Brazil: Short-term outlook*

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Casa das Garças – Homenagem ao Professor Albert Fishlow
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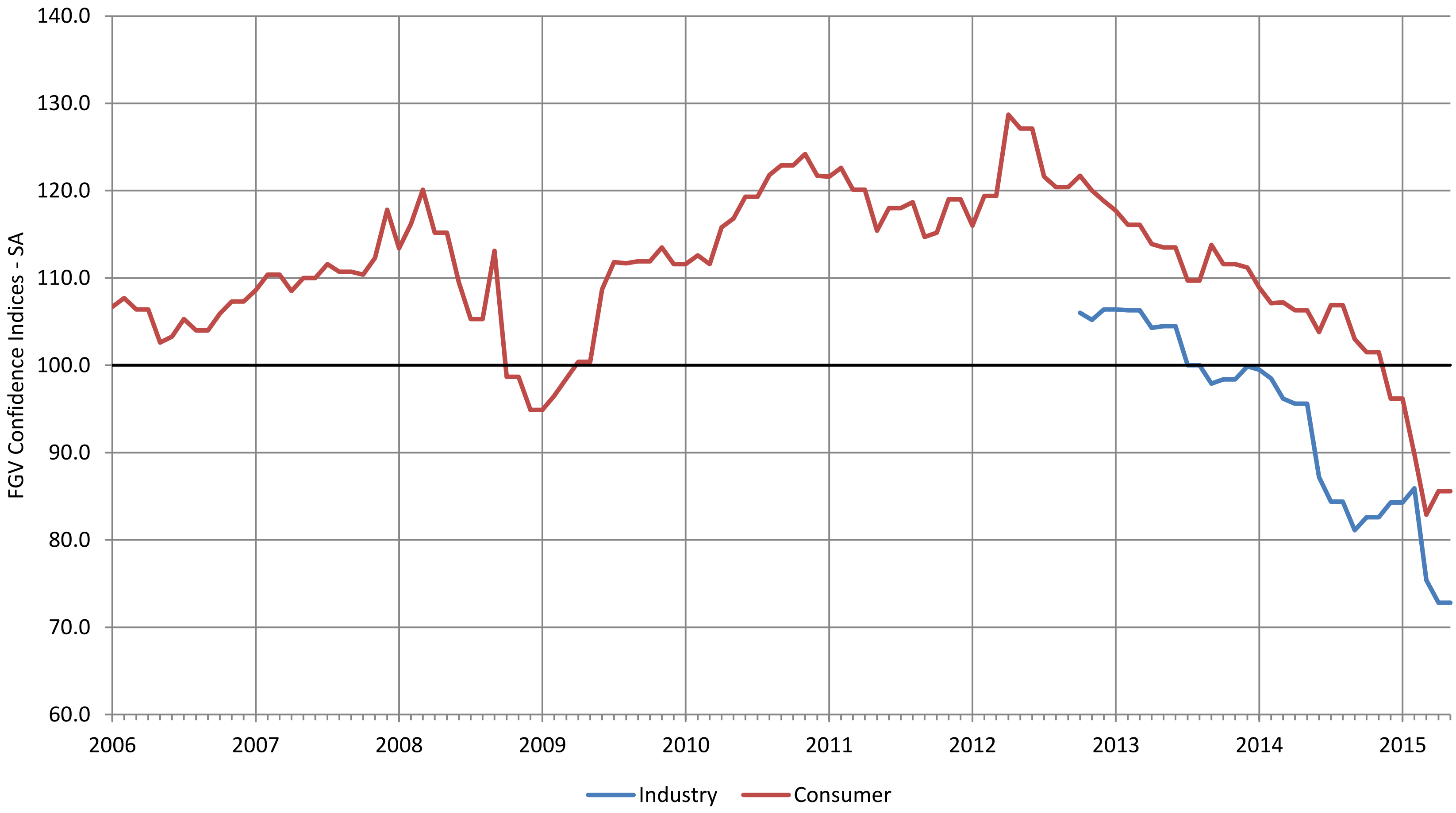
*All data used for the charts in this presentation are from BLOOMBERG PROFESSIONAL service.

A crisis of confidence
Accentuated by the political process in 2014; mismanagement; poor and uncertain prospects



What happened?

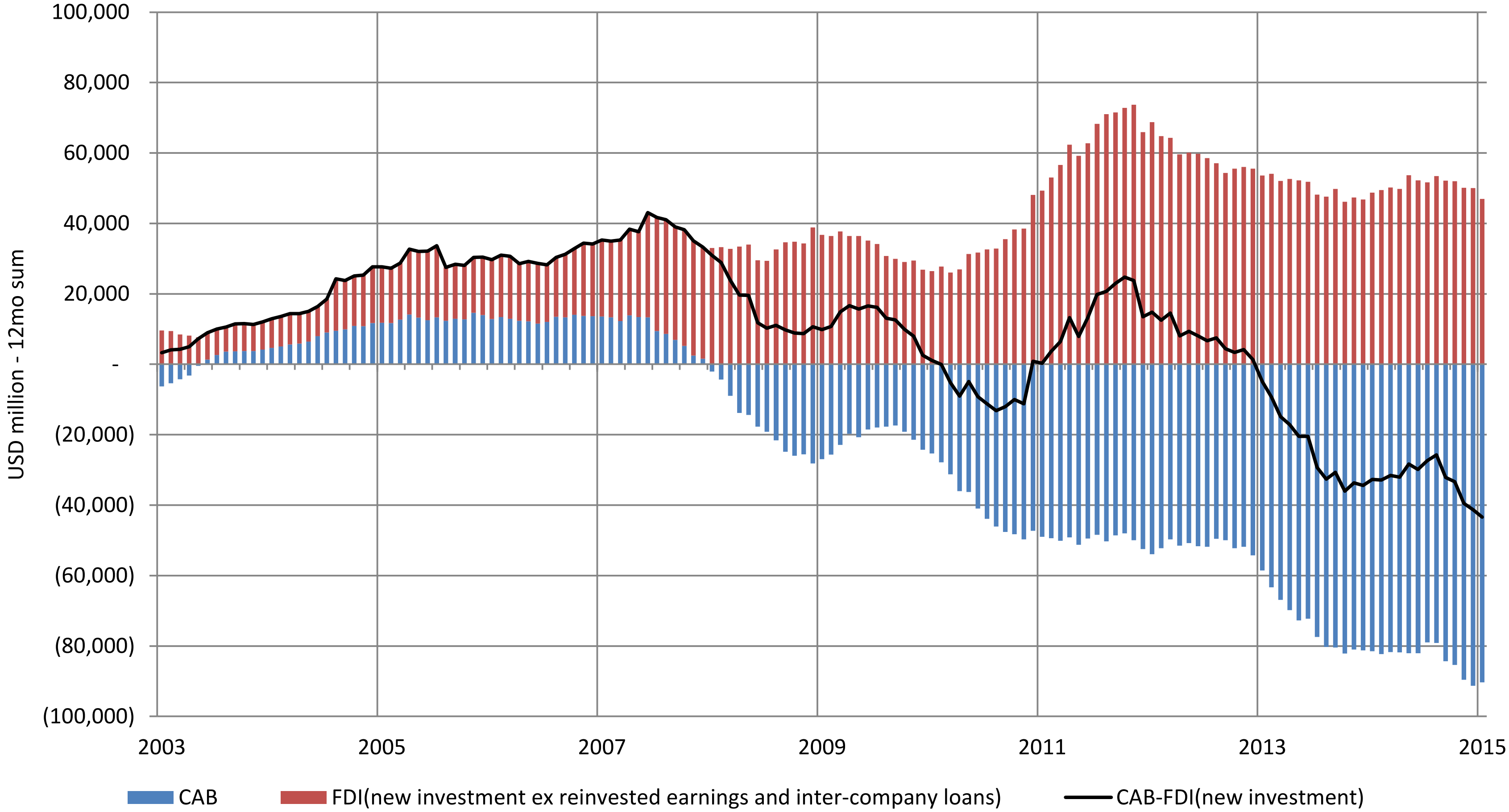
- Historical origins (Lula)
  - Mensalão and Lula2: Sindicalismo for political support and staffing of key positions; interventionism and resort to populism with use of state apparatus for political goals
  - GFC as an excuse to pump-prime the economy; re-gearing BNDES; erroneous assessment of crisis impact: China's 2% of global GDP impulse and impact on imports and prices of commodities
- Mistaken diagnosis (Dilma)
  - Misreading of the causes of recent growth: It was mainly China and "external manna" not a new "growth model" hence no change in trend potential GDP
  - Demand management policies (credit mainly through public banks & public spending) to push growth to "potential @ 4.5-5%pa" backfired
    - Wider CAD: Post GFC policy-induced boom attracted large k-inflows; thereafter increasingly financed by more speculative flows made worse by currency intervention and induced appreciation of BRL/USD
    - Deep fiscal deterioration (including machinations/"*pedaladas*") at all levels of government (inc. return to imprudent subnational borrowing)
    - Price controls, etc. with repressed inflation and serious loss of credibility in monetary policy
    - Loss of confidence with collapse of investment and, eventually, with reduction in credit growth also deceleration in consumption ➔ no growth

