EUROPEAN CENTRAL BANK

Market Efficiency – A Policy Perspective

Marcel Fratzscher
European Central Bank

Symposium – The Deutsche Bank Prize in Financial Economics 2005 to Eugene Fama

Frankfurt, 6 October 2005

Disclaimer: The talk presents the author's personal opinions and does not necessarily reflect the views of the European Central Bank.

Market efficiency and policy

- Eugene Fama's seminal work on market efficiency
  - Guide for understanding market outcomes…
  - …but also role and limitations of economic policy
- An uneasy relationship between market outcomes and macroeconomic policy-making
- What policy can do …
- …and what it should not (attempt to) do

"The inability to anticipate changes in supply and demand for a currency is at the root of the statistically robust finding that forecasting exchange rates has a success rate no better than that of forecasting the outcome of a coin toss."

Gov. Alan Greenspan, 19 November 2004

1. Financial Globalization

- Increased role of financial markets
  - Massive rise in the size of financial markets and transaction volume
  - Substantial degree of financial market interdependence
  - Real integration of economies fostering financial integration
- Rising importance and impact of financial markets for policy
- Impotency of policy in influencing/guiding markets ??

II. Why Markets Matter

- Market efficiency as a key policy objective
  - Policy does not necessarily have conflicting objective, but rather…
  - Policy objective can only be: asset prices should reflect (macro-)economic fundamentals and surrounding risks appropriately
- Policy concern are about misalignments and excessive volatility
  - But does this have to imply market "inefficiency"?
  - Not necessarily: depends on definition of the term "market efficiency"

