# *Monetary Policy Regimes and Economic Performance: The Historical Record, 1979-2008*

*Benati and Goodhart*

## Discussion

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# What a rich paper!

- 140 pages
- 30 years
- Many countries
- 2 authors (quite different!)
- History and econometrics

# Many questions

- Are the NICE years due to luck or to policy?
- Should we acclaim them? ... seeds of disruption → have Central Banks overlooked financial stability?
- Monetary policy and financial stability: will new macro prudential responsibilities imply a break of the great consensus on good monetary policy practices? Do we need a new mandate and/or new tools/instruments?
- Crisis has revealed that liquidity policy is important: how should Central Banks provide liquidity?
- But also many other questions .....

# Key messages?

- NICE years due to a bit of luck and a bit of policy
- Central Banks have overlooked financial stability
- Estimates suggest low volatility associated to low risk premium which encouraged risk taking but paper seems to say that low interest rate should not get all the blame
- Central Banks should not target asset prices but monitor financial stability through monetary analysis
- New instruments for macro prudential purposes? This will challenge central banks' independence

# My discussion

Select TWO points only

If time THREE or FOUR

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# The point is partly methodological

- VAR literature attributes great moderation to good luck on the basis of counterfactual exercises
- But cannot rely on VAR based counterfactuals because behaviour (coefficients) change with policy regimes [Lucas' critique]+ changes in expectations induced by monetary policy likely to end up in VAR residuals (shocks)
- Quantify importance of the point by performing VAR counterfactuals on different examples, including estimated DSGE models

# The positive conclusion of the paper

The estimated DSGE in the paper points to *both* luck and policy – this is what we should believe NOT VAR evidence

*Observations*

1. The emphasis on the methodological point is surprising – VARs never meant to recover deep parameters !
2. DSGEs are the right tool for that, but they are possibly highly misspecified – shocks may capture missing frictions. Should we believe the positive result?

# An alternative exercise

*I don't want only rely on DSGE results*

- Cross check with VAR but enlarge the VAR to capture omitted expectations and variables (consider 20 variables in the empirics and use Bayesian shrinkage to deal with curse of dimensionality problem)
- Perform the usual VAR counterfactual

Answer: it is all structure / policy!!!!

# Giannone, Lenza and Reichlin, JEEA 2007

Consider a VAR for the macroeconomy [20 macro variables: inflation, activity variables, labor market variables, interest rates, ...]:

$$X_t = A_{pre84}(L)X_{t-1} + e_{pre84,t} \qquad e_{pre84,t} \sim WN(0, \Sigma_{pre84})$$

$$X_t = A_{post84}(L)X_{t-1} + e_{post84,t} \qquad e_{post84,t} \sim WN(0, \Sigma_{post84})$$

# Giannone, Lenza and Reichlin, JEEA 2007

Keep unchanged the pre 1984 shocks and feed them through the post-1984 mechanism

$$X_t^* = A_{pre84}(L)X_{t-1}^* + e_{post84,t}$$

- Ask (for GDP and inflation):
- How much of the decline in volatility and the decline in relative predictability can be explained by a change in the propagation mechanism?

# Giannone, Lenza and Reichlin, JEEA 2007

**It is not the shocks!**

**Results**

| Prop. | Shocks | Std | | Predictability | |
|---|---|---|---|---|---|
| | | GDP growth | Inflation | GDP growth | Inflation |
| | | *Observed* | | | |
| Pre 84 | Pre 84 | 2.68 | 2.66 | 0.18 | 0.12 |
| Post 84 | Post 84 | 1.28 | 0.75 | 0.36 | 0.31 |
| | | *Counterfactual* | | | |
| Post 84 | Pre 84 | 1.30 | 0.69 | 0.47 | 0.33 |

# Giannone, Lenza and Reichlin, JEEA 2007

ALL the decline in variance of inflation and ALL decline
in variance of output can be explained by a change in the coefficients capturing either structure or policy

If the VAR has enough information
cannot rule out is all policy!!!!

*Information is insurance against misspecification*
*Not surprising that role of luck becomes minimal if we consider large information*

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# Does monetary analysis help?

Does monetary analysis help to identify financial imbalances/ credit and leverage expansion beyond fundamentals?

Rephrase: has dynamics of monetary aggregate signalled anomalies that are not captured by prices, output, yield curve ...

