Discussion of Giannone, Lenza and Reichlin's

"Business Cycles in the Euro Area"

Tommaso Monacelli

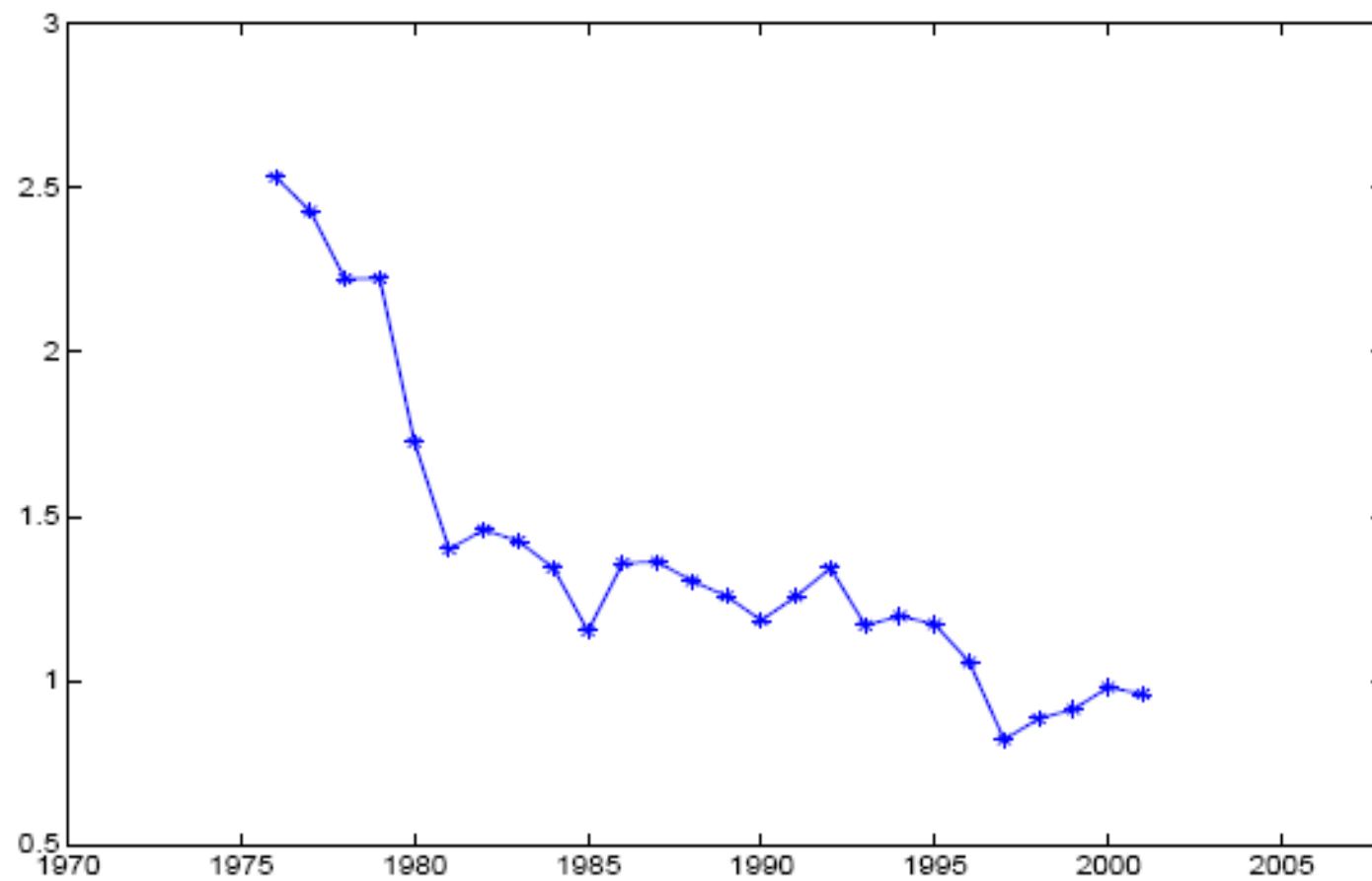Università Bocconi, IGIER and CEPR

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- Three main ideas

1. Euro area business cycle is **less dispersed** than it used to be

2. **No** clear effect of Euro per se

3. The EA business cycle **is** the **US/global** business cycle

- My reaction at first: why expect any different?

- Baxter and Stockman (1989): **irrelevance** of exchange rate regimes for business cycle (developed countries)

- If anything: smaller ability to use nominal exchange rate $\rightarrow$ higher relevance of **idiosyncratic** shocks

