

Discussion of "The Great Escape? A
Quantitative Evaluation of the Fed's
Non-Standard Policies"

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September 30, 2010

Great work which merges three strands of the literature:

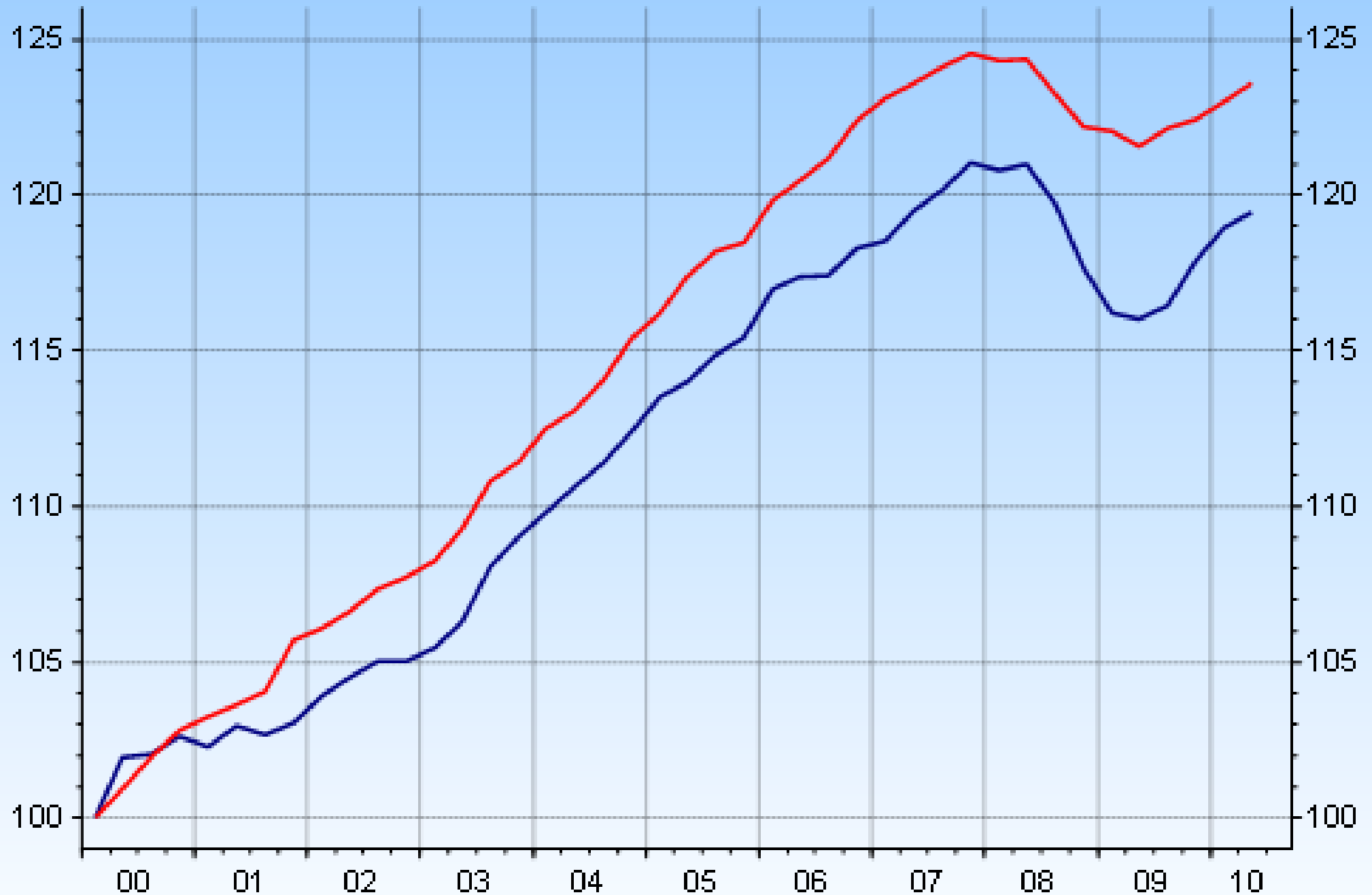
1. New-Keynesian models with sticky prices and sticky wages
2. Models with credit frictions à la Kiyotaki and Moore
3. Zero-lower bound models and solution methods à la Eggertsson

Address questions which are not only relevant to understand past events but also to direct current and future policy interventions.

At this stage policymakers are particularly interested in understanding:

- whether monetary and fiscal policies and in particular unconventional monetary policy have been effective in avoiding another Great Depression;
- what are the quantitative effects of different types of unconventional policy;
- whether there is a need of more unconventional policies in the next months and of which type.

