

Comments on  
Capital Flows and the Risk-Taking  
Channel of Monetary Policy  
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# Key Findings

- Elegant micro model
  - shows that low policy rates at major central banks can increase risk-taking in other countries
  - exchange rate changes magnify increased risk-taking
- Good empirical support
  - fed funds rate correlated with risk taking measures and bank lending flows
- Policy implications
  - Monetary factors in the recent global crisis
  - International monetary policy going forward

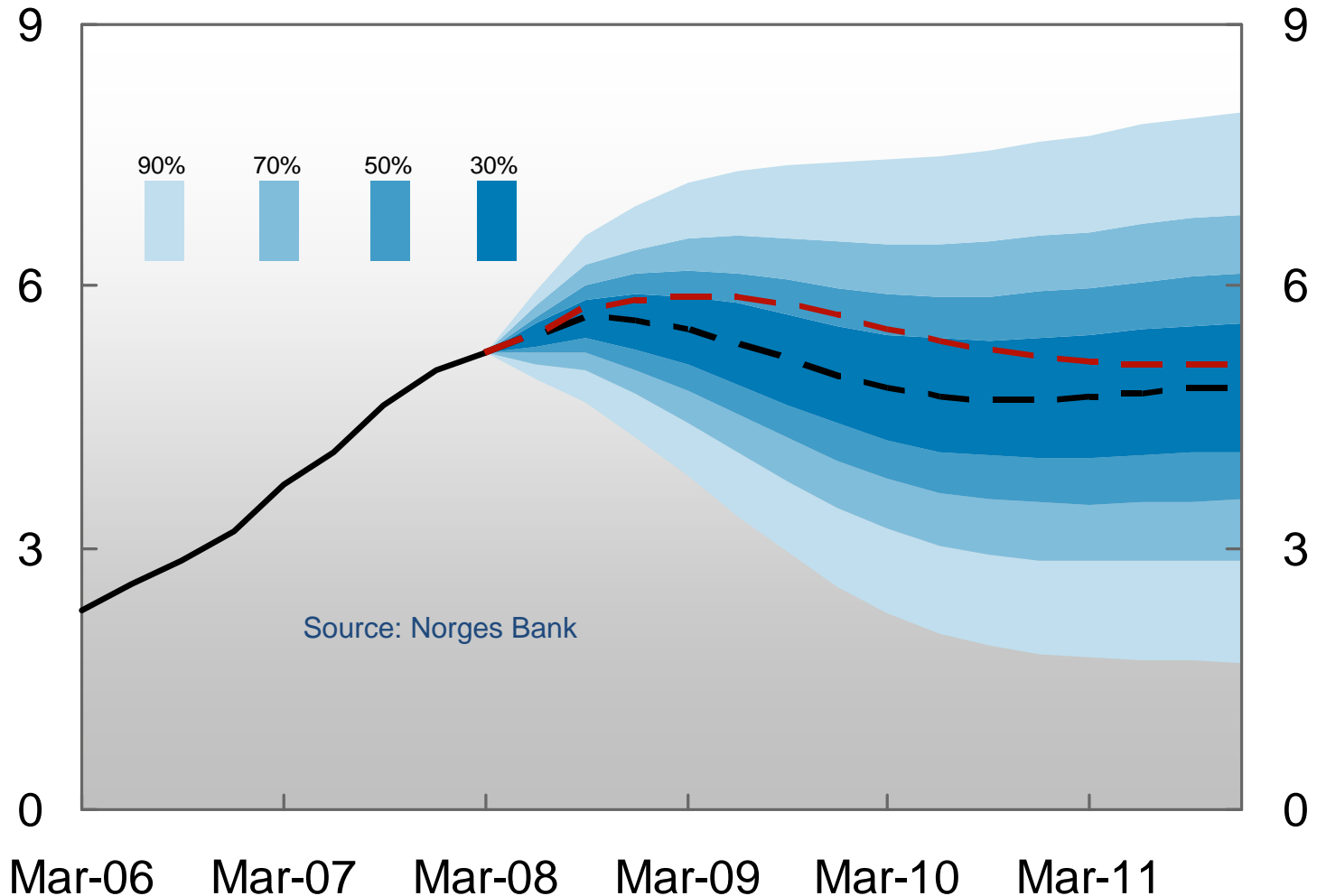
# Key Elements of the Theory

- **Firms** borrow in dollars to fund risky projects
  - default if earnings less than amount owed
- **Banks** decide on amount of loan,  $L$ 
  - Set  $(1+f)L$  to give a certain Value at Risk,  $\alpha$
- **Central bank** affects dollar funding rate  $f$ 
  - So lower  $f$  implies larger  $L$  (to keep  $\alpha$  constant)
  - This is the risk taking channel
- **Foreign exchange traders**: bid up  $\theta$  as  $L$  rises
  - Causes higher  $L$ , which causes higher  $\theta$ , and so on...
  - Convergent feedback loop, but with a multiplier
  - Relation between  $\theta$  and  $f$  same as in open economy macro models (e.g. Volker Wieland model data base)

