Monetary policy before and after the crisis

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1. Introduction

- The financial crisis has raised two important questions for monetary policy makers:
  1. Did monetary policy contribute to the crisis?
  2. Is a new paradigm for monetary policy needed?

- These are unsettled and controversial questions.

2. Monetary policy before the crisis

- Two, interrelated arguments have been made:
  1. *"CBs focused too much on inflation and down-played Asset Market Developments (AMD)."*
  2. *"They set too low interest rates for too long that led to the development of a financial bubble."*
- Raises two questions:
  1. To what extent should AMD be an objective of interest rate policy?
  2. What interest rates matter for AMD?

- **Question 1: To what extent should AMD be an objective of interest rate policy?**
  - Common view before the crisis:
    - *"Only to the extent that they signal something about aggregate demand and future inflation."*
    - *"With only one policy instrument, we can only one target."*

- Several considerations played a role:
  - The statistical evidence suggested that AMD are not on their own very informative about:
    - Future inflation and output.
    - “Tail risks” (the risk on an asset price crash).
  - Not more informative at longer horizons.

– The aftermath of the *"dot-com bubble"* in 2001 had suggested that macroeconomic effects of an unwinding of a bubble were small.
  - "*Clean up afterwards with monetary policy.*"

– While the macroeconomic effects of a financial crisis might be large, it was felt that the risk of a crisis was small.
  - Financial stability policy was felt to be effective.

- Whether AMD should be an objective of interest rate policy depends on what went wrong:
  - Monetary policy makers overestimated the effectiveness of financial stability policy.
  - Financial firms' risk controls were weak or non-existent and regulation and supervision was ineffectual.
    - Shadow banking system.

- Bean (2008) lists a range of explanations unrelated to monetary policy:
  1. Inadequate incentives for care in the origination of loans that were to be securitised.
  2. Extreme opacity of the risks in complex structured finance assets.
  3. Too much reliance on statistical risk models based on past behaviour.
  4. Disproportionate dependence on ratings by end-investors and a failure to observe due diligence.

5. Excessive closeness of rating agencies to debt issuers.
6. Compensation schemes encouraging excessive risk-taking and a focus on short-term returns.
7. Excessive reliance on short-term wholesale funding and inadequate attention to liquidity.
8. A failure by regulatory and supervisory authorities to appreciate fully the risks inherent in the ‘originate-to-distribute’ model.

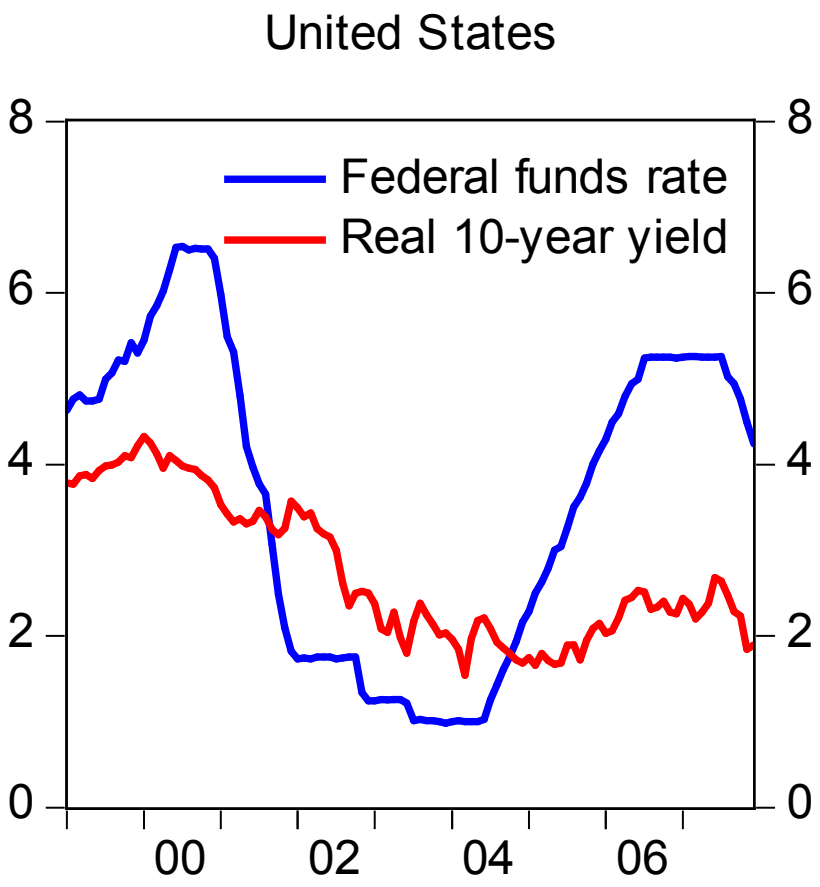
– Financial stability policy inherently very different from inflation control.
  - Inflation control – the mean of the inflation forecast.
  - Financial stability policy – “the likelihood of an unlikely event.”

