



**BANCO CENTRAL  
DO BRASIL**

# Brazil: Responses to the Financial Crisis

**Mario Torós**

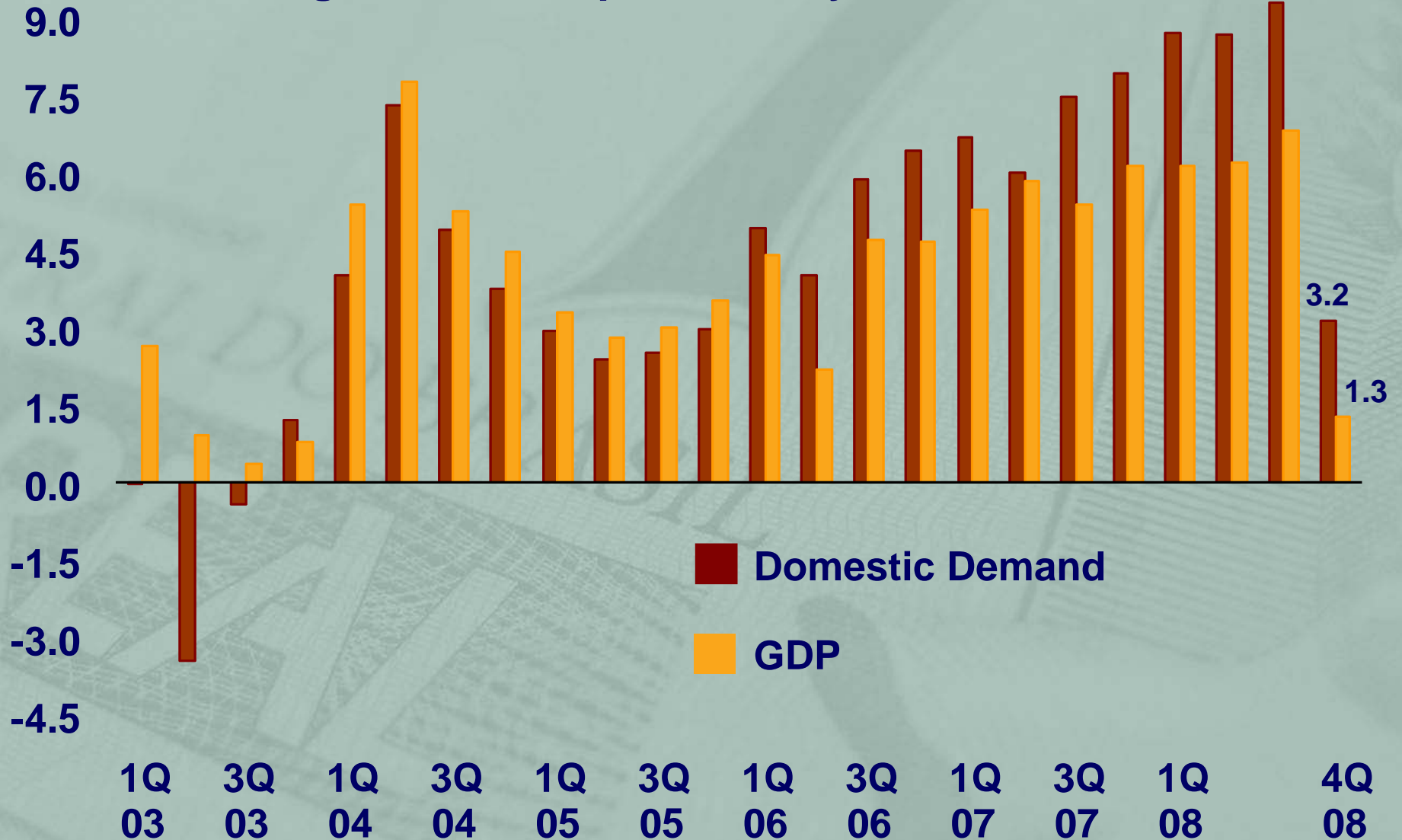
**Lima, Peru**

**March 2009**

# I. Domestic Economic Conditions

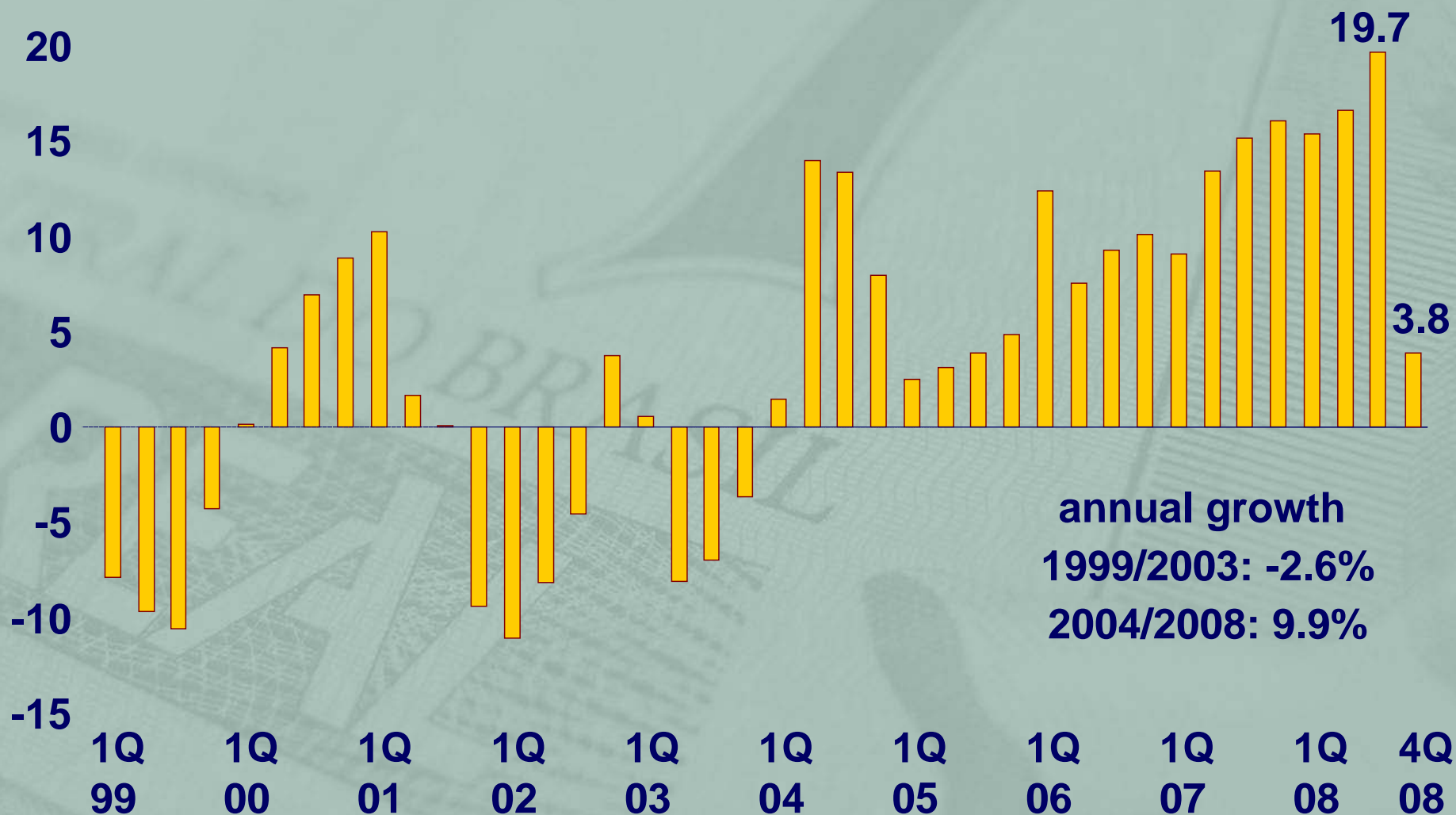
# Domestic Demand x Supply

% against same quarter the year before

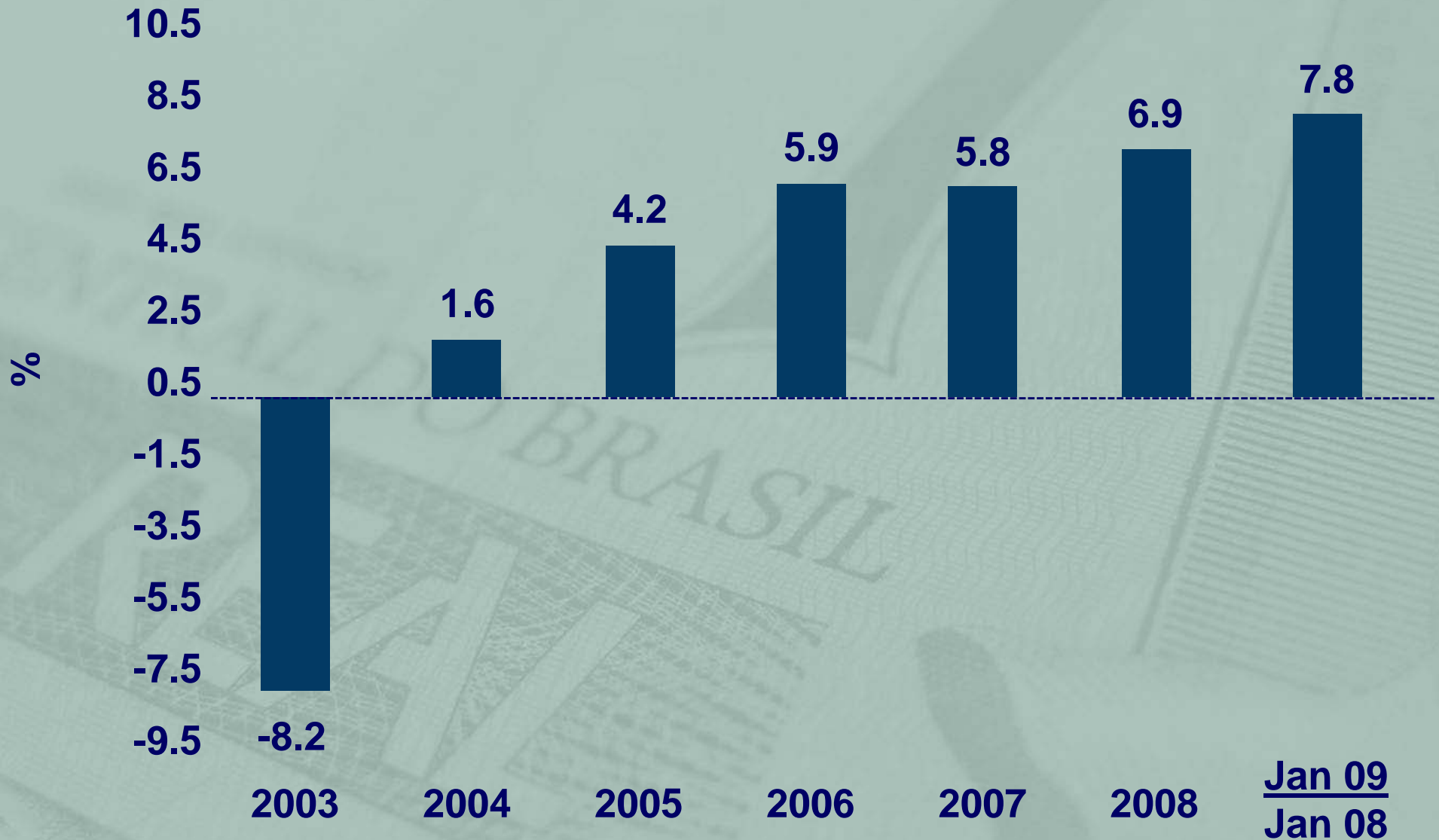