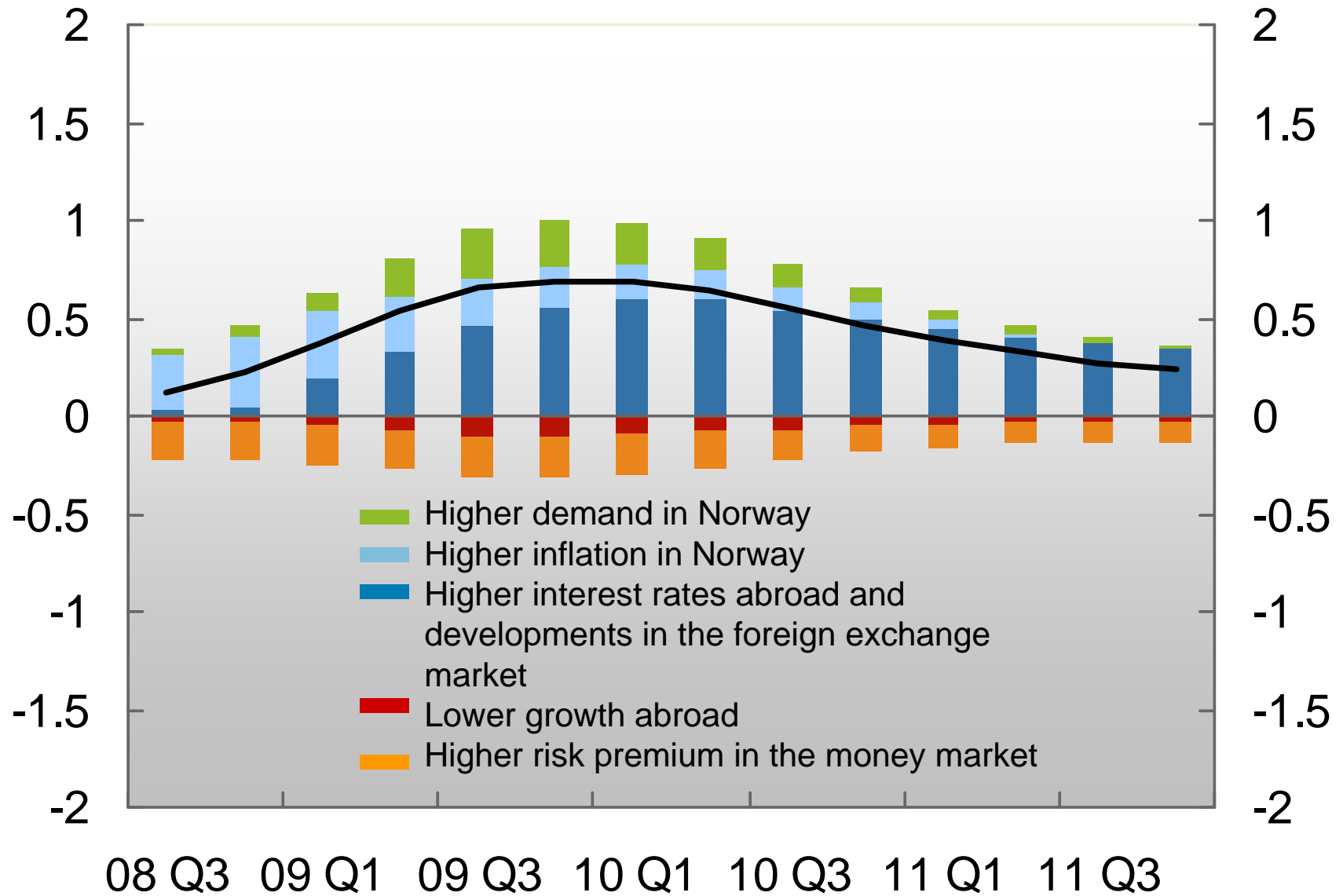
# Monetary Policy Responses

- Intervene in currency market to prevent appreciation; reserve accumulation
  - Purchase dollar assets: Treasuries, MBS,...
  - Gross flows up; no change in current account
    - Borio and Disyatat (2011), Beckworth and Crowe (2012),
  - While research now emphasizes gross flows (e.g. Obstfeld (2012)) still little on role of monetary policy