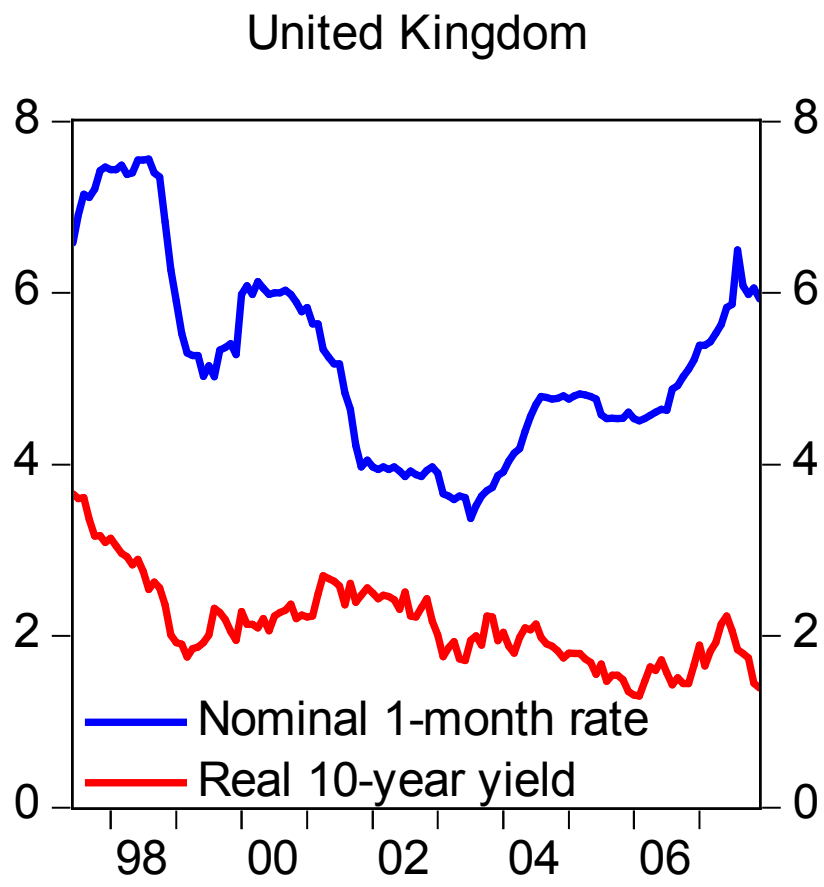
– Measures are now taken to improve financial stability policy.
  - Monetary policy has been transformed and improved since 1990. That is like to happen also to financial stability policy.

- Overall:
  - The first-best policy remains using interest rate policy for inflation control.
  - Could there be a second-best argument for using interest rates to deal with AMDs?
    - Should CBs in setting interest rates “hedge” the risk that financial stability policy in ineffectual?

- **Question 2: What interest rates matter for AMD?**
  - Central banks control short, nominal interest rates.
  - Are long, real interest rates more important?