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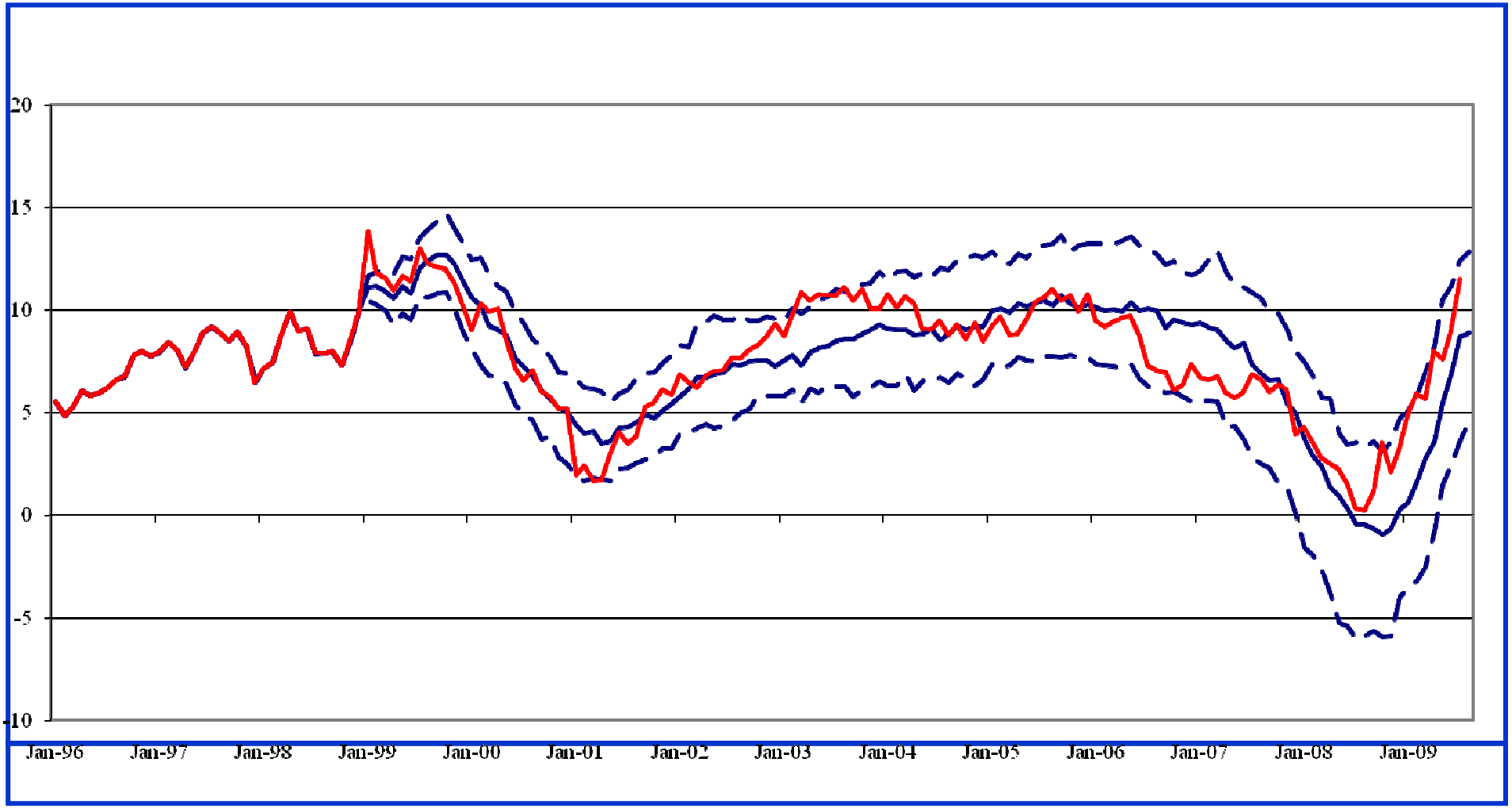
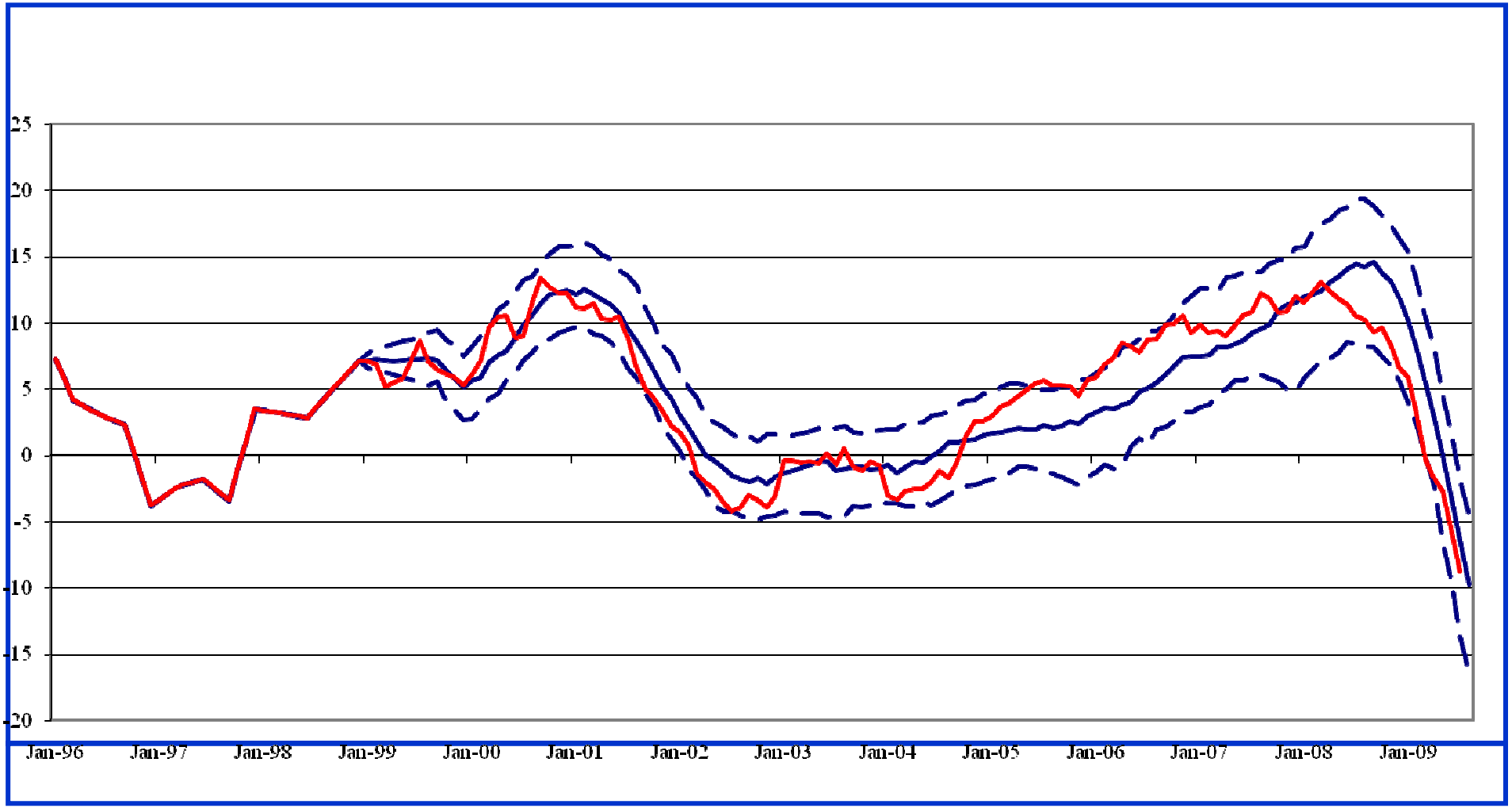
# My (large) VAR based counter-factual

- Estimate a VAR model on euro area data with 31 variables, macro and some monetary and financial (Giannone, Lenza and Reichlin, 2009): 1/1991- 8/2009
- Compute *expected path of monetary aggregates* given VAR parameter estimates until July 2007, past of all variables (1/1991-12/1998) and the *full observation path* of industrial production, unemployment and inflation (Taylor rule variables)
- ASK: are the counterfactual paths significantly different than what we have observed?

