



# **Measuring Competitiveness**

**ULC and their impact on stability in the  
Euro Area**

**Rome 11. July 2011**

## Introduction

### **I. Current accounts: a misleading indicator**

- A. The Commission proposals
- B. The chauvinistic bias
- C. Europe's restructuring process

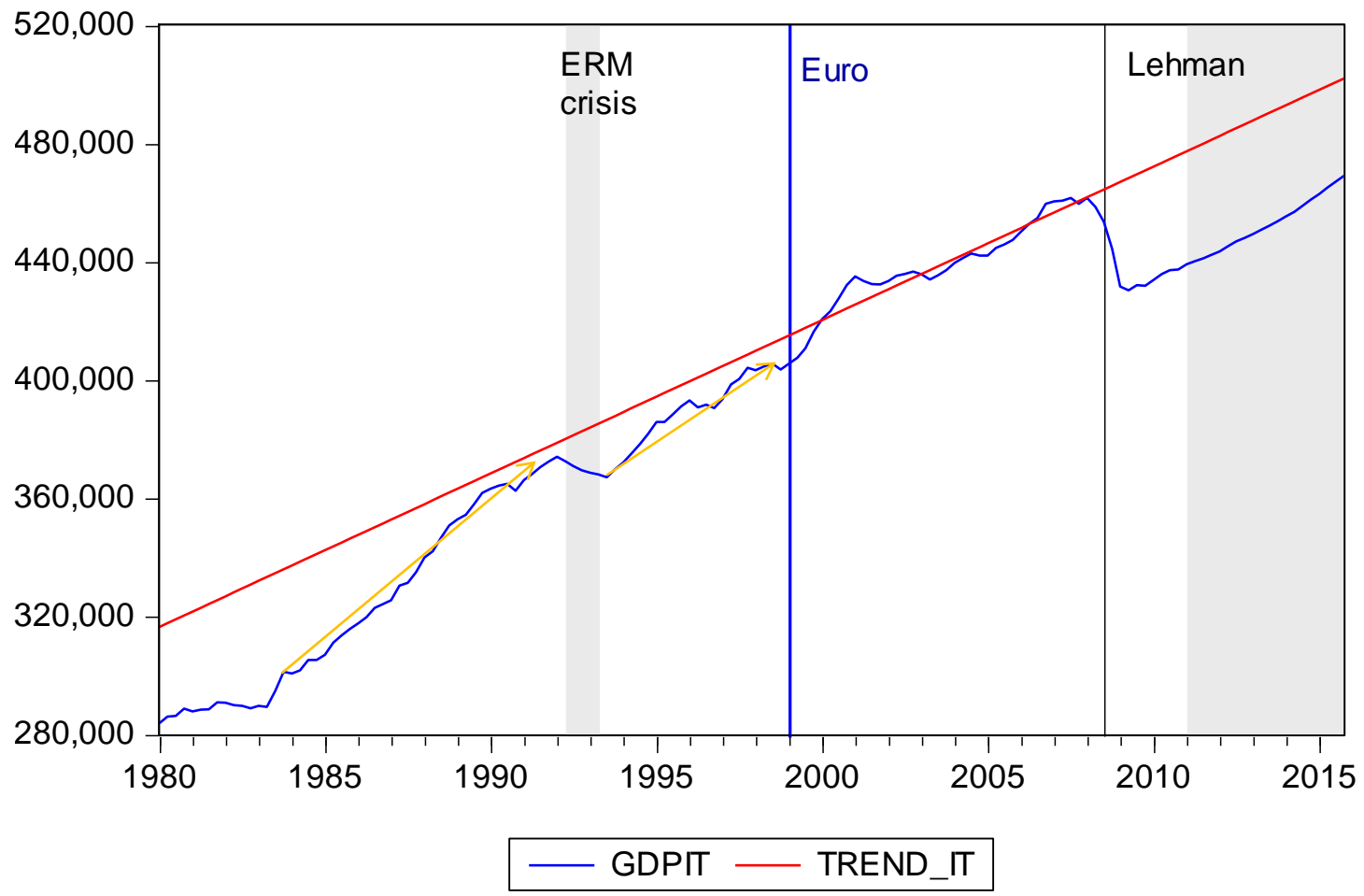
### **II. Cost competitiveness: the real issue**