Weakening of the external accounts post-GFC

Consumption-fueled import drive

Corporate shift from domestic to external funding

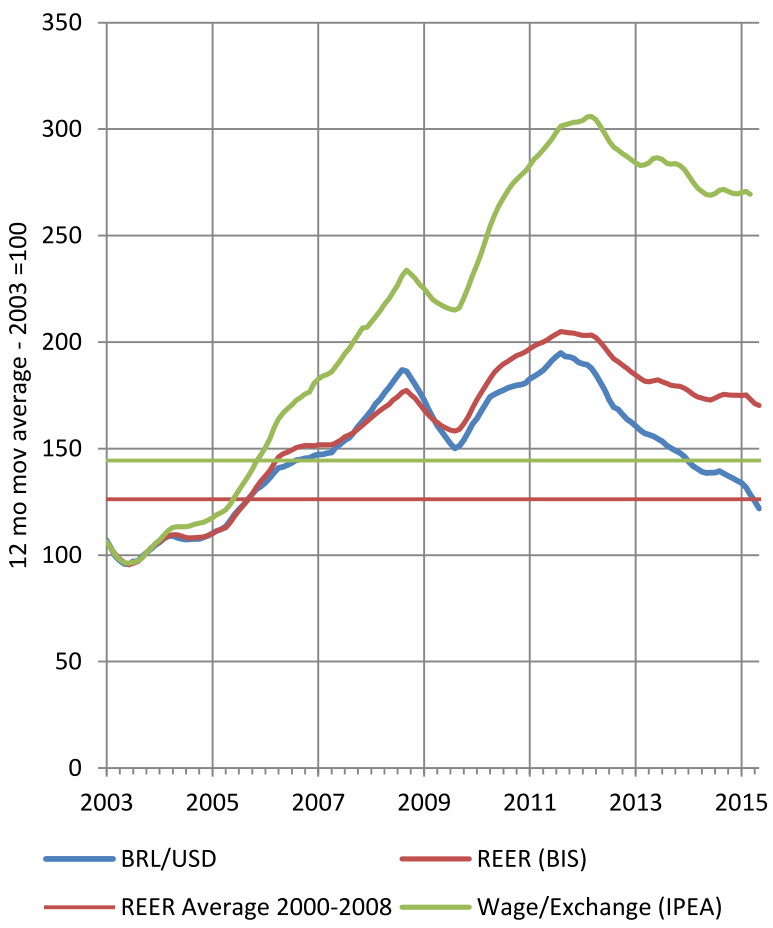
Speculative K-inflows: Progressive decline in “true” FDI funding

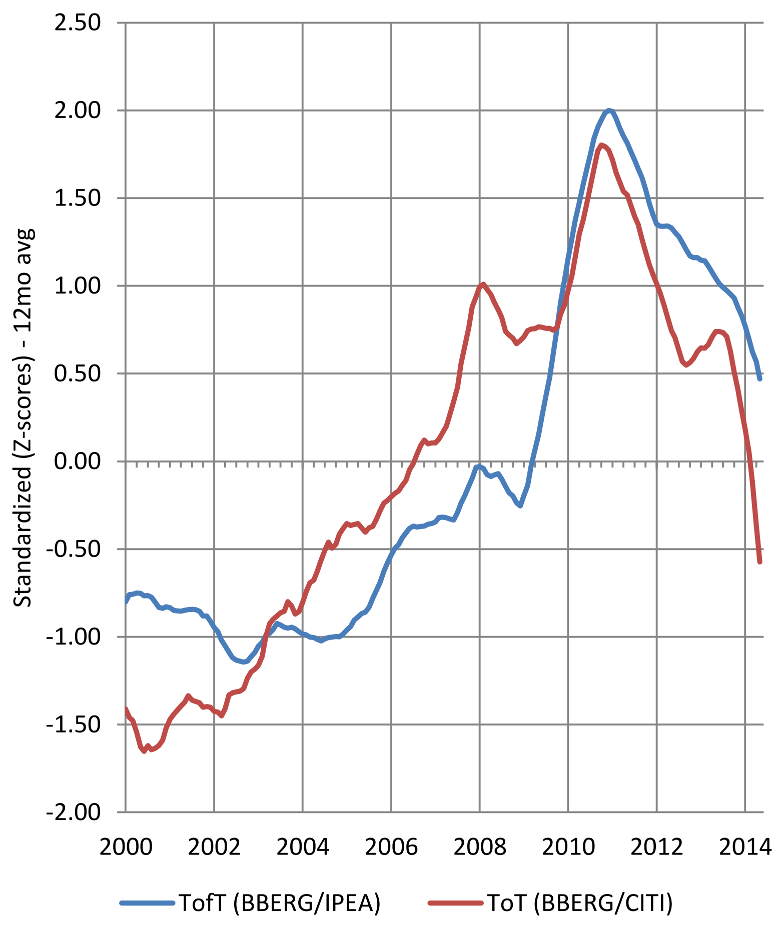


Large gains in ToT pre and post GFC (China)

Reversal post-2011 = Cycle of lower commodity prices

Gains in REER and especially in W/FX ratio (ULC) = To be reversed (Wage share down)

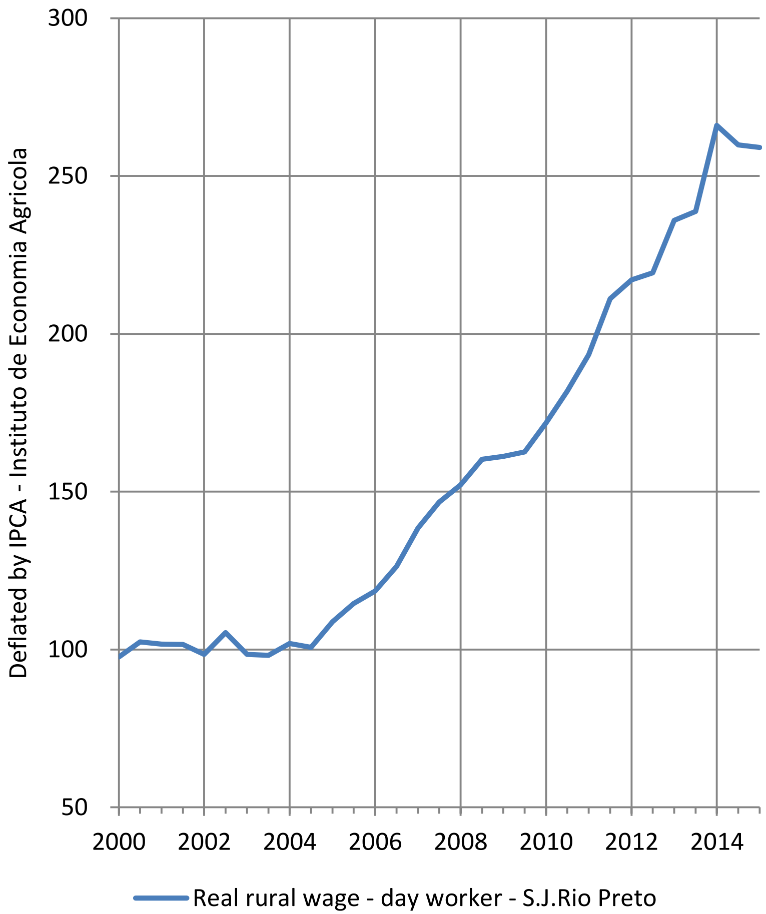


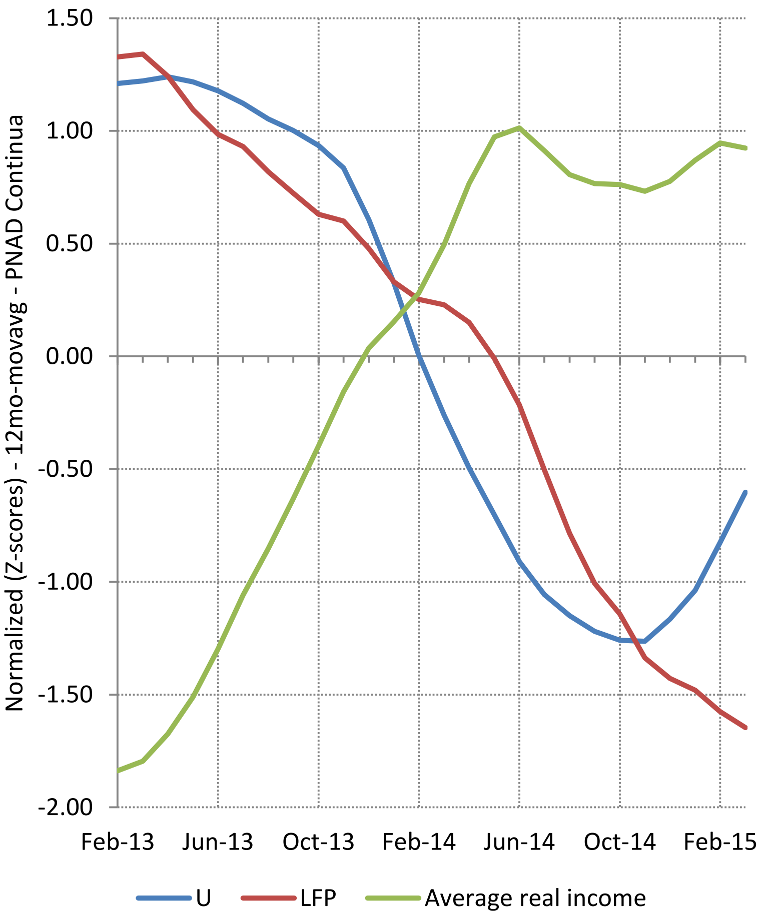


Growth in real incomes

Part policy: Real increase in MW 2003-2014 = 73.4% (5.1%pa vs. GDP 3.5%pa)