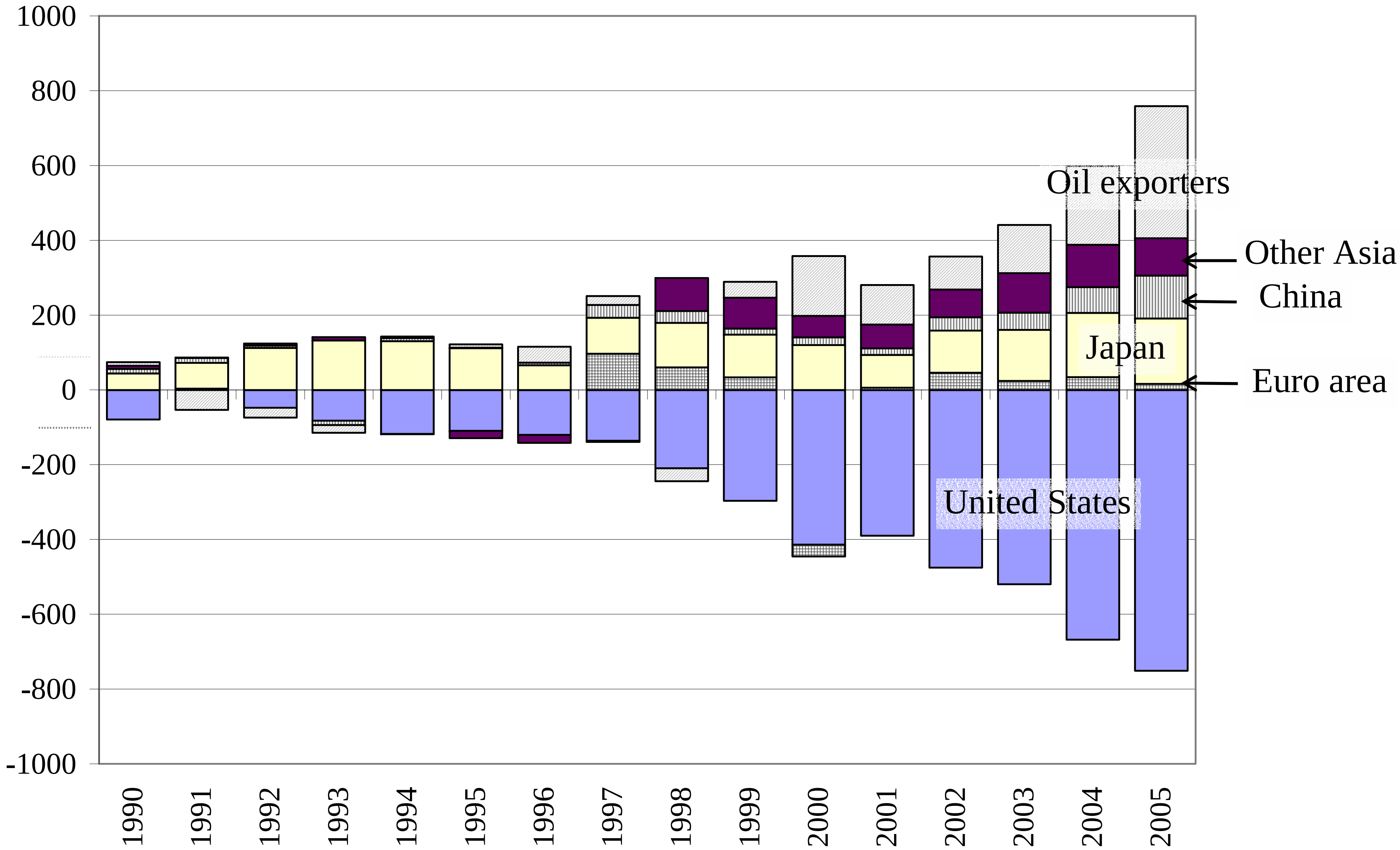
Why Markets Matter

- **Some sources of market "inefficiency"**
  - ***False perception* of true "fundamentals"**
  - ***Beliefs* matter: self-fulfilling expectations – herd behaviour – multiple equilibria / outcomes**
  - **Economic fundamentals are *endogenous* to markets: example of 1997-98 Asian financial crisis**