- Traditionally, CB think of interest rate policy as affecting spending, in particular housing, through long interest rates.





- Long indexed yields fell by ½!

- Declining long real yields reduced other yields:
  - Contributed to a *"search for yield"* as financial institutions raised leverage and held riskier assets.
  - Due to global savings-investment imbalances.

- Do the short, nominal interest rates CBs control impact on long, real interest rates?
  - In the long run, the real and nominal side of the economy are approximately independent.
  - MP has at most temporary effects on real variables.

- Monetary policy involves setting the real interest rate equal to some equilibrium level:

$$(i - \pi) = r^*$$

- Case 1: Suppose that *i* is too low (monetary policy is too expansionary):

$$(i - \pi) < r^*$$

  - Real rates are now too low so inflation rises.
  - CB must raise i to prevent inflation from rising.
- In sum, too low interest rates should be "self-correcting."

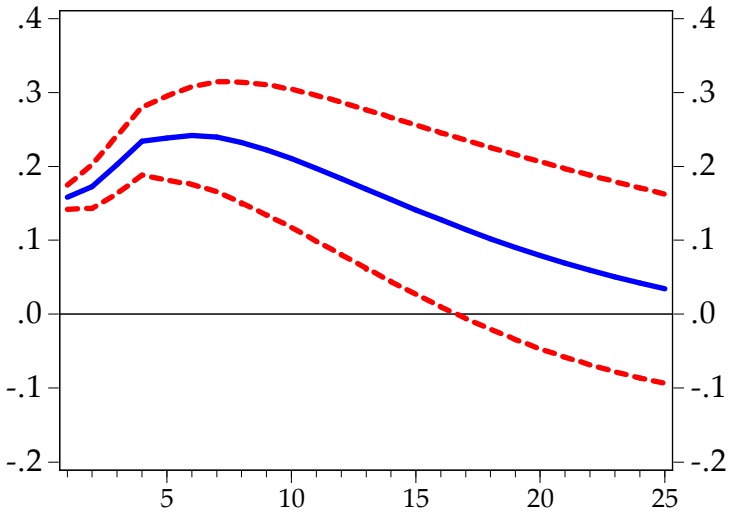
- Case 2: Suppose equilibrium real interest rate falls and CB doesn't change nominal rates.

$$(i - \pi) > r^*$$

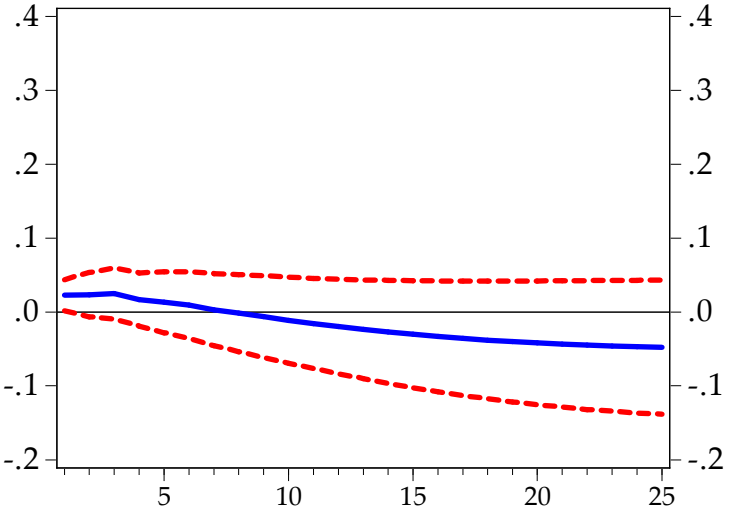
  - Real rates are now above the equilibrium level so inflation falls.
  - CB has to cut *i* prevent inflation from falling too far.
- In sum, if real yields fall, CB must cut interest rates to prevent inflation from falling too low.

- Look at some simple evidence:
  - Study 1-month nominal and 10 year real (indexed) interest rates in the UK.
  - VAR(4), monthly data 1997 – 2007.
  - Assume that all contemporaneous correlation between the variables is due to MP. (This maximises the explanatory power of MP.)