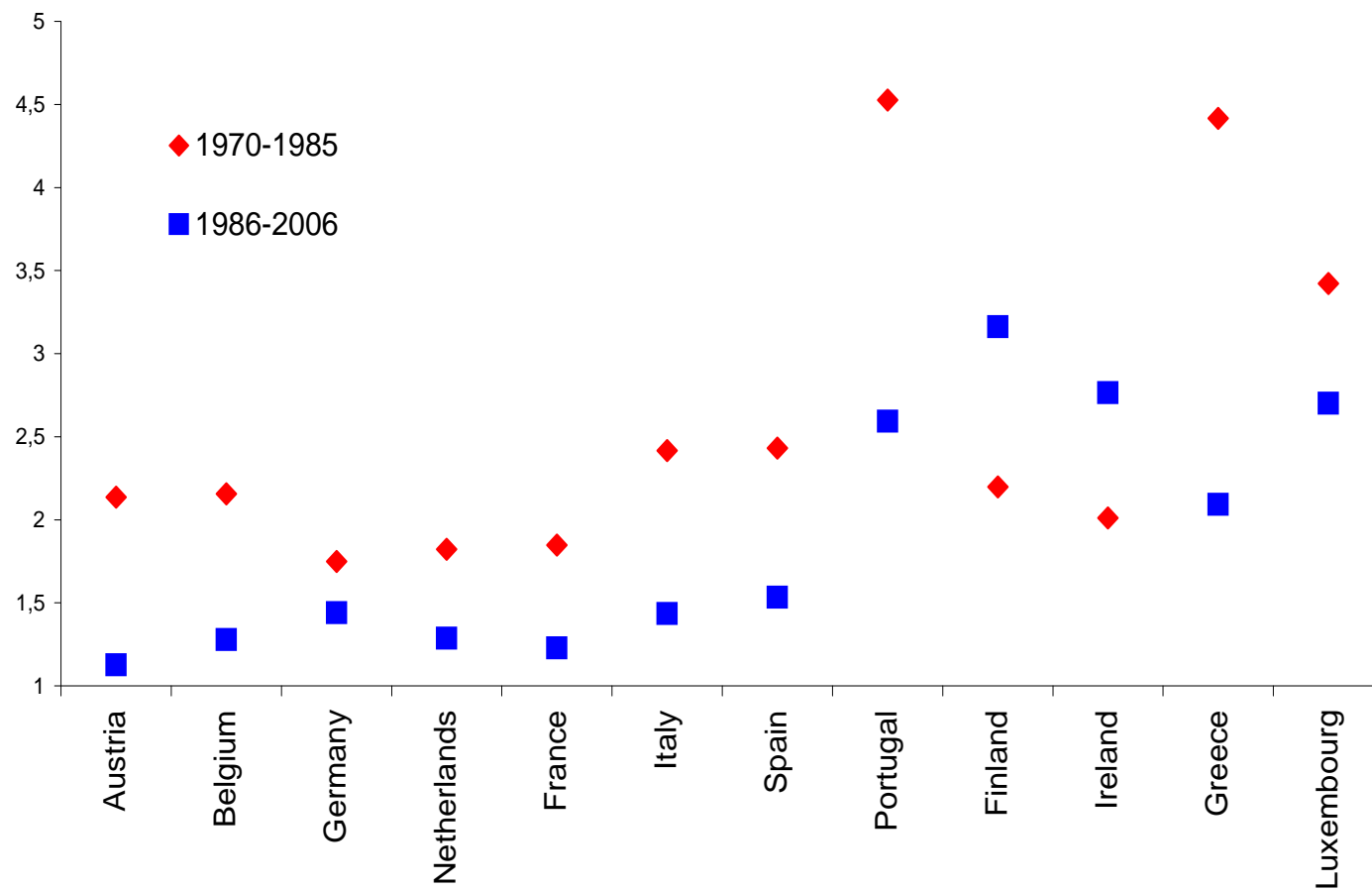- GLR: the **great fall in dispersion**
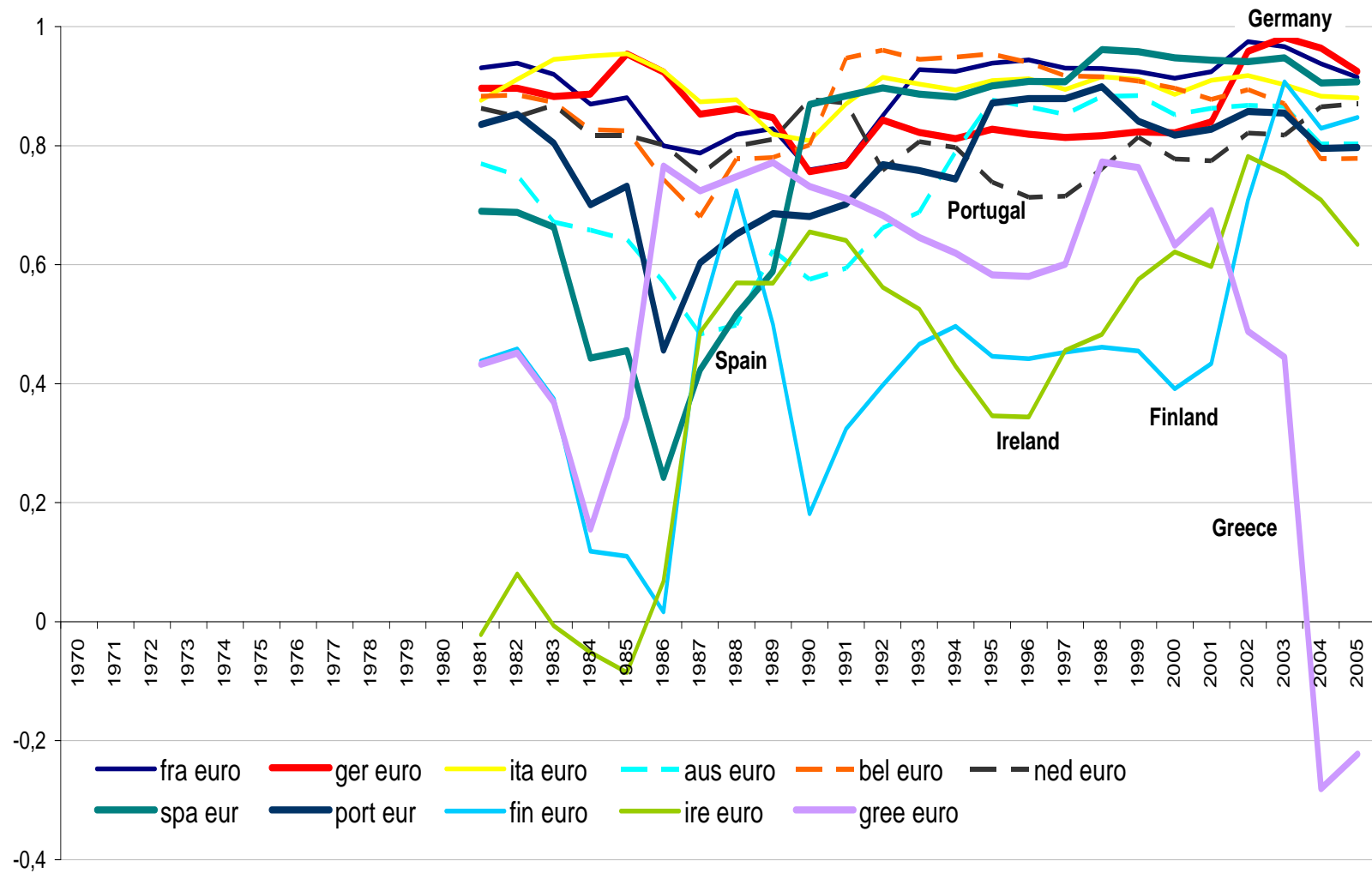
Figure 3: Cross-country growth dispersion

• Man idea: **Great Moderation** (GM) main responsible
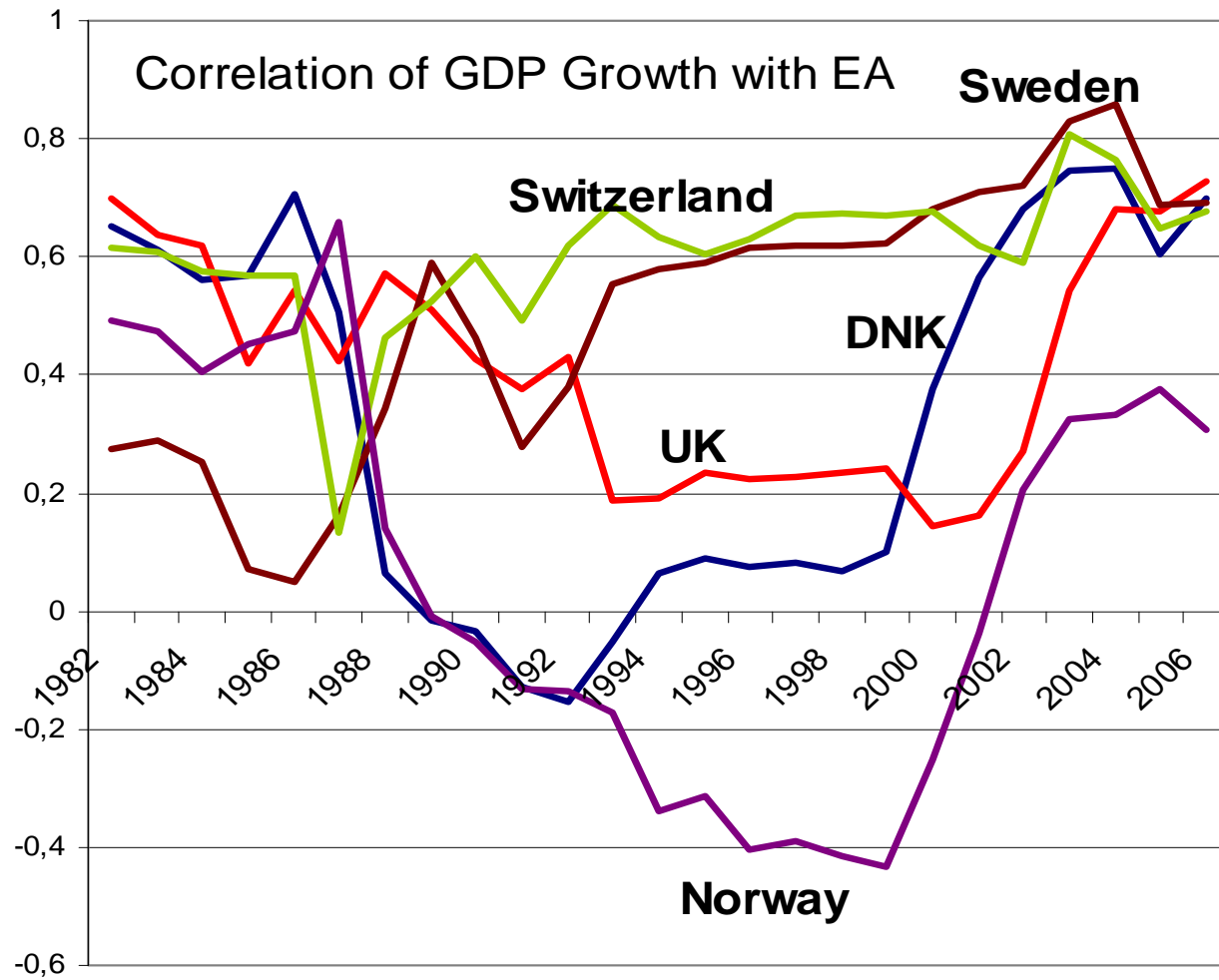
• Yet proof is simply eye-balling