  - Dispute over “global saving glut” in financial crisis
- Impose capital controls to prevent money inflows and exchange rate appreciation
- Reduce interest rate—below what monetary policy strategy would otherwise call for...

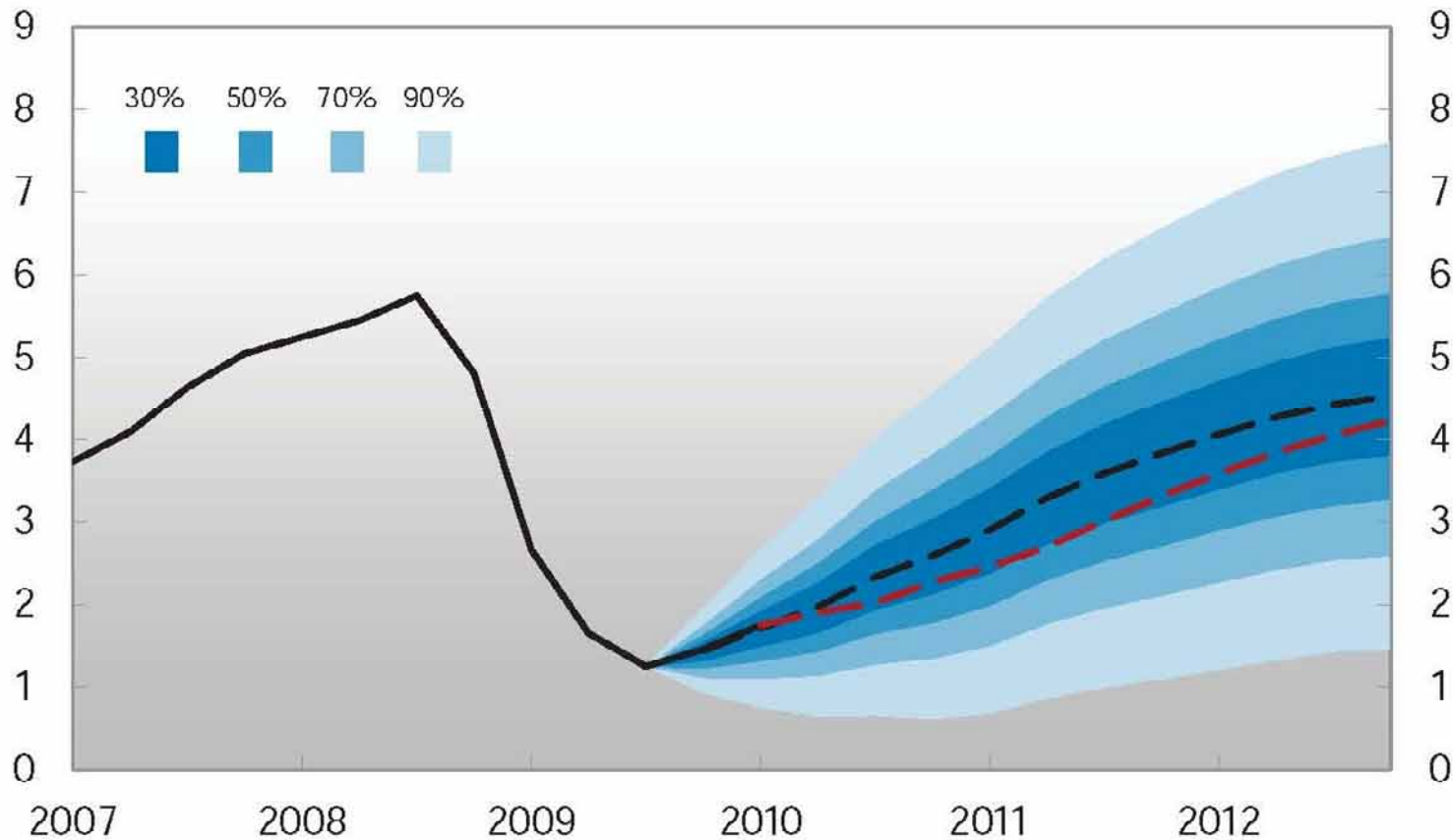
Norges Bank Policy rate in 1/2008 (black dashed line) and the increase in the policy rate in 2/2008 (red dashed line)