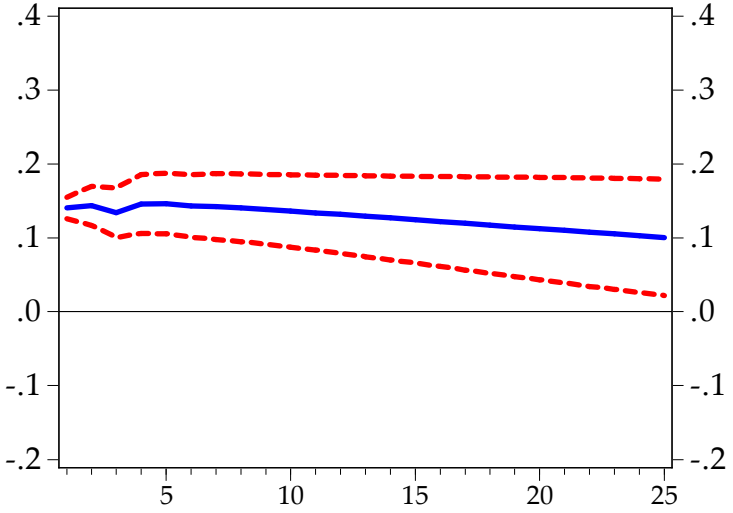
Shocks to short nominal



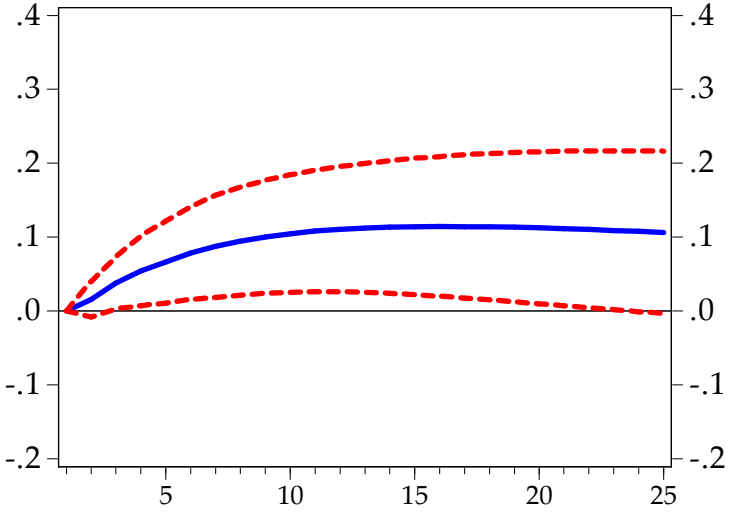
Responses of long, real



Shocks to long real



Responses of short, nominal



- Real interest rates collapsed during the bubble.
  - That would have lead to a rise in asset prices.
  - It would have depressed other yields.
  - Would have caused central banks to reduce interest rates to prevent inflation from falling too low.