US Consumption and GDP

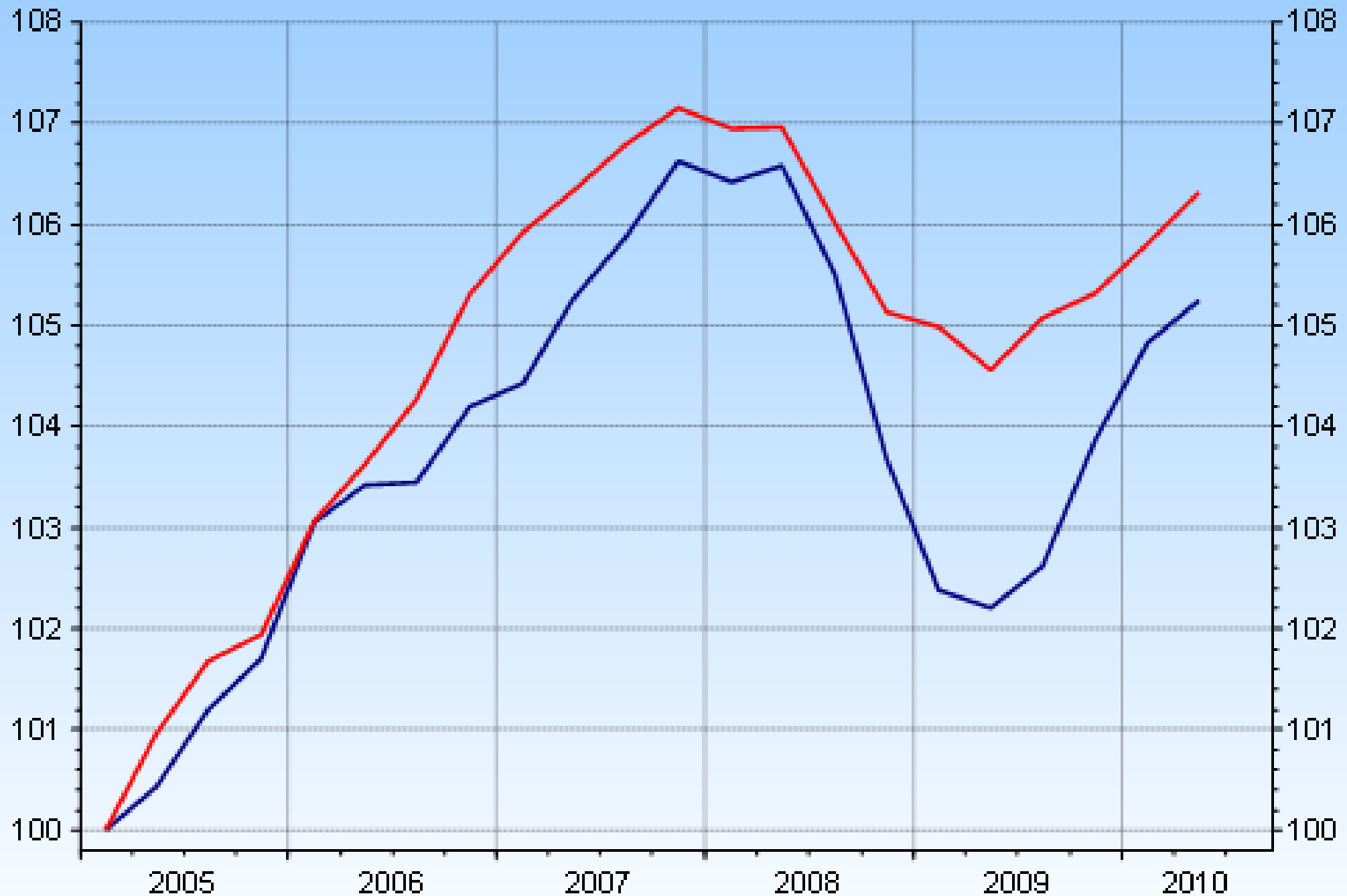


— Rebase GDP (AR) : United States to 100

— Rebase PERSONAL CONSUMPTION EXPENDITURES (AR) : United States to 100

Source: Thomson Reuters Datastream

US Consumption and GDP



Rebase GDP (AR): United States to 100

Rebase PERSONAL CONSUMPTION EXPENDITURES (AR): United States to 100

Source: Thomson Reuters Datastream

Bernanke (2010) speech at Jackson Hole

“One risk of further balance sheet expansion arises from the fact that, lacking much experience with this option, we do not have very precise knowledge of the quantitative effect of changes in our holdings on financial conditions. In particular, the impact of securities purchases may depend to some extent on the state of financial markets and the economy; for example, such purchases seem likely to have their largest effects during periods of economic and financial stress, when markets are less liquid and term premiums are unusually high”.

Key features of the model:

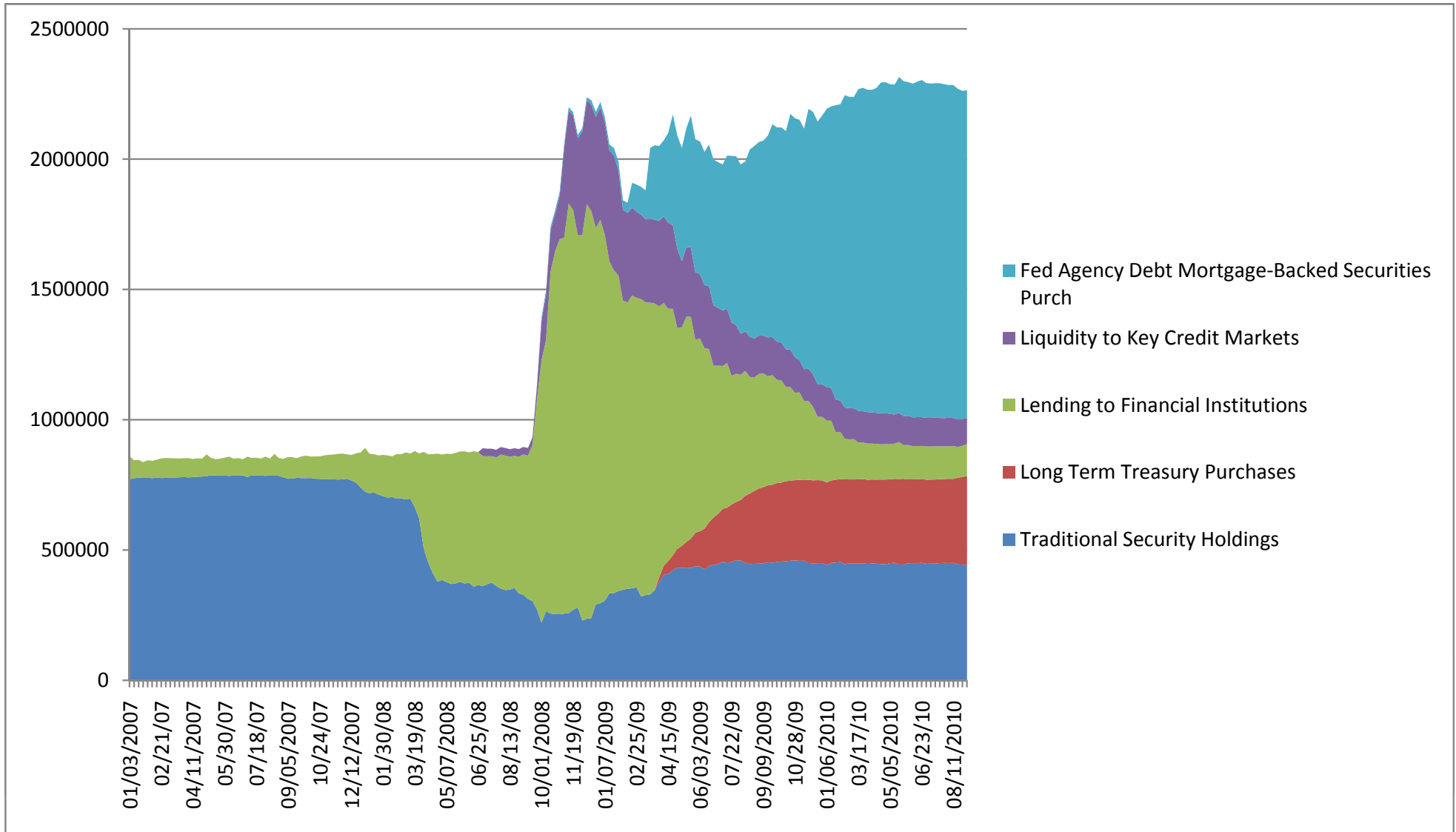
- Agents are heterogeneous with respect to consumption and portfolio choices: entrepreneurs (with or without investment opportunities) and workers.
- Entrepreneurs are subject to two constraints: 1) Borrowing constraint on new equity (θ), 2) Resaleability constraint on own equity (ϕ) (This is the critical constraint to capture the financial crisis)
- Government in normal times issues real debt to make transfers to the private sector. Under stress (when ϕ falls) government buys private-sector assets and finances them through an expansion of the balance sheets issuing more real debt.