- Idea: if zero shocks → zero volatility → zero dispersion

- (i) Absolute volatility vs. (ii) relative volatility: GM concerns (i) not (ii)

- Volatility must have dropped particularly in some countries

Standard Deviation of GDP Growth
Subsamples

◆ 1970-1985

■ 1986-2006

Austria, Belgium, Germany, Netherlands, France, Italy, Spain, Portugal, Finland, Ireland, Greece, Luxembourg

**Rolling Correlation of GDP Growth
Window 12 with Euro Area**

Correlation of GDP Growth with EA

- Stock and Watson (2006)

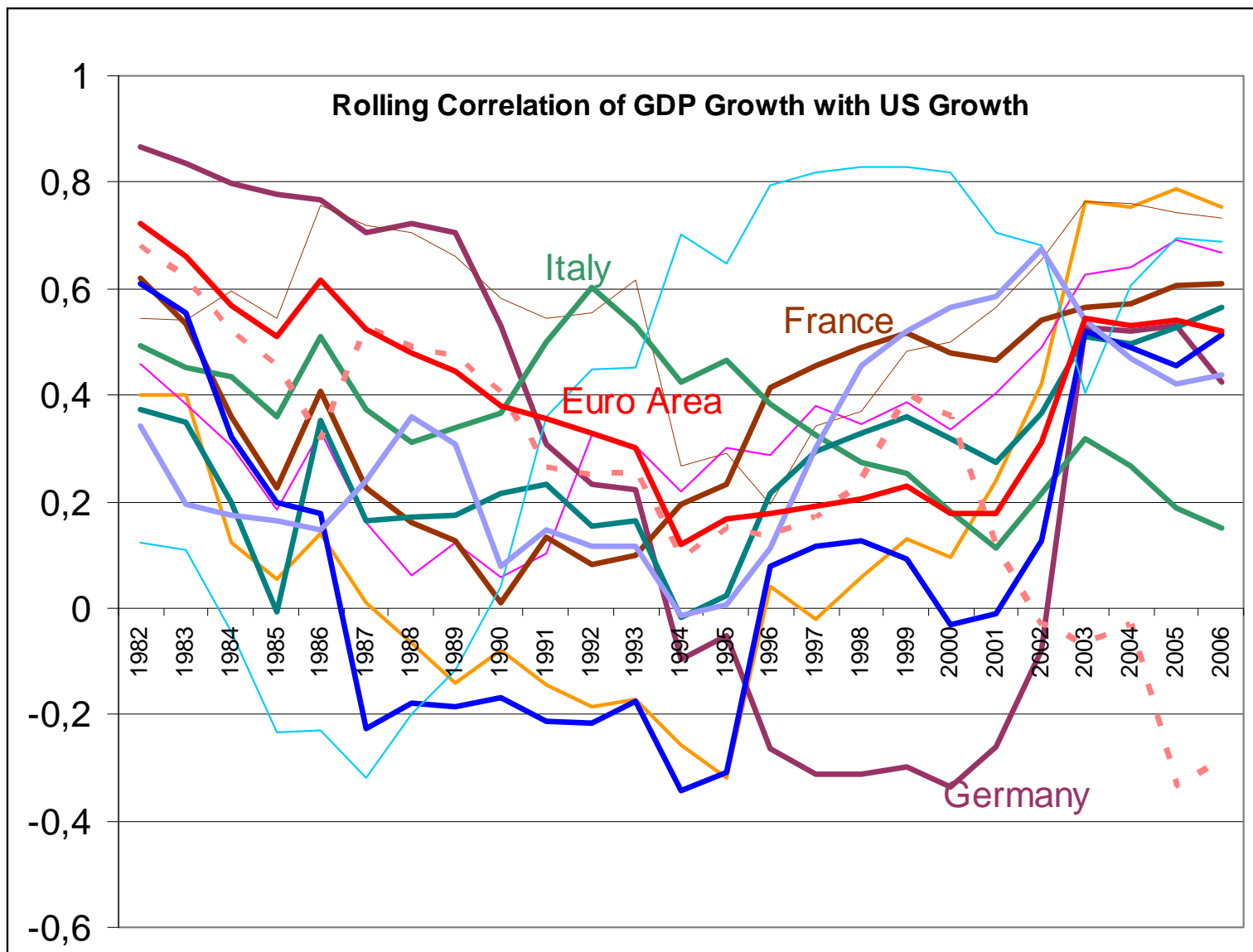- Factor analysis: global + spillover + country-specific shocks

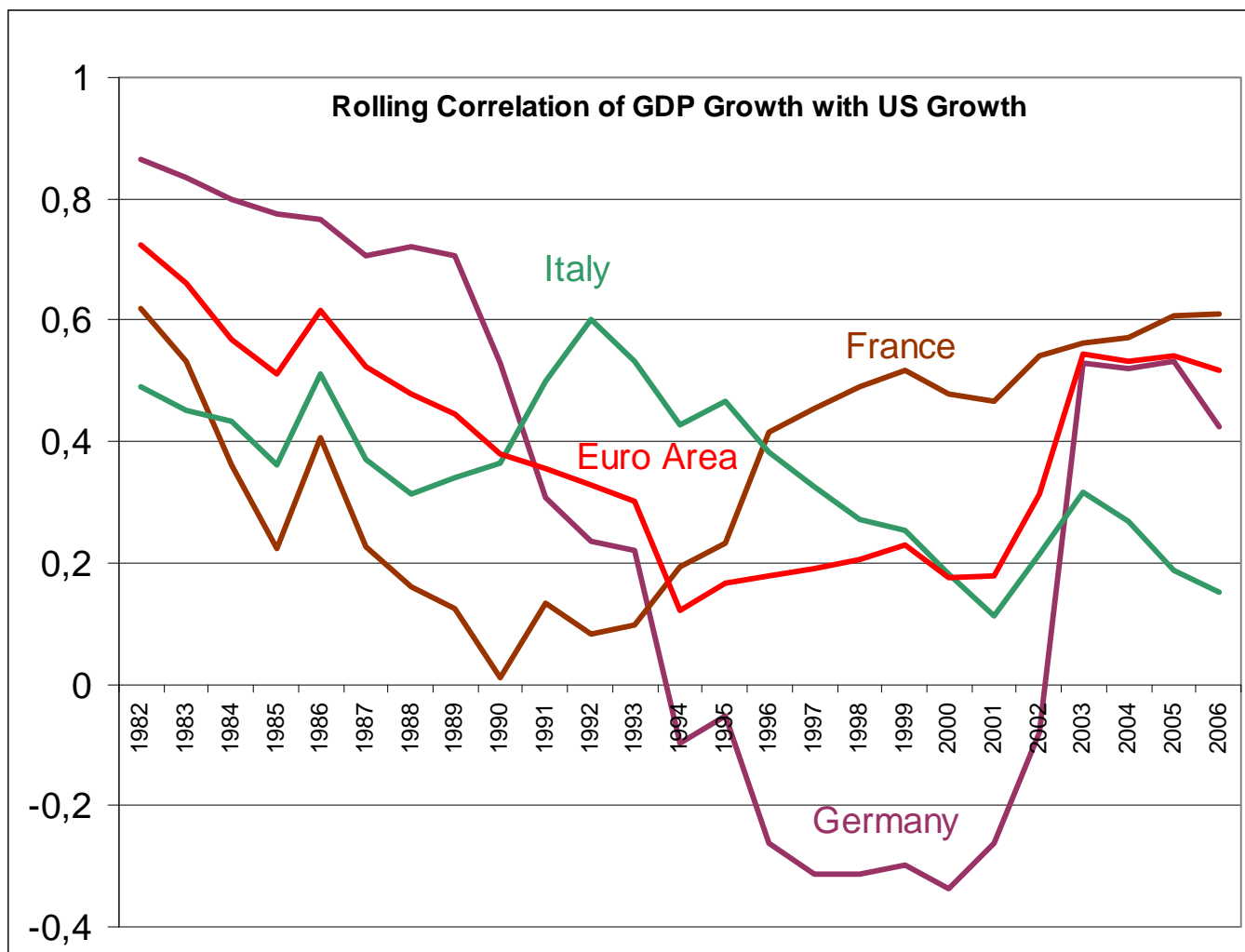$\rightarrow$confirm evidence of **Euro-area block**