  - ***Contagion* – international transmission of shocks unrelated to economic fundamentals: example of financing constraints for hedge funds during crisis**
- **Example: a "rational" asset price bubble (*N. Roubini's presentation*)**

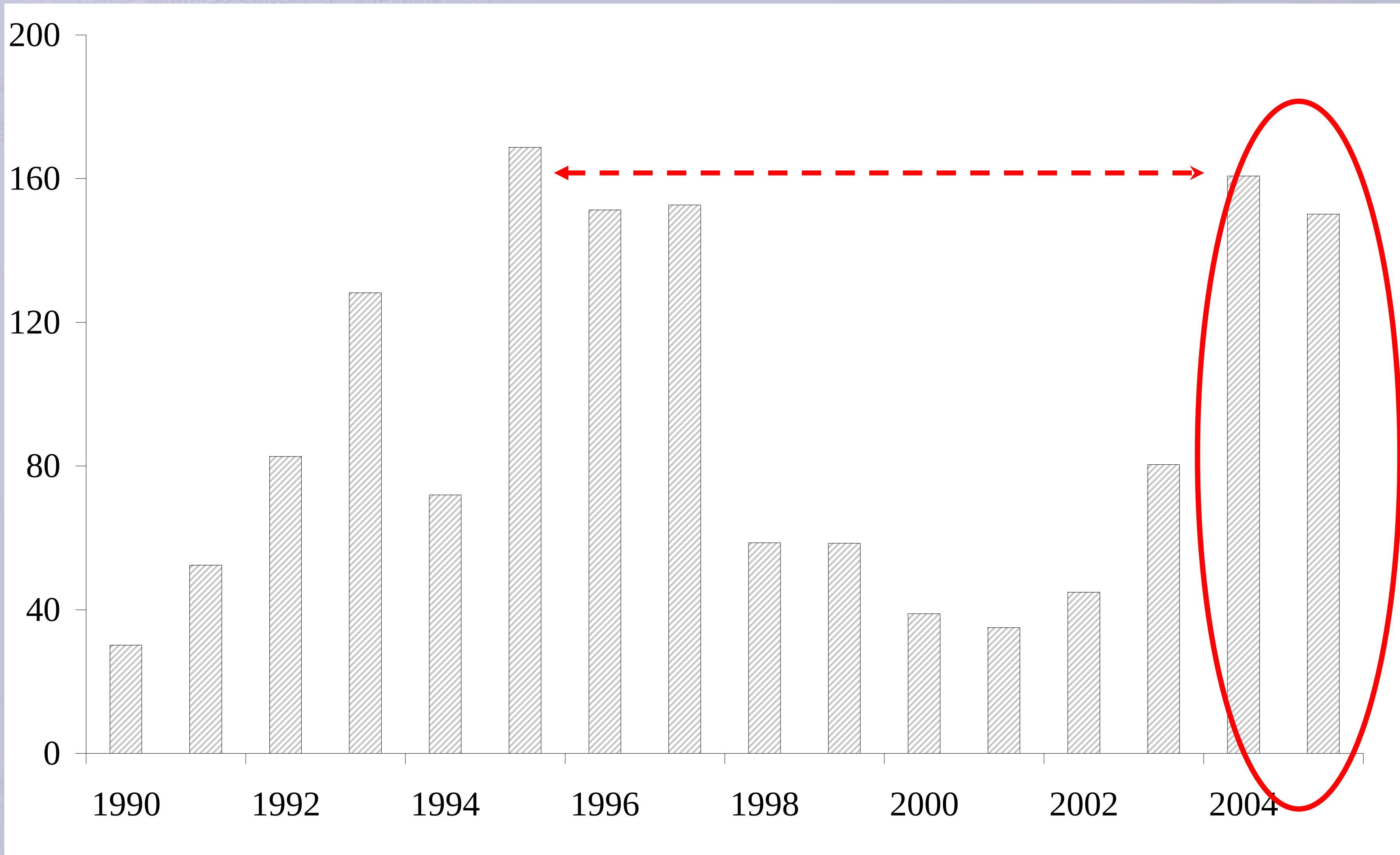
III. Market (In)efficiency Today ?