Questions:

- With incomplete markets and heterogeneous agents, do we really need credit frictions to be able to depart from Wallace's irrelevance result? What are the minimal requirements to get rid of the irrelevance result? (Perhaps just non-negative constraints on asset holdings can make it)
- Very rich model of portfolio choices. Three agents making optimizing portfolio choices: 1-2) two types of entrepreneurs, 3) workers.
 - In standard models, portfolio allocations depend on returns and pricing kernels.
 - Here instead, the portfolio allocation is a corner solution for most of the assets and agents. Is this just a model for bad times?

Which kind of unconventional policy?

- Three groups (Bernanke's speech at LSE)
 1. Lending to financial institutions (TAF, TSLF and PDCF)
 2. Providing Liquidity to key credit markets
 3. Purchasing longer-term securities
- This paper aims at modelling 1), but it looks like it is modelling 3), a generic purchase of private assets.



How should we expect unconventional monetary policy of type 1) to work?

- Entrepreneurs with investment opportunity struggle to raise equity to finance their investment.
- They should sell their assets, but the private asset markets are frozen.
- By intervening, the government can exchange illiquid assets for liquid assets and therefore help the entrepreneurs with investment opportunity to relax their constraints.

But:

- It looks like that investing entrepreneurs do not hold liquid assets in equilibrium. They are not directly affected by the injection of liquidity.
- The non-investing entrepreneurs instead exchange illiquid assets for more liquid assets.
- Moreover, government transfers wealth to either the non-investing entrepreneurs or the workers.

- This is why the intervention is most effective on consumption (through a wealth effect) rather than on investment.
- This why the assumption of sticky prices matters (via an intertemporal substitution effect).
- Credit frictions are only relevant for shaping the fall in investment, but they are not important for explaining the effect of the intervention on output.

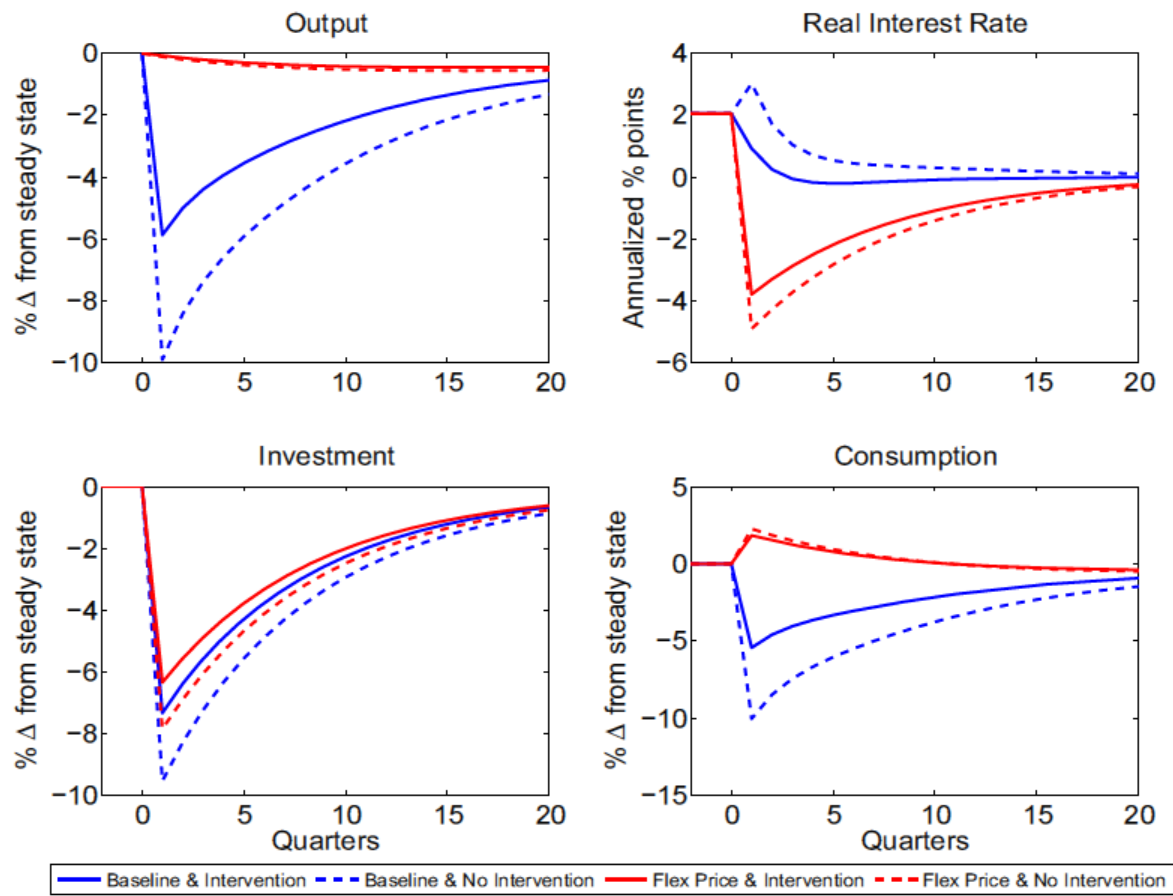


Figure 11: The role of sticky prices and wages.