- The increased role of **regional** shocks (source: IMF-WEO 2006, Kose, Otrok and Prasad, 2008)

Contributions to Output Fluctuations

		Global	Regional	Country
North America	1960-85	31.4	36.4	15.7
	1986-2005	5.0	**62.8**	8.2
W. Europe	1960-85	26.6	20.5	31.6
	1986-2005	5.6	**38.3**	8.2
Emerging Asia and Japan	1960-85	10.6	9.5	50.5
	1986-2005	6.5	**34.7**	31.1
Latin America	1960-85	16.2	19.4	41.2
	1986-2005	7.8	**8.7**	51.7

- Idea: "between-group" convergence but "across-group" divergence

- Globalization seems mostly a process of **block-regionalization** (except for Latin America)

Rolling Correlation of GDP Growth with US Growth

Rolling Correlation of GDP Growth with US Growth

- Has the **Euro per se** contributed to a **regional business cycle** in Europe? Most likely **NO**

- Other suspects

1. Trade integration (**TI**)

2. Financial integration (**FI**)

3. Policy convergence (**PI**)

4. Good luck

- Suspect 1: **trade**

- Strong empirical evidence that higher trade enhances **co-fluctuations (**Frankel and Rose 1996, Clark and van Wincoop 2001, Otto et al. 2001, Claderon et al 2002, Baxter and Kouparitsas 2004)

- Doubling the **median** trade intensity $\rightarrow$ Increase bilateral cross-correlation of GDP growth by **0.06 (OECD)**

- Problems for theory

1. **Very** difficult to generate link between trade and co-movement within standard dynamic equilibrium models (Kose-Yi, AER P&P 2001)

2. If asset markets complete (and even if productivity shocks correlated across countries) $\rightarrow$ Higher trade intensity leads to **lower** cross-country correlation of GDP

- *Irony I*: lower transport cost $\rightarrow$ Makes problem worse

- If increase elasticity of substitution between H and F goods $\rightarrow$ Problem even worse!

$\rightarrow$*Irony II*: it is trade theorists (not macro guys) that want that elasticity to be high

- Fixes

1. Financial autarky: helps (but not much), but implausible

2. **Vertical specialization** of production $\rightarrow$ New frontier for international business cycle models
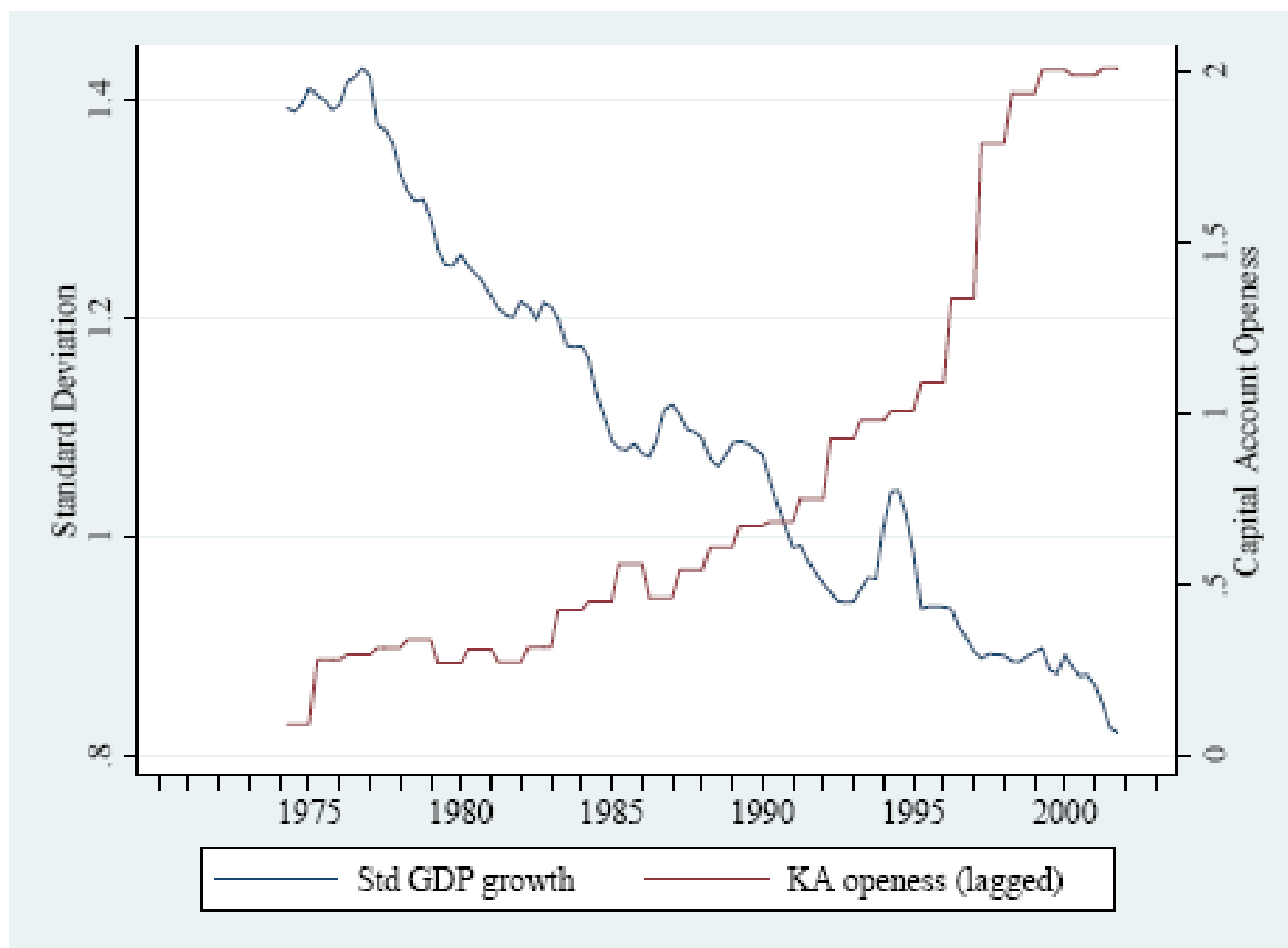
- Suspect II: **financial integration** (FI)