# Investment Growth

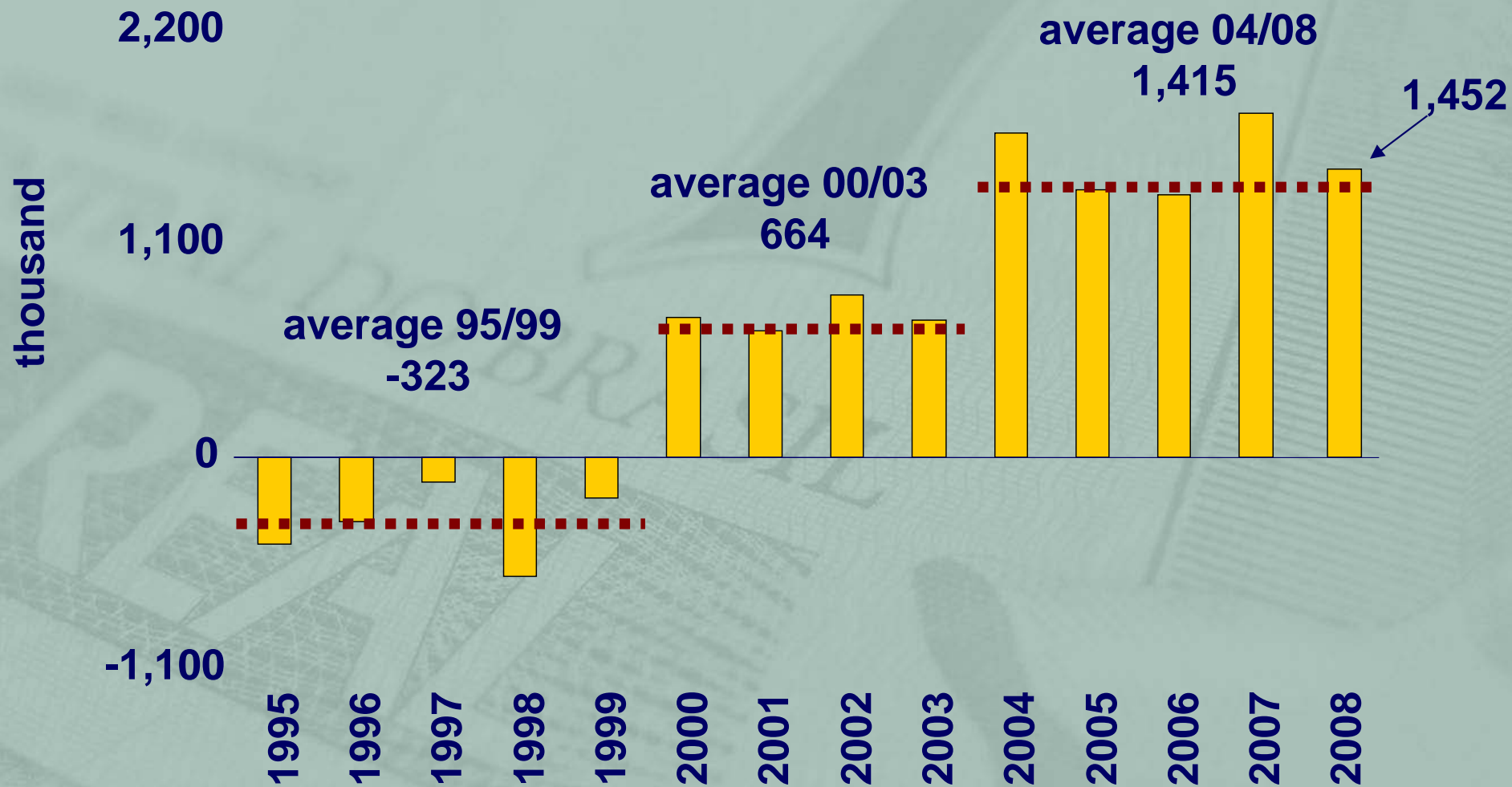
% against same quarter the year before



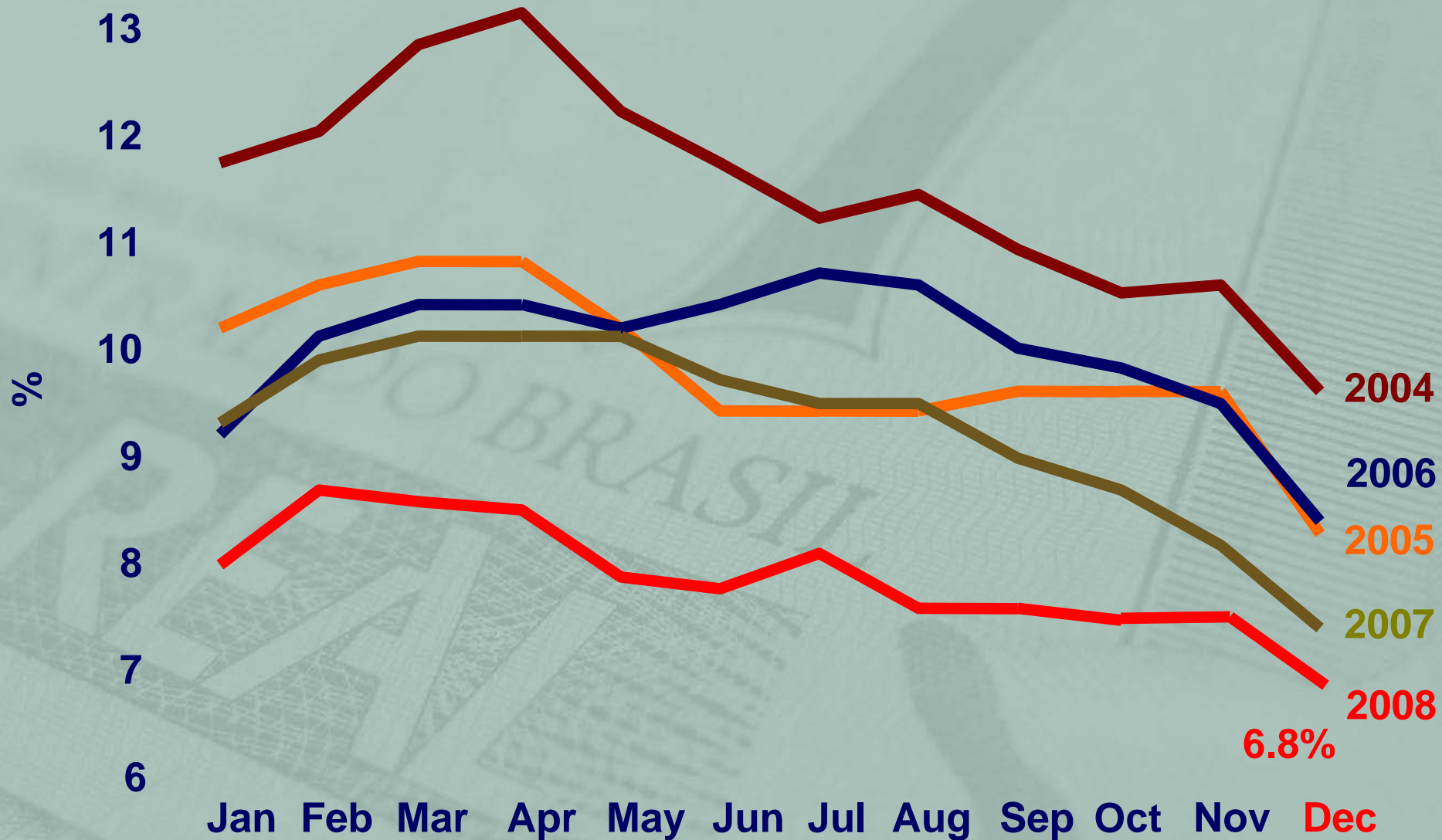
# Payroll



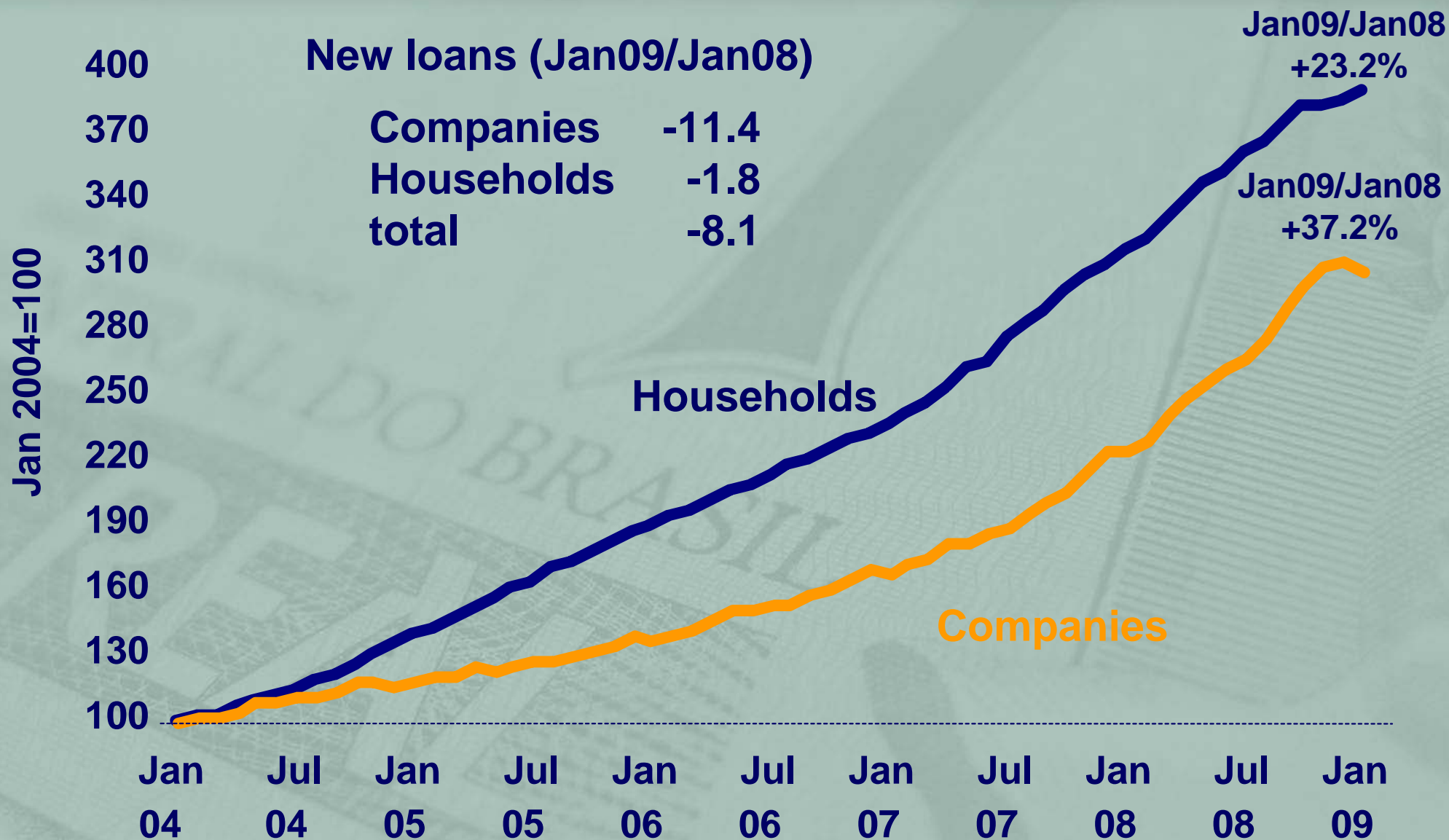
# Job Creation



# Unemployment

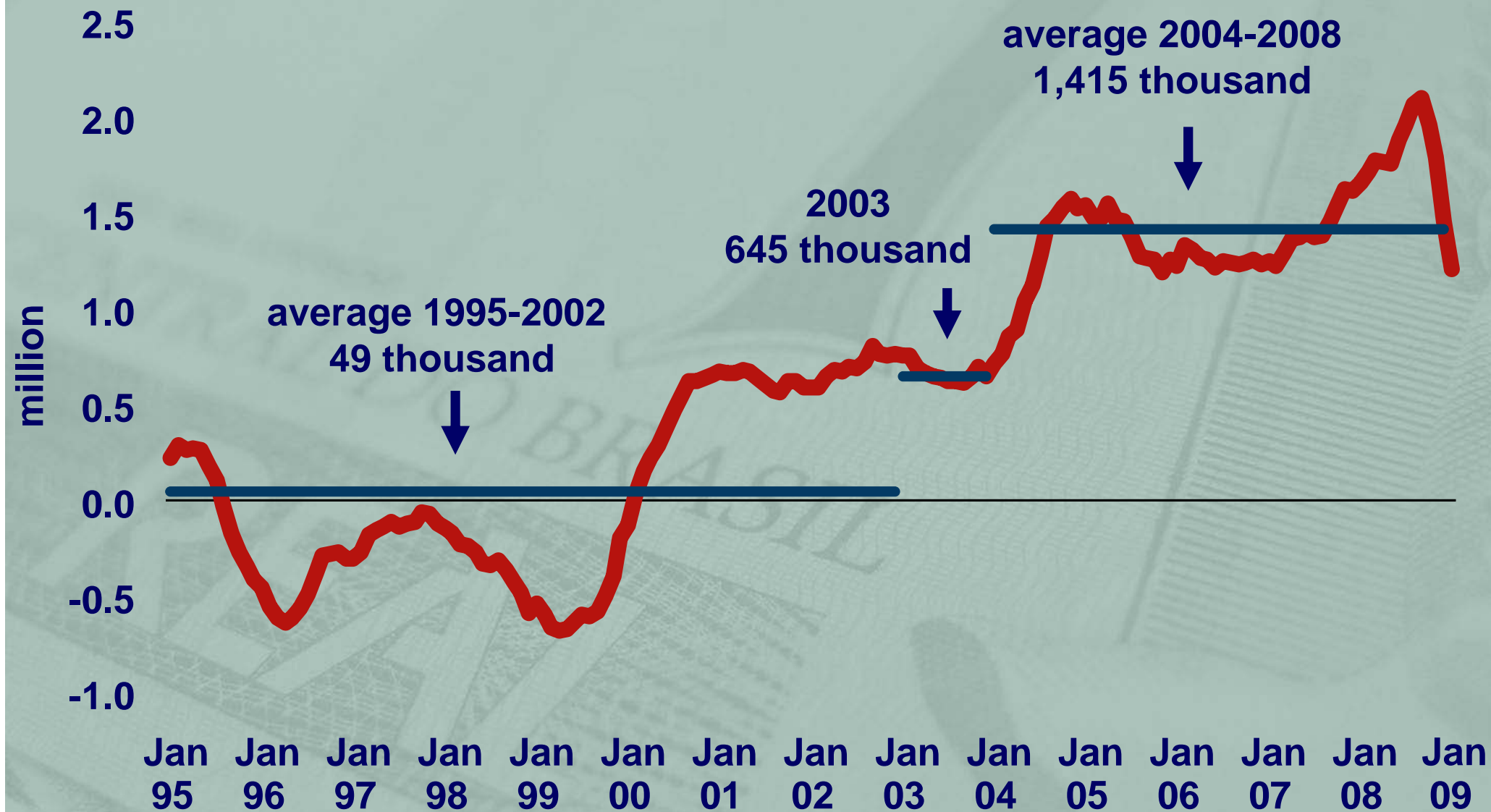


# Credit Growth

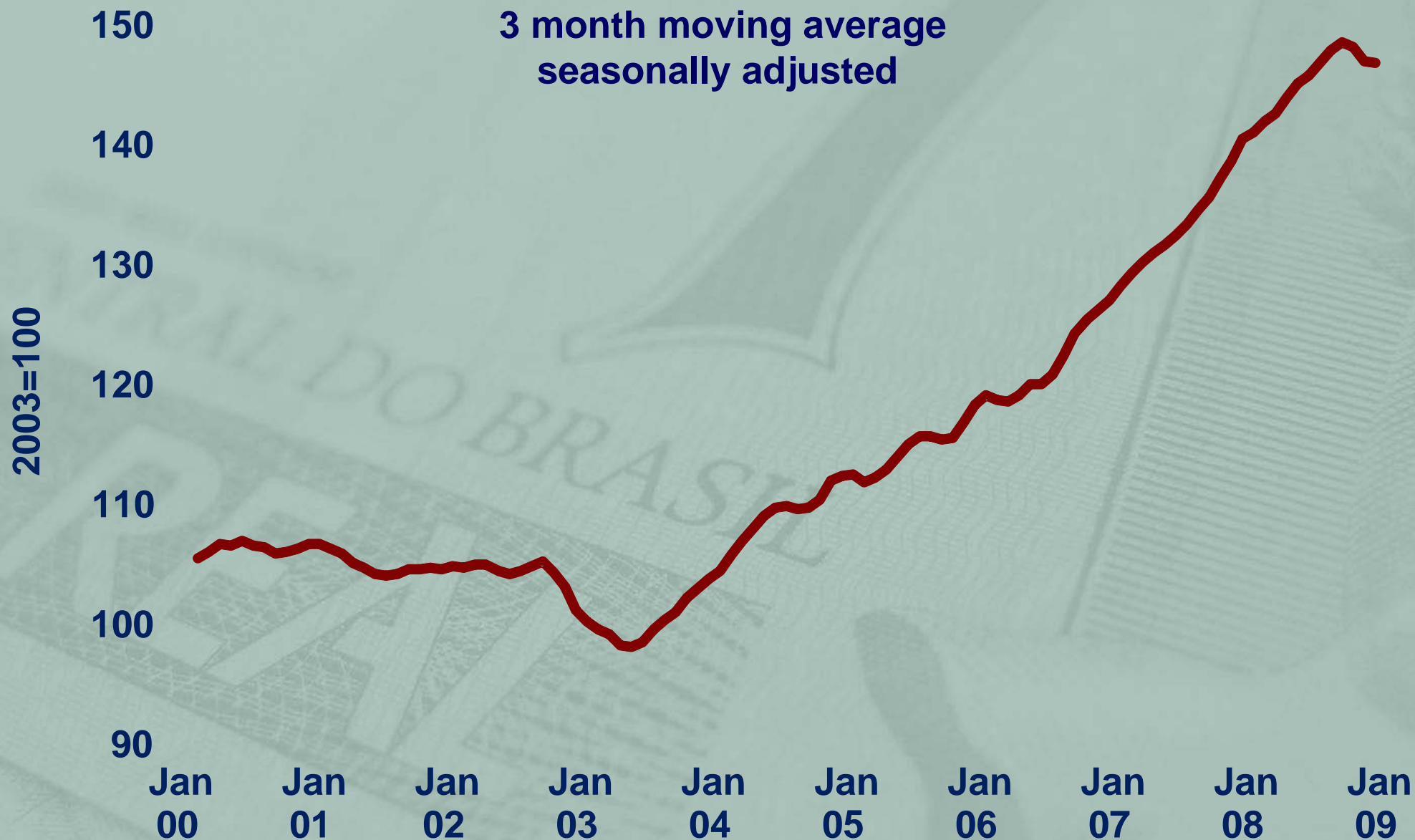