- **Market overshooting has been a persistent phenomenon over time**
- ***"Global imbalances"* as the catchphrase of today's international policy debate**
  - **Trade imbalances (US CA deficit > 6% of US GDP)**
  - **Bond market "conundrum"**
  - **Huge capital flows from poor to rich countries**
  - **Emerging markets: very low bond spreads reflecting excessive risk-taking ?**
  - **Asset price boom – esp. housing markets worldwide**
  - **Oil price hike**

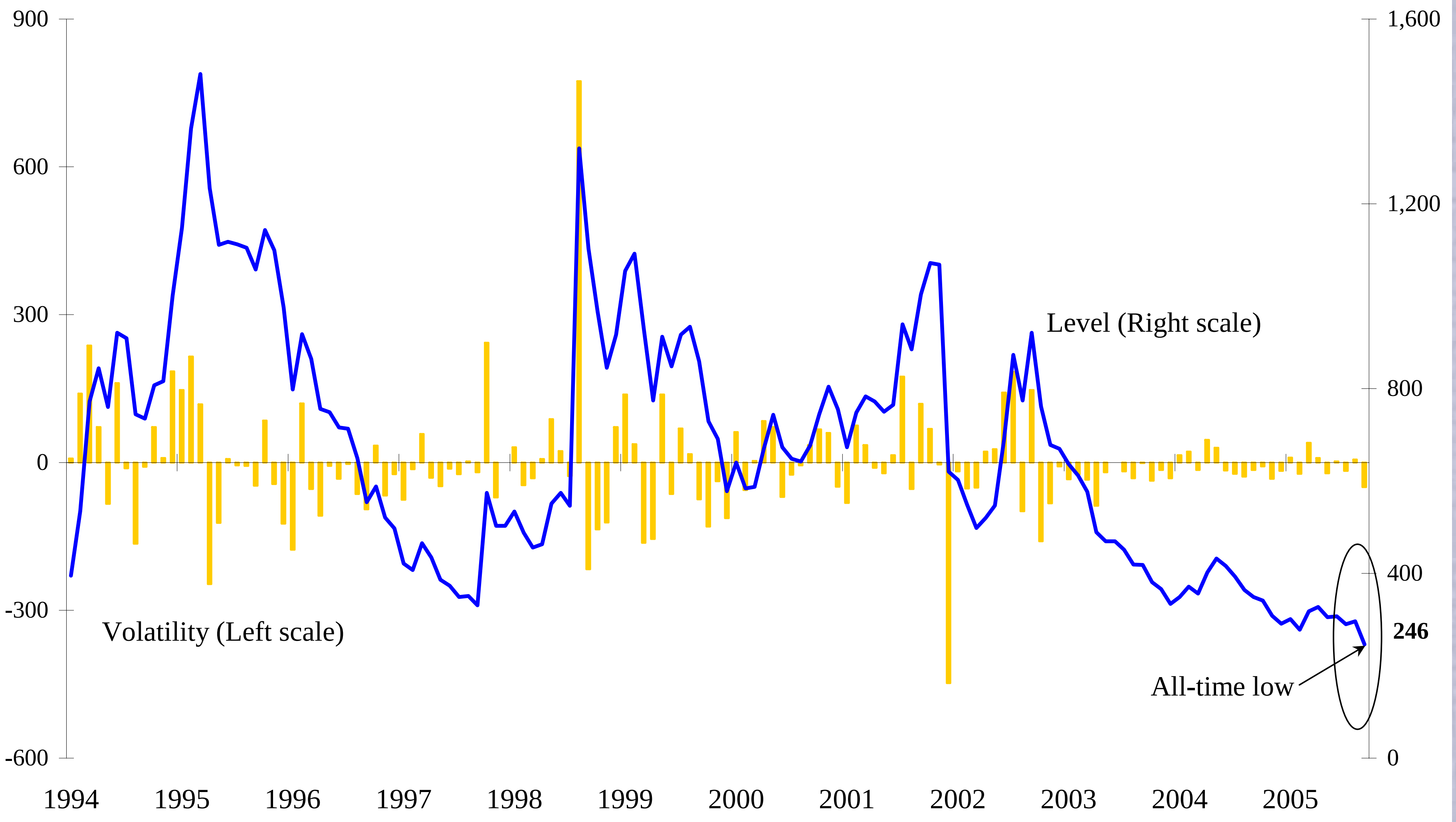
Global current account positions



Financial flows to EMEs

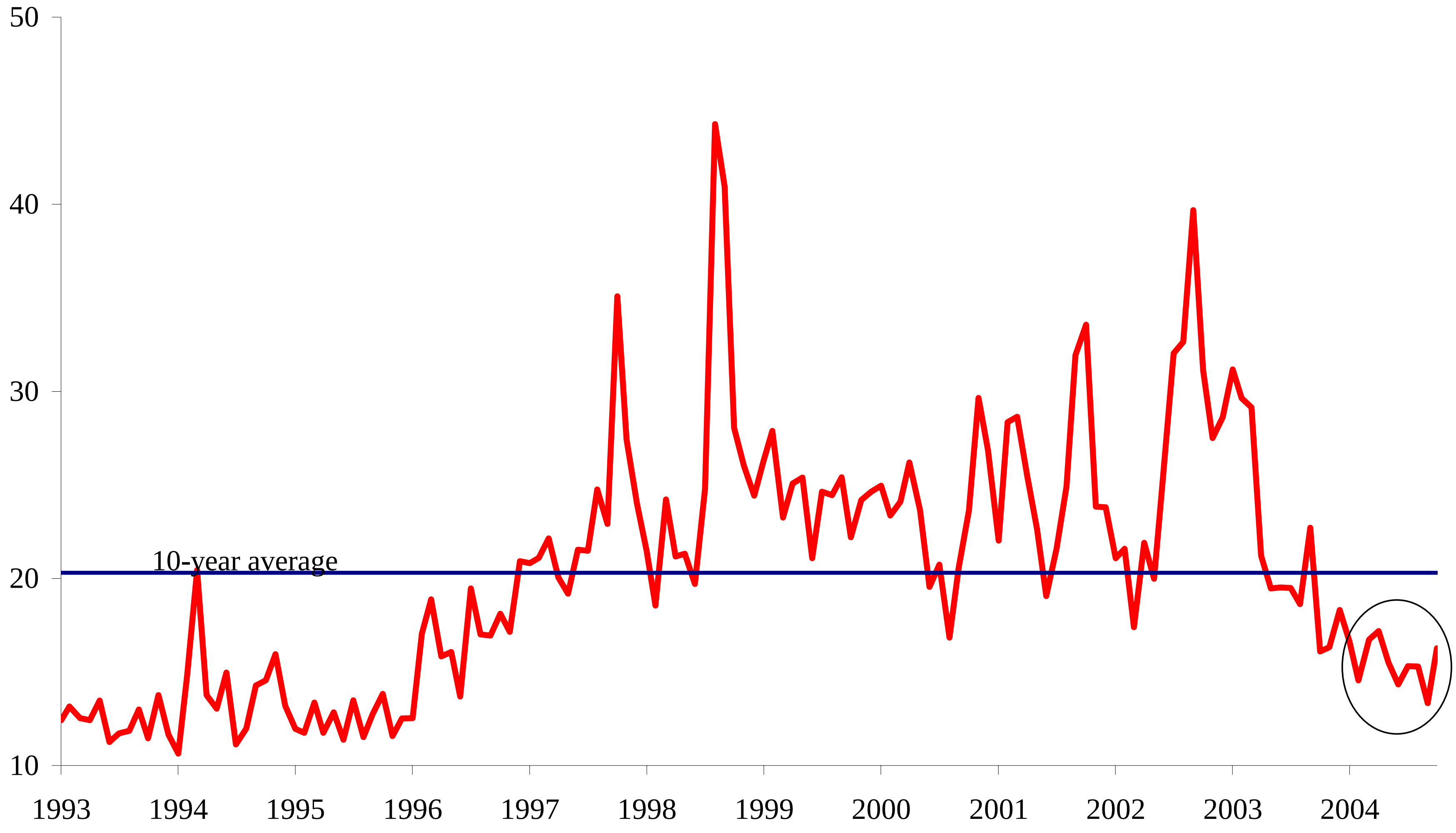


Emerging market sovereign spreads



Source: JP Morgan (EMBI+) and ECB staff calculations. Volatility is defined as the monthly change in the spread index.

Investor risk aversion (re. SPX options vol.)



Source: Bloomberg and ECB staff calculations.

Market (In)efficiency Today ?

- **Much progress has been made:**
  - **Many new financial instruments to price fundamentals and underlying risks**
  - **Much better availability of information**
  - **More powerful (incl. statistical) tools for pricing and the analysis of risks**
- **But market imbalances keep re-occurring… and with ever greater destabilising force**
- **What role for policy?**
  - **Policy to address imbalances and market inefficiency**
  - **…versus: policy as the *source* of imbalances**

IV. What Can Policy Do (and what not) ?

1. ***Transparency*: about objectives, strategy and instruments of policy**
2. **Provide *information*: central banks & others have valuable, private information**
3. **Guarantee *stability*: price stability, stable macroeconomic & regulatory environment**
4. **Allow markets to *function*: enable risks to be priced appropriately, avoid perverse incentives** (example: exchange rate regimes in Asia)

***Credibility* of essence for policy success**

What Can Policy Do (and what not) ?

- **Can policy counteract market inefficiency?**
  - **Nouriel Roubini: monetary policy and the pricking of an asset price bubble**
- **But *limitations* of policy:**
  - **Impotency of policy instruments: limited number and reach of instruments (example: Hong Kong 2000s)**
  - **Lack of information: What is a bubble? – What is the "appropriate" pricing of an asset?**
  - **Theory of the second best: policy may make market outcomes (even) worse**

V. Conclusions

- Policy has an important role to play for financial markets
- But limitations
  - Limited potency of policy instruments
  - Information of key importance; but large information asymmetries always persist
  - Policy all too often the source of economic imbalances and market inefficiencies
- Policy role as an *anchor* rather than a manager of financial markets