- Empirical evidence suggests:

1. FI enhances co-fluctuations (Imbs 2005)

2. FI enhances ability to smooth consumption (Bekaert, Harvey, Lundlblad 2006)

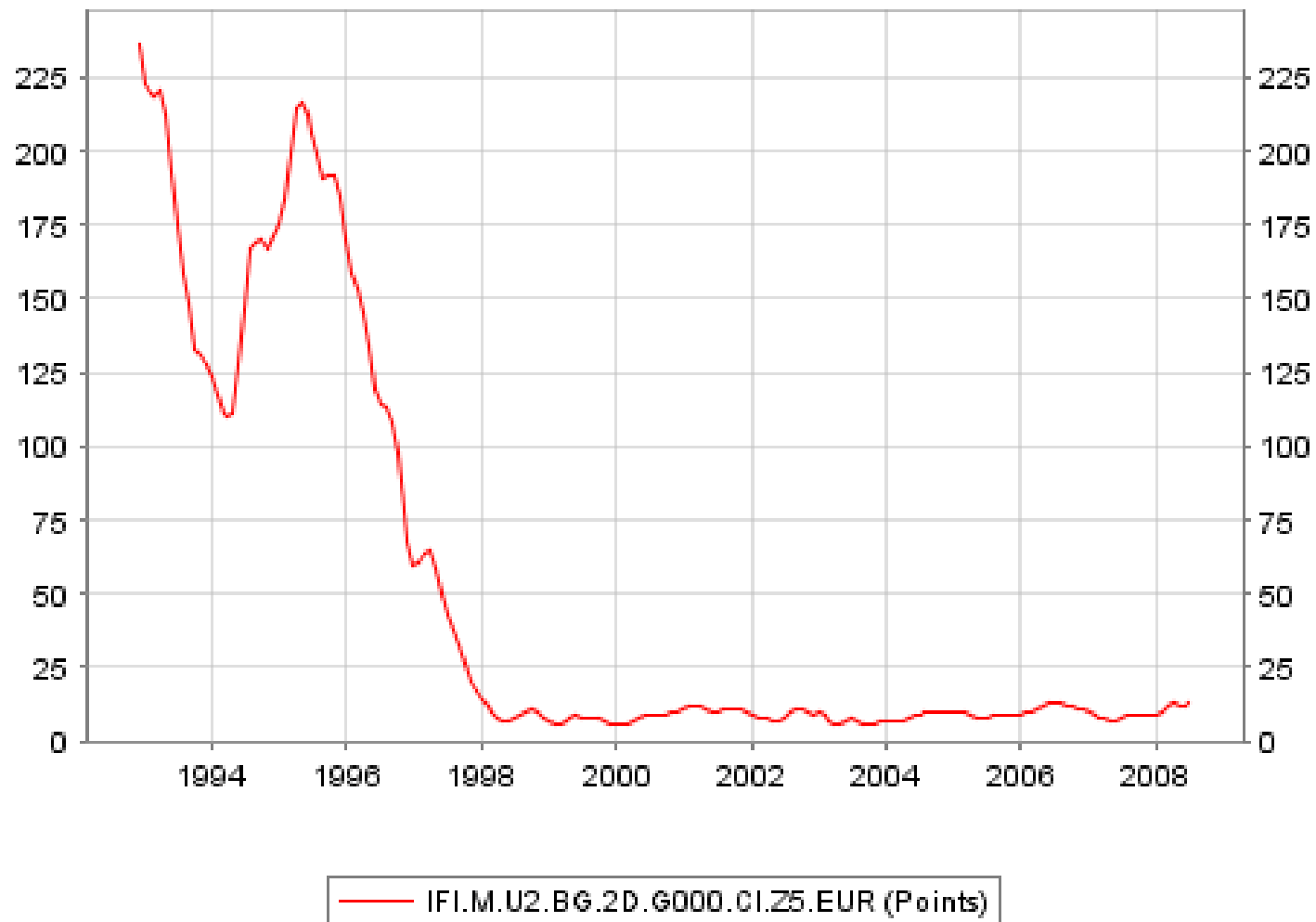- Measure FI with Chinn-Ito (2005) index of capital account liberalization (Quadrini and Perri 2008)

- Problems with theory

1. Can FI explain block-regionalization?

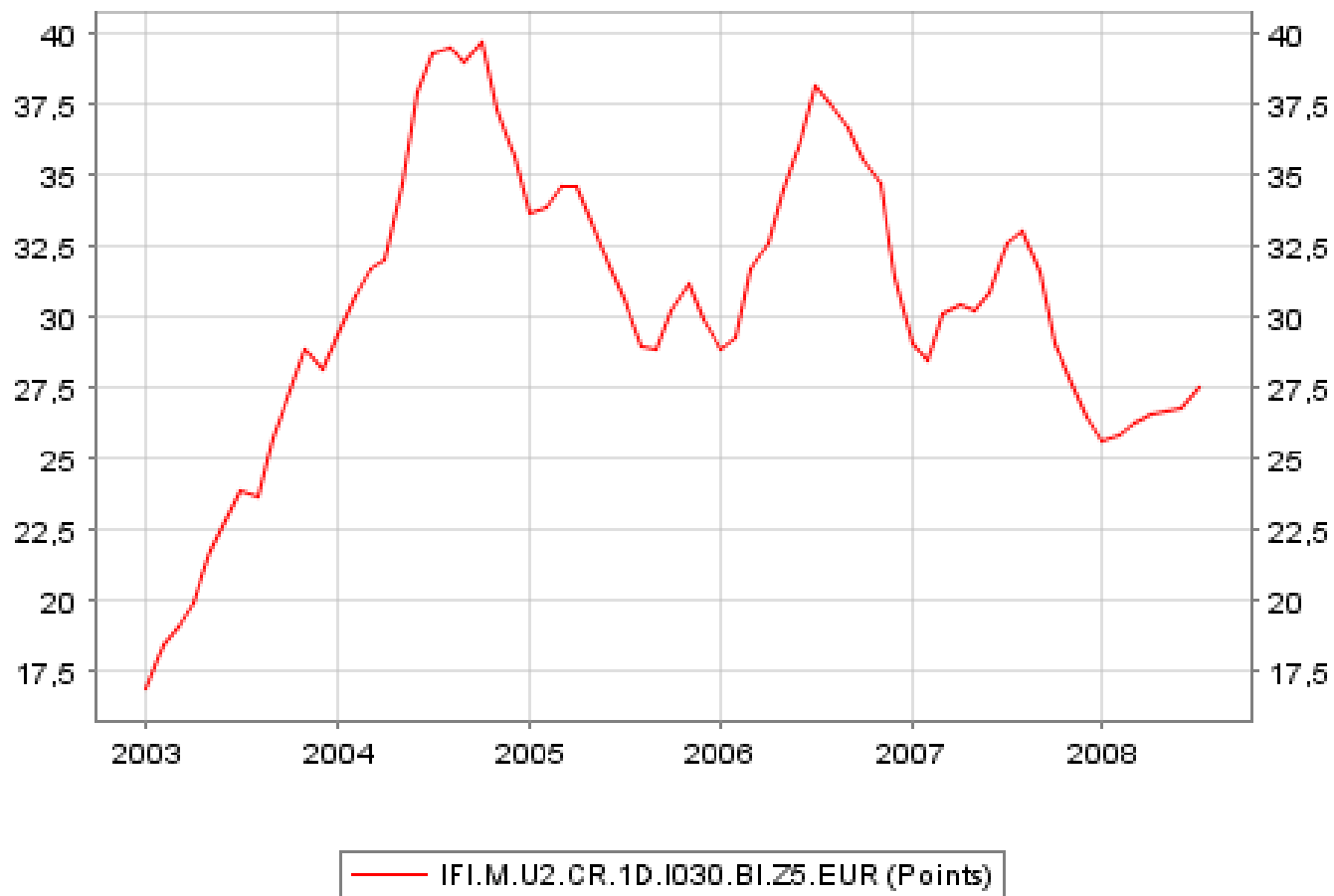2. Standard equilibrium **complete market** model: stronger financial integration $\rightarrow$ **lower** correlation of output