Part demography (also policy): Drop in LF growth and in LF participation





Lula 2 + Dilma 1: Sustained erosion of fiscal strength

At first compatible w/changes in debt composition; since 2012: increasingly reckless

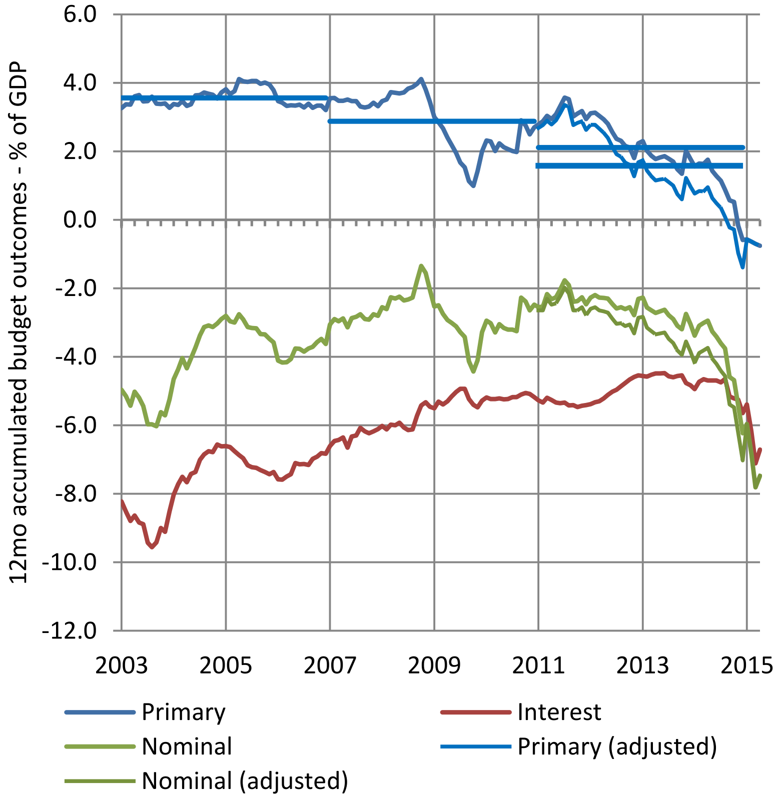
Arguments of fiscal dominance in play: Interest bill = 8% GDP and rising

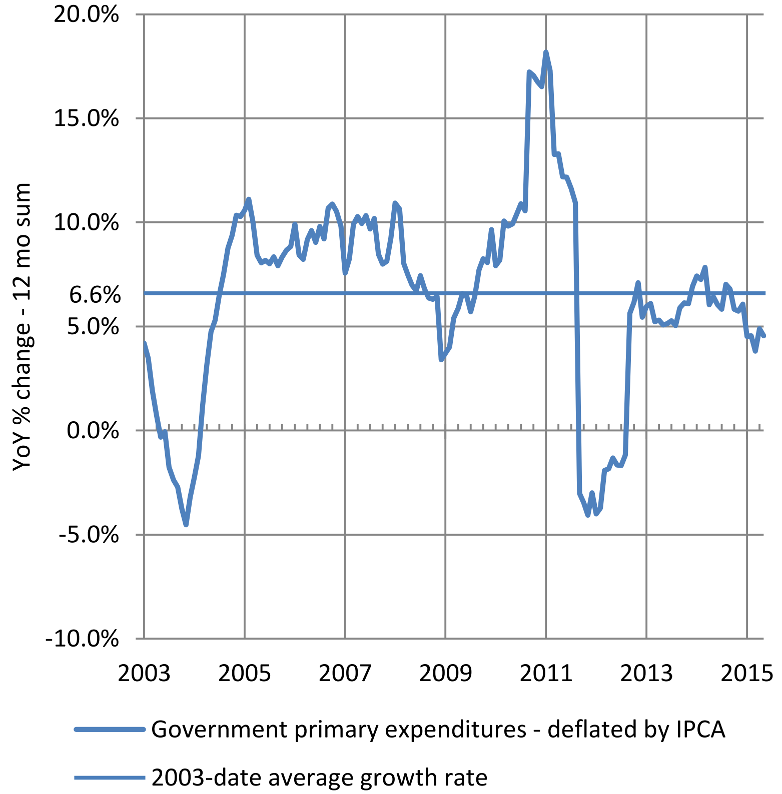
Politics under "Presidential Coalition" post-1998 = Fiscal failure

(Exchange of congressional votes for pork-barrel spending …and no one cares about taxes)

➔Public spending w/o accountability

➔Public taxation through "stealth" taxes: Income tax = 24% of revenues (32% in 1997)





Dilma 1: Good-bye inflation targeting, hello price controls

Inflation under control? Read, lower than ceiling of the band (6.5%)

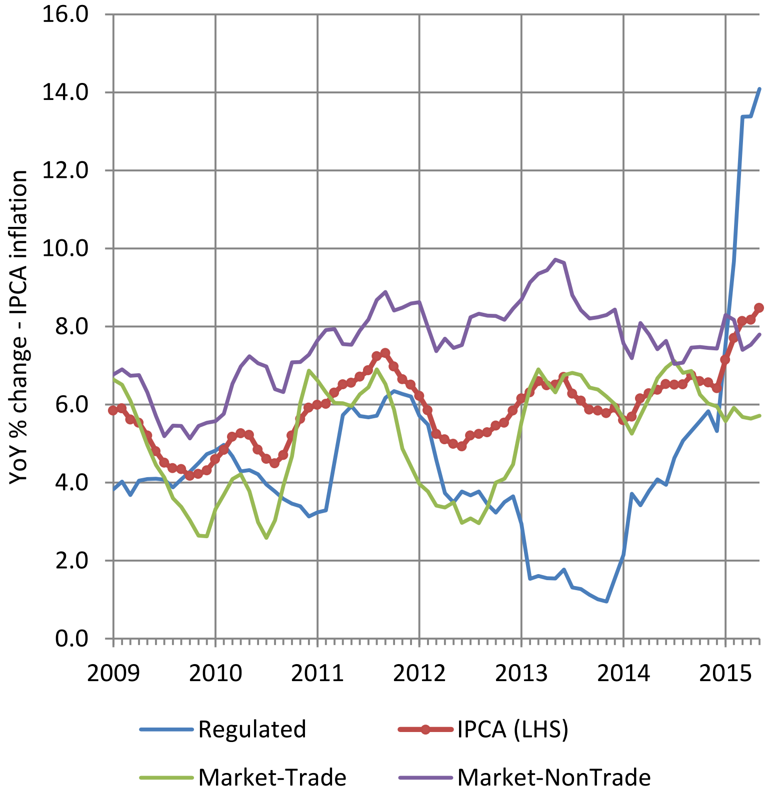
Problems? Control prices; grant targeted tax dispensations; intervene in the currency