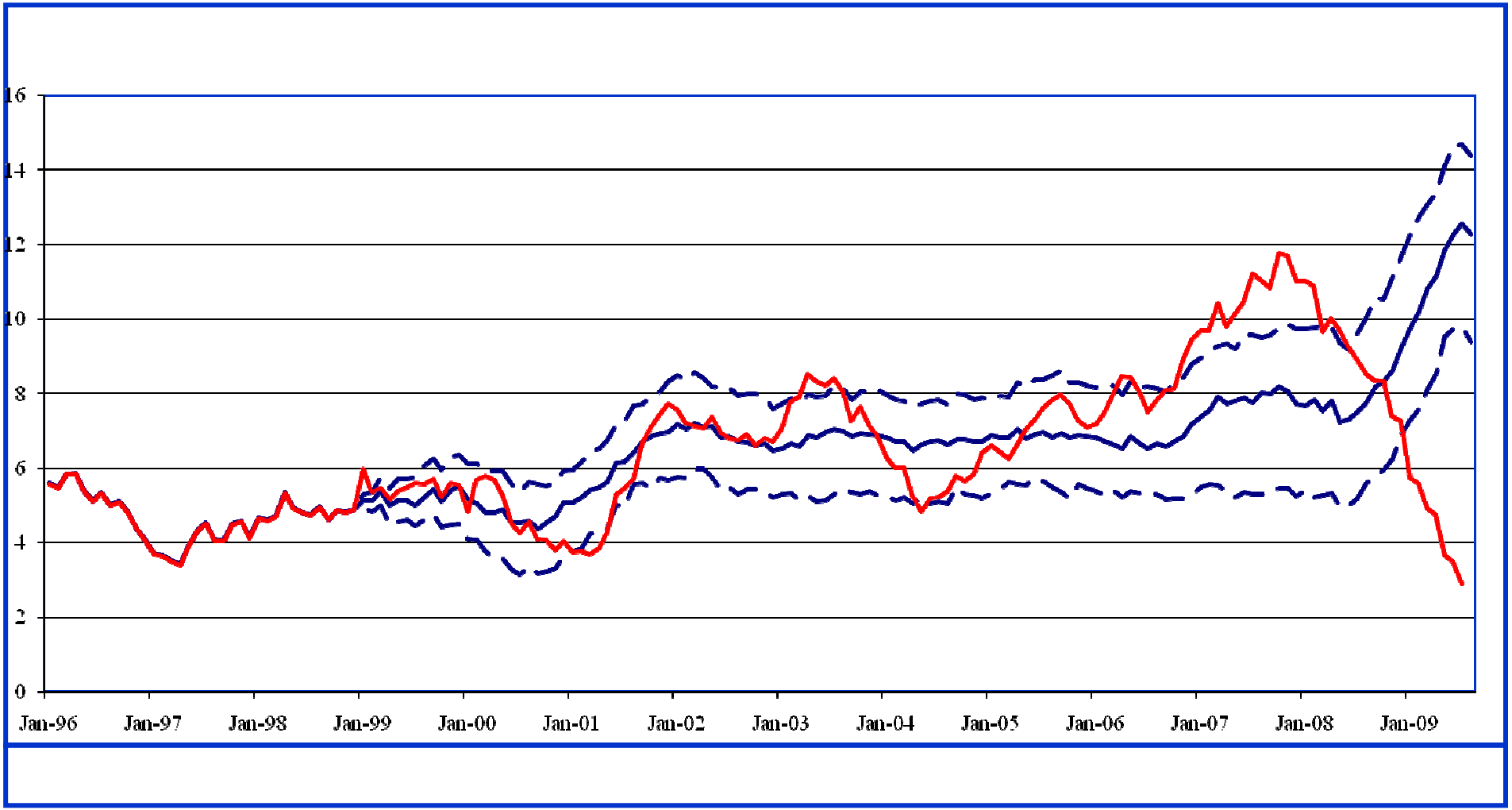
# M1: no anomalies!