# Formal Job Creation



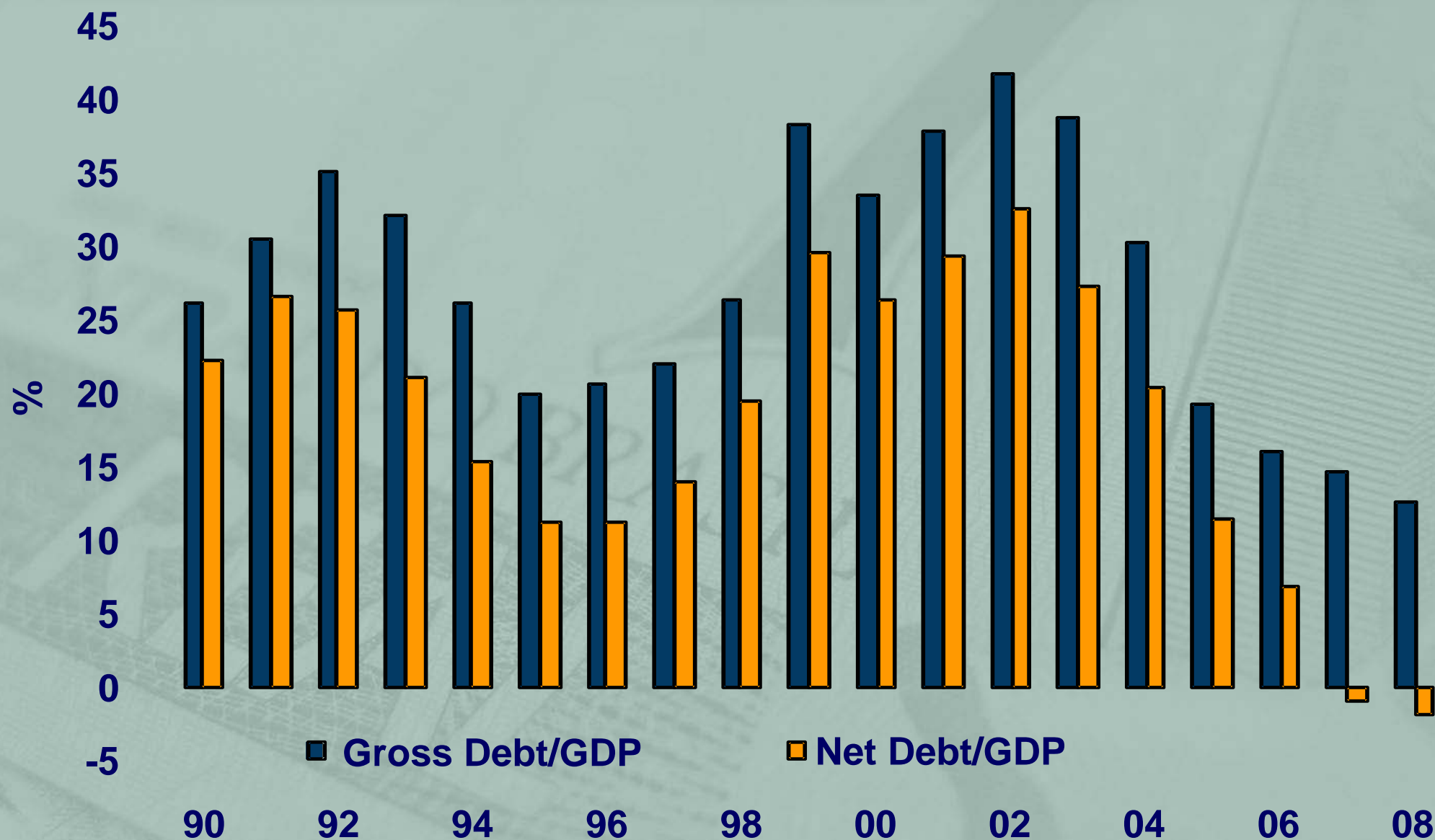
# Retail Sales



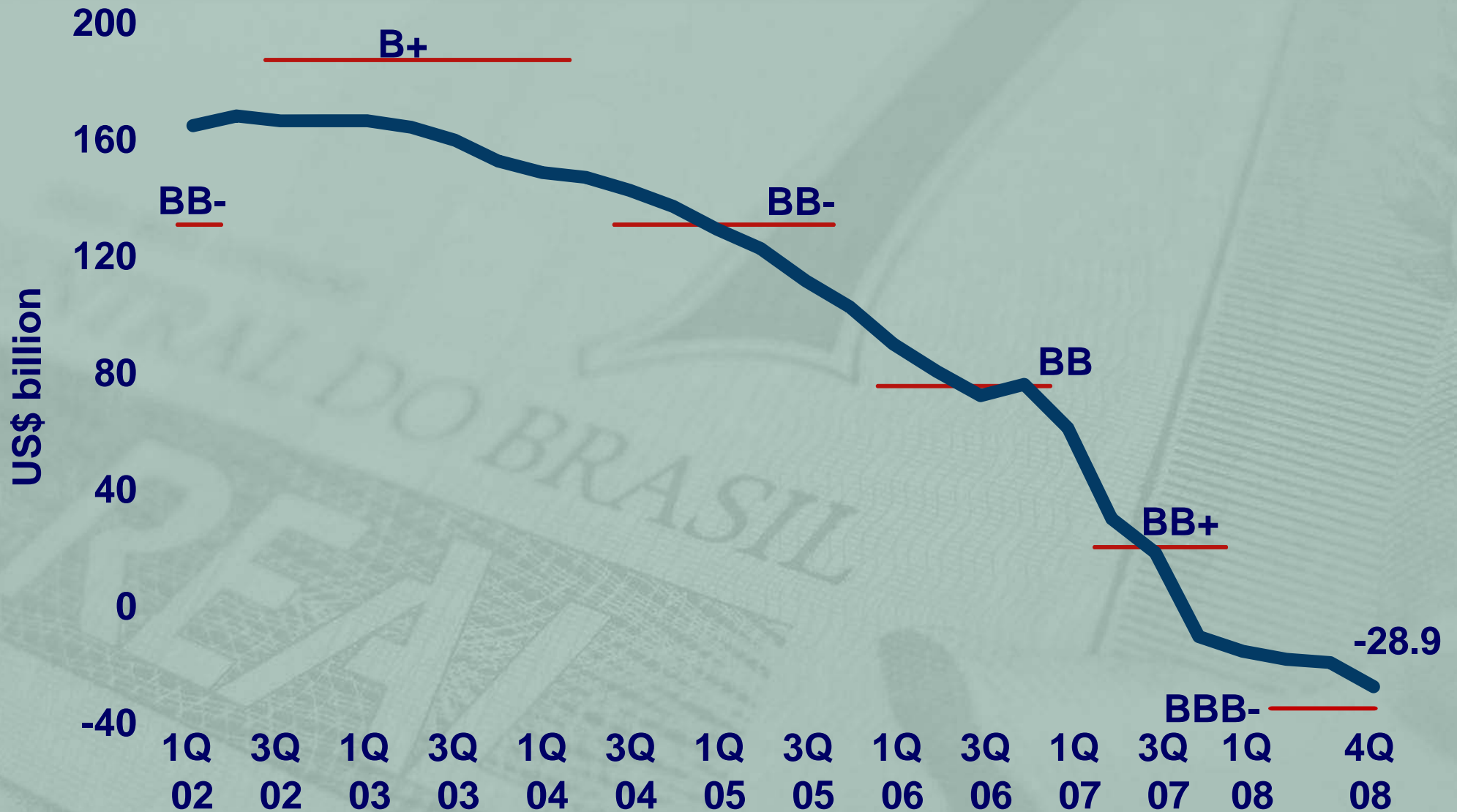
# International Reserves



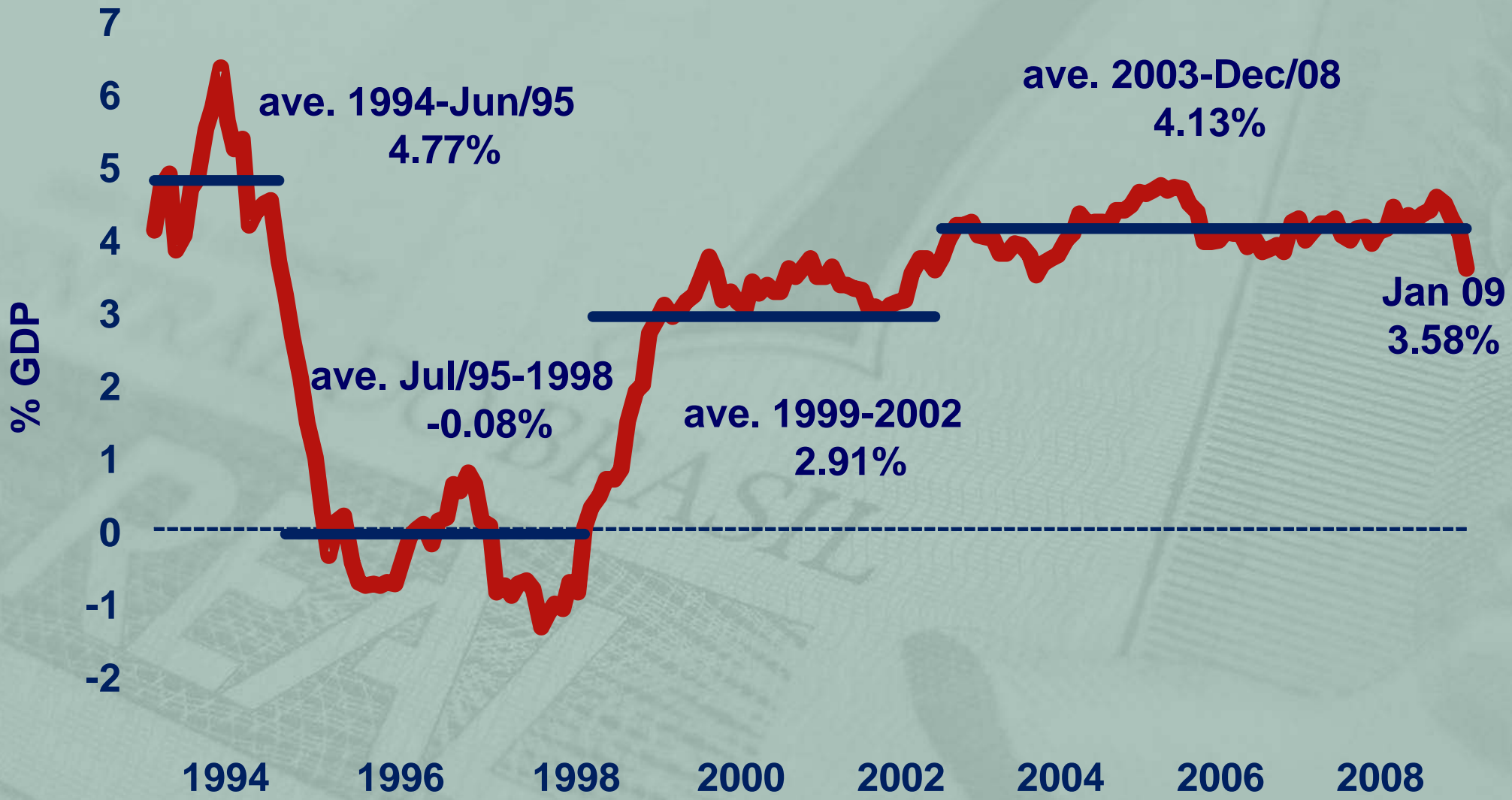
# Public Sector External Debt/GDP



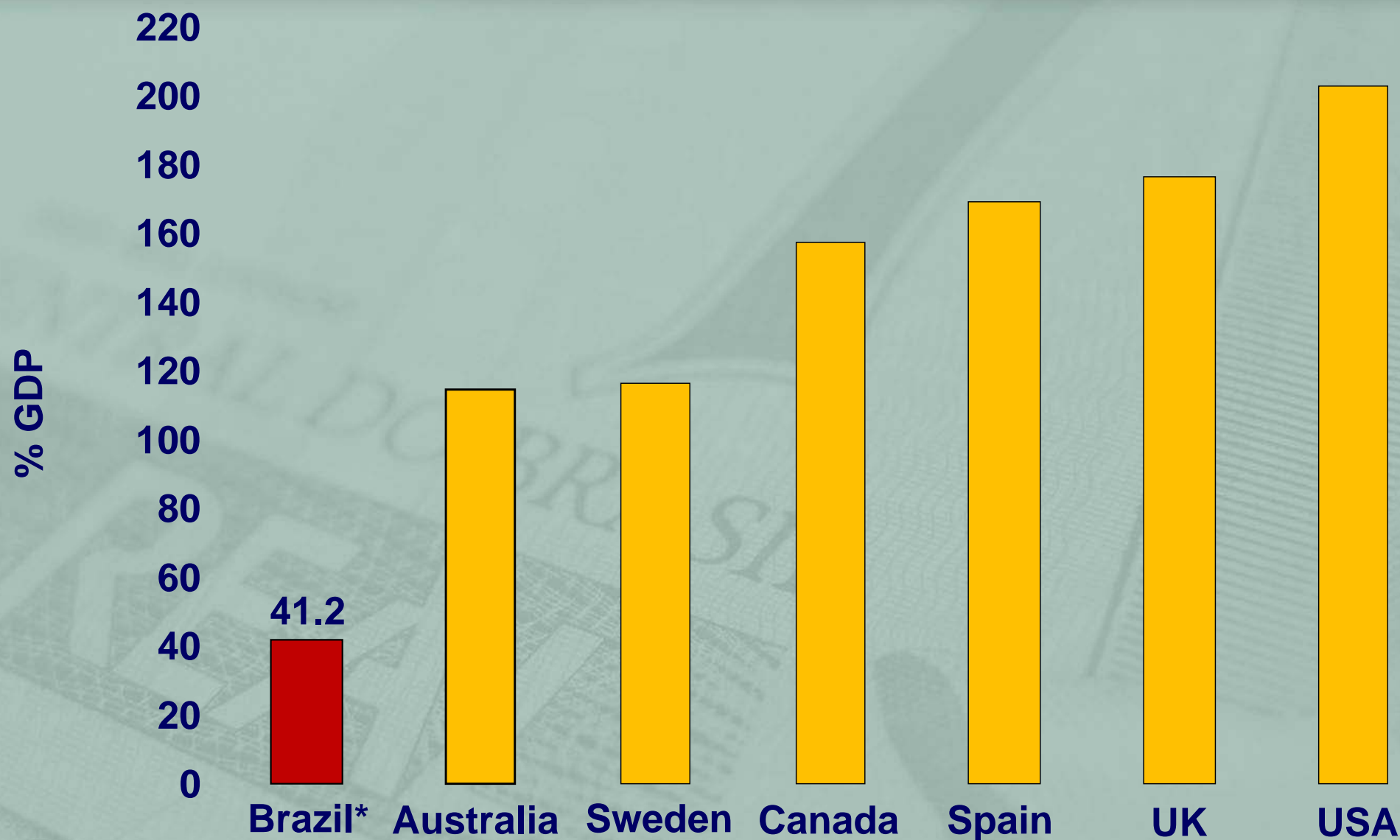
# Net External Debt x Sovereign Rating (S&P)