Some other observations

- Model predicts a significant drop in the inflation rate, but this is not in the data.
- Model predicts a small improvement in credit spreads after the intervention, but perhaps it was larger
- Model predicts a drop in investment of the same magnitude as output. But in the data is larger, and the more is on residential investment rather than on non-residential investment
- Model predicts a drop in the real rate after the intervention. But real rates went up first and then fell. Did consumption increase because of fiscal policy?

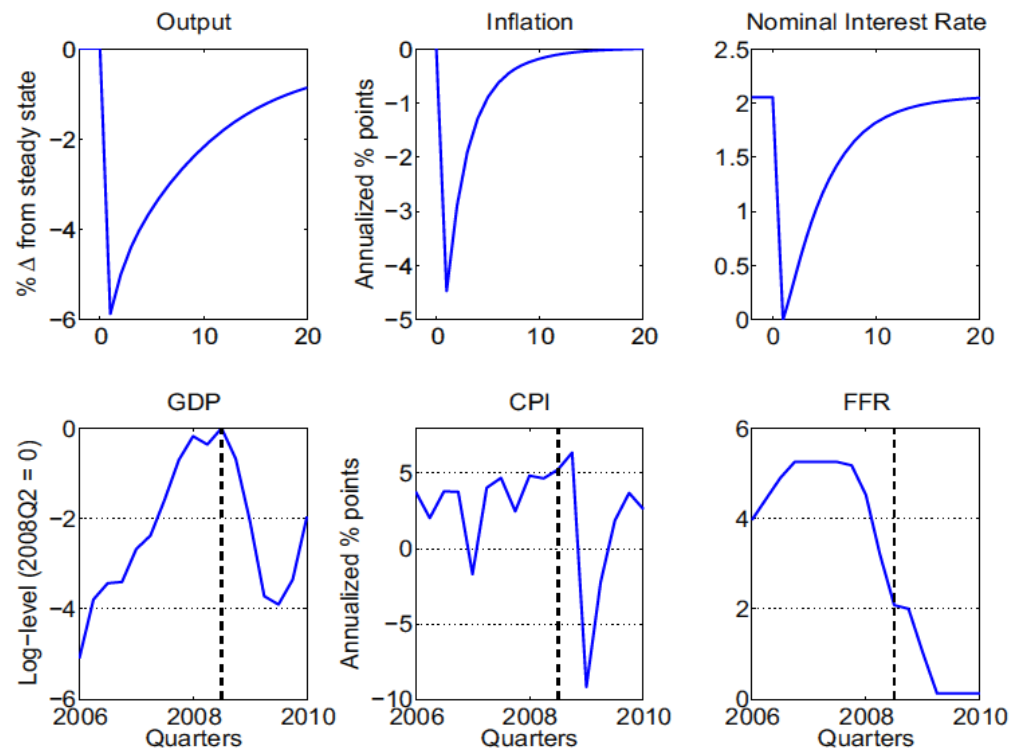


Figure 5: Response of key macro variables to a shock to resaleability of assets (with interventions).

US CPI and CPI Core



— Annualised percentage change of CPI - ALL URBAN: ALL ITEMS : United States over 10
— Annualised percentage change of CPI - ALL ITEMS LESS FOOD & ENERGY (CORE) : United States over 10