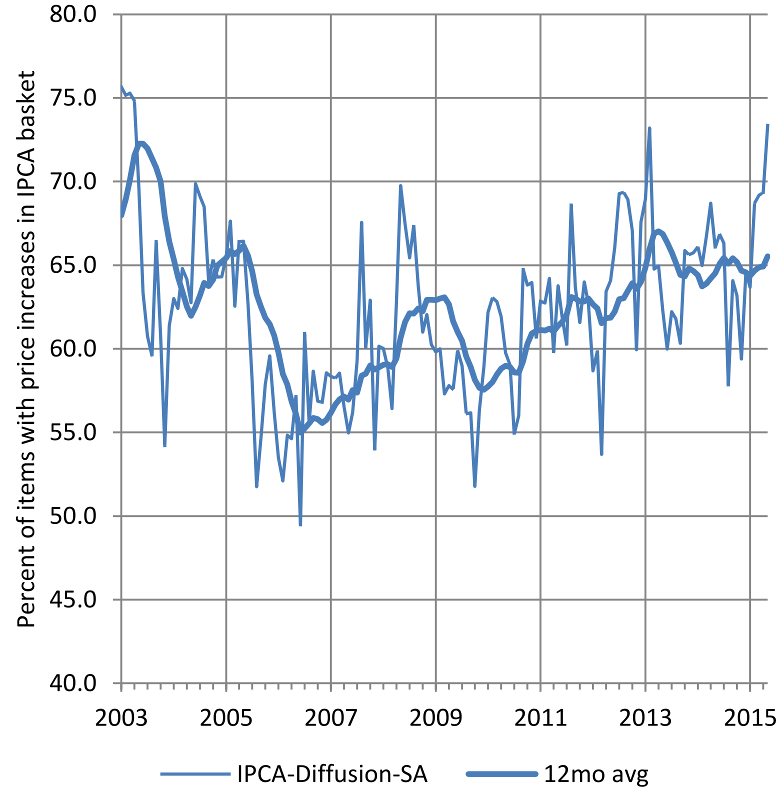
Outcome: 2015 is the year of correction of repressed inflation; IPCA yearend 9-10%yoy

Underlying inflation since 2011 at 6%+, accelerating since 2013

De-anchoring of expectations & loss of nominal anchor

Rising persistency/inertia in inflation: 2/3 of prices adjust at least once a month



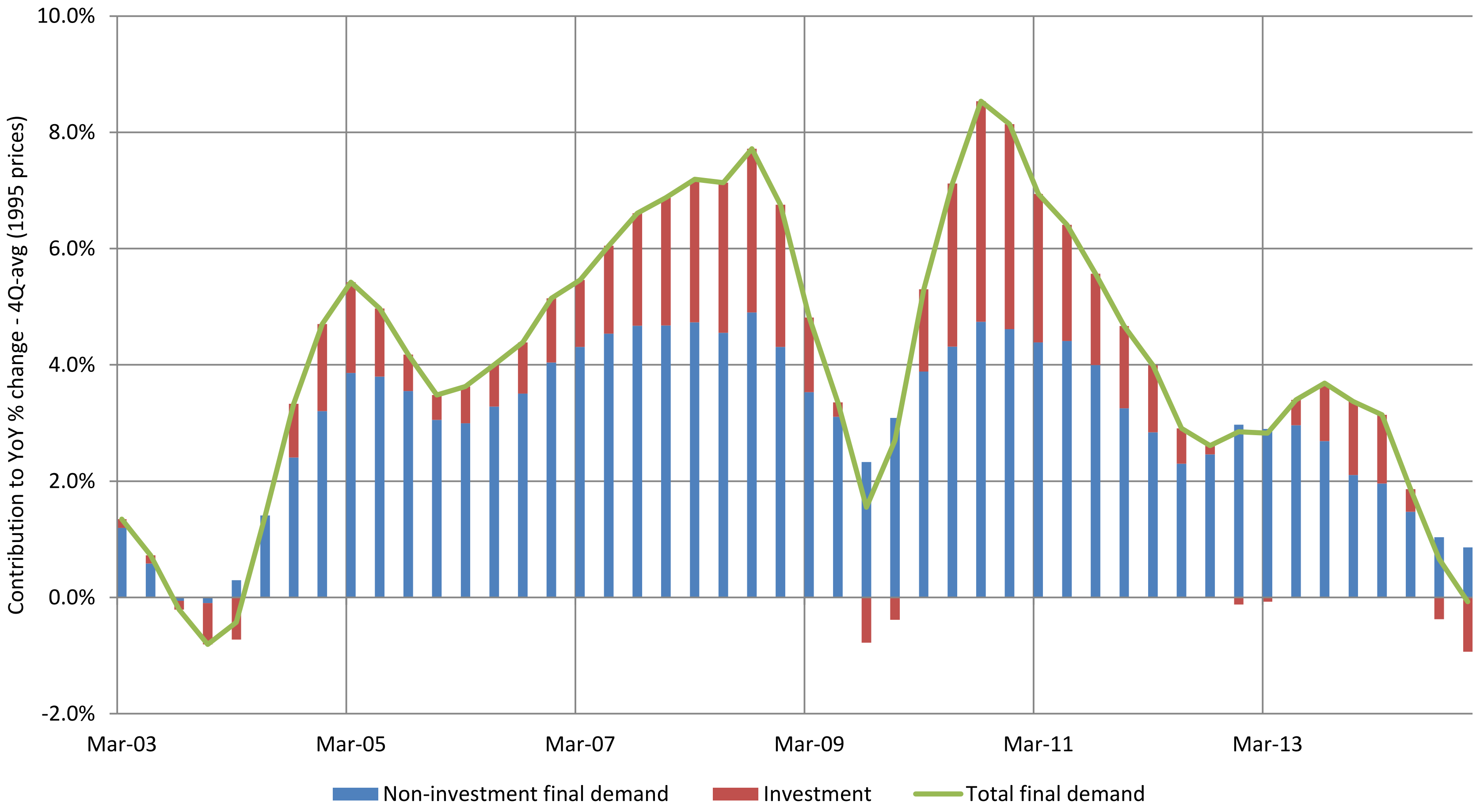


New Economic Matrix (2011-14)

Growth is always and everywhere demand driven

Potential GDP near 5%pa and will always and everywhere increase if demand expands

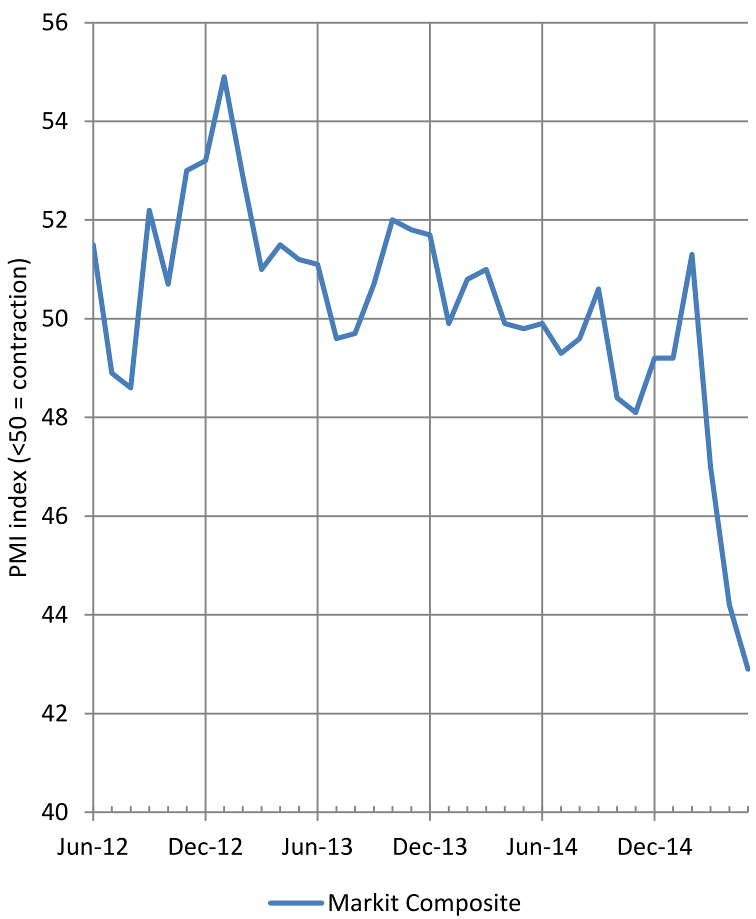
Thus, if y<5%, more policies to stimulate demand, driven by public intervention