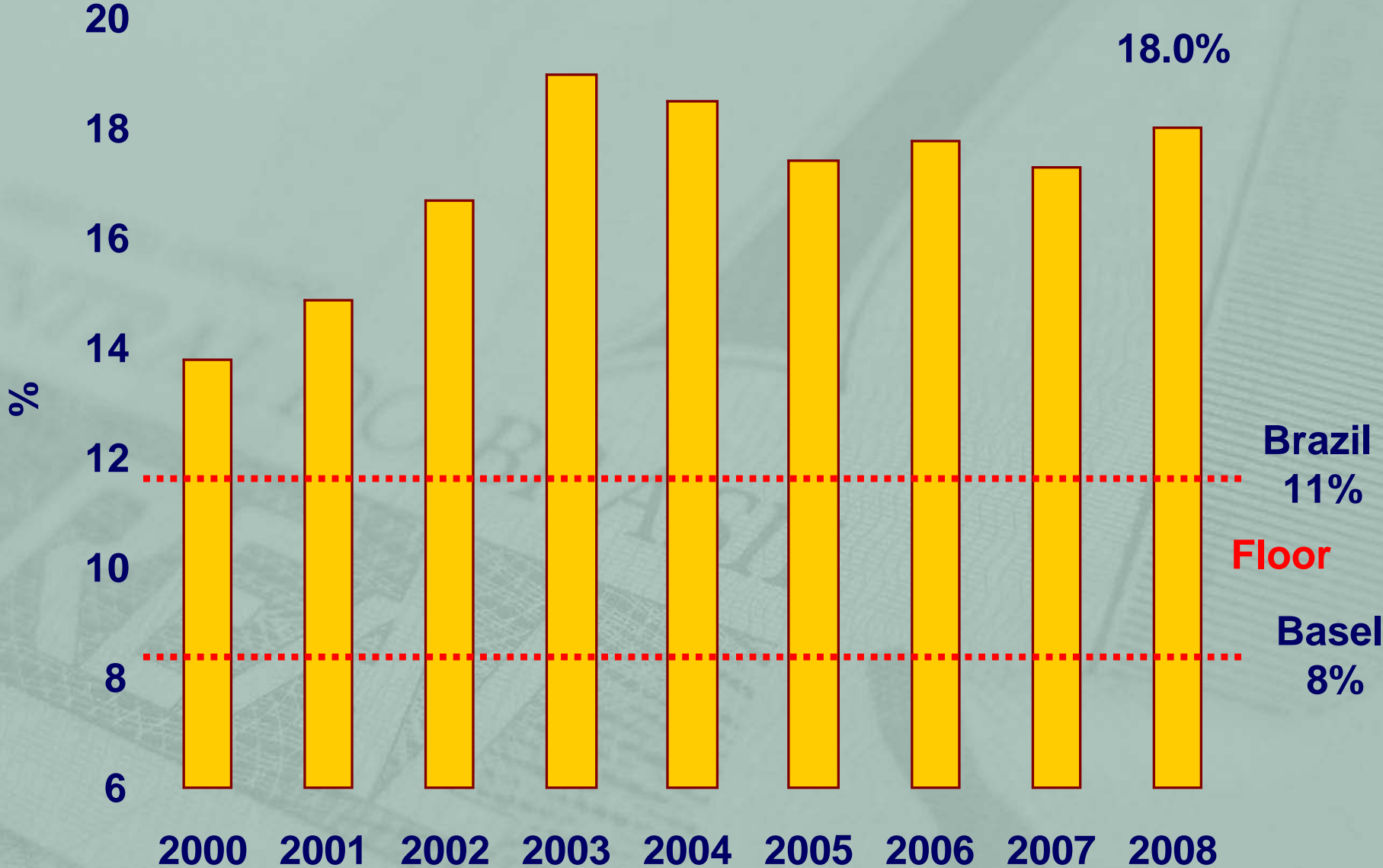
# Public Sector Primary Surplus



# Credit/GDP: Brazil x Central Economies - 2007



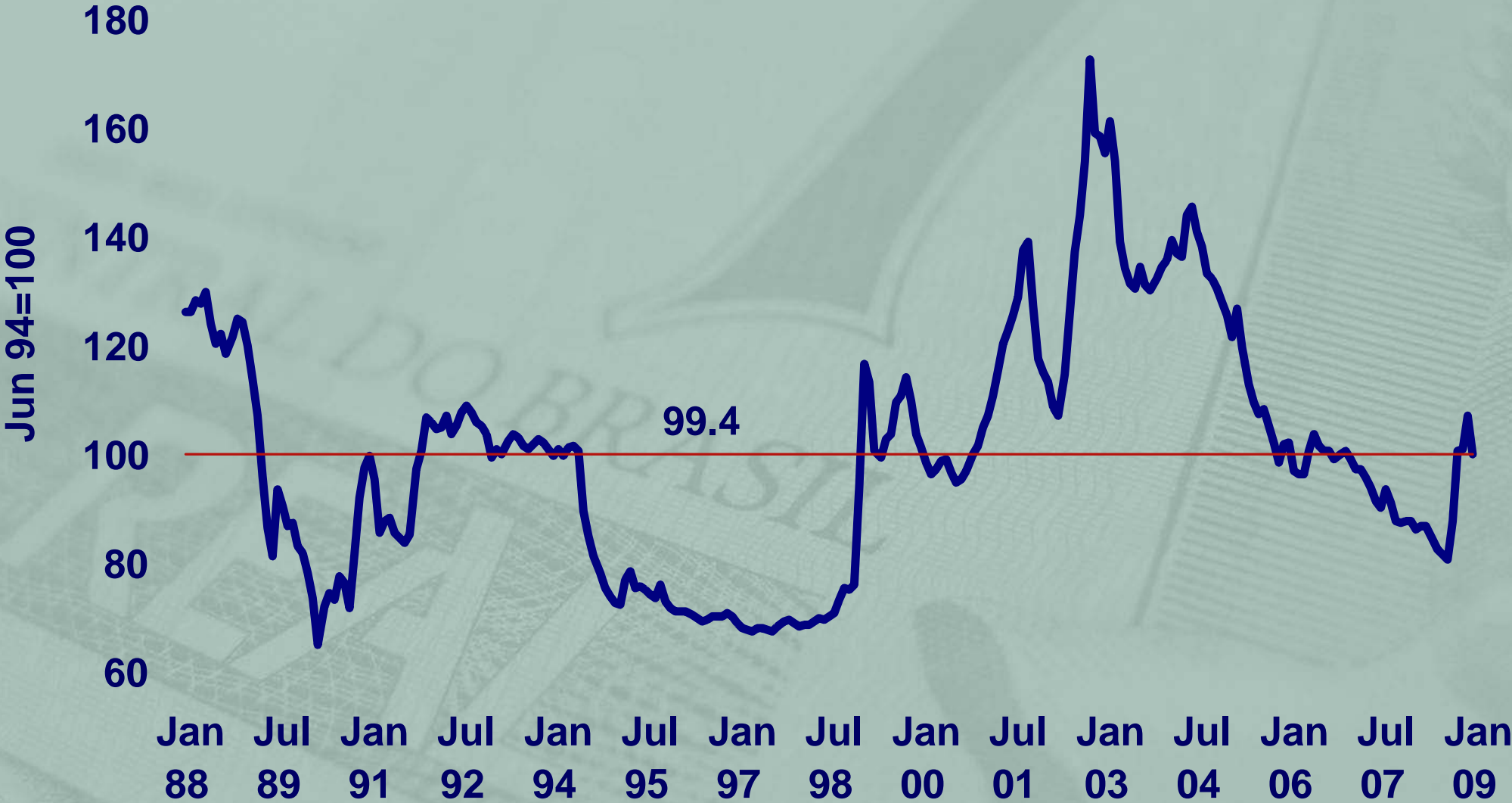
# Brazilian Banks: Capital Ratio





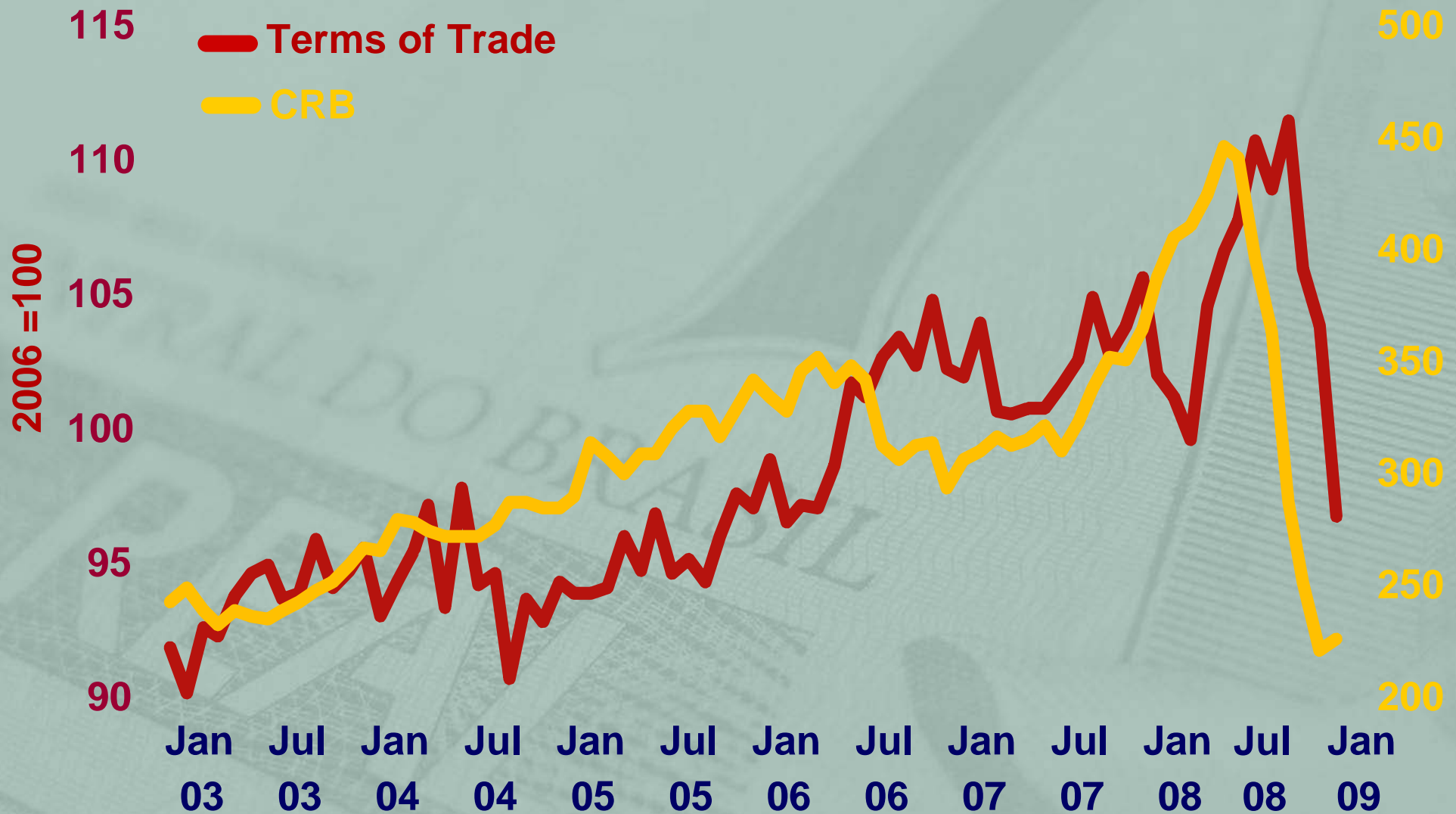
# Real Effective FX Rate

15 currency basket



## II. Crisis Impacts

# “Commodities Boom and Bust”: CRB Index and Brazilian Terms of Trade



# Commodities and Real FX Rate: Partial Offsetting



# Stocks x Brazilian Real



# Industrial Output and Inflation (CPI)

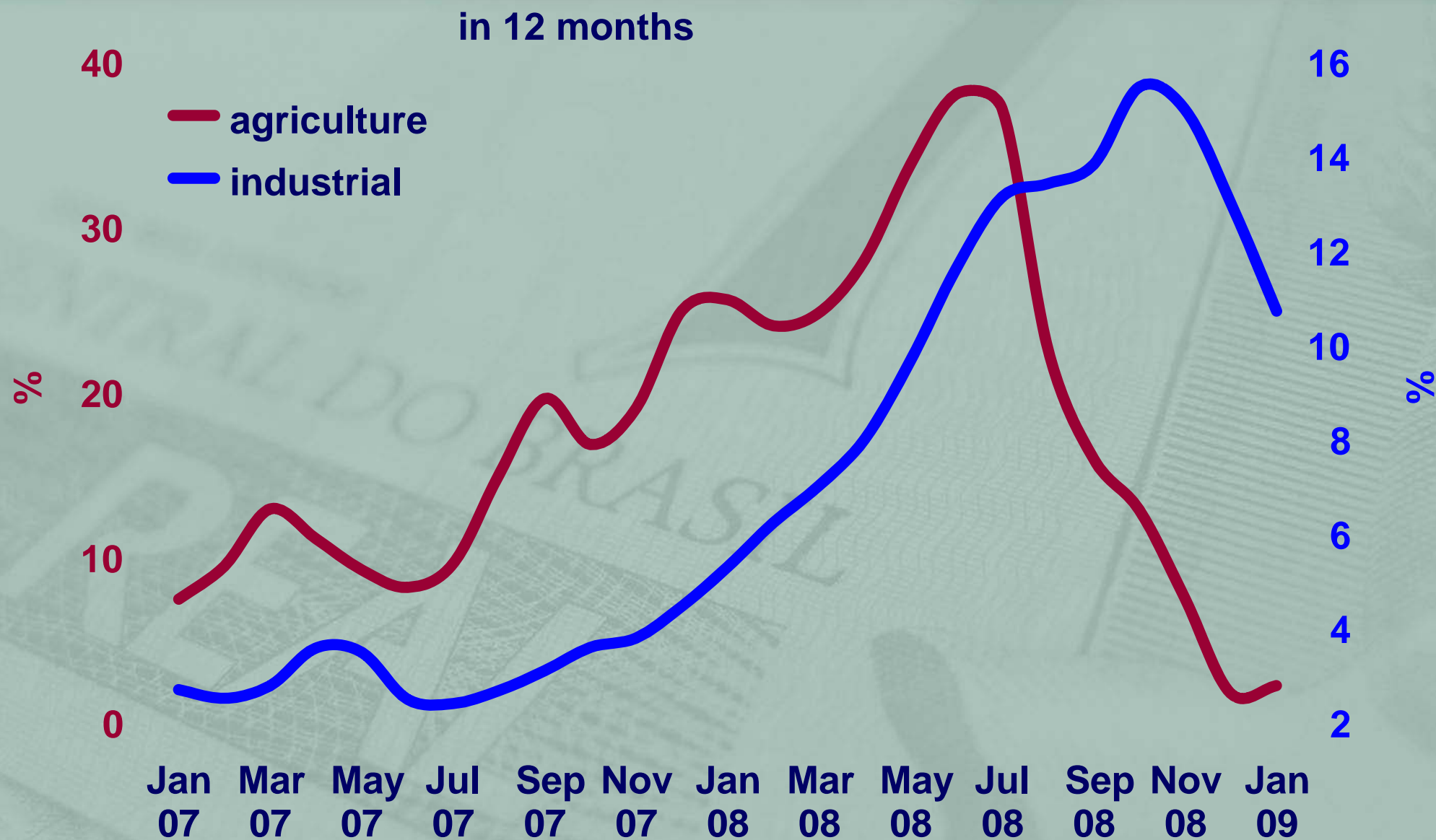
## Industrial Output (% p.y.)

	USA	EU	Japan	China	Russia	India	Turkey	South Africal	Chile	Colombia	Mexico	Peru	Brazil
Sep 08	-6.3	-2.5	0.2	11.4	6.4	5.5	-4.2	4.7	3.6	-3.5	-2.2	...	9.7
Oct 08	-4.2	-5.6	-7.1	8.2	1.7	-0.3	-8.5	-1.8	-0.8	-7.4	-2.3	...	1.1
Nov 08	-5.9	-8.1	-16.6	5.4	-8.7	2.4	-13.9	-4.8	-5.7	-13.3	-5.4	...	-6.2
Dec 08	-7.8	...	-20.6	5.7	-10.2	...	...	...	-3.7	...	...	...	-14.5

## Inflation – Consumer Price Index (% p.y.)

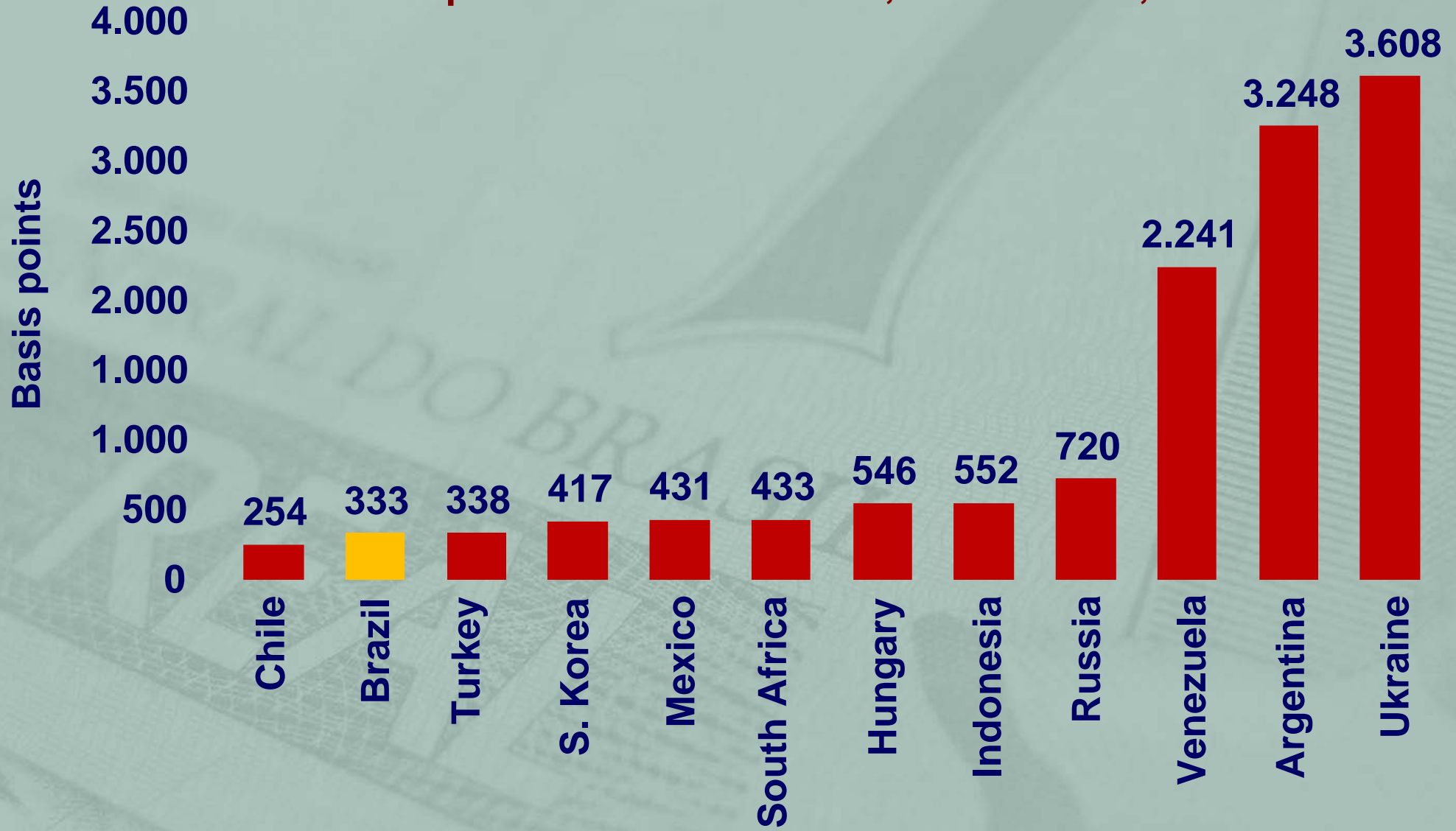
	USA	EU	Japan	China	Russia	India	Turkey	South Africa	Chile	Colombia	Mexico	Peru	Brazil
Sep 08	4.9	3.6	2.1	4.6	15.0	11.0	11.1	13.1	9.2	7.6	5.5	6.2	6.3
Oct 08	3.7	3.2	1.7	4.0	14.2	11.1	12.0	12.1	9.9	7.9	5.8	6.5	6.4
Nov 08	1.1	2.1	1.0	2.4	13.8	11.1	10.8	11.8	8.9	7.7	6.2	6.8	6.4
Dec 08	0.1	1.6	0.4	1.2	13.3	11.1	10.1	9.5	7.1	7.7	6.5	6.7	5.9
Dec-Sep (p.p.)	-4.8	-2.0	-1.7	-3.4	-1.7	0.2	-1.0	-3.6	-2.1	0.1	1.1	0.4	-0.4