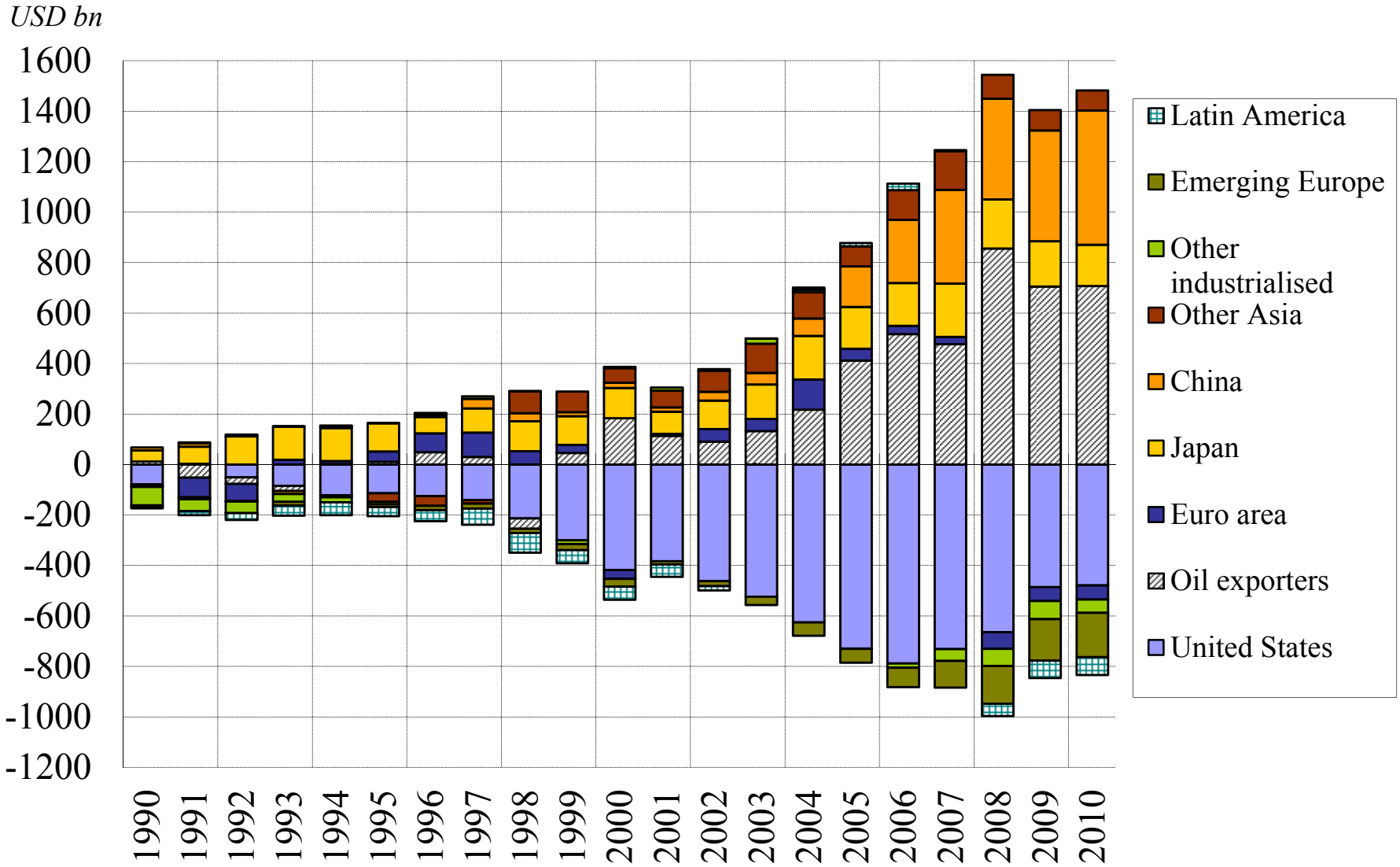
3. Monetary policy after the crisis

- Monetary policy probably played a secondary role in the formation of the bubble.
- Financial stability policy is undergoing rapid development.
- Good reasons to continue to focus monetary policy on inflation.

- Should monetary policy change as a consequence of the crisis?
  1. CBs must pay greater attention to financial stability concerns.
     - In particular when interest rates are low.
  2. If financial stability policy is weak, it may make sense to take AMD into account at the cost of worse inflation control.
     - This is a second-best policy; the first-best policy is tighter regulation and supervision, and macro-prudential (non-interest rate) policies to constrain financial system.