- A. Defining competitiveness
- B. Equilibrium unit labour cost levels
- C. Competitiveness and macroeconomic performance

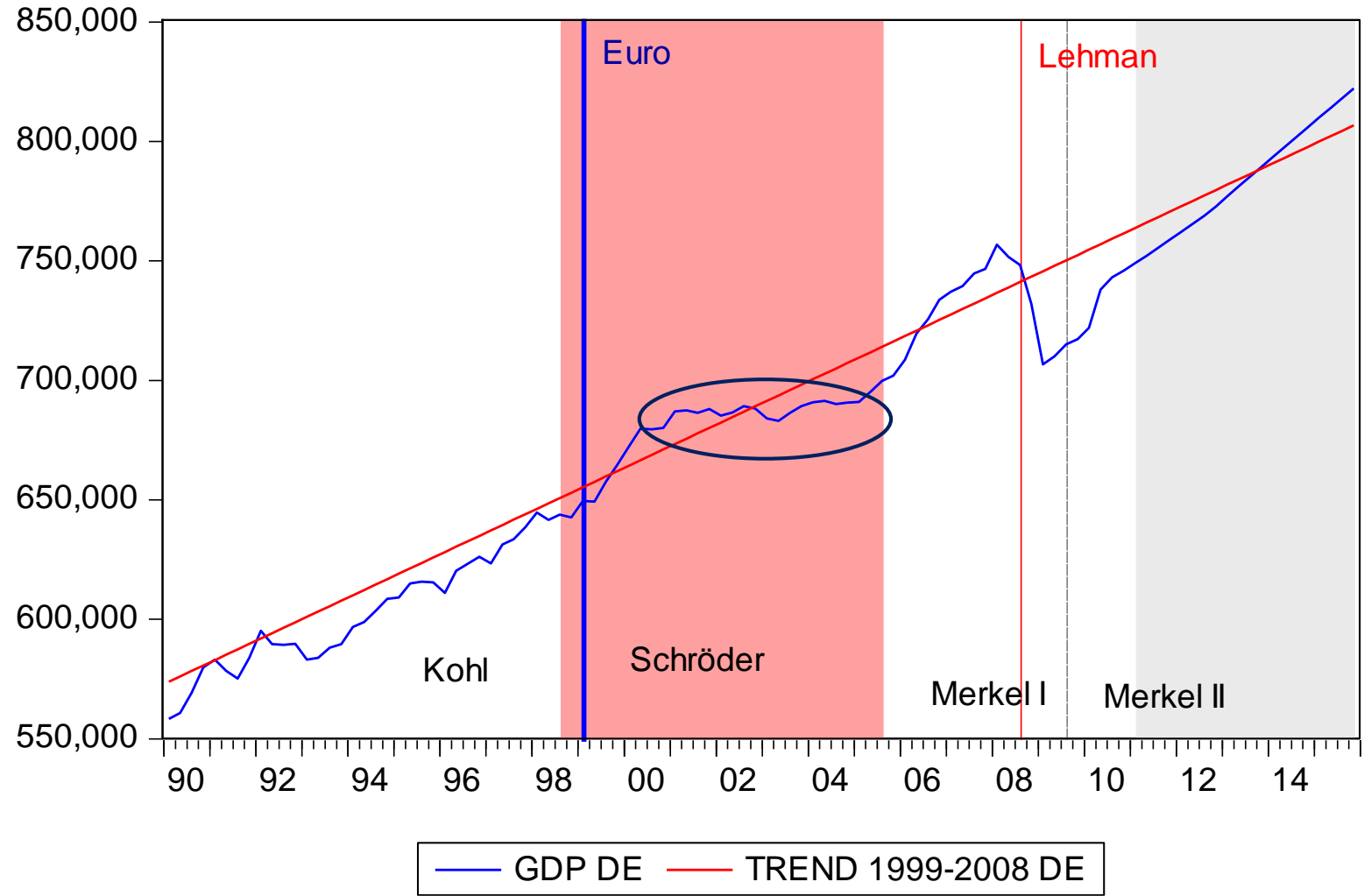
## Conclusion

- The Global Financial Crisis of September 2008 has caused Tsunami-like devastation in the public finances of most industrial economies and in particular in the European Union.