# Wholesale Prices



# CDS (5 years): Brazil and Selected Countries

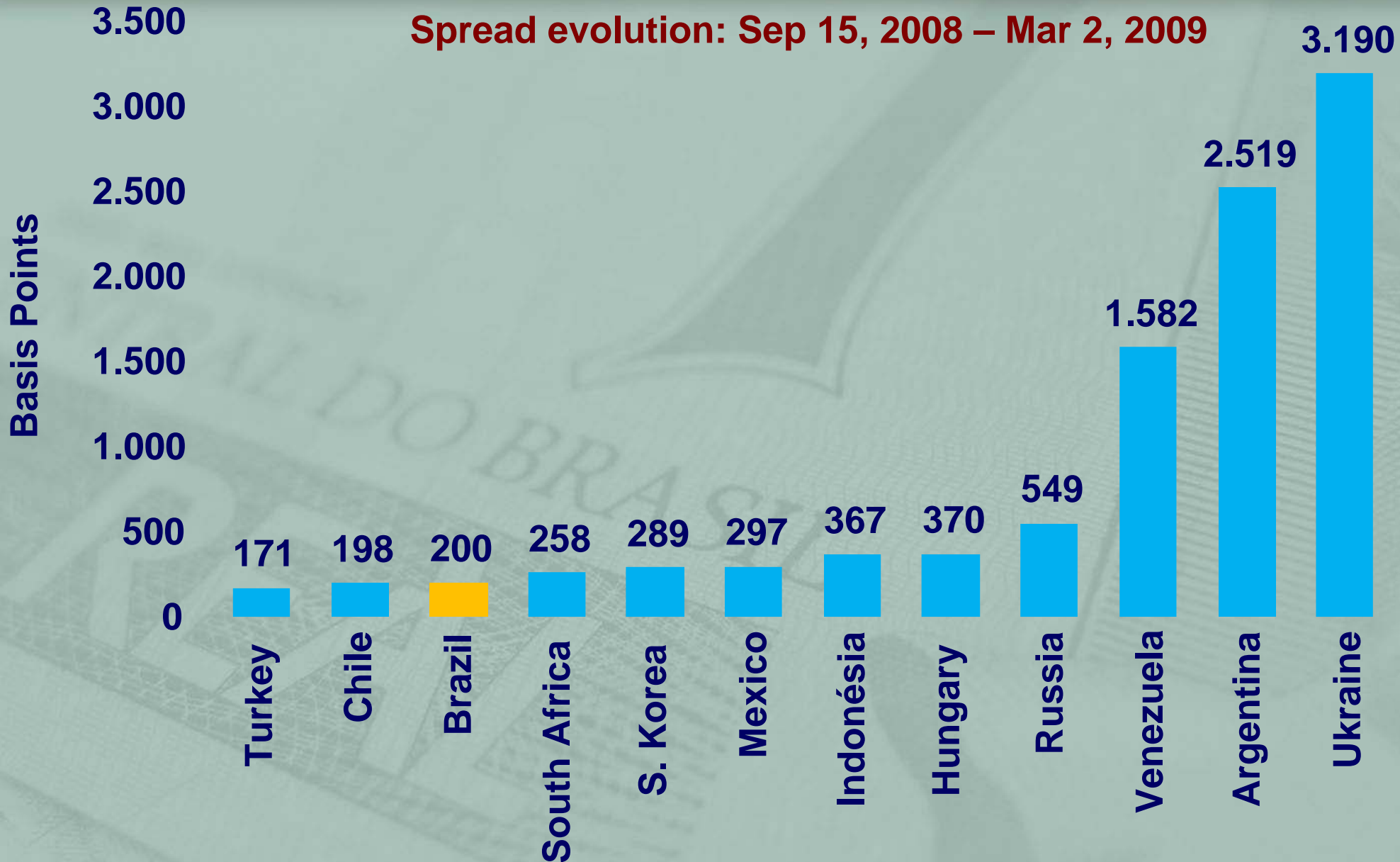
Spread evolution: Jun 14, 2007 – Mar 2, 2009





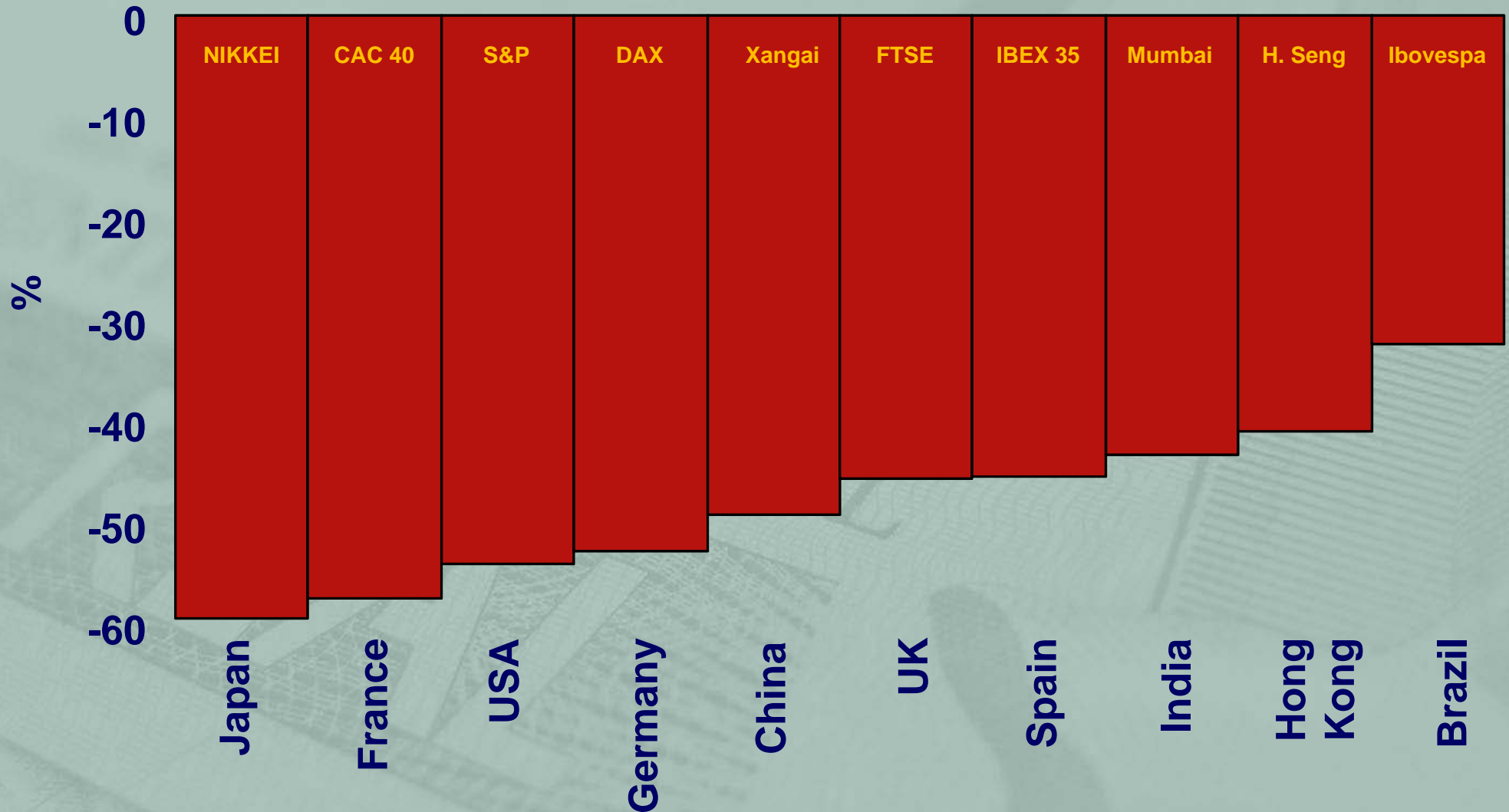
# CDS (5 years): Brazil and Selected Countries

Spread evolution: Sep 15, 2008 – Mar 2, 2009



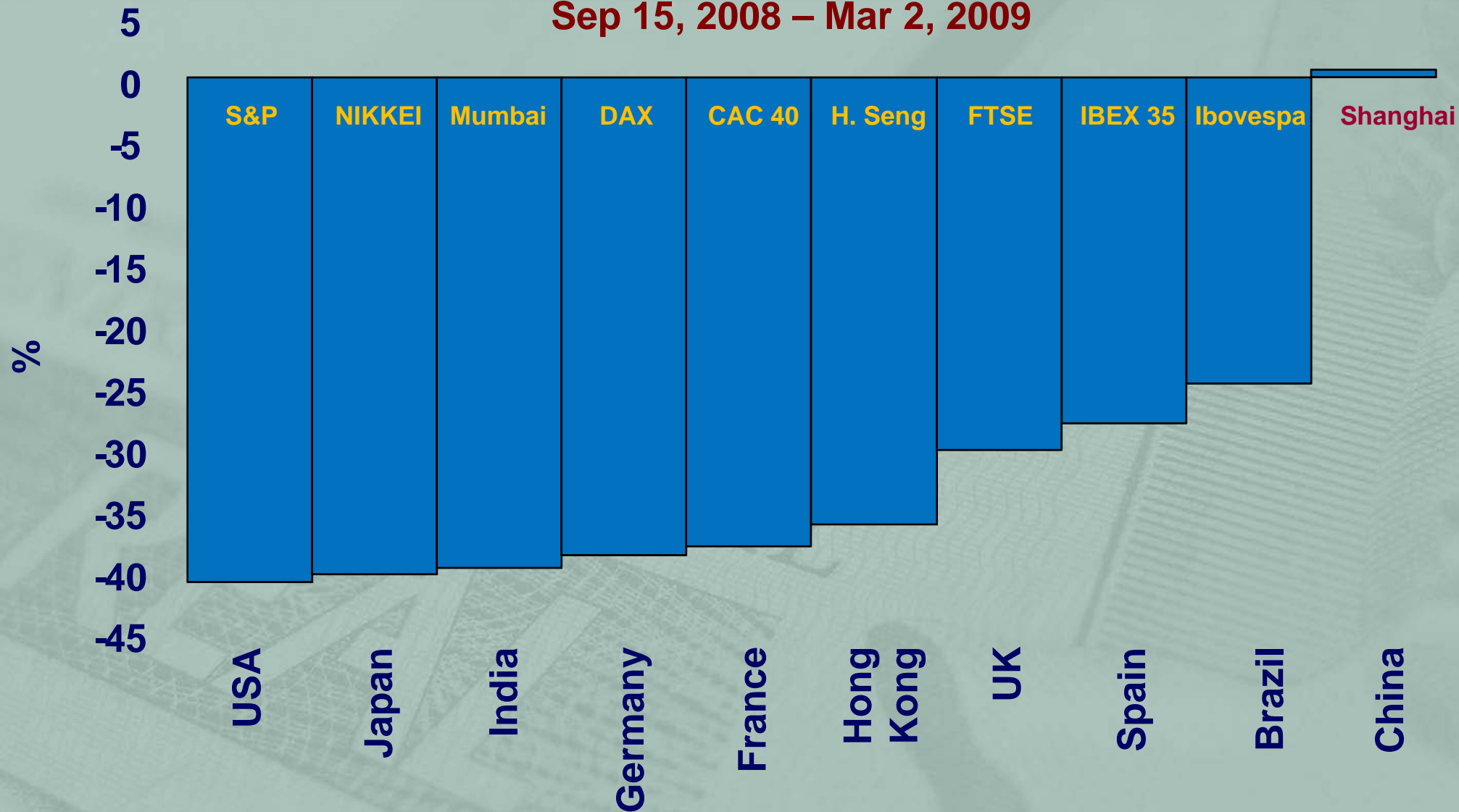
# Stock Exchanges: Brazil and Selected Countries