- Is the EA (more) **financially integrated?**

Dispersion in 10 yr Bond yieald spreads

Dispersion in 12-m Business Loans Rates to Non-Financial Corporations
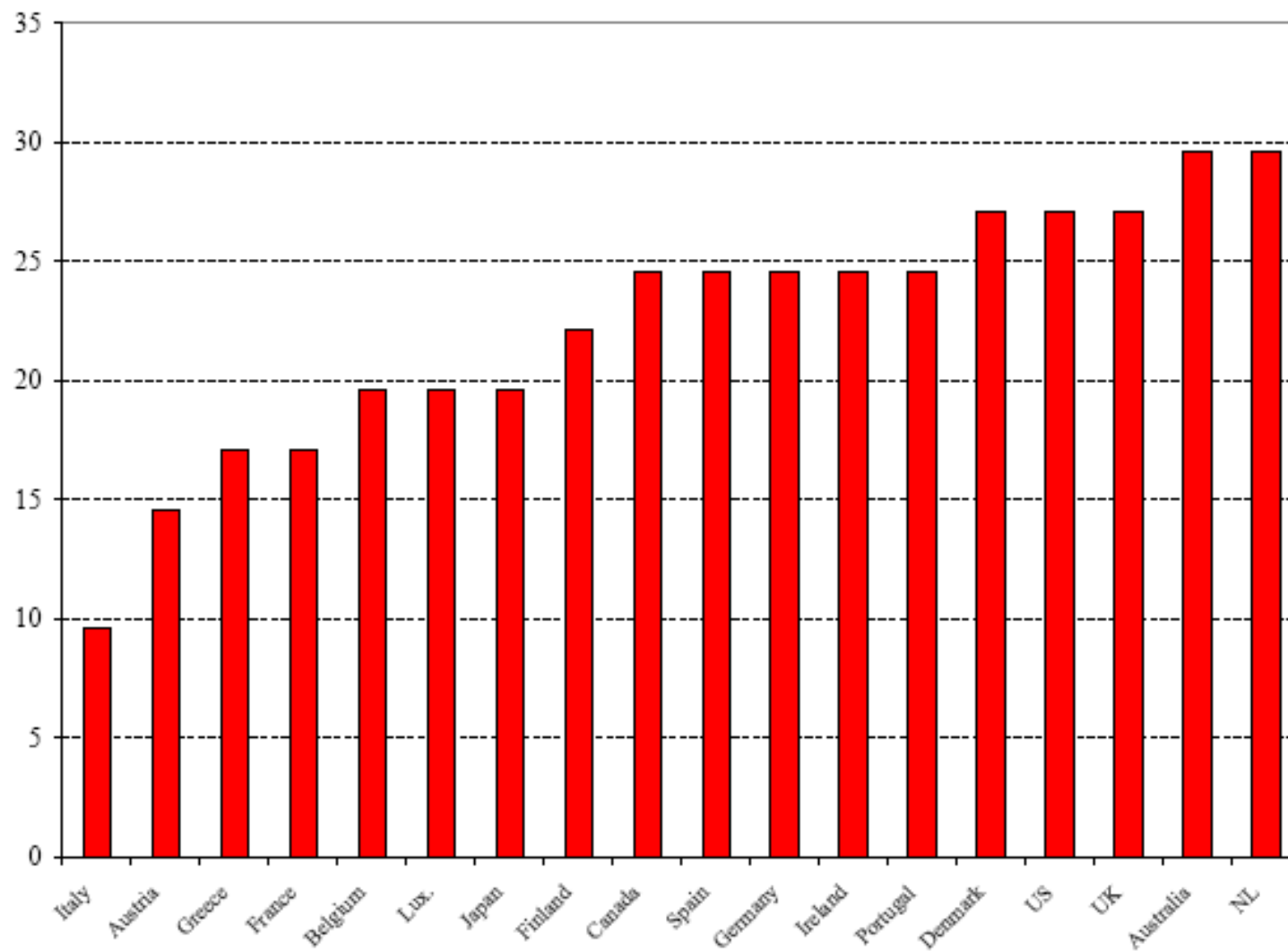
Dispersion in 5-10 Yrs Mortgage Loans Rates

- Large differences especially in **mortgage markets**
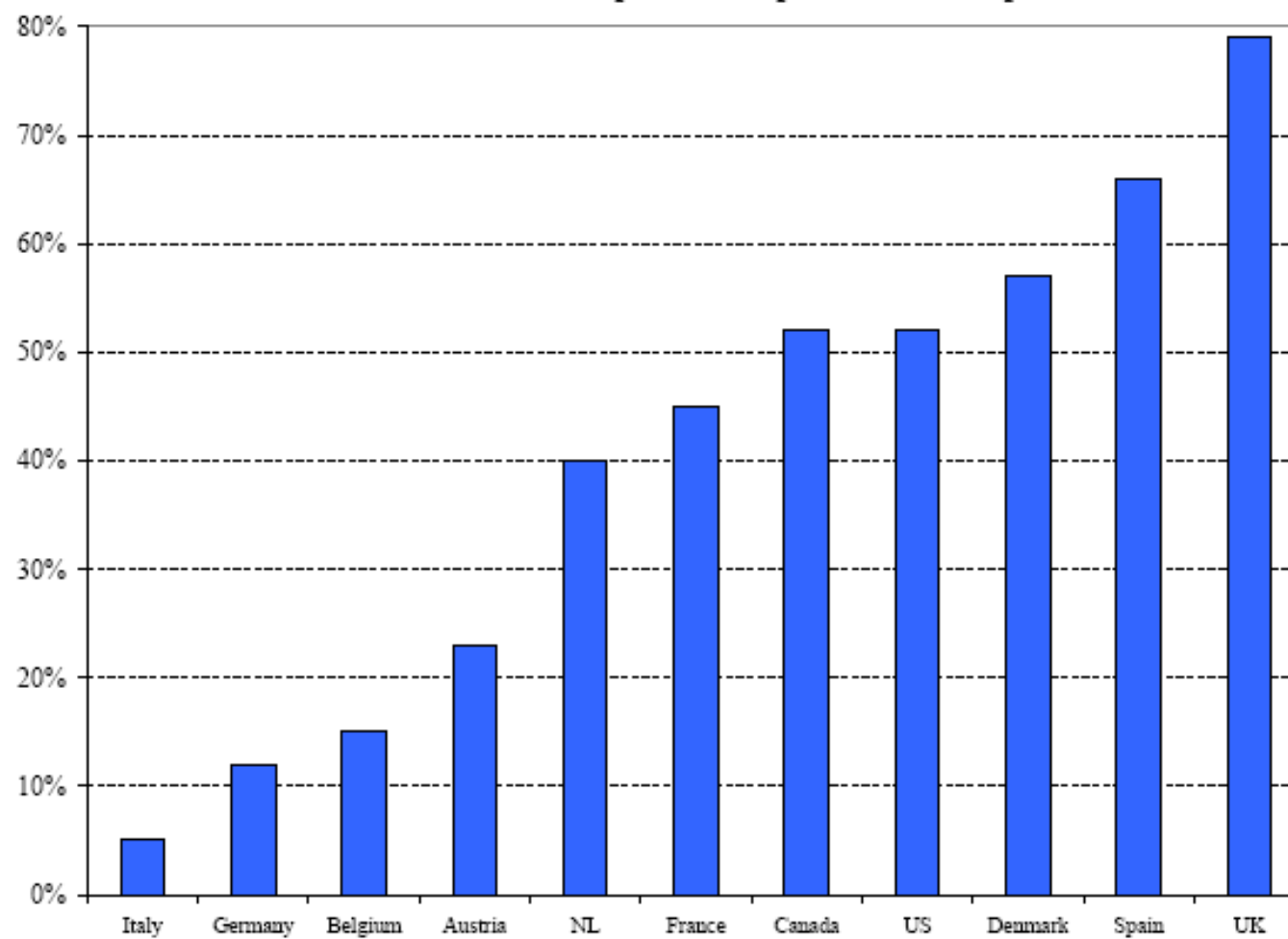
Index of Mortgage Markets Development