# Loans to non financial corporations: no anomalies!



# M3: anomalous up trend in growth since beginning 2006 and down since Oct 2007



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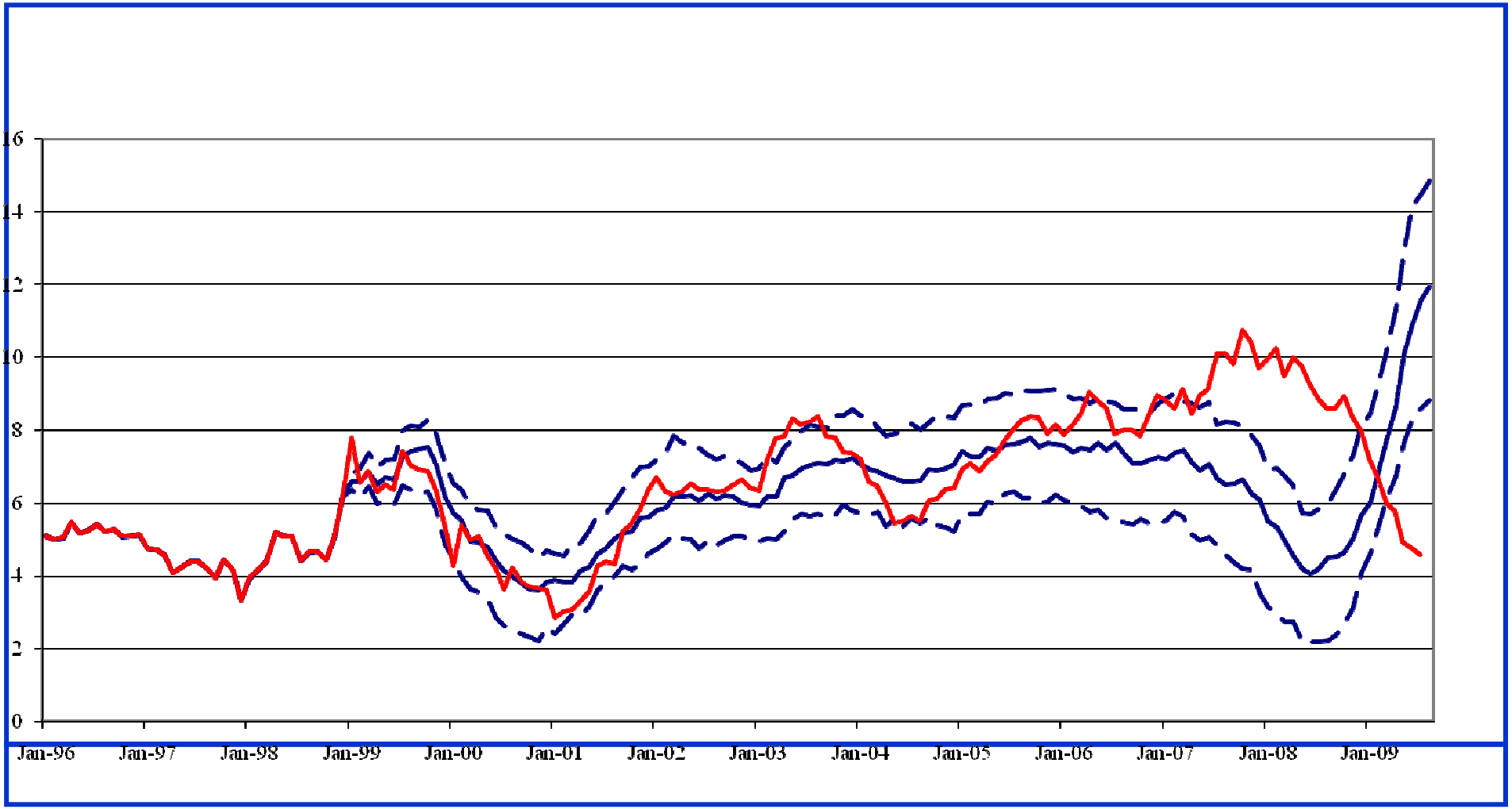
# M2: similar anomalies than M3



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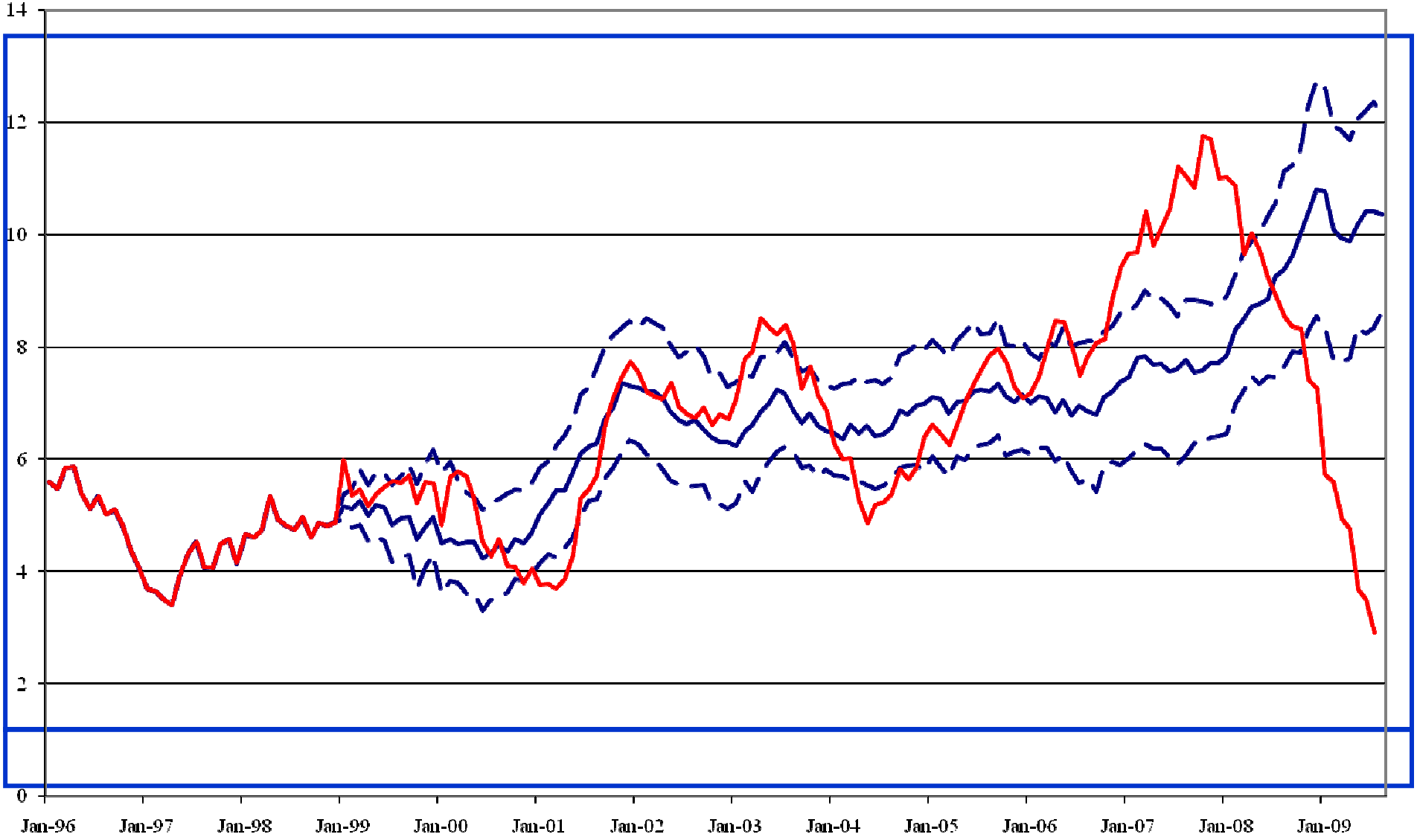
# Results are encouraging for monetary analysis

M2 and M3 are telling us something ... but not about price stability

-- Are these simple portfolio shifts? NO / anomalies stay if we condition for the yield curve as well