Jun 14, 2007 – Mar 2, 2009

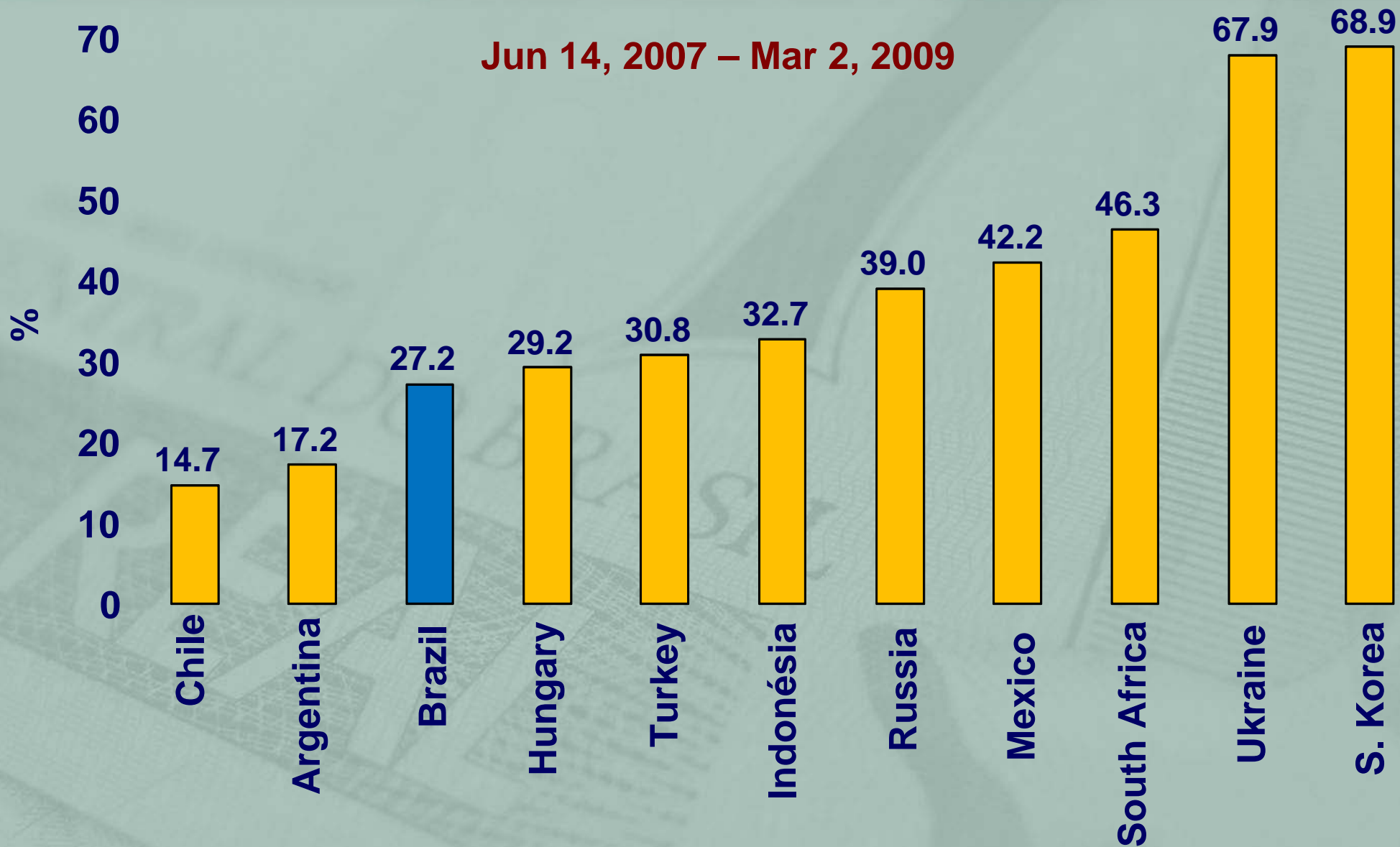


# Stock Exchanges: Brazil and Selected Countries

Sep 15, 2008 – Mar 2, 2009



# Currencies: Brazil and Emerging Economies



# Currencies: Brazil and Emerging Economies



# Currencies: Brazil and Central Economies

Jun 14, 2007 – Mar 2, 2009

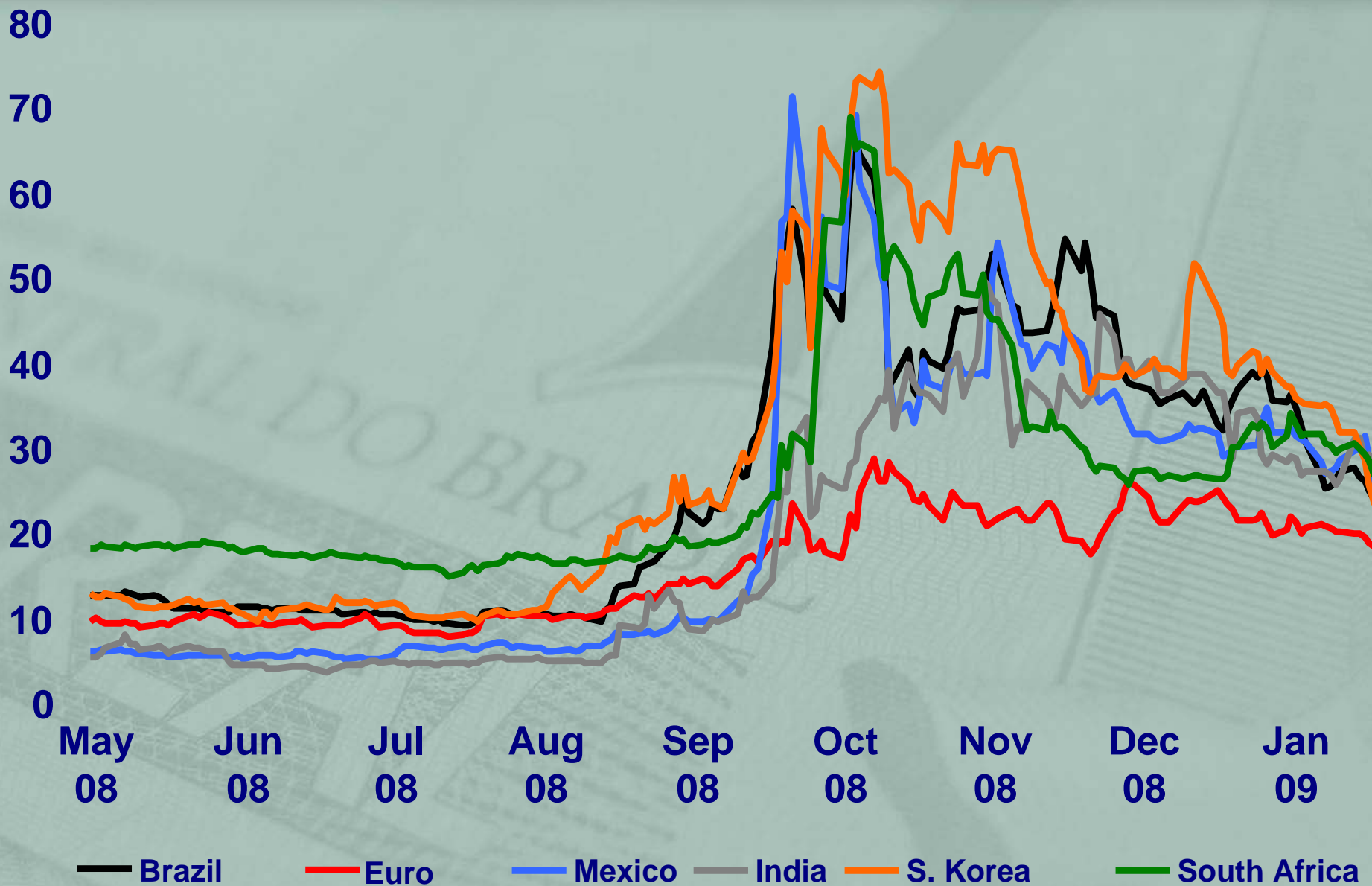


# Currencies: Brazil and Central Economies

Sep 15, 2008 – Mar 2, 2009



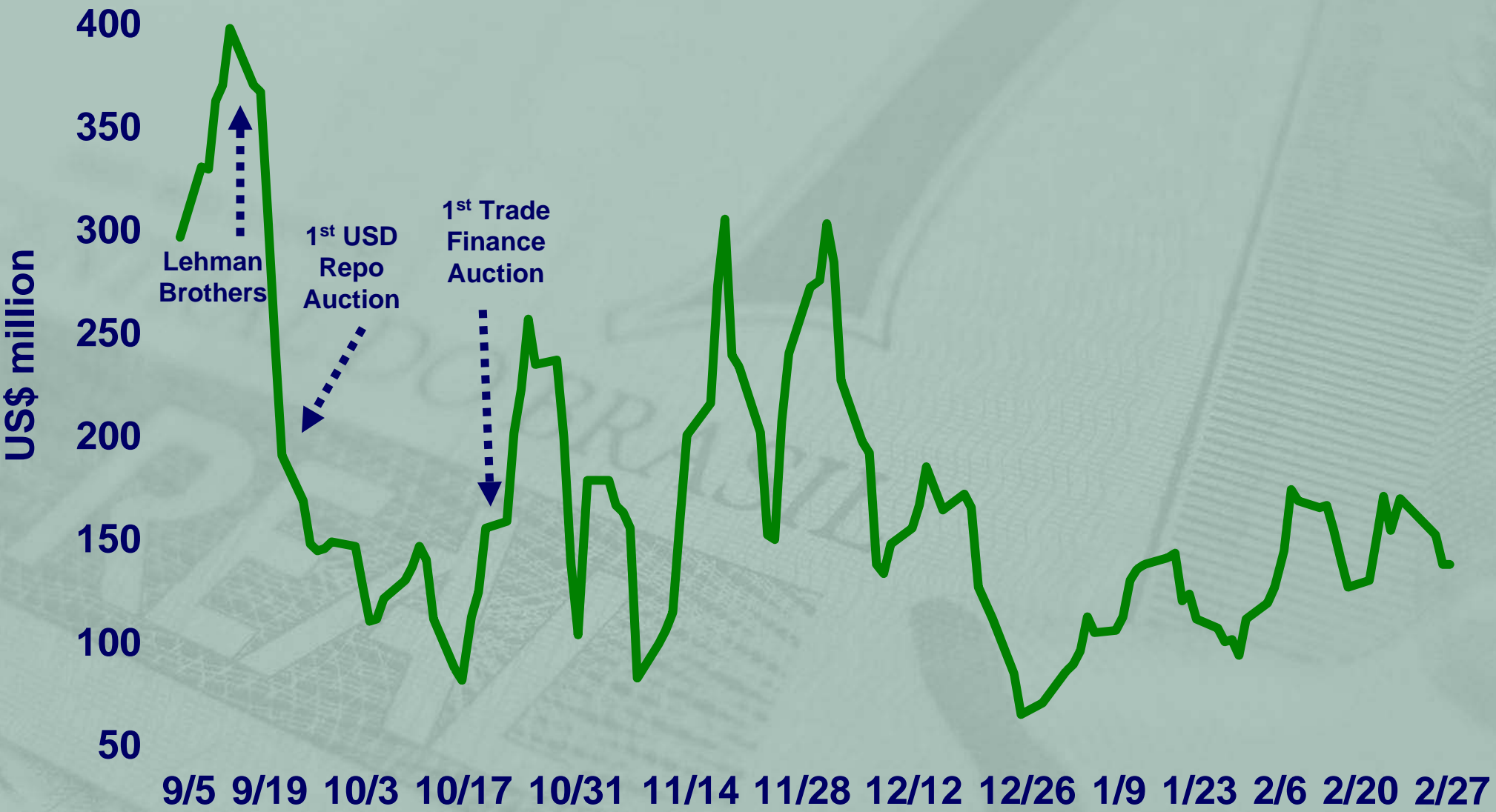
# Currencies: Increased Volatility



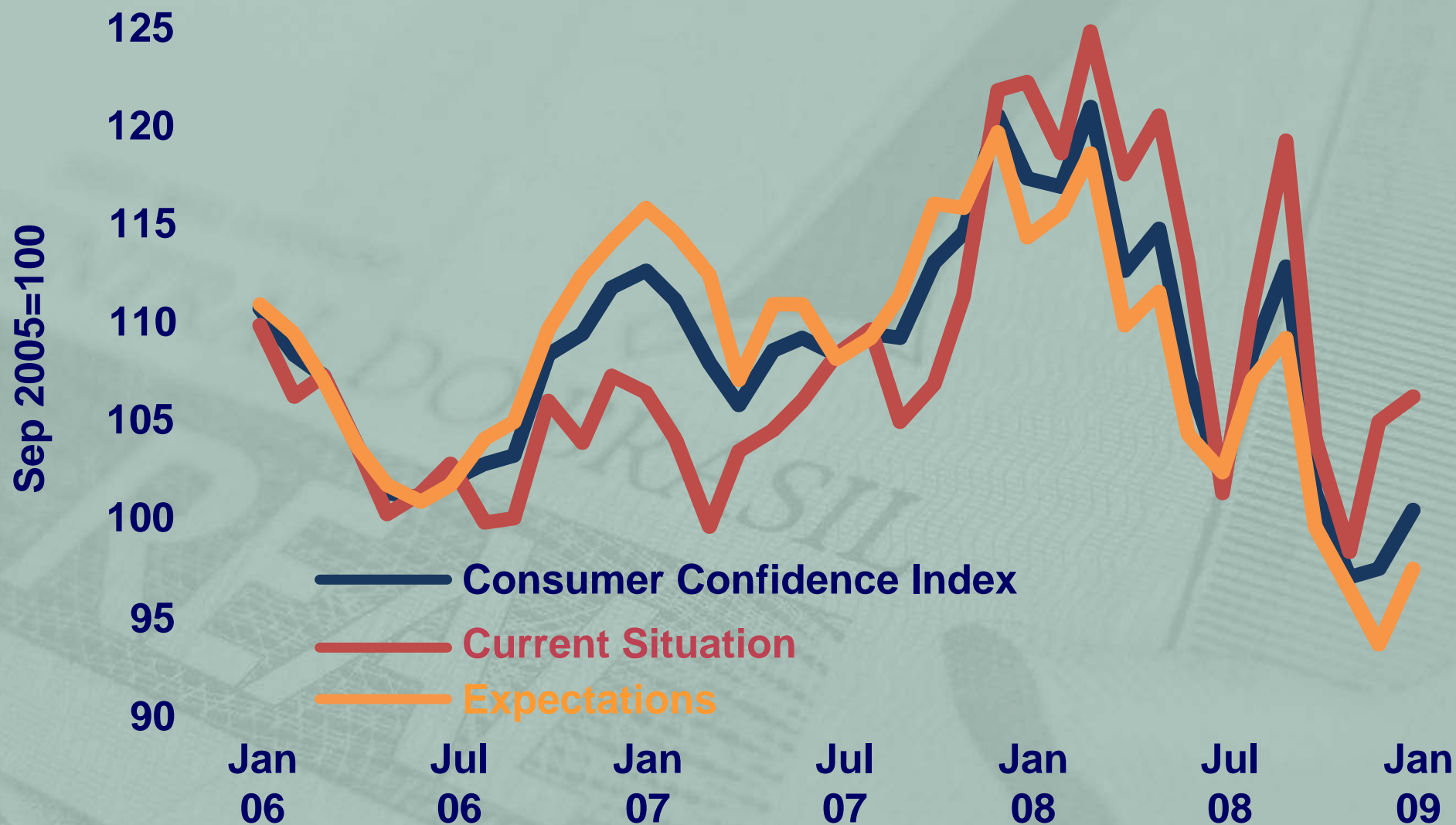


# Export Finance FX Flow (ACC)

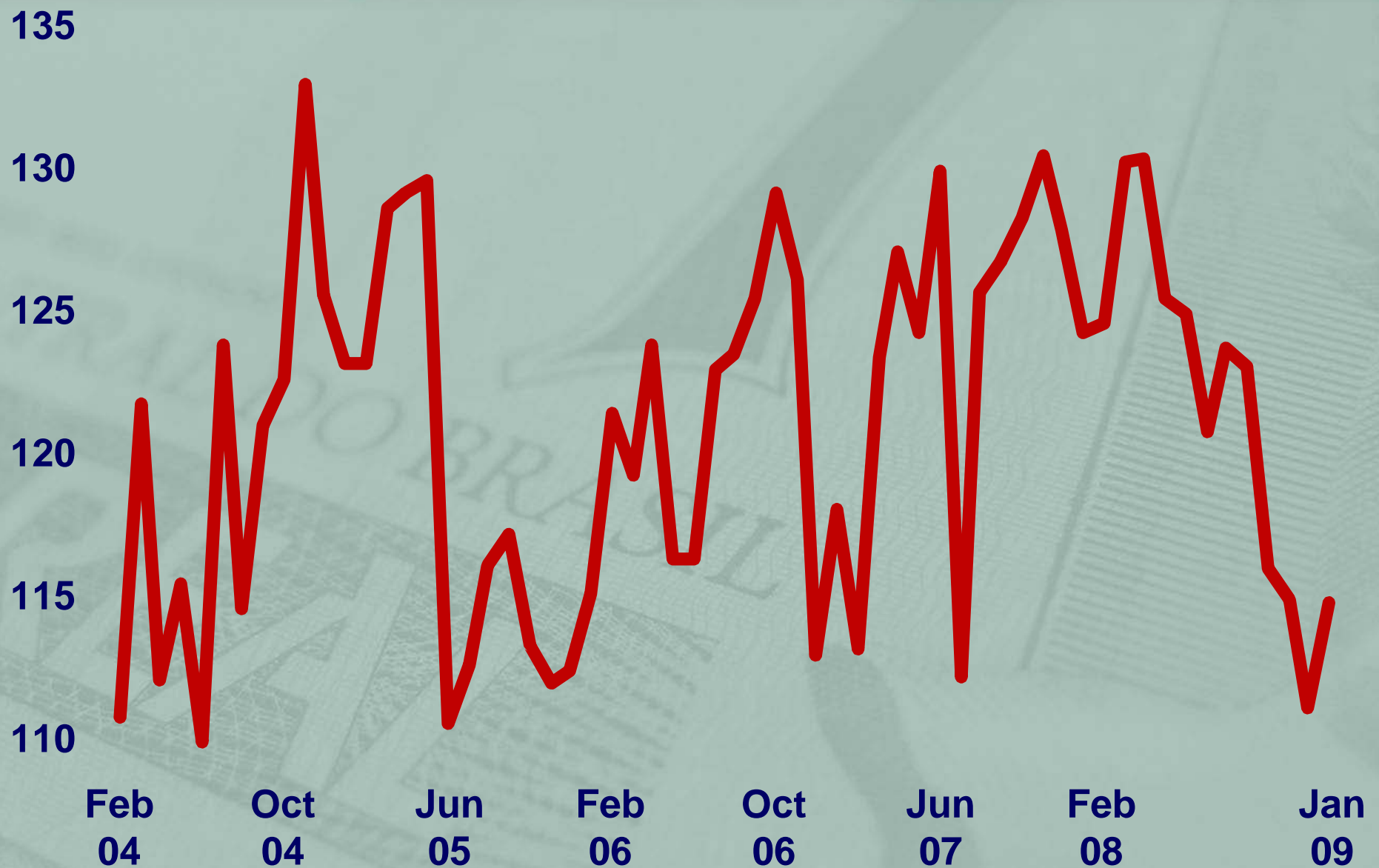
5 Day Moving Average



# CCI (Consumer Confidence Index)



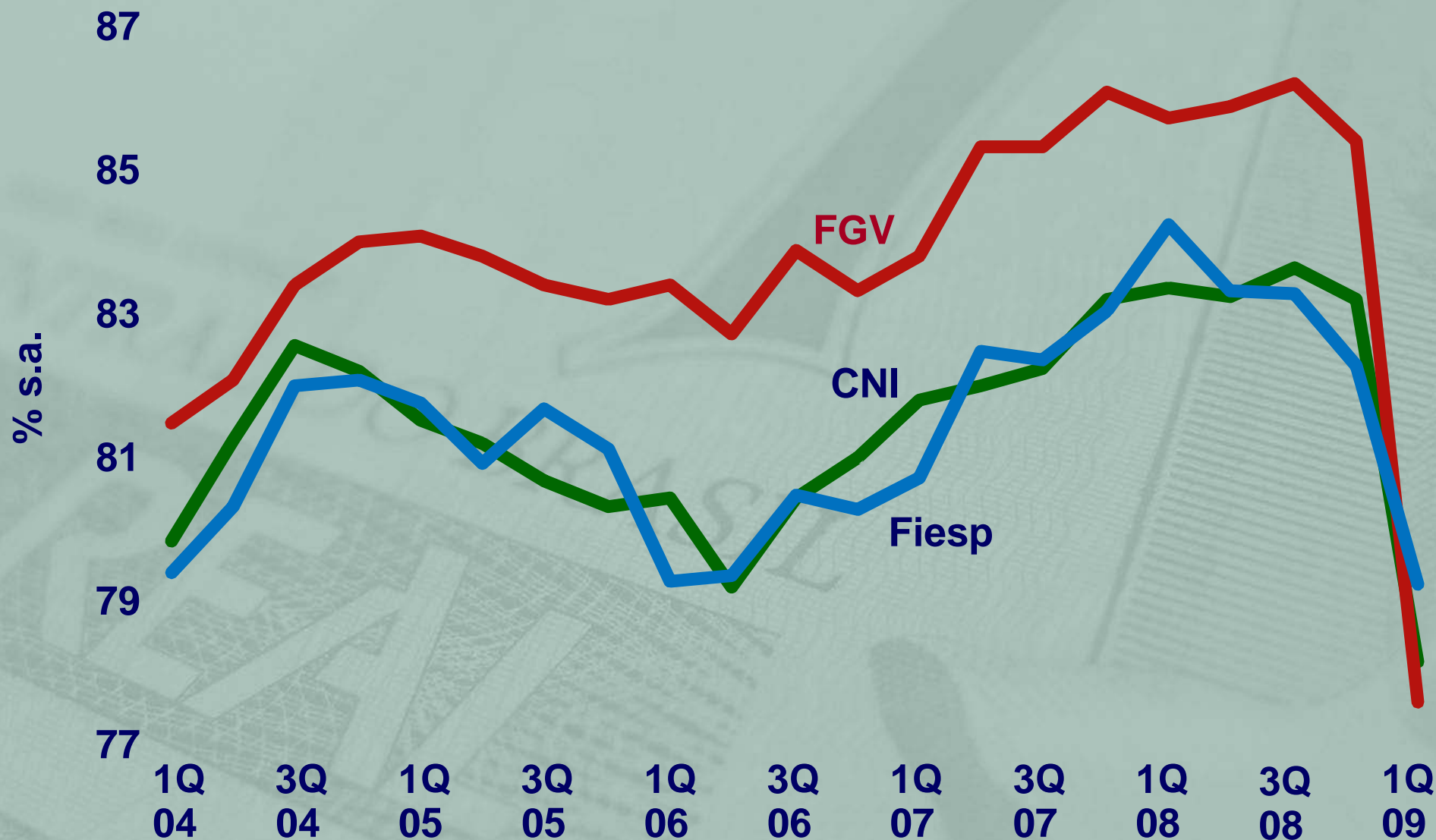
# Business Expectations Index



# Industrial Output



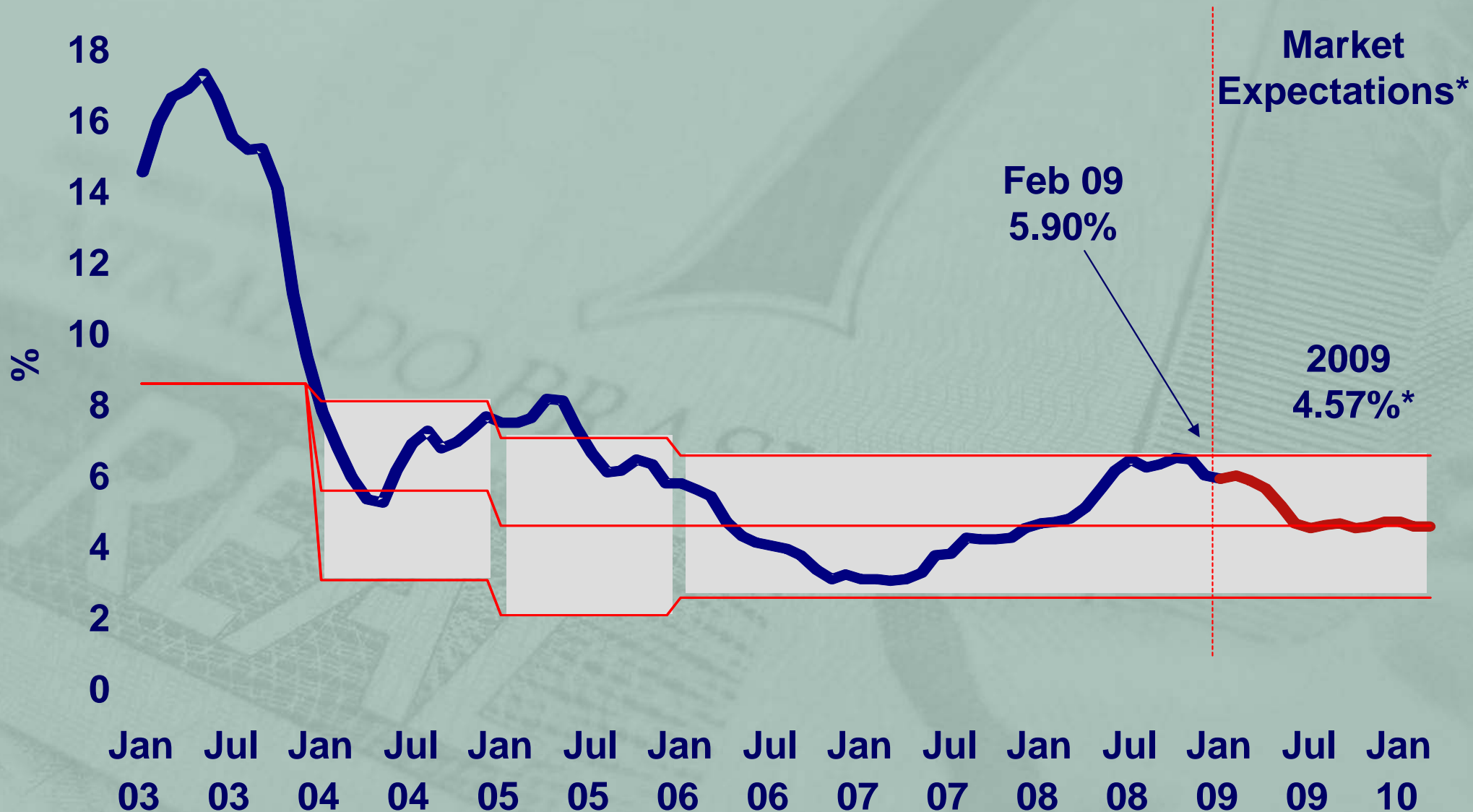
# Installed Capacity Utilization



# ICI (Industrial Confidence Index)



# Inflation Target IPCA (12 months)

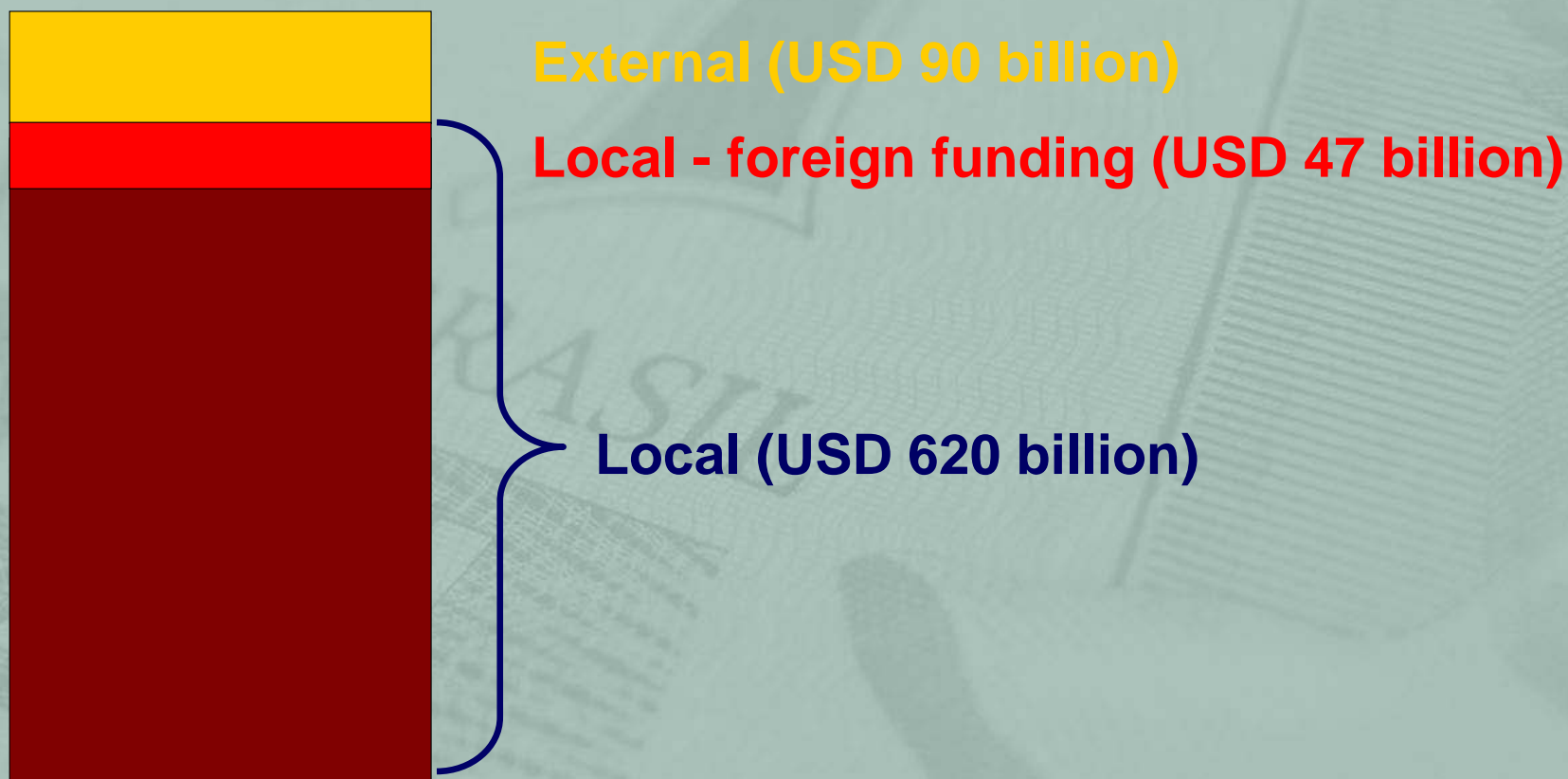


### **III. Central Bank Actions (so far...)**



# Total Credit Supply

## Estimated Values Before Crisis



# Local Currency Liquidity

## September 24

- **Rise on reserve requirements over leasing companies deposits postponed**
- **“Additional Requirements” deduction value rises from R\$ 100 million to R\$ 300 million**
- **Measures freed up R\$ 5.3 billion**

# Local Currency Liquidity

## October 2

- **Up to 40% of Time Deposits Reserve Requirements freed for acquisition of small banks (capital up to R\$ 2.5 billion) assets**
- **Potential impact: R\$ 25.3 billion**

# Local Currency Liquidity

## October 8

- **Time Deposit Reserve Requirements deduction value raised from R\$ 300 million to R\$ 700 million**
