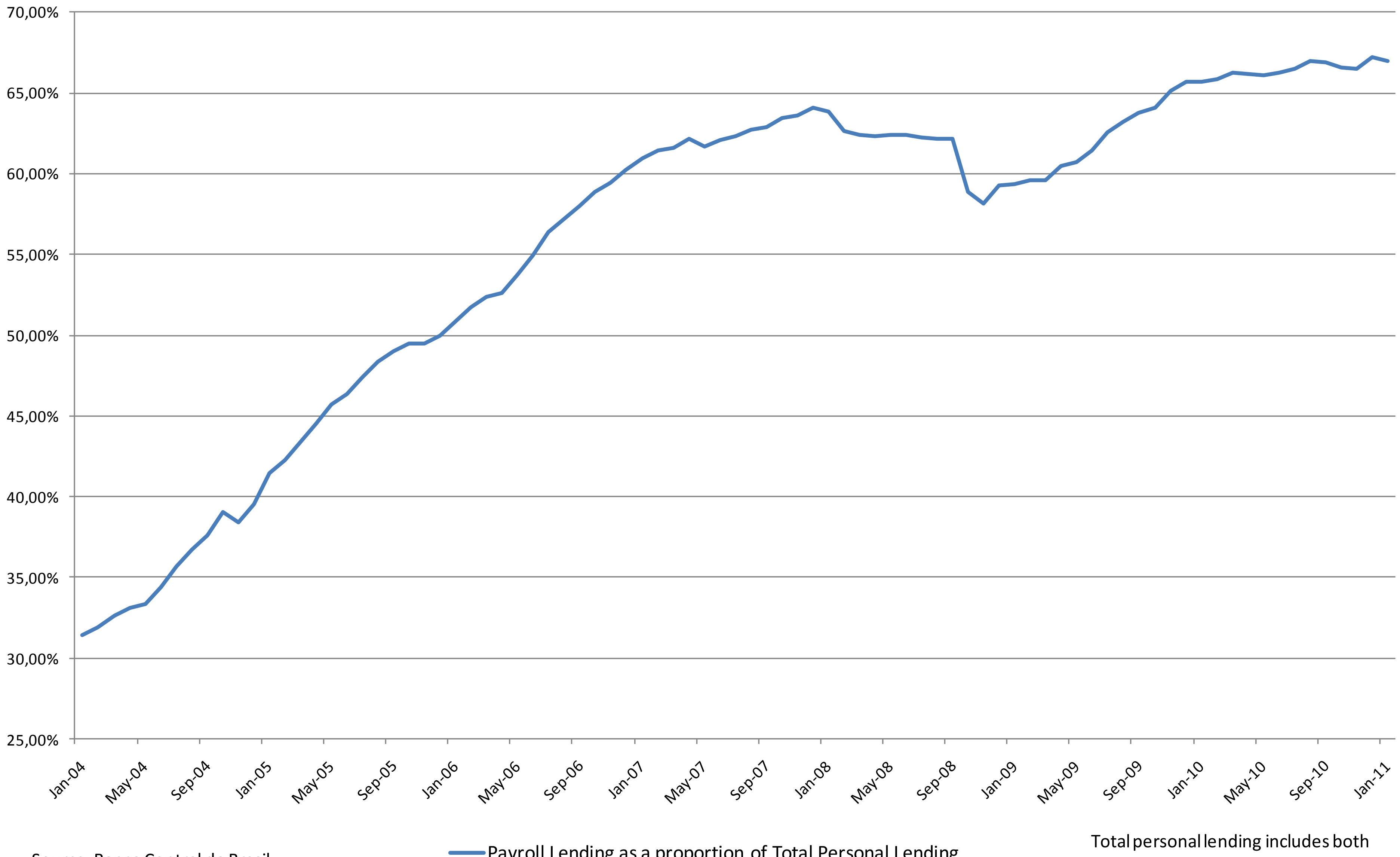


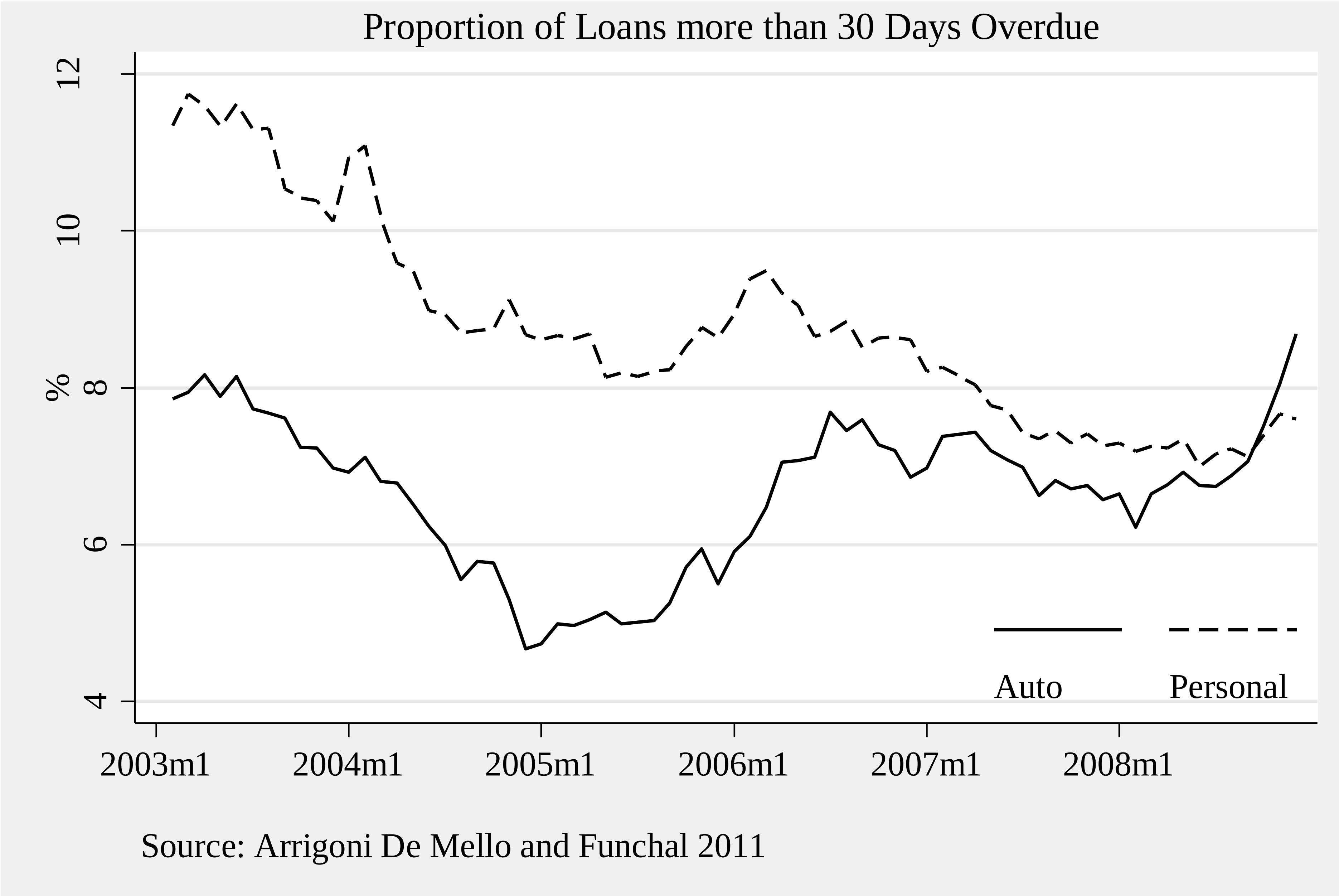
Chart 15 – Payroll Lending as a Proportion of Total Personal Lending



Source: Banco Central do Brasil

Total personal lending includes both payroll and non-payroll personal loans.