# M3 conditioning also on realization of yield curve



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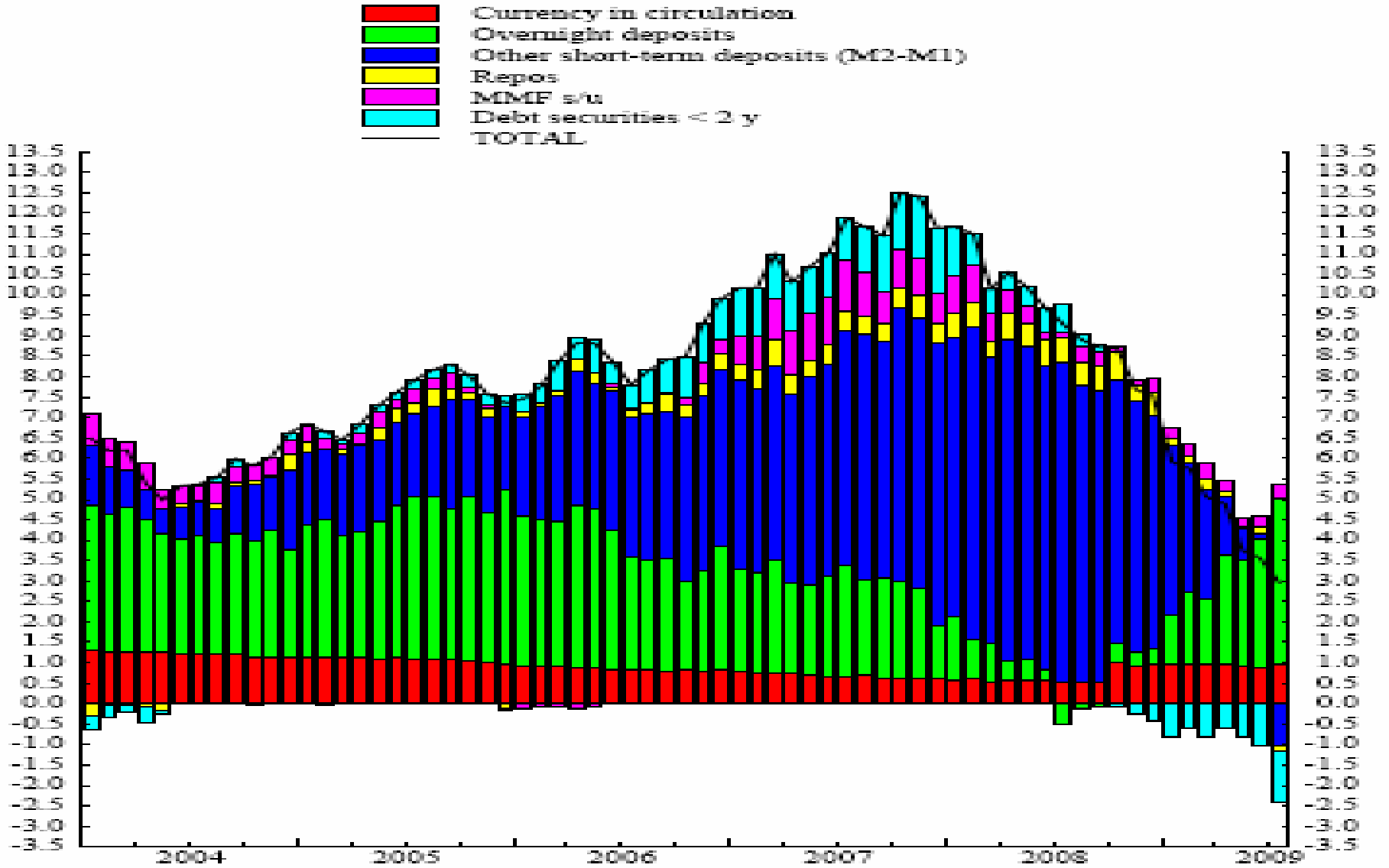
# What is going on in M?

Let us look at decomposition of M3 by instruments

It is short time deposit!!!!

# M3 – decomposition by instrument

Scaled to percentage points of M3 annual growth




MFM Statistics Division 26.Aug.09

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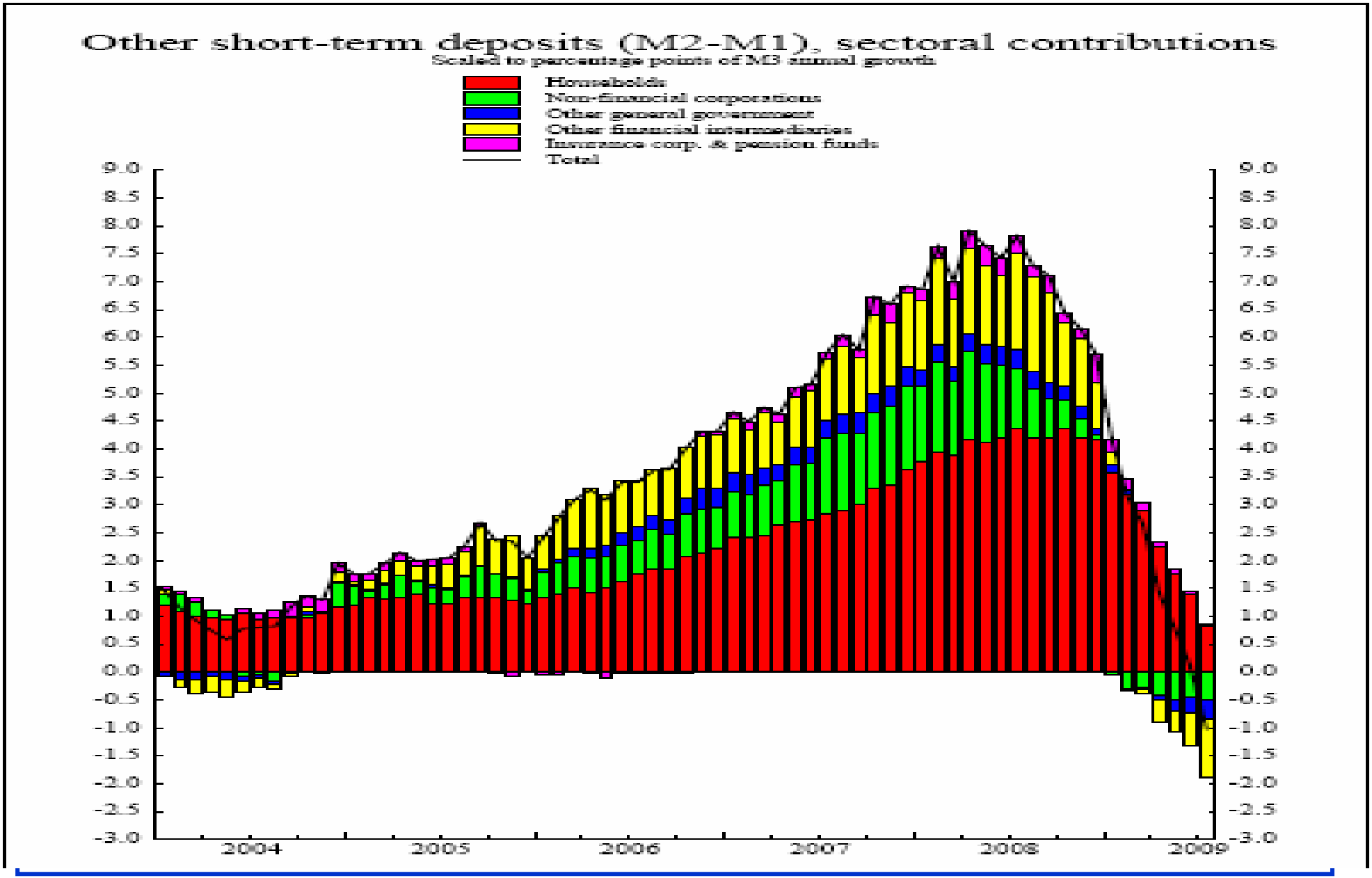
# What is going on in M?