- **“Additional Requirements” ratio on cash and time deposits lowered from 8% to 5%**
- **Potential impact: R\$ 21.8 billion**

# Local Currency Liquidity

## October 13

- **“Additional Requirements” deduction raised from R\$ 300 million to R\$ 1 billion**
- **Time Deposit requirements deduction raised from R\$ 700 million to R\$ 2 billion. Ratio for asset acquisition raised from 40% to 70%**
- **Capital ceiling of banks eligible to sell assets increased from R\$ 2 billion to R\$ 7 billion**
- **Potential impact: R\$ 27.0 billion**

# Local Currency Liquidity

## October 14

- **Facility for banks to use requirements for buying other banks assets expanded**
- **Demand Deposits reserve requirements ratio lowered from 45% to 42%, freeing up R\$ 4.0 billion**

# Local Currency Liquidity

**October 14**

- **National Monetary Council increases ratio on demand deposits that banks must lend to agricultural sector from 25% to 30%**
- **Potential impact: R\$ 4.5 billion for loans**

# Local Currency Liquidity

## October 30

- **Changes on requirements framework to foster use of liquidity freed up by previous measures**
- **70% of time deposits requirements to be made in cash**
- **Target: to encourage large banks to acquire small banks assets**



# Local Currency Liquidity

## November 13

- **Banks can use government bonds, instead of cash, to meet part of the “Additional Reserve Requirements”**
- **Potential impact: R\$ 42.1 billion**

# Local Currency Liquidity

## December 19

- Requirements rules made simpler (changes to be liquidity neutral)
- Time deposit requirements share in cash lowered to 60%
- “Additional Requirement” on time deposits reduced to 4% from 5%
- More options available for banks to comply with reserve requirements