Chart 16 – Delinquency Rates: Auto versus Personal Loans

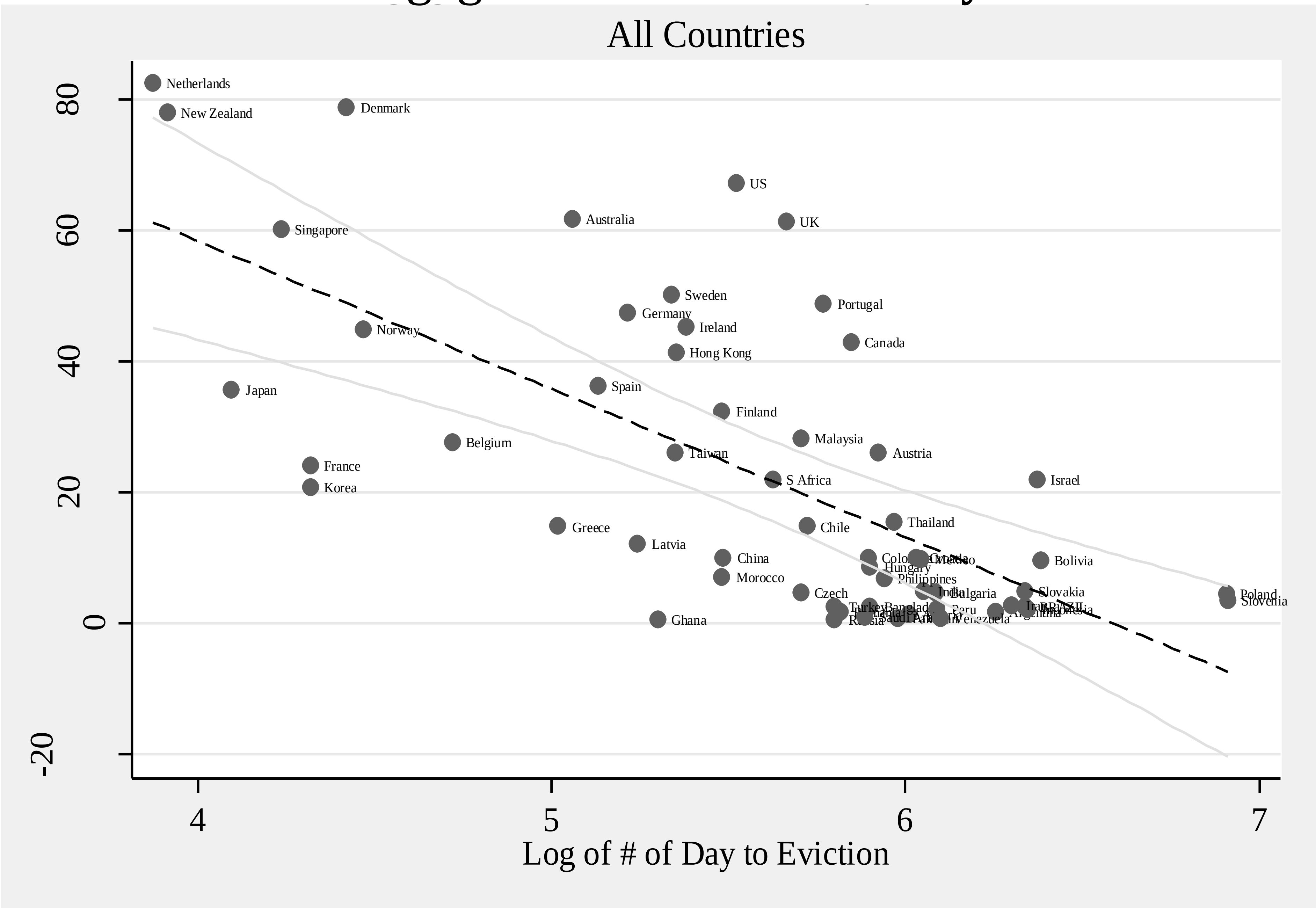


Micro-level Institutional Improvements

- Payroll Lending;
- New Bankruptcy Law;
- *Alienação Fiduciária* (*leasing*) for physical assets (securities already had it).