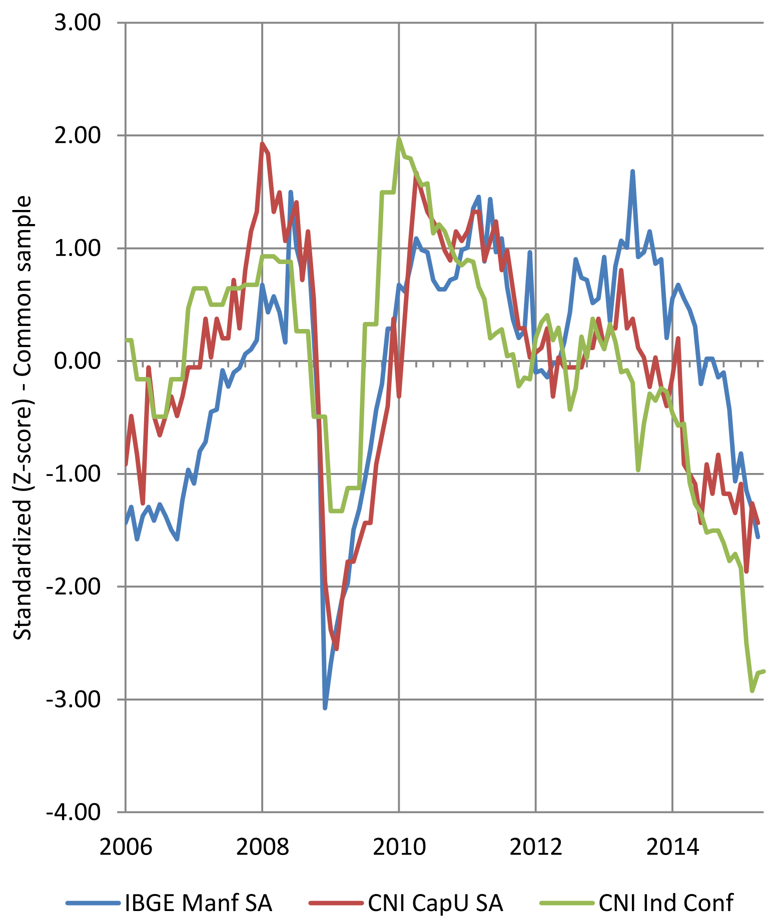


Bad policies, bad luck (reversal of commodity cycle), bad management

Result = Collapse in sentiment, in output and investment

Industry hit badly… lately, also services w/diminishing income and demand





Credit boom (2005-09): Legal reforms, higher incomes, financial inclusion

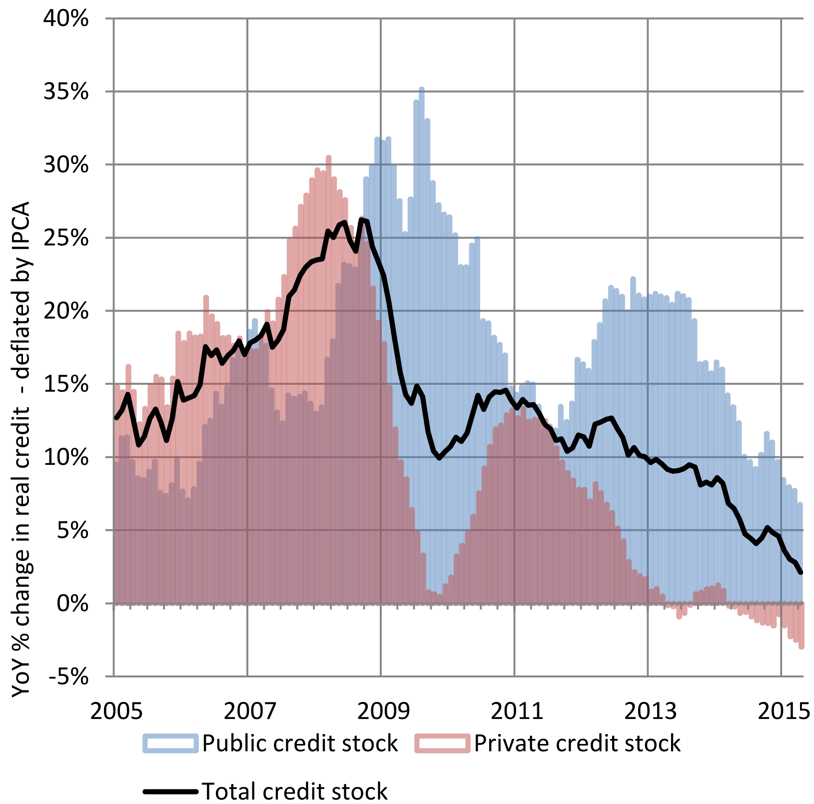
Latterly, policy-driven through public banks …w/deleveraging by private banks

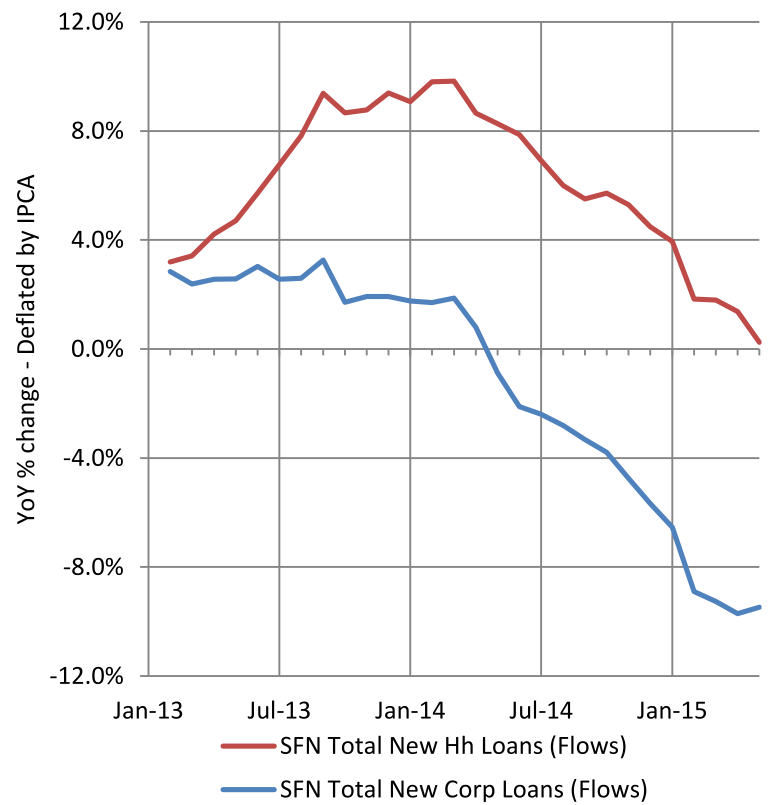
GFC = Public for private credit; New Economic Matrix = BNDES + CEF

Demand for credit is decelerating rapidly

Growth in new loans to households at standstill; increases in NPLs, esp. in CEF mortgages

The corporate sector is deleveraging



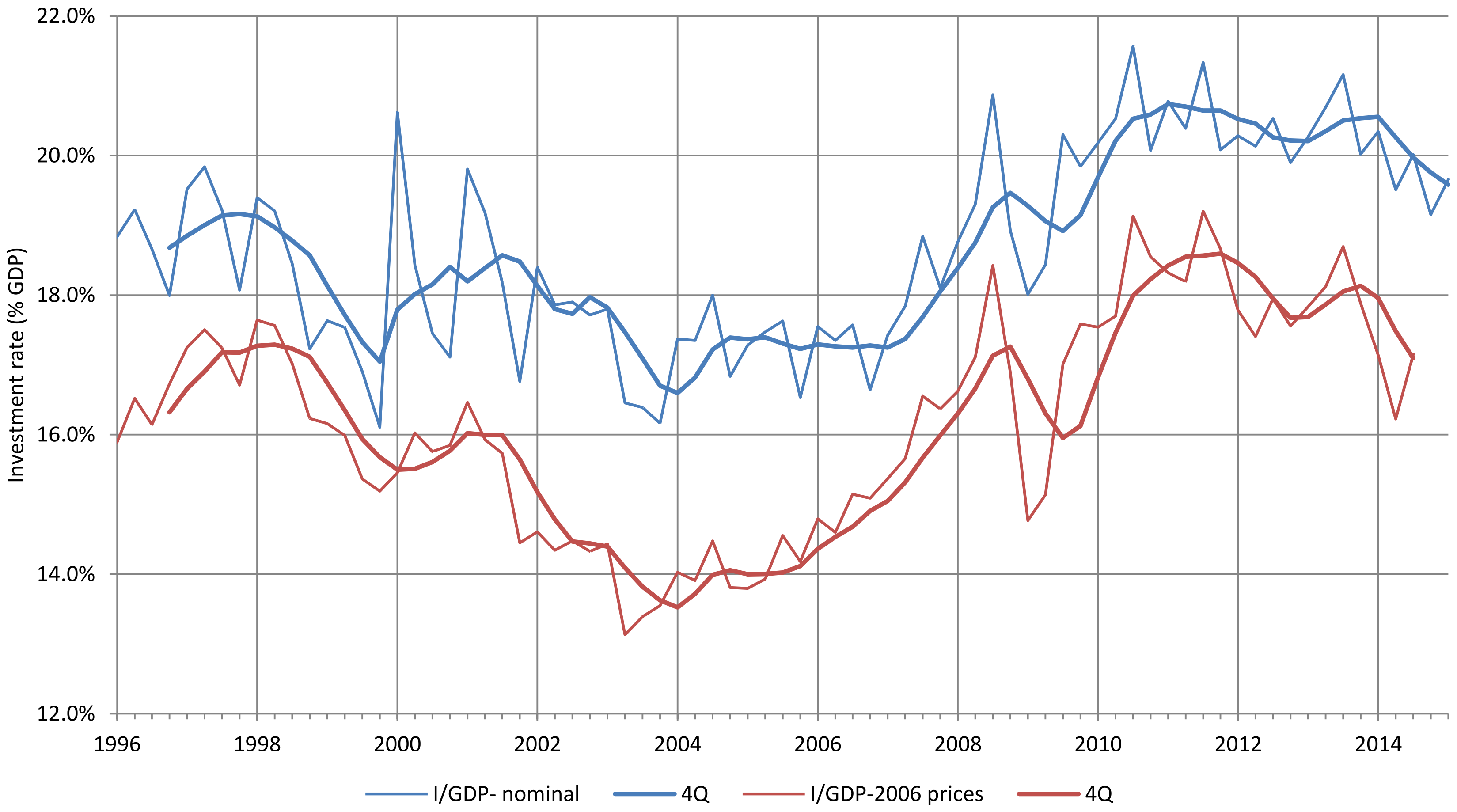


Investment/GDP average 1996-2014 = 16.2% (2006 prices)