Source: Thomson Reuters Datastream

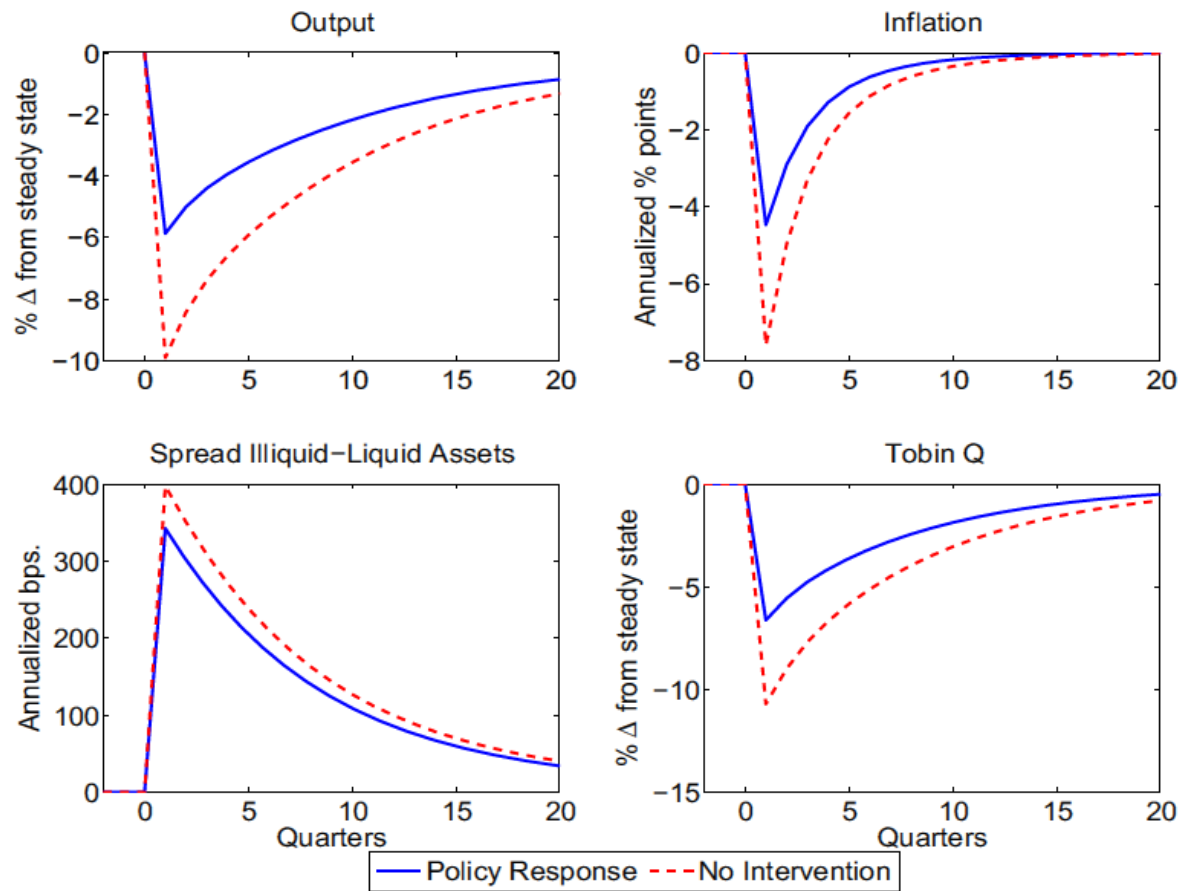
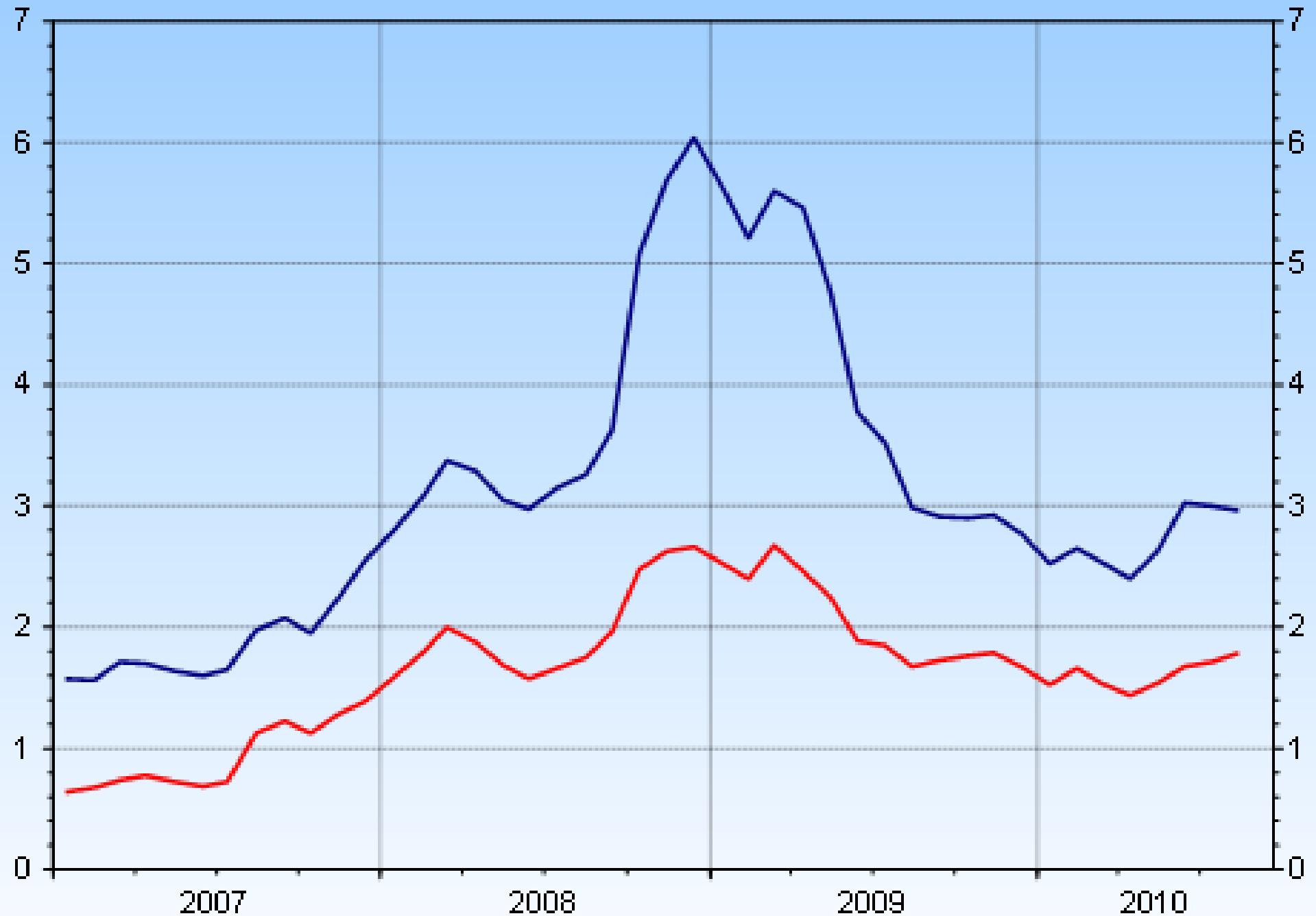