	MEW	REF	LTV	COVB	MBS	MTGDEBT	Index
United States	1,0	1,0	0,89		1,00	0,77	0,93
Denmark	1,0	1,0	0,89	1,00	0,00	1,00	0,81
Australia	1,0	0,5	0,89		0,28	0,83	0,70
New Zealand	1,0	0,0				0,80	0,60
United Kingdom	1,0	0,5	0,83	0,01	0,12	0,83	0,55
Japan	0,5	0,5	0,89		0,44	0,41	0,55
Netherlands	1,0	0,0	1,00	0,00	0,13	1,00	0,52
Norway	1,0	0,0	0,78	0,14		0,60	0,50
Sweden	1,0	0,0	0,89	0,41	0,03	0,57	0,48
Canada	0,5	0,0	0,83		0,49	0,49	0,46
Finland	1,0	0,0	0,83	0,02		0,43	0,46
Spain	0,5	0,0	0,78	0,19	0,12	0,51	0,35
Portugal	0,0	0,0	0,92		0,22	0,56	0,34
Greece	0,5	0,0	0,83		0,12	0,21	0,33
Ireland	0,5	0,0	0,78	0,02	0,08	0,58	0,33
Belgium	0,0	0,0	0,92		0,06	0,34	0,26
Germany	0,0	0,0	0,78	0,15	0,02	0,59	0,26
France	0,0	0,0	0,82	0,04	0,03	0,29	0,20
Austria	0,0	0,0	0,67	0,05		0,23	0,19
Italy	0,0	0,0	0,56		0,09	0,17	0,16

MEW	Mortgage Equity Withdrawal, available/permissible
REF	Refinancing (fee-free prepayment)
LTV	Typical loan to value ratio, percent
COVB	Total Covered Bonds Outstanding (% of Residential Loans Outstanding)
MBS	Total MBS Issues (% of new residential loans)
MTGDEBT	Residential mortgage debt to GDP Ratio

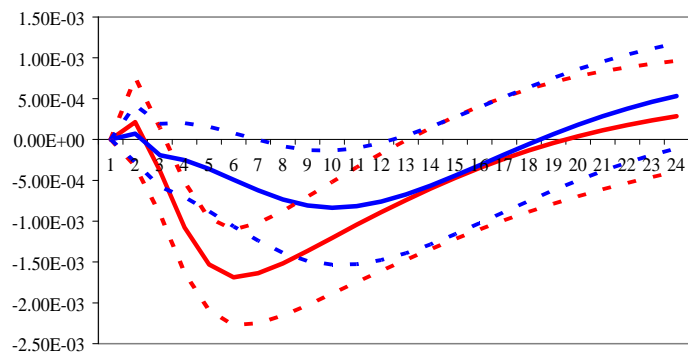**Typical duration (years)**

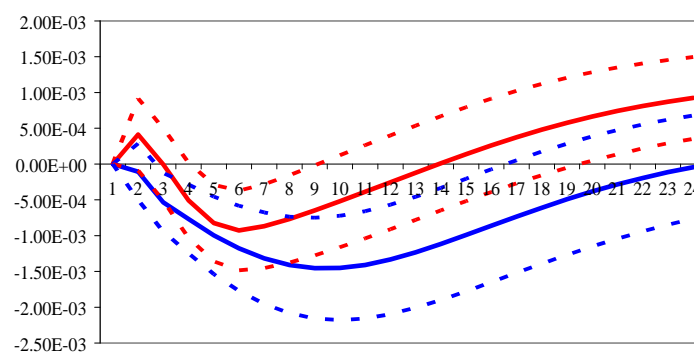# Correlation between house prices and private consumption

- Implies differences in the **transmission of monetary policy**

- Look at **consumption** and **residential** investment
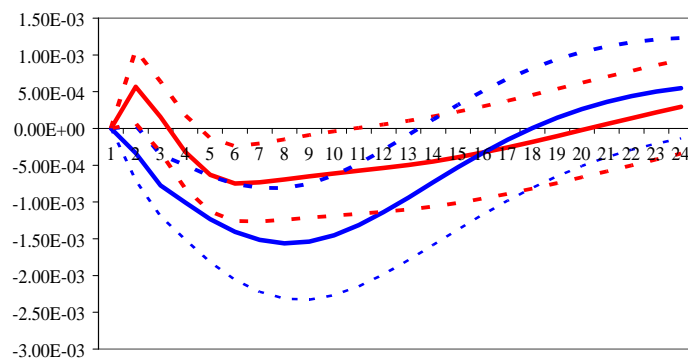
Response of **Consumption** to a Monetary Tightening
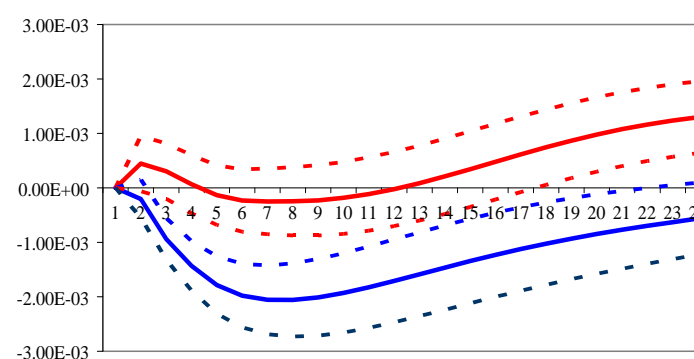
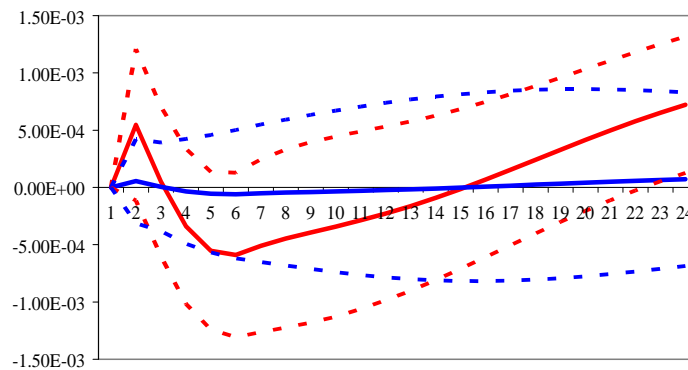Mortgage to GDP ratio