# Factors behind the increase in the interest rate path from 1/2008 to 2/2008

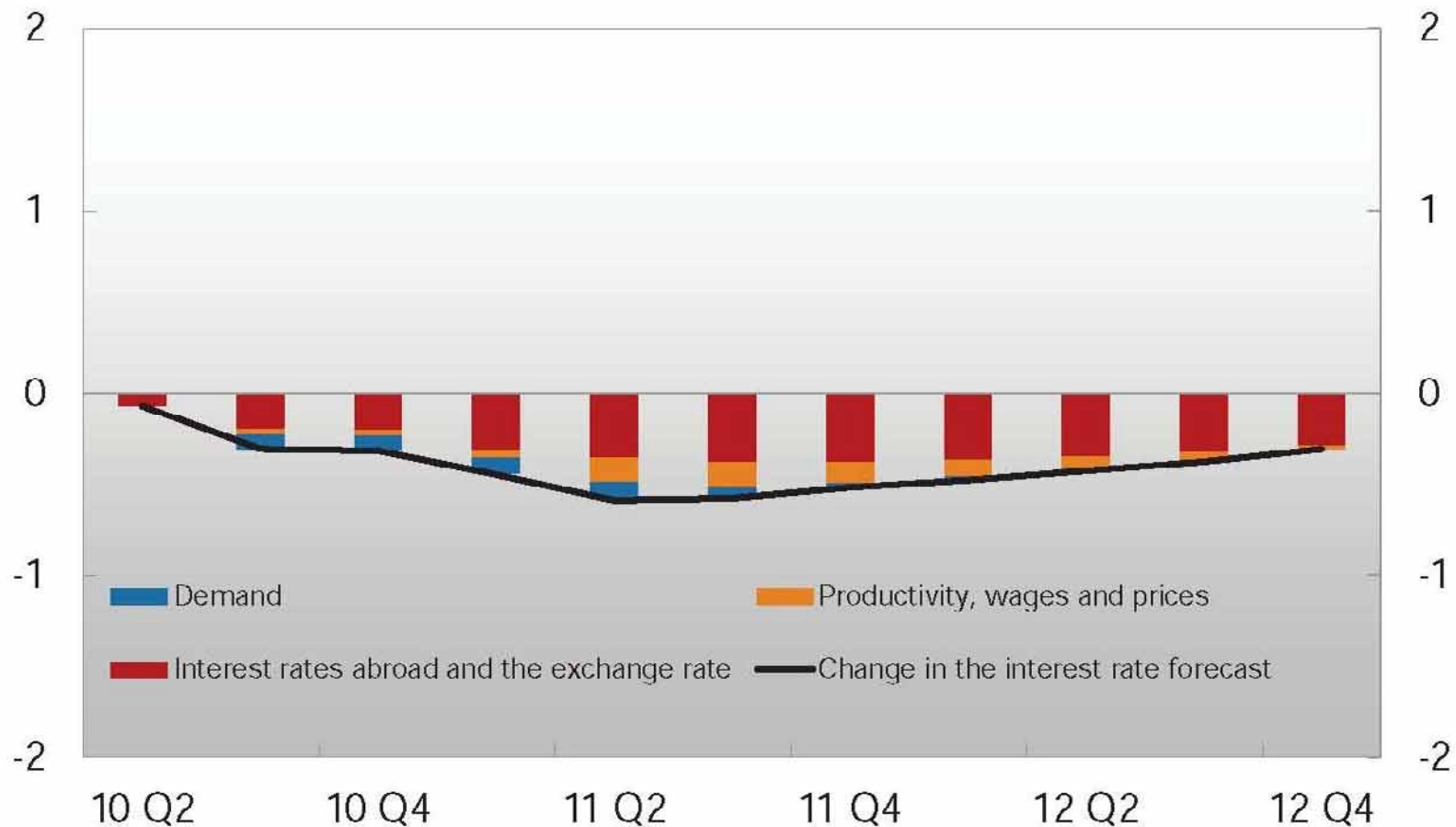


Policy rate in 3/2009 (black dashed line) and the decrease in the policy rate in 1/2010 (red dashed line)