Figure 7: The effect of policy intervention.

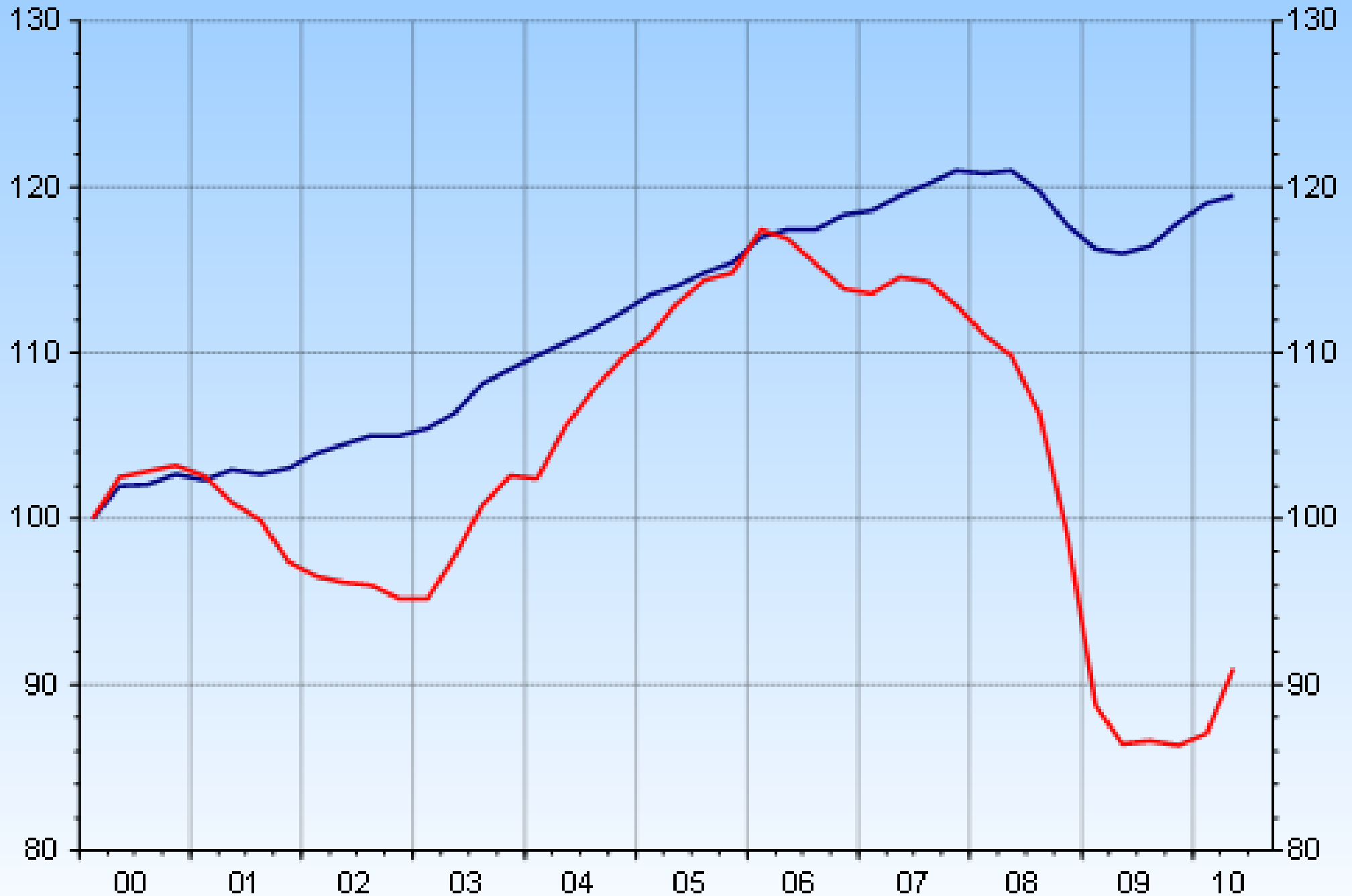
US Economy: Spreads between Corporate and Treasury yields