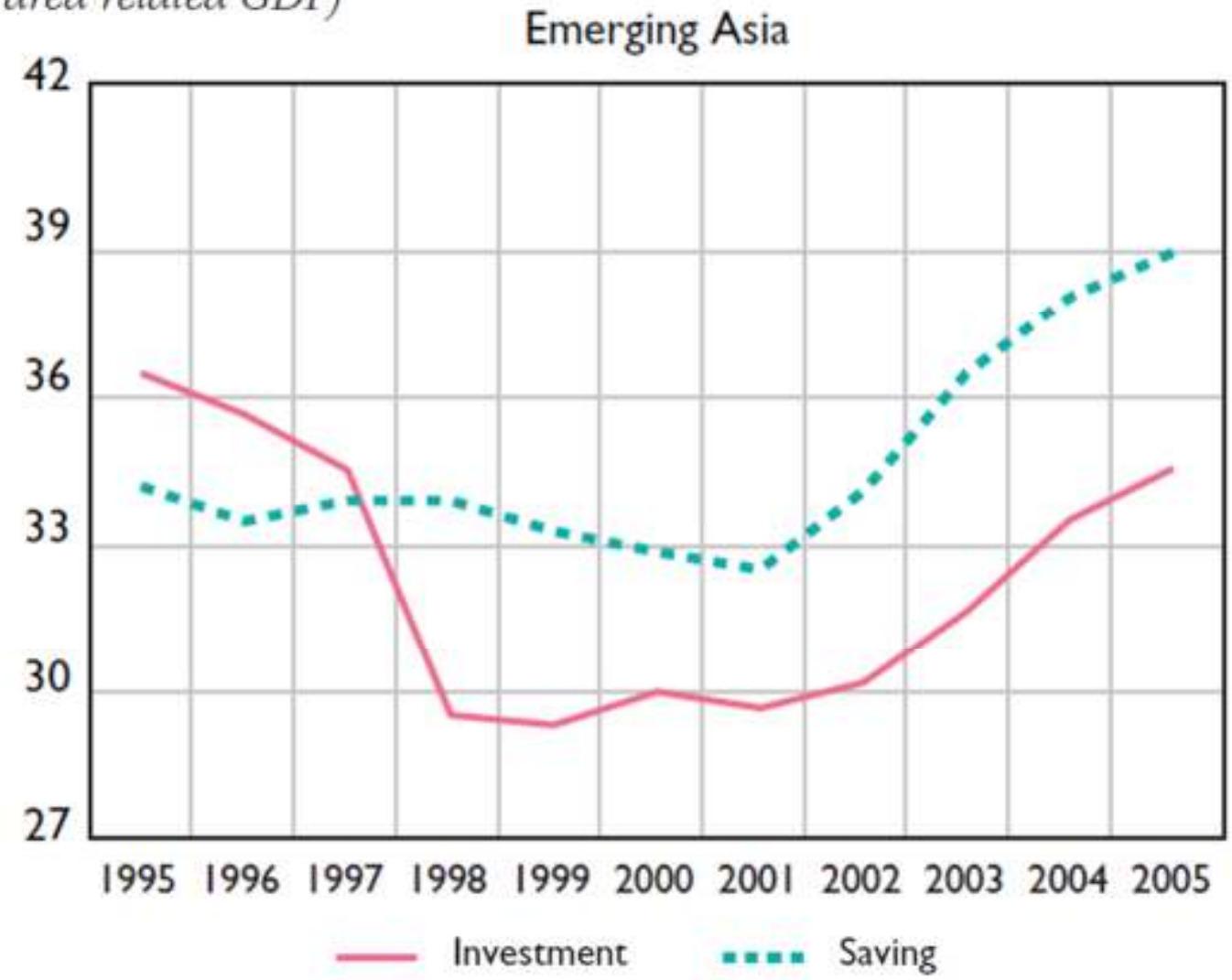
3. Focus less on the central forecast for inflation & output and more on tail outcomes.
   - This is very difficult in practice.
4. Pay greater attention to real economy (!) when setting monetary policy.
   - Bubbles tend not to show up as inflation pressures but in the form of strong investment, in particular housing investment.
5. Worry about leverage.
   - Changes in leverage acts as a amplifier of monetary policy impulses.
   - But difficult to measure.

Extra slides



Source: IMF WEO Data

(in% of area related GDP)



(in% of area related GDP)