Bacha/Bonelli: Low, costly, underutilized, badly allocated and inefficient investment

2004-11 – upward cycle

2012-?? – downward cycle



Stabilization in 2015/16: More difficult than in 2003/04

	1999-2002	2003	2011-14	2015*
GDP growth (%yoy)	2.3	1.2	2.2	-2.0
Inflation (%yoy)	6.8	14.8	6.1	9.8
Selic-eop (%pa)	25.00	16.50	11.75	14.50
Primary surplus (% GDP)	3.2	3.4	2.1	0.4
Public debt - net (% GDP)	42.8	38.7	31.0	41.0
CAB (% GDP)	-3.7	0.3	-2.7	-4.1
Reserves-eop ($bn)	37.8	49.3	374.1	370.0

- 2002: Prior to the “Lula shock” the macro was OK: 1999-02 - “new tripod”
  - Inflation: 6.8% yoy; Dec/2002 = 12.5%
  - Primary surplus: 3.4% GDP (1999-02 average)
  - External vulnerability ➔ External shock (BRL devalued 53%yoy in 2002)
    - CAD: 3.7% GDP
    - Reserves: $36.4bn; Net reserves Dec/2002 = $16.3bn
    - Share of FX-indexed debt: 27%; Sep/2002 = 41%
    - Mismatched currency composition: A/L of corporate sector
- IMF program + New funding + Palocci transition team (Lula’s fear of 1st year crisis) ➔ Stabilization - China , Terms of Trade and subsequent boom
- Average primary surplus in 2003 = 3.4% GDP = Return to debt sustainability

Current stabilization attempt:

Political opposition and hostility w/opportunistic Congress
Fiscal – Poorer starting point with diminished (zero) fiscal space
Monetary – Low credibility; strong inertia and possible overreaction
Growth outlook – Exhaustion of consumer-led impetus; no confidence for investment

- The fiscal deterioration in 2012-14 is large and the fiscal space exhausted
  - Starting point: a deficit in the range of 0.5-1% GDP
  - Required primary surplus to stabilize Debt/GDP
    - Best scenario: 2.5-3% GDP
    - Adverse scenario: 4% GDP
  - Usual response = higher taxes… but Tax/GDP
- Central bank w/low credibility and having to re-invent its MPRF
  - Highly inertial inflation w/negative shocks (administered prices; food, etc.)
  - Issue is less how high the rate than its persistency
  - Fiscal dominance redux? Real implicit cost of debt in double digits

Fiscal deterioration in 2012-14
Large and damaging

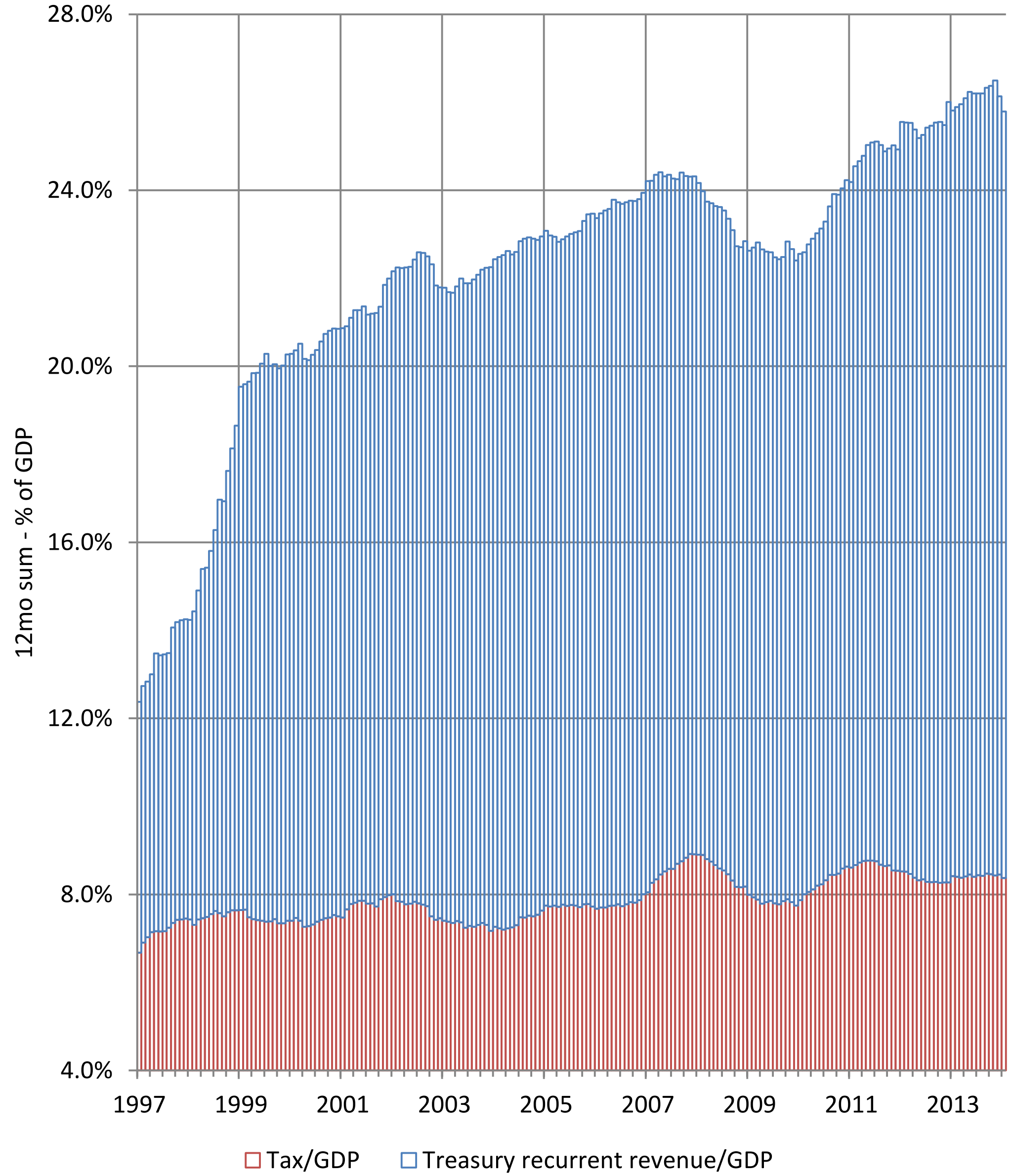
Starting point (2014):
- Deficit in the range of 0.5-1% GDP (depending on unaccounted items)

Primary surplus to stabilize Debt/GDP
- Best scenario: 2.5-3% GDP
- Adverse scenario: 4% GDP

Usual response = Higher revenues
- Treasury revenues/GDP
- 12% in 1997 -- 27% in 2014
- 15pp GDP in 17 years: 0.9pp/pa
- Real revenue growth = 8.6%pa

Meanwhile (Slide 8)
- Real expenditure growth = 6.6%pa

The fiscal space is empty – and with the economy in recession real revenues are down: -4.0%yoy in May
-3.1%yoy 12mo