The Missing Market: Mortgages

Chart 18 – Mortgages as a Function of Days to Eviction



Stability during the Boom and during the 2008 Crisis

Chart 19 – Delinquent More Than 90 Days as a Proportion of Assets

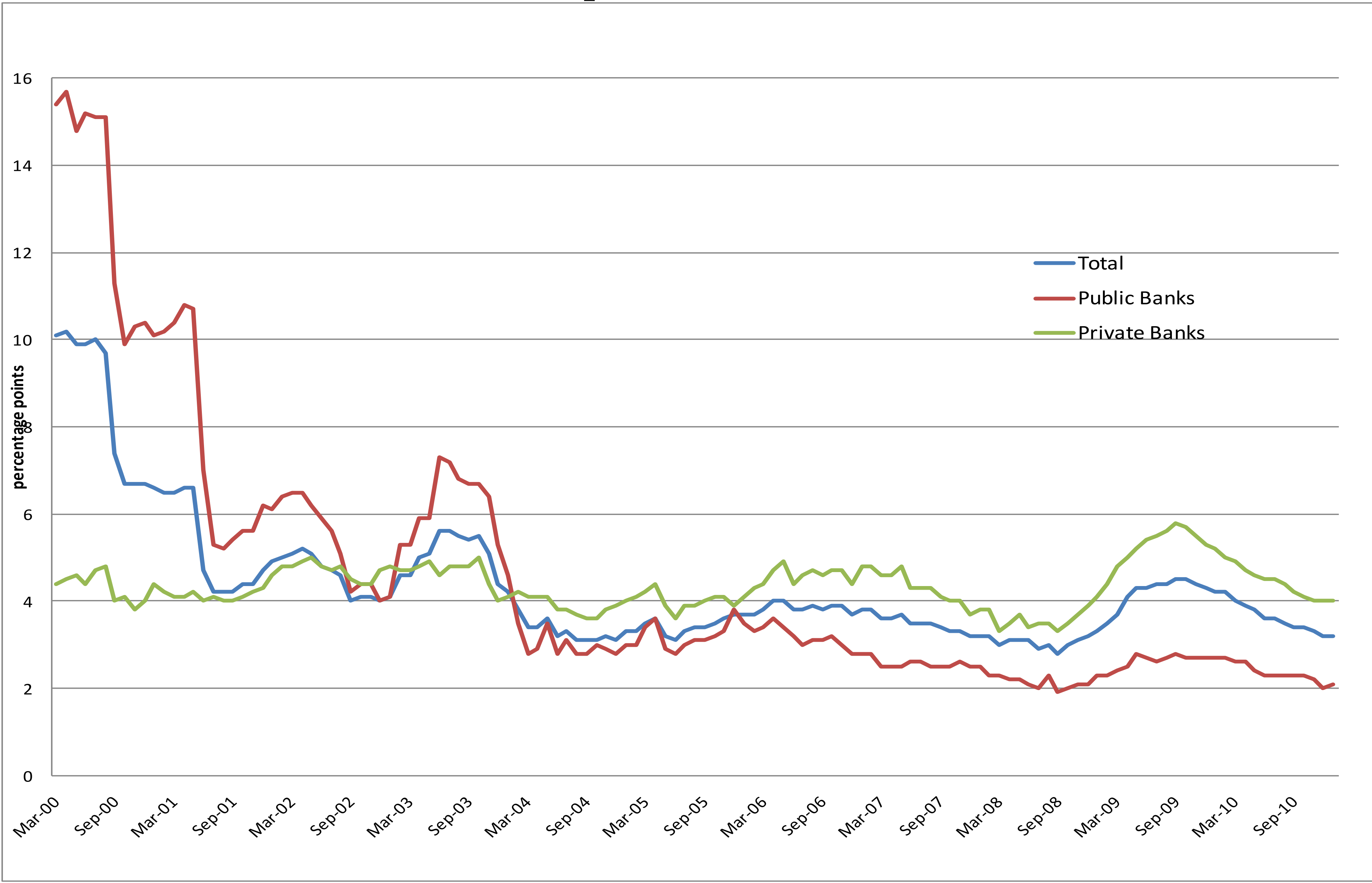


Chart 20 – Capital Adequacy Ratio in the Brazilian Banking System

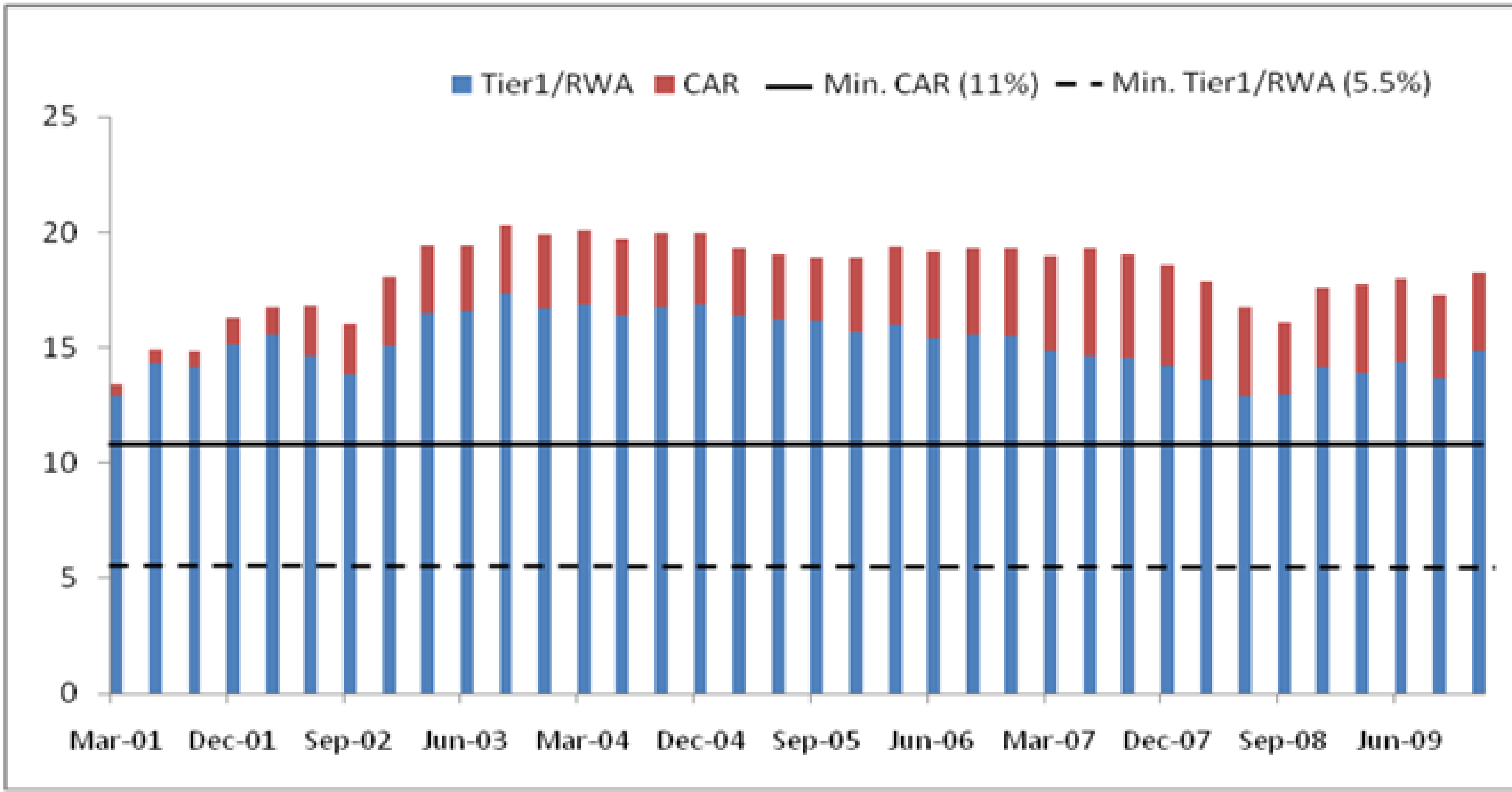


Figure 1. The capital adequacy ratio in the Brazilian banking system. The graph shows the quarterly evolution of capital adequacy ratio (CAR) and tier 1 ratio (Tier1/RWA) of commercial-type banking firms in Brazil between 2001 and 2009. The capital ratios are calculated as the total regulatory capital and the tier 1 capital over the total risk weighted assets in a specific quarter.

Table 2 – Comparison between the Basel Ratios of Various Countries

G-20 countries	Date of latest available data	Regulatory capital on risk-weighted assets	Regulatory capital on risk-weighted assets (Tier 1)
Australia	Q 4 2009	11.3	8.4
Brazil	Q 4 2009	18.8	14.9
Canada	Q 4 2008	12.2	9.8
France	A 2008		8.3
Germany	Q 4 2009	14.8	10.8
India	A 2008	13	9.1
Indonesia	A 2008	17.5	15.4
Italy	A 2007	10.1	7.1
South Korea	Q 3 2009	14.2	10.8
Mexico	Q 4 2008	15.2	13.5
Russian Federation	SA 4 2009.1	18.5	13.1
South Africa	A 2008	13	10.2
Turkey	Q 4 2009	20.6	18.6
United Kingdom	SA 4 2009.1	13.3	10.2

Why Brazilian Banks look so Prudent? A few conjectures

1. *de jure* unlimited liability on banks' management;
2. concentrated ownership structure of large and listed banks;
3. large deposit base and little reliance on wholesale funding;
4. strong regulation and supervision;
5. very high interest rate.

- Thank you