# Local Currency Liquidity



**Reserve requirements  
easing:**

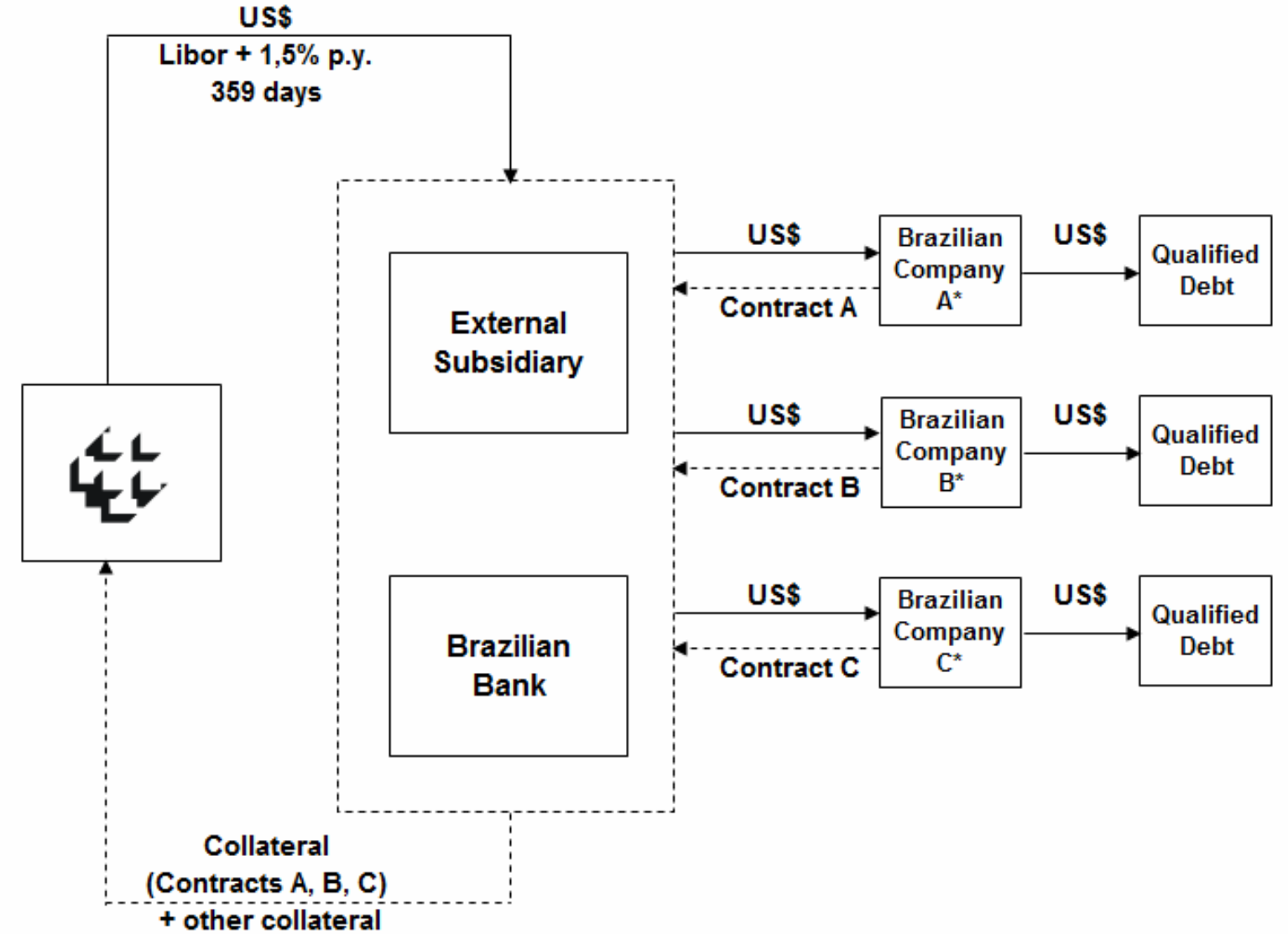
**R\$ 99.8 billion**

**US\$ 43.3 billion**

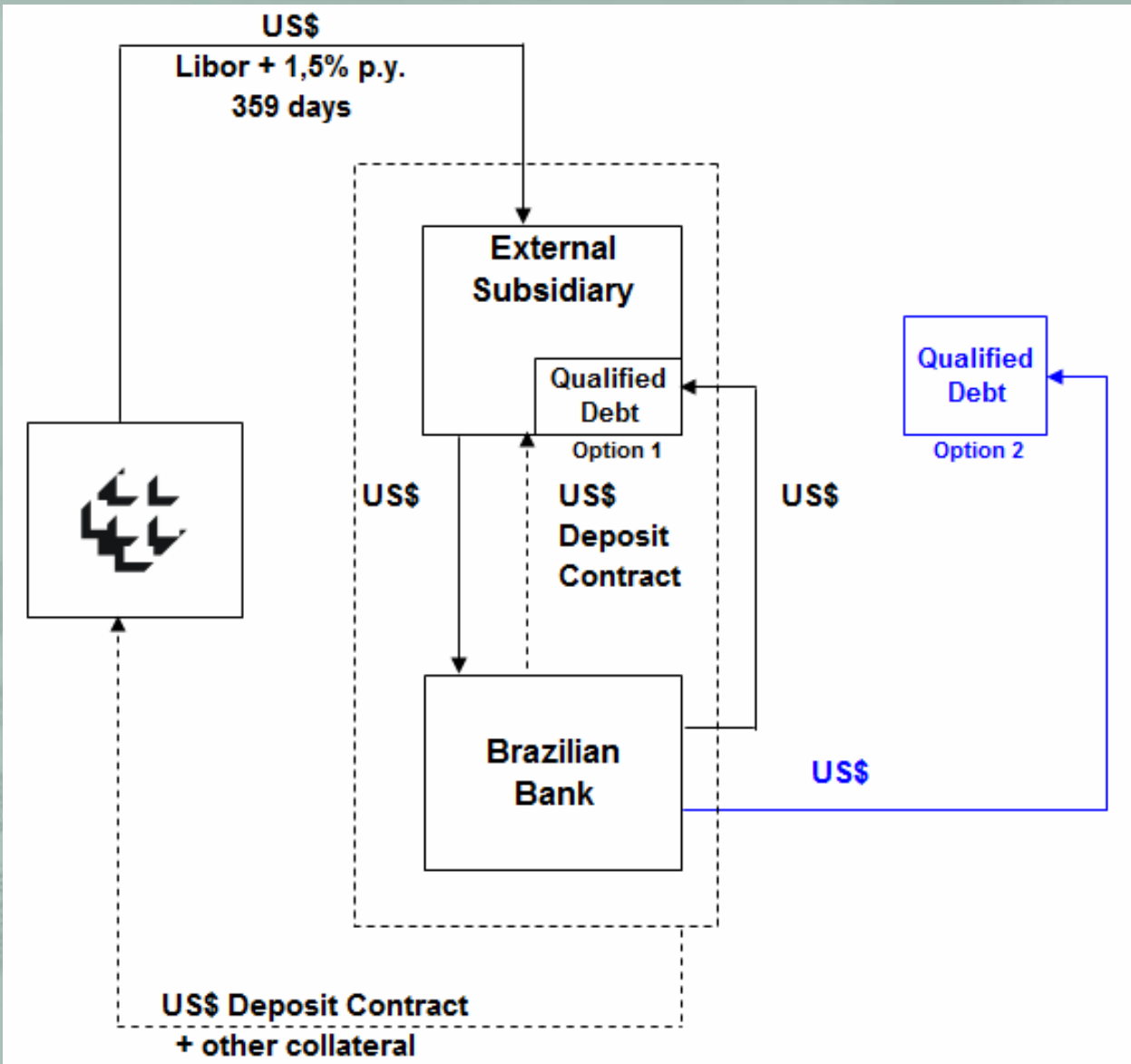
# Foreign Currency Liquidity

- **Foreign currency swap contracts**
- **Sales of USD in spot market**
- **USD repurchase agreement auctions**
- **Collateralized loans aimed at financing exports**
- **Currency swaps transactions with other central banks (Fed)**
- **Loans to companies and banks to roll over external debts**

# Loans to Brazilian Companies



# Loans to Brazilian Banks



# Currency Swaps Contracts



# Foreign Currency Liquidity

## Central Bank Interventions since Oct/2008

Values in US\$ millions

Spot Market Sales Auctions	
Period	Value
Oct/2008	4.568,85
Nov/2008	2.129,50
Dec/2008	4.880,55
Jan/2009	2.716,50
Feb/2009	236,50
<b>Total</b>	<b>14.531,90</b>

Repurchase Agreement Auctions	
Period	Value
Sep/2008	1.000,00
Oct/2008	4.810,00
Nov/2008	1.070,00
Dec/2008	1.030,00
Jan/2009	1.825,00
Feb/2009	-
<b>Total</b>	<b>9.735,00</b>

Trade Finance Loans Auctions		
Period	Collateral	Value
Oct/2008	Globals	1.519,00
Nov/2008	Trade Finance	3.810,00
Dec/2008	Trade Finance	1.957,50
Jan/2009	Trade Finance	1.276,00
Feb/2009	Trade Finance	1.000,00
Mar/2009	Trade Finance	1.000,00
<b>Total</b>		<b>10.562,50</b>

Swap Contracts Actions			
Period	Regular*	Reverse**	Net
Oct/2008	22.597,25	375,50	22.972,75
Nov/2008	6.461,00	2.080,00	8.541,00
Dec/2008	(145,50)	1.697,50	1.552,00
Jan/2009	(2.124,25)	2.322,50	198,25
Feb/2009	(2.138,50)	1.560,00	(578,50)
Mar/2009	(305,00)	50,00	(255,00)
<b>Total</b>	<b>24.345,00</b>	<b>8.085,50</b>	<b>32.430,50</b>

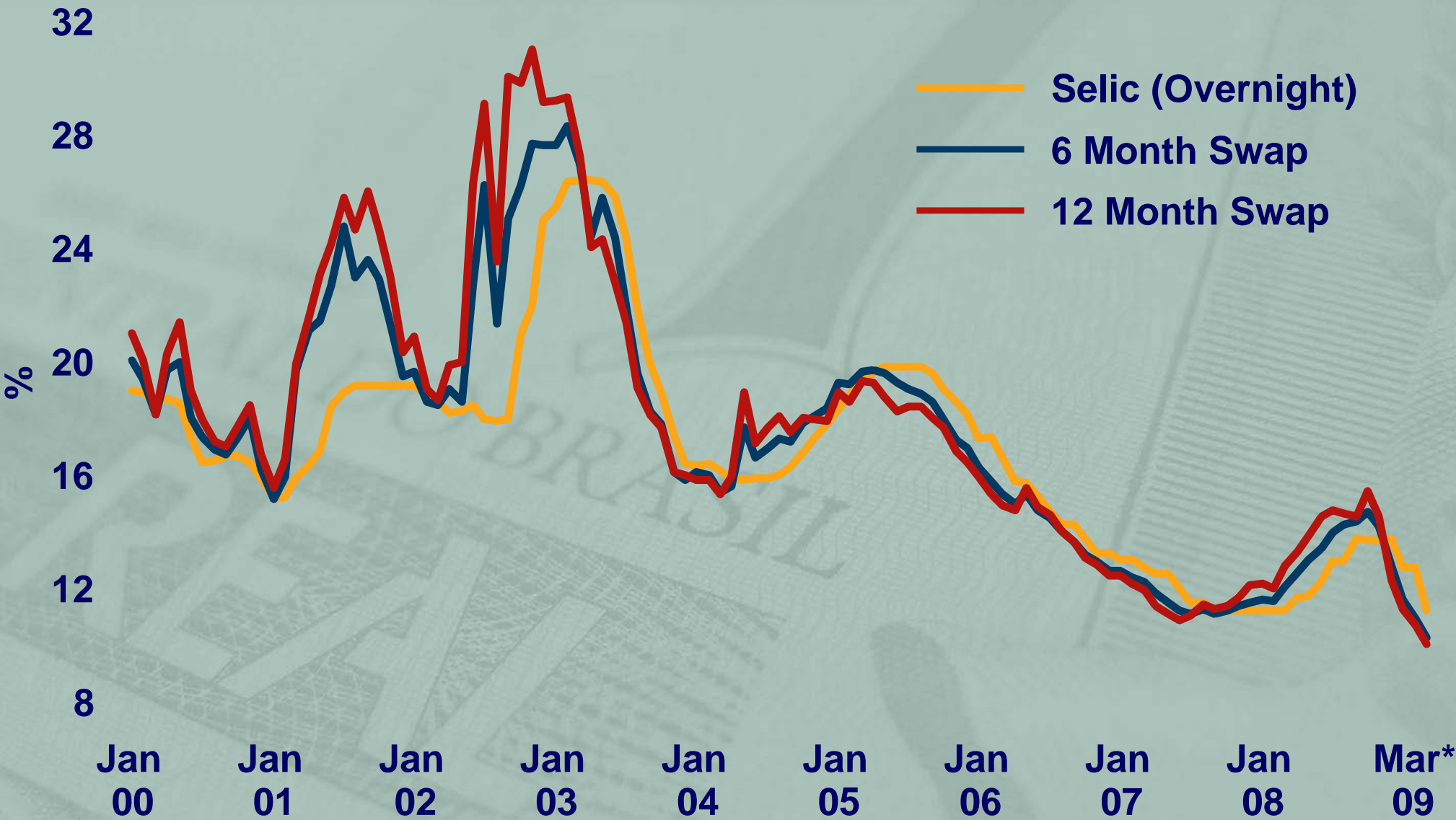
\* Positive values indicate more new contracts than maturing ones

\*\* Positive values indicate more maturing contracts than new ones

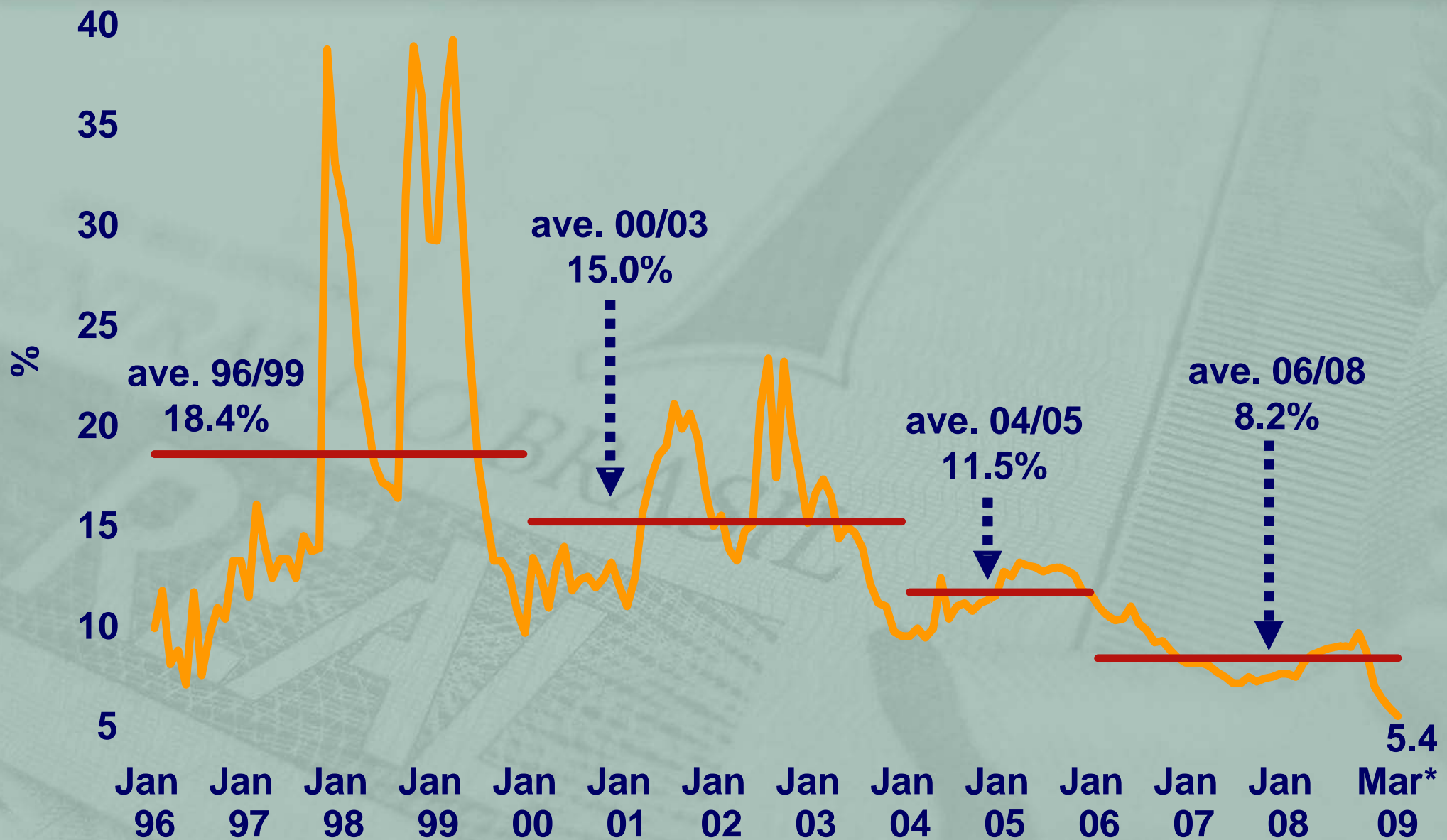
**Grand Total** **67.259,90**



# Interest Rates



# Real Interest Rate (12 Month Swap)





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DO BRASIL**

# Brazil: Responses to the Financial Crisis

**Mario Torós**

**Lima, Peru**

**March 2009**