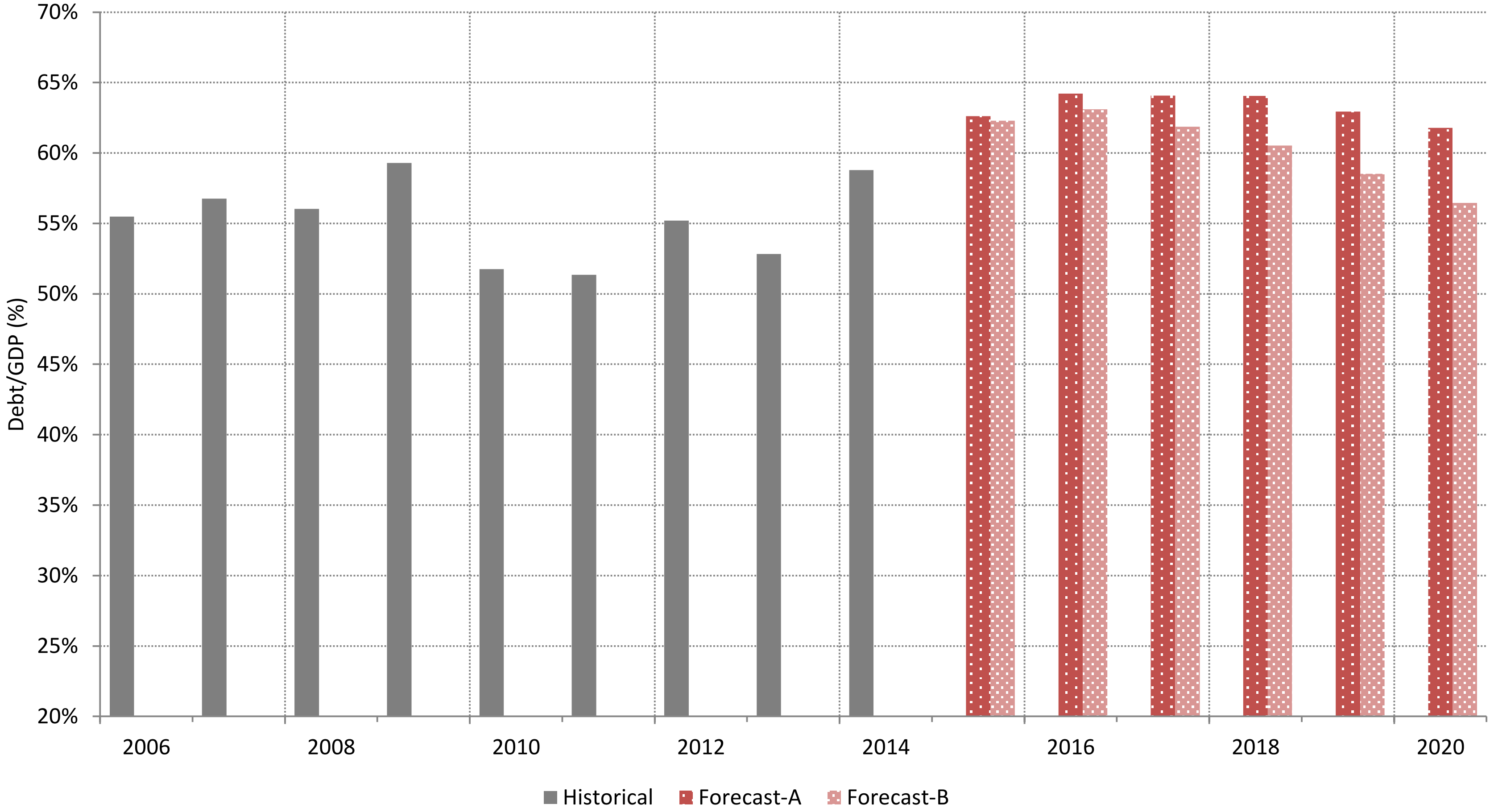
Debt/GDP > 60% GDP

Current fiscal stance: Unstable path

Fear of a downgrade below I-grade

Greater uncertainty in portfolio flows to finance 4%GDP CAD

Base Case	2015	2016	2017	2018	2019	2020
GDP growth (YoY%)	-2.00	0.50	2.00	2.00	2.00	2.00
Primary surplus (% GDP)	0.40	1.20	2.00	2.00	2.50	2.50
Effective interest rate (%pa)	28.63	14.07	16.17	16.01	15.86	15.73
Average Selic	14.00	13.00	10.75	10.00	8.50	8.50
Inflation (YoY %)	9.00	6.00	5.20	4.50	4.50	4.50
Base money (% GDP)	4.76	4.76	4.76	4.76	4.76	4.76
BRL/USD	3.40	3.60	3.80	4.00	4.20	4.40



BACEN: De-facto abandoned IT regime in 2012-14

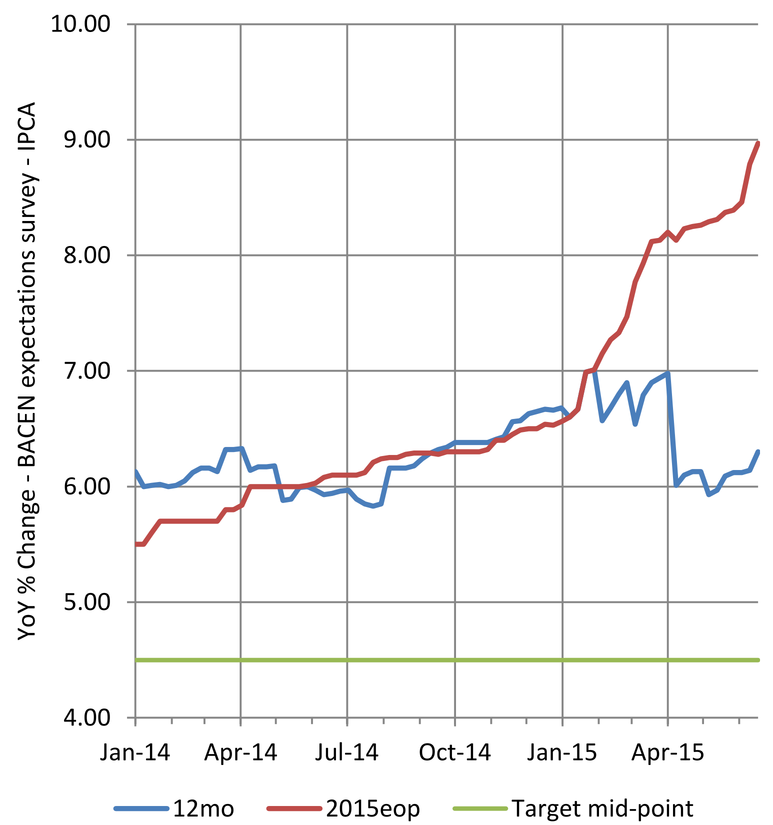
Loss of credibility; erratic and misguided communications

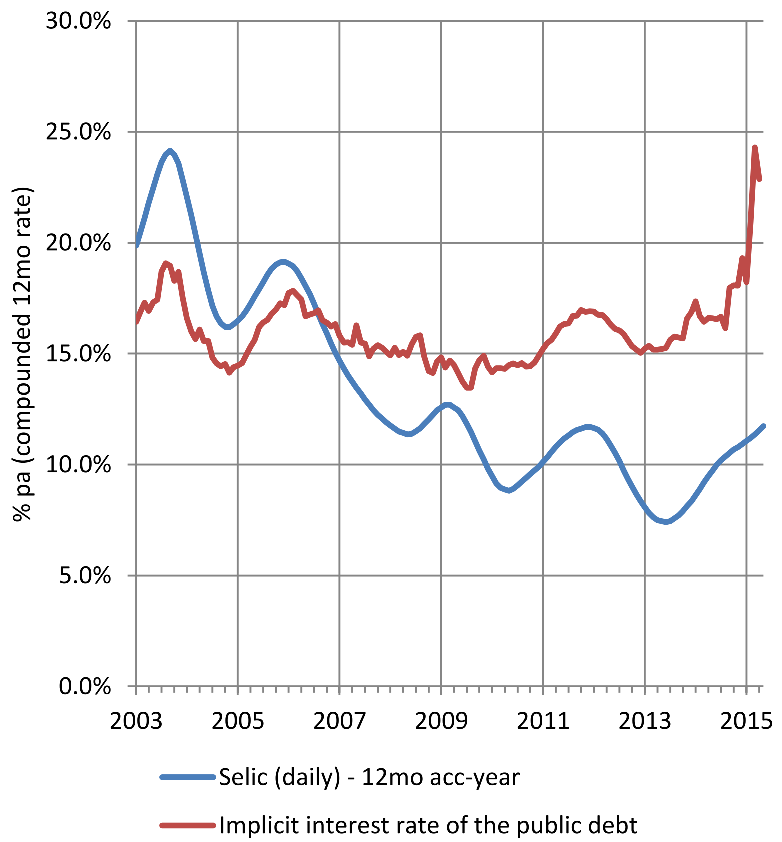
Current approach = forced march in reverse direction?

Ineffectual: Agents fear premature reversal given past performance

What is needed : Signalization of determined action - narrower target band in 2017 is positive

Large fiscal & output cost: Indication of intertemporal inconsistency or of distress?