Source: Norges Bank

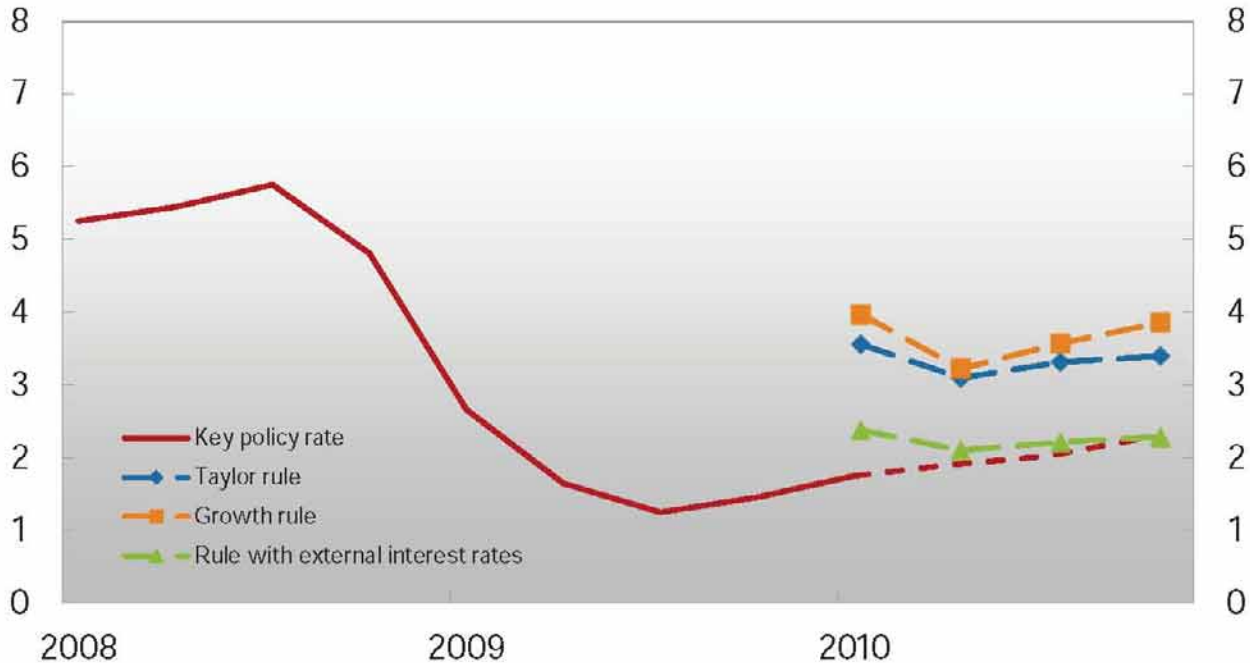
# Factors behind the decrease in the interest rate path from 3/2009 to 1/2010