The anomalies are in M2-M1

And they are in all sectors!


Other short-term deposits (M2-M1), sectoral contributions
Scaled to percentage points of M3 annual growth
Households
Non-financial corporations
Other general government
Other financial intermediaries
Insurance corp. & pension funds
Total
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
2004
2005
2006
2007
2008
2009

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# The investigation continues ...

- Is monetary analysis telling us anything about financial stability?
- Can it be used as ex-ante warning on financial imbalances?

  Maybe but it still has to be shown: this is what we have to find out to make the point that monetary analysis can be used for macro prudential purposes

*Giannone, Lenza and Reichlin, in progress ..*

# Conclusions

Fascinating narrative!

Many questions / issues ...

Huge research agenda

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# End

# 3: liquidity and monetary policy

*Lessons from the turmoil*

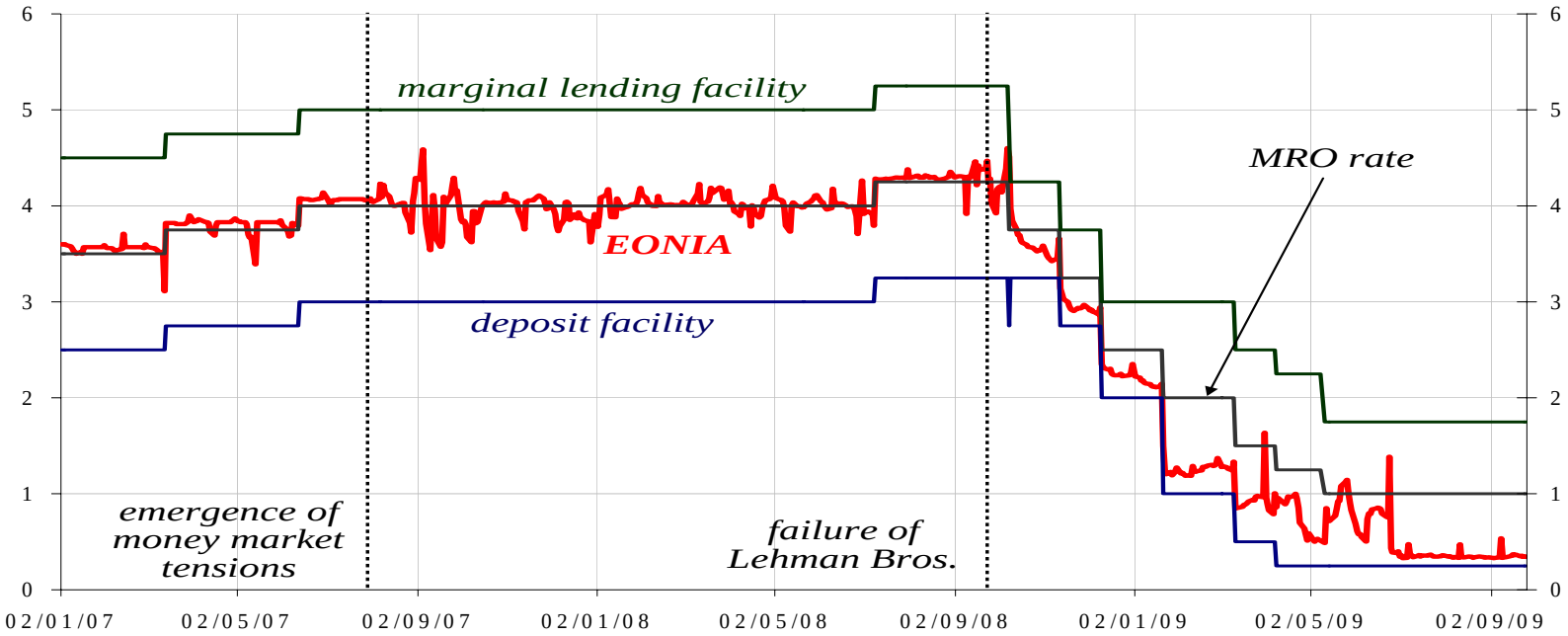
Given policy rate, can expand liquidity and drive down interest rate on deposit facilities

But when policy rate different from effective rate there is a problem of communication