— CORPORATE BOND YIELD - MOODY'S AAA SEASONED ISSUES : United States-TREASURY YIELD ADJUSTED TO
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Source: Thomson Reuters Datastream

US GDP and INVESTMENT from 2000

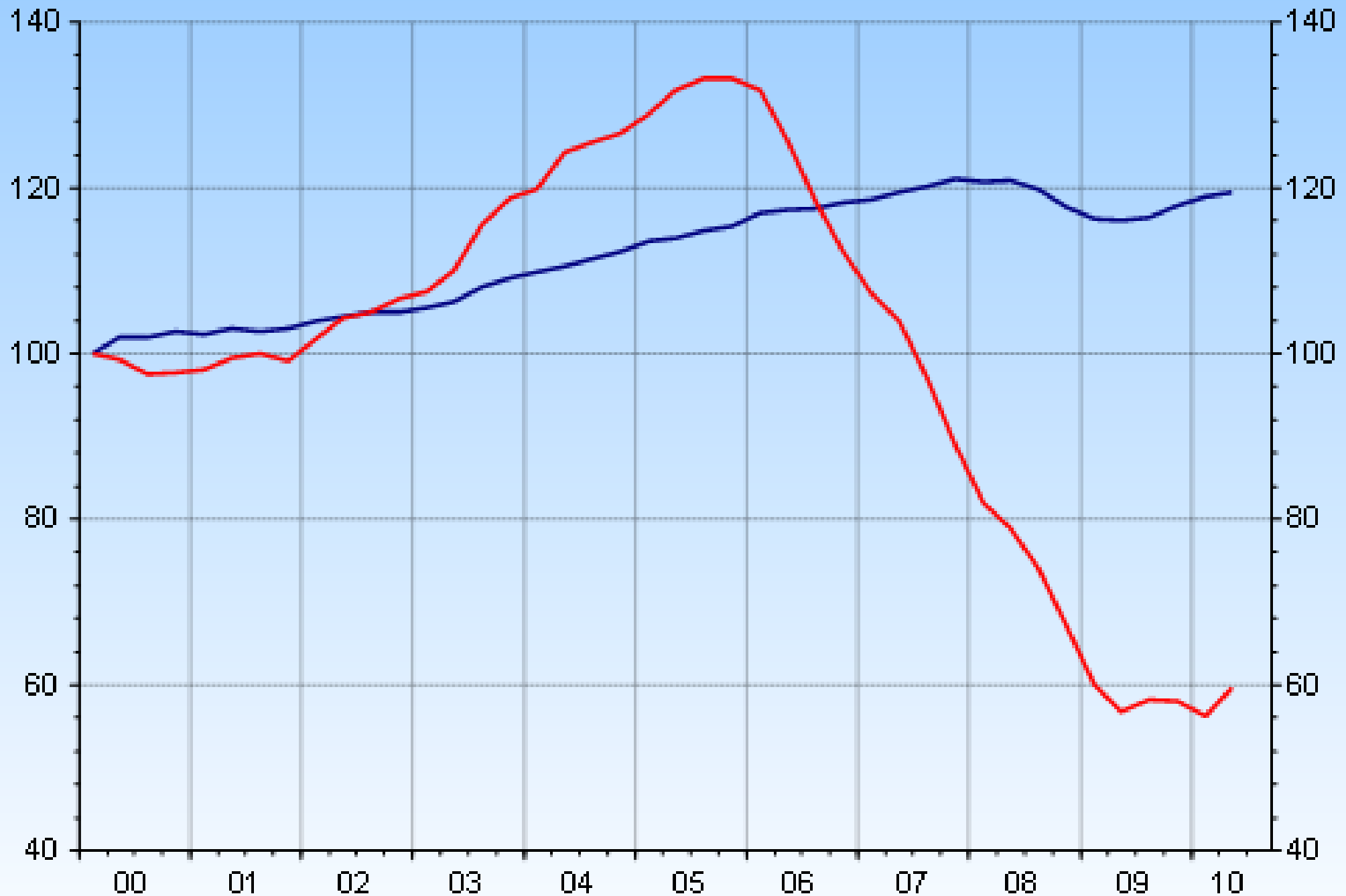


— Rebase GDP (AR) : United States to 100

— Rebase PRIVATE DOMESTIC FIXED INVESTMENT (AR) : United States to 100

Source: Thomson Reuters Datastream

US GDP and Residential Investment from 2000

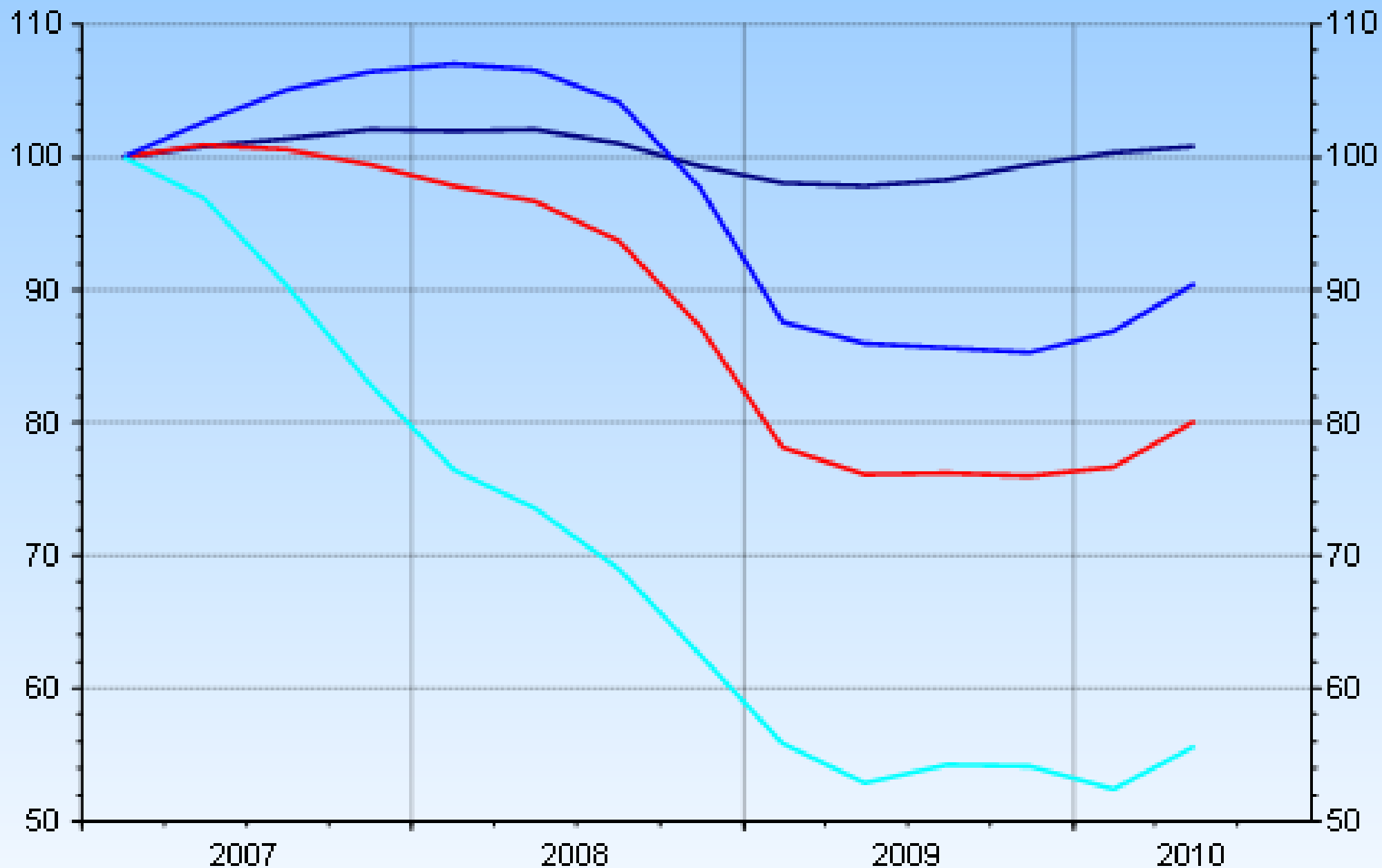


— Rebase GDP (AR) : United States to 100

— Rebase RESIDENTIAL PRIVATE DOMESTIC INVESTMENT (AR) : United States to 100

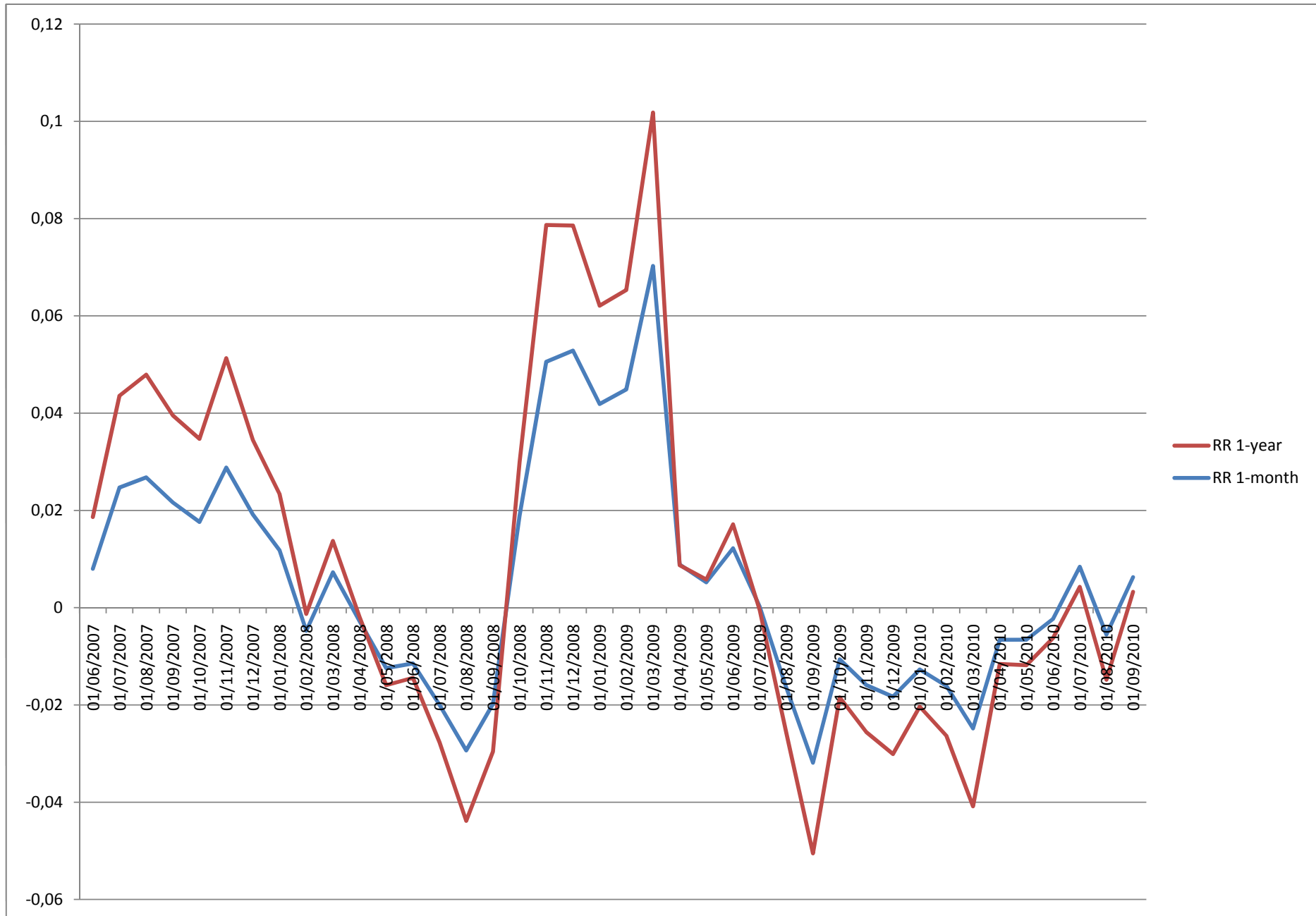
Source: Thomson Reuters Datastream

US GDP and INVESTMENT from 2007