Source: Norges Bank



# Key policy rate compared simple monetary policy rules with and without external interest rates

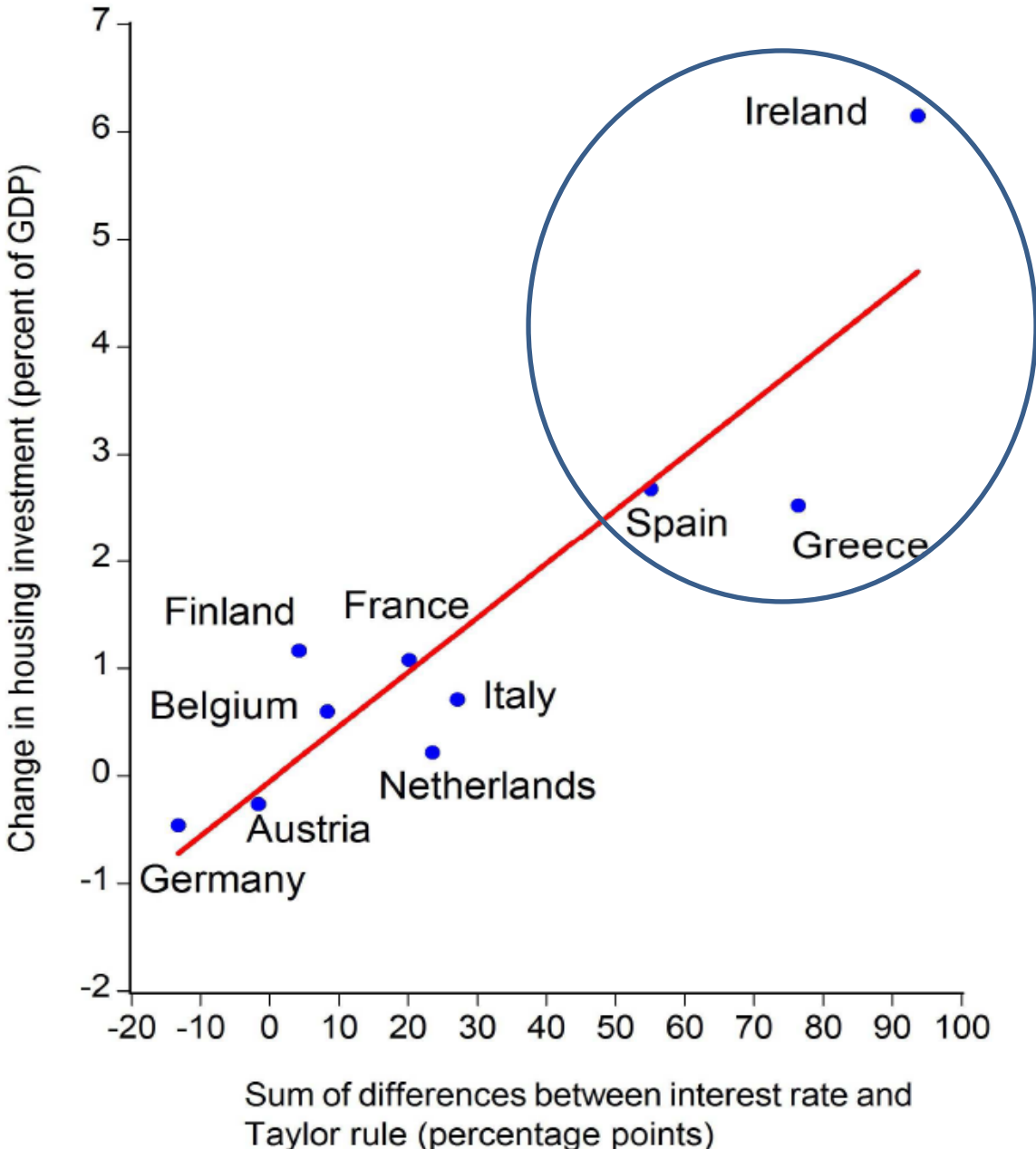


1) The calculations are based on Norges Bank's projections for the output gap, consumer prices adjusted for tax changes and excluding temporary changes in energy prices (CPIXE) and three-month money market rates. To ensure comparability with the key policy rate the simple rules are adjusted for risk premiums in three-month money market rates  
 Source: Norges Bank

# Econometric evidence

- Panel data from 12 central banks and the 1980.Q1 and through 2008.Q2.
- Australia, Canada, South Korea, the United Kingdom, Norway, New Zealand, Denmark, Israel, Brazil, the Eurozone, China, and Indonesia
- Estimated average reaction coefficient as high as .75
  - (Colin Gray (2012))
- ECB coefficient .21 during that 2001-2006
  - (John Taylor 2007)

# Illustrative Chart from the OECD, March 2008



# A Simple Framework for Analysis

“Two country” model with  $i$  and  $i^*$

- Interest rates are set according to:

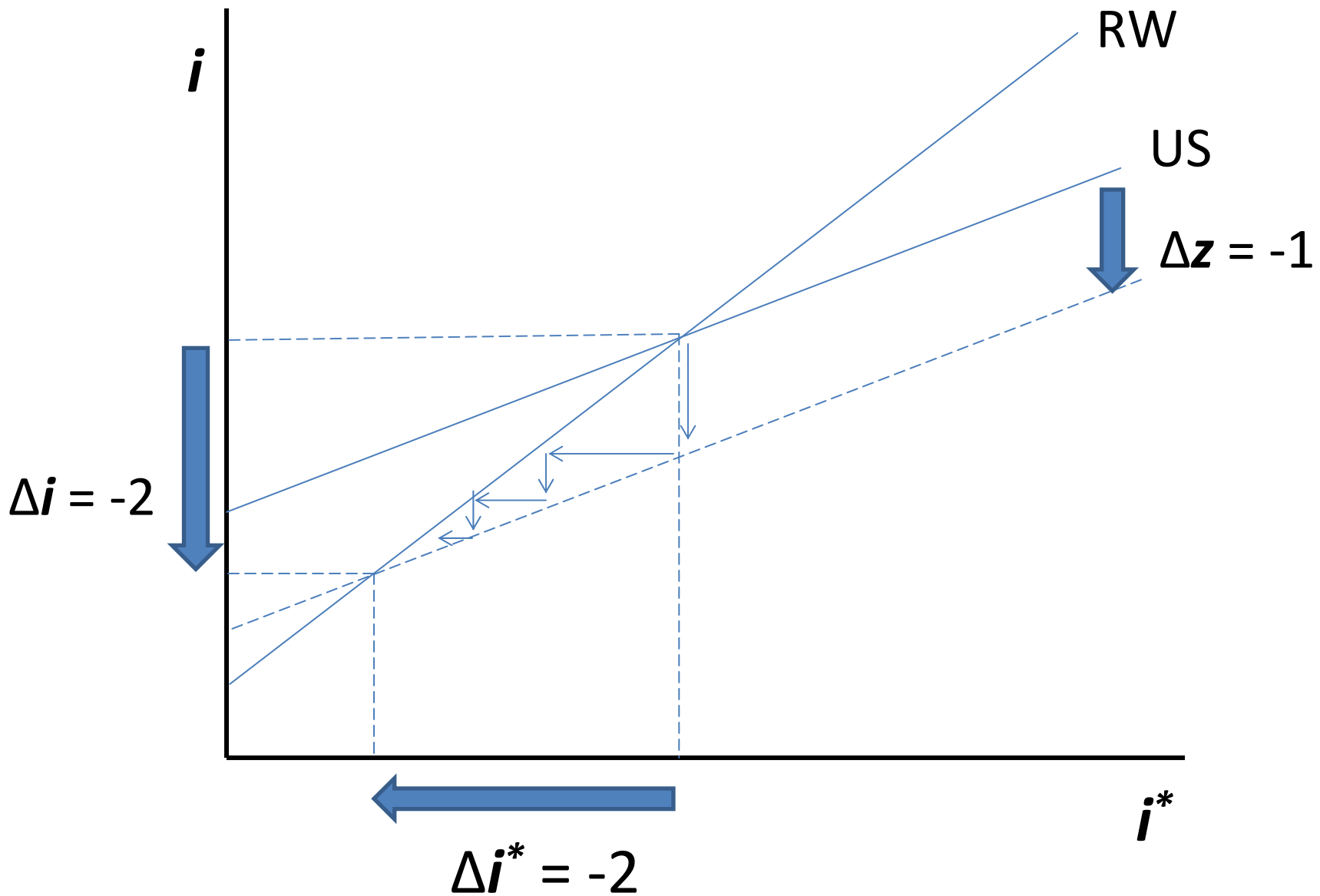
$$i = z + \alpha i^*$$

$$i^* = z^* + \alpha^* i$$

Solving for the interest rates results in the following

$$i = \frac{1}{1 - \alpha\alpha^*} (z + \alpha z^*)$$

$$i^* = \frac{1}{1 - \alpha\alpha^*} (z + \alpha^* z^*)$$



# The Global Monetary Situation

- Very low policy rates in major central banks
- Creates pressures on some EM central banks to
  - hold rates lower than they would be otherwise
  - to intervene in currency markets
  - impose capital controls
- Can lead to poor economic performance, perhaps crises
- Need to consider “monetary rebalancing” as well as “current account rebalancing”