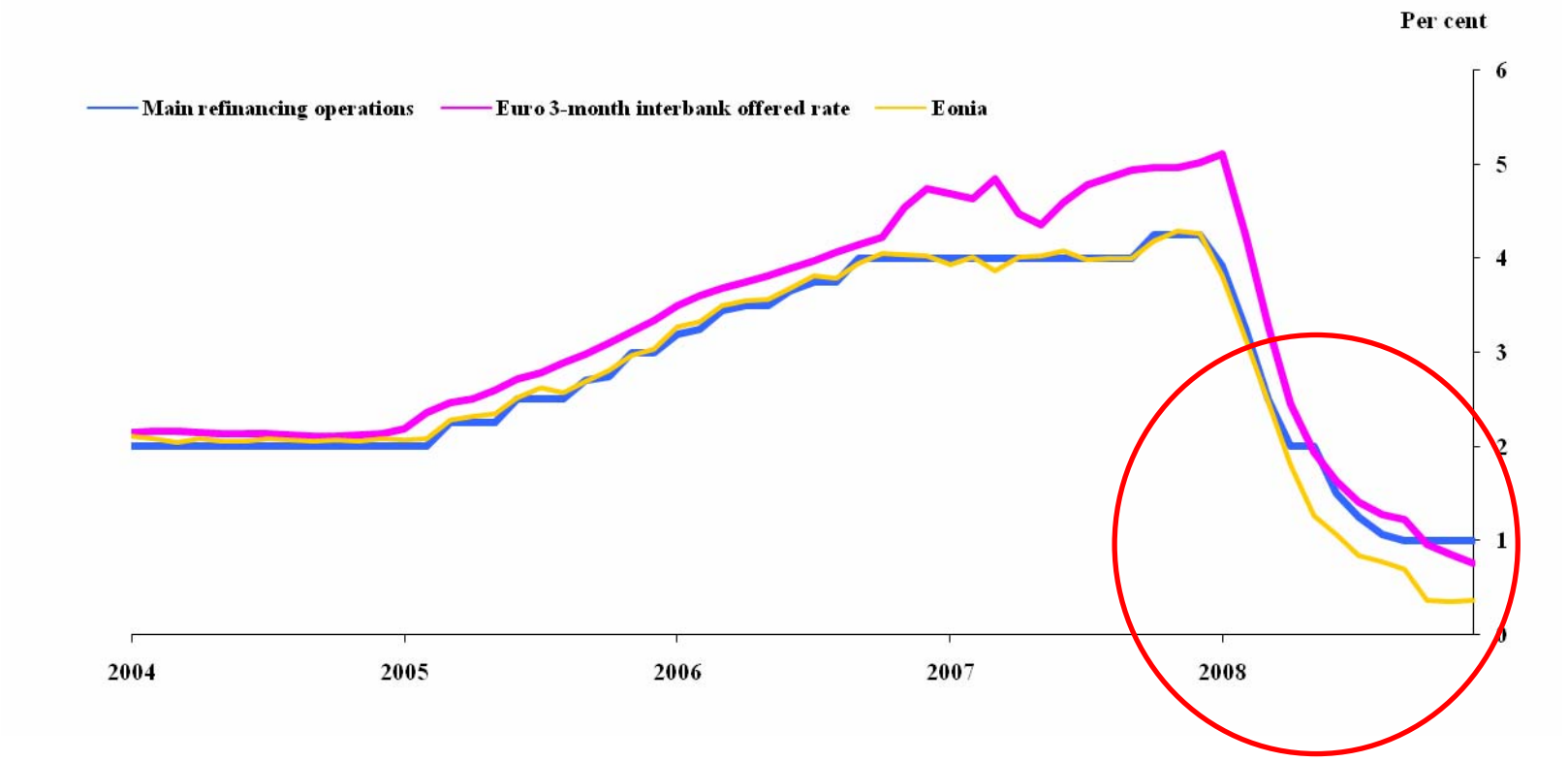
*Example: recent ECB experience*

# ECB interest rate corridor: Evolution of the EONIA relative to the ECB key interest rates

*percent per annum*



# Euro Area money market spreads



# 4. Modified Taylor rules: mind the spreads

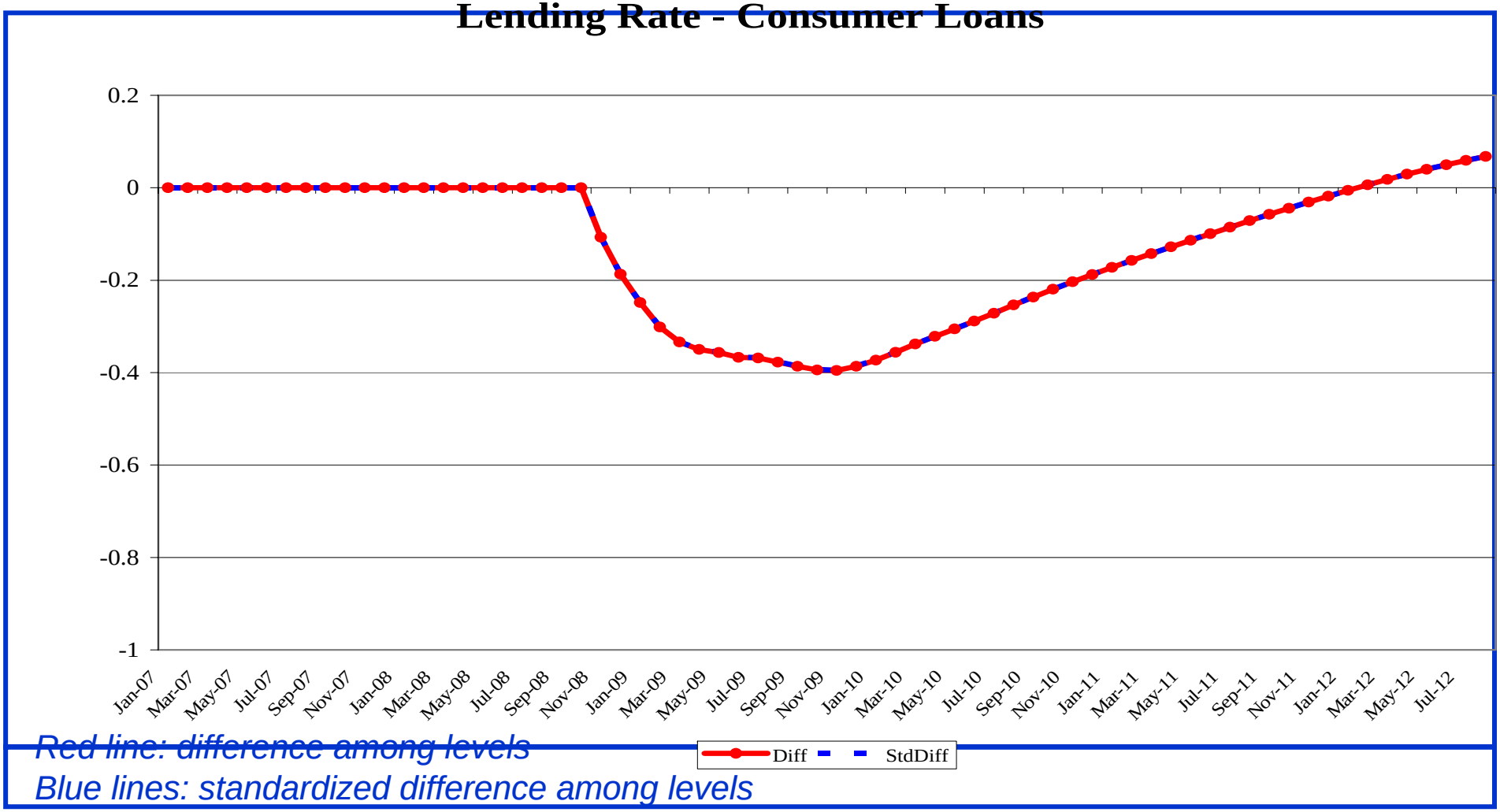
Non conventional monetary policy have operated by narrowing spreads