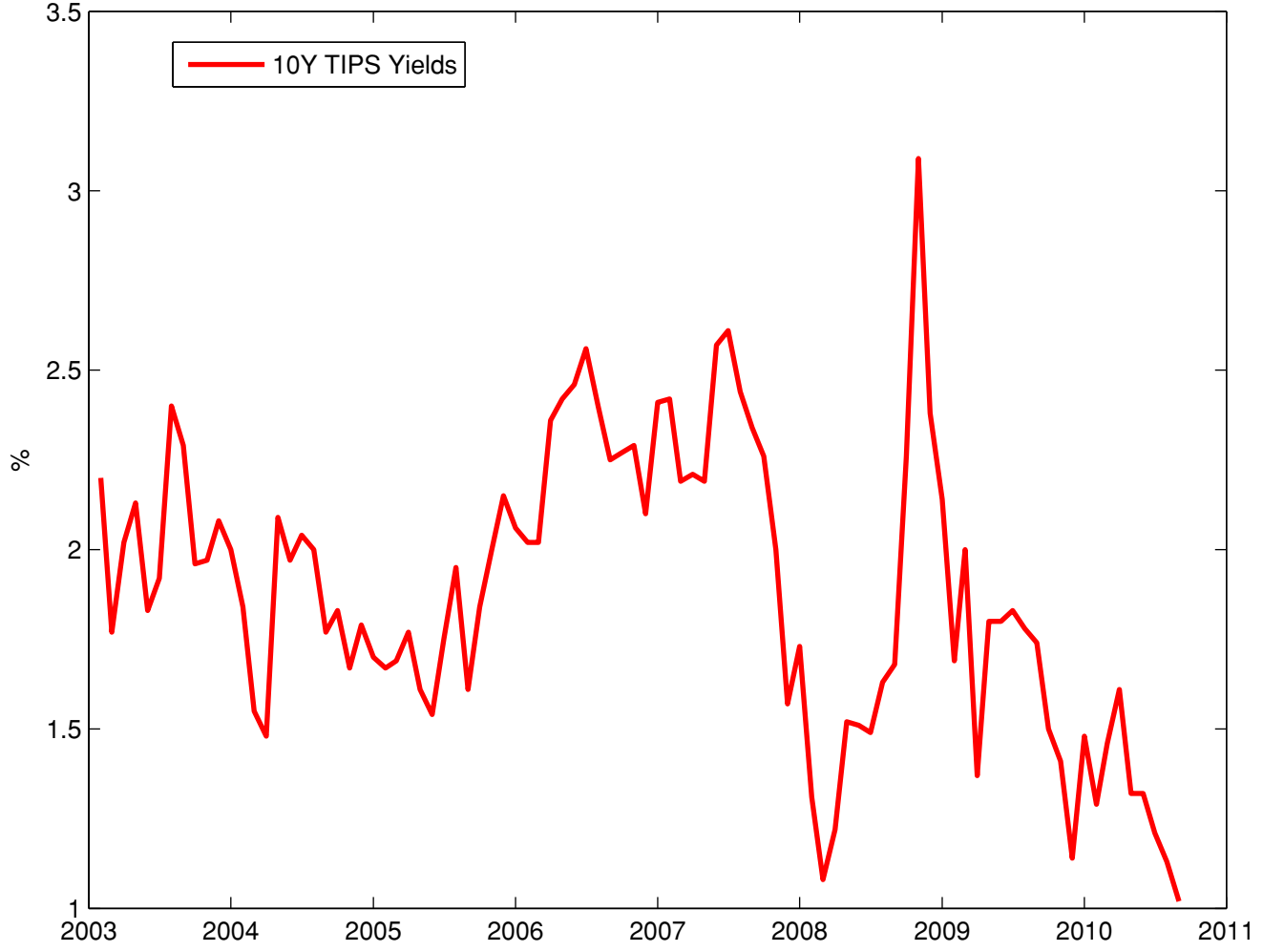
- Rebase GDP (AR) : United States to 100
- Rebase PRIVATE DOMESTIC FIXED INVESTMENT (AR) : United States to 100
- Rebase NONRESIDENTIAL PRIVATE FIXED INVESTMENT (AR) : United States to 100
- Rebase RESIDENTIAL PRIVATE DOMESTIC INVESTMENT (AR) : United States to 100

Source: Thomson Reuters Datastream



US Real Rates /(TIPS 10Y Yield)

10Y TIPS Yields



Conclusion

- The recent financial crisis, the associated Great Recession and Great Escape are all complex phenomena
- This paper goes in the right direction to understand them
- There is a need of further (urgent!) work along these lines to understand the different quantitative contributions of monetary and fiscal policy interventions.