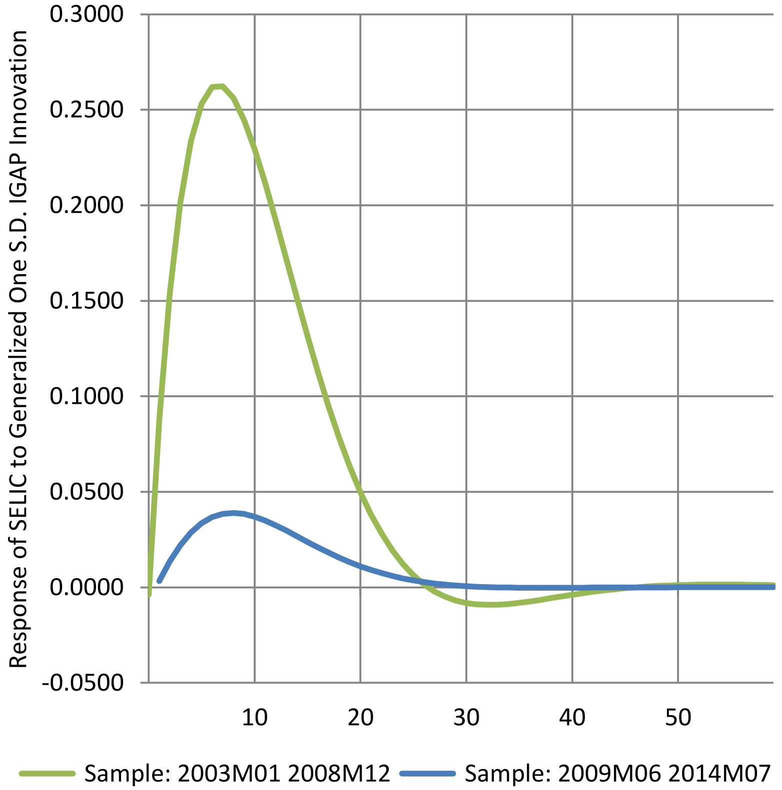




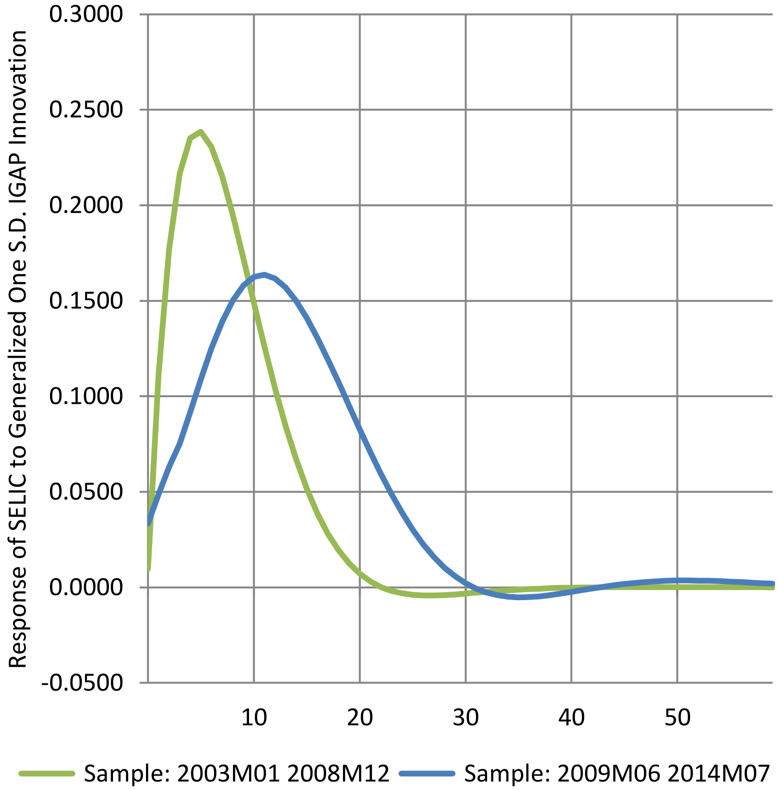
The central bank's reaction function changed post-2008

New MPRF: Does not meet Woodford's determinacy condition. Taylor rule long run coefficient < 2

Sample: 2003-2008
Bayesian VAR - Litterman/Minnesota priors (N=72; 3 lags)
Estimated long run impact of Selic to 1pp increase:
IGAP = 2.612
YGAP = 0.151



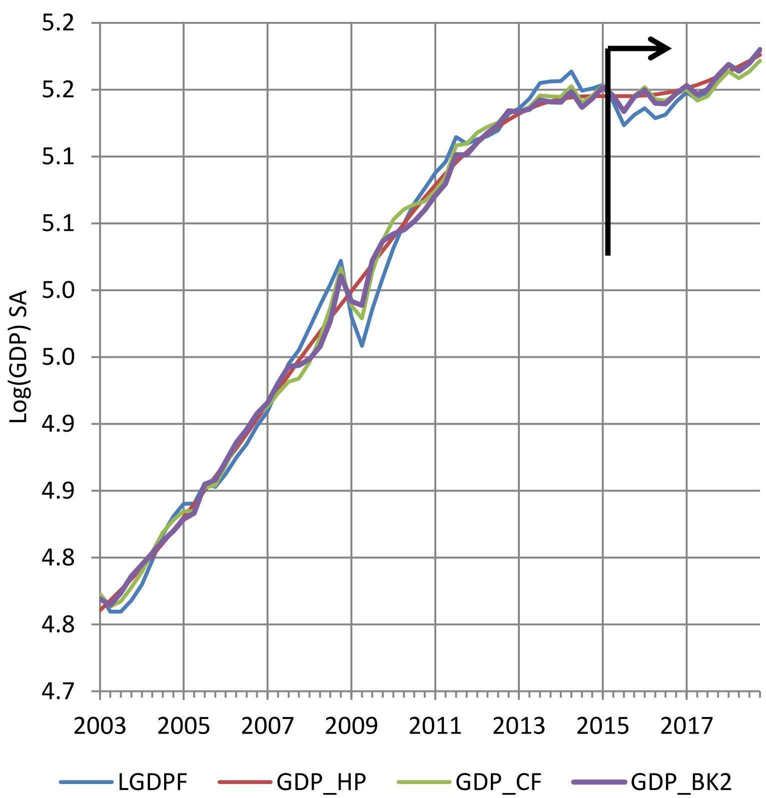
Sample: 2009-2014
Bayesian VAR - Litterman/Minnesota priors (N=62; 3 lags)
Estimated long run impact of Selic to 1pp increase:
IGAP = 0.050
YGAP = 0.112



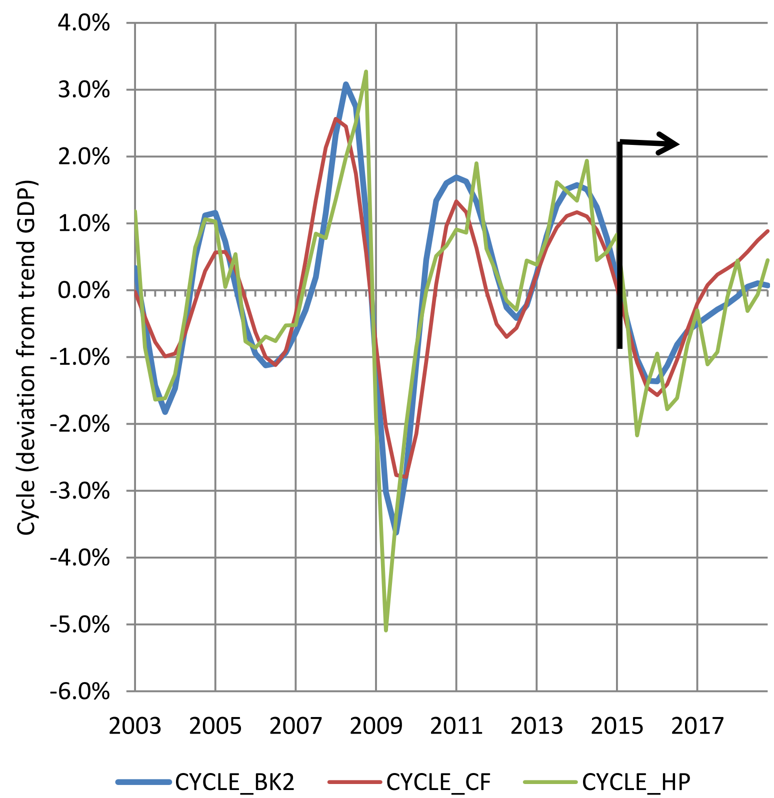
The oncoming recession will be deep and prolonged

Trend growth is low (current y* is at 1%pa or less)
Even so, output gap widening until late 2015 and not closing until late 2017

Notes:
HP filter w/end point correction - (log(GDPsa))
Baxter-King (BK) – Fixed length/symmetric; 8 quarters lag - (log(GDPsa))



Notes:
Christiano-Fitzgerald (CF) – Full sample asymmetric; series with unit root I(1); cycle rage 8-28; detrended series - (log(GDPsa))



The biggest challenge: Low productivity

And especially low TFP - Declining path since 1980

With modest pickup since 2003

➔ Present approach to stabilization will not help

	y	k	h	TFP
1980-2009	-0.5%	0.1%	1.3%	-1.8%

Source: Ferreira, P. (2015)