$$i_t^{3-month} = i_t^{policy} + \alpha_t$$

This implies to modify Taylor rule: compress spreads by satiating market with liquidity

It has worked!

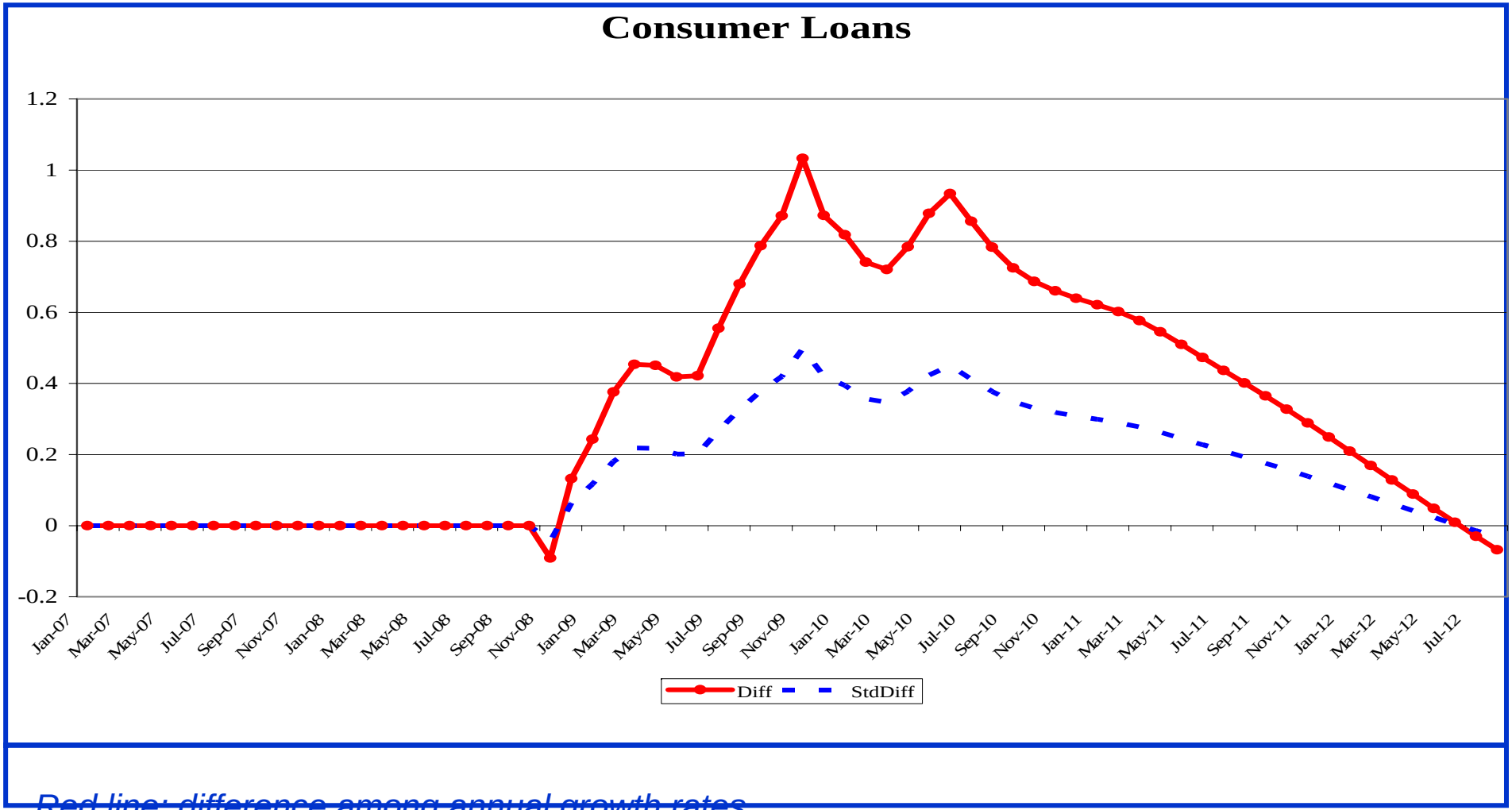
# The effect of spreads on consumer lending rates




*Red line: difference among levels*

*Blue lines: standardized difference among levels*

# The effect on consumer loans




*Red line: difference among annual growth rates*

*Blue lines: standardized difference among annual growth rates*