IMF mortgage index
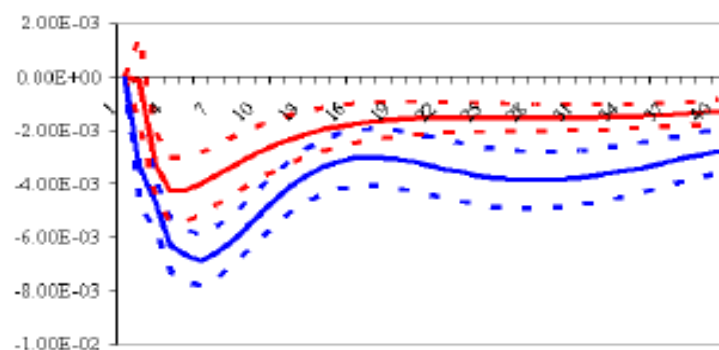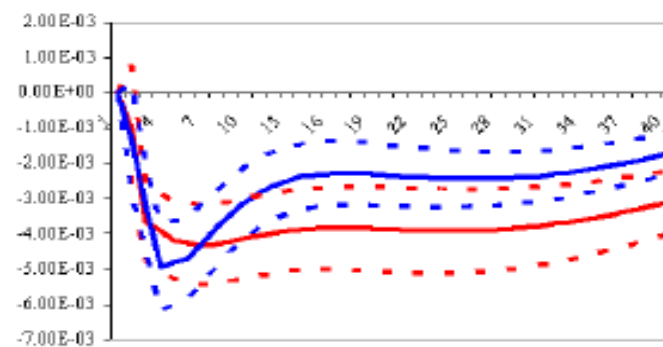
MEW

Interest rate adjustment

Loan to value ratio

Response of **Residential Investment** to a Monetary Tightening
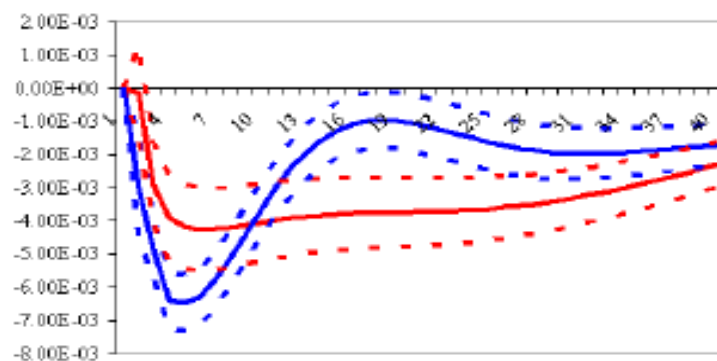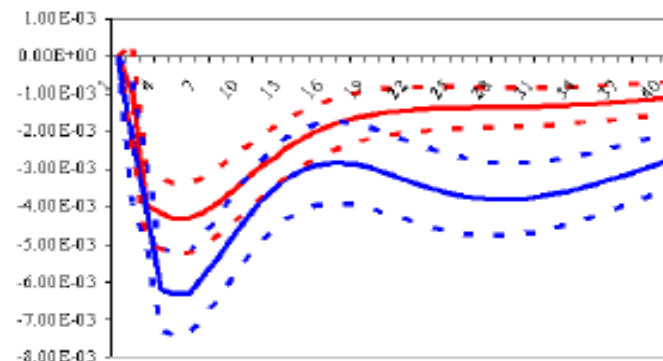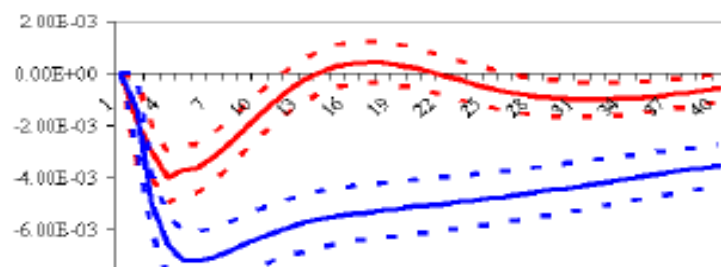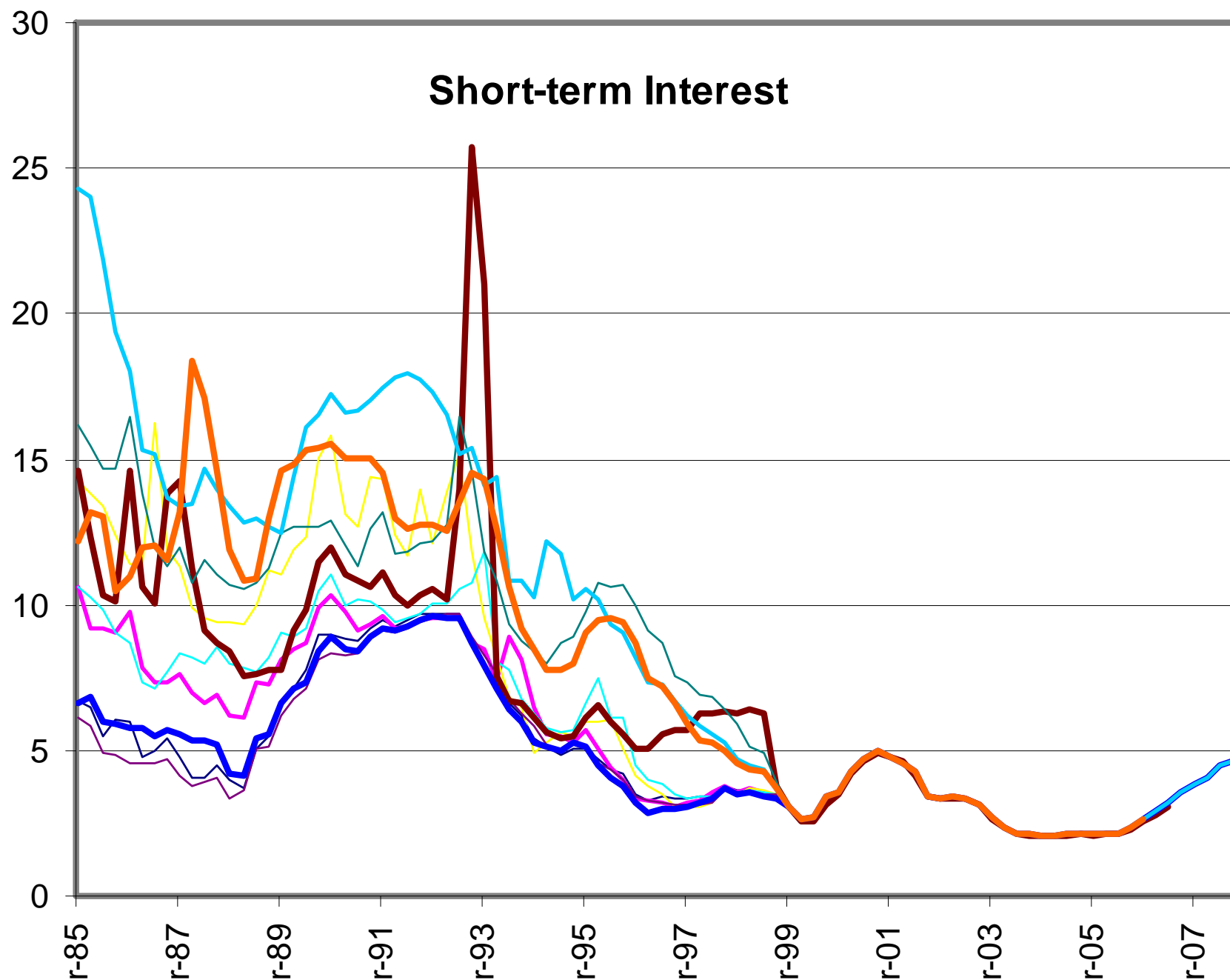
MEW

LTV

Mortgage / GDP ratio

IMF mortgage index

Interest rate adjustment

- Policy integration (PI)

Short-term Interest

- Research agenda

1. Does PI lead to stronger **co-fluctuations?**

2. Is it "convergence per se" or the "convergence to good policy"?

3. Has PI contributed to great moderation in Europe?

4. Can we disentangle **PI** vs. **good-luck**?