## Italy



## Germany



- Uncooperative behaviour by European governments nearly caused total meltdown of the Euro in 2010 because no one is in charge of citizens' common interest
- The Barroso Commission is politically and ideologically constrained by member states

- Since May 2010 a number of reform proposals have been made to re-ignite balanced growth
  - EFSF and ESM
  - European Semester
  - excessive imbalance procedure (EIP)
- In this presentation, I will focus on the excessive imbalance procedure and will show why it is misconceived

# I. Current account imbalances



## A. The Commission proposals

- A structured framework to prevent and correct macroeconomic imbalances
  - Note for EPC 16.11.2010
  - Ignores EP
  - Proposal for a Regulation Of The European Parliament And Of The Council on the prevention and correction of macroeconomic imbalances, 29.9.2010
- Alert mechanism triggers “more in-depth analysis”
- Scoreboard of indicators
  - Current account
  - External debt
  - Cost competitiveness index

- Monitor **“external imbalances”**
  - Current account balance
  - Net foreign financial asset position
  - Real effective exchange rate based on ULC
- **“Internal imbalances”**
  - Housing market
  - Construction sector
  - Private sector debt
  - Private sector credit
  - Government debt

### However:

- Talking of **external** balances **within** the Euro Area does not make economic sense
- Confusion between economic and politico-juridical concepts
- It creates a chauvinistic bias for policy making in the Euro Area

## **B. The chauvinistic bias**

- Definitions of chauvinistic:
  - Dictionaries: ‘prejudiced belief in the superiority of one's own gender, group, or kind’ or ‘a blind belief in national superiority’.
  - Hanna Arendt:
    - ‘Chauvinism ... almost natural(ly) ... springs ... from the old idea of the "national mission." ...
    - (A) nation's mission might be interpreted precisely as bringing its light to other, less fortunate peoples that, for whatever reason, have miraculously been left by history without a national mission.’
      - Hannah Arendt, "Imperialism, Nationalism, Chauvinism", in *The Review of Politics* 7.4, (October 1945), p. 457

- Ravenscroft has described chauvinism **as a ‘bias in favour of the familiar’**.
  - » I. Ravenscroft, in *Philosophy of Mind. A Beginner’s Guide*, Oxford, Oxford University Press, 2005, at p. 58.
- This is how I will use the term “chauvinism”
- The “bias in favour of the familiar” results from taking the nation state framework of policy making for granted even if the economy is integrated in a single market with a single currency.
- **A confusion between political heterogeneity and economic-monetary homogeneity**
  - Chancellor Kohl: monetary union requires political union

- **Current accounts: the wrong concept**
  - The use of current account balances is an example for such confusion
  - Current account in **different currency areas** indicates change in external indebtedness
  - Together with capital flows CAs determine **foreign exchange reserves**
    - FXR provide liquidity for currency convertibility
    - Loss of reserves makes maintenance of exchange rate stability unsustainable
    - **“Country” risk is determined by currency**
      - “caught with them, hanged with them”



- In **same currency area** liquidity is provided by Central Bank
  - Banks borrow from CBk and lend to economy
    - Firms and governments
    - Lender of last resort
  - ECB is the lender of last resort to all banks
  - **solvent** banks can always count on obtaining the necessary liquidity from the ECB.
    - Any “current account” position is sustainable
  - It makes no difference whether the lender is a “domestic” or “foreign” bank in the Euro Area.
    - this open and unlimited access to liquidity for Monetary Financial Institutions (i.e. banks) is the defining feature of a monetary union.
  - **European Monetary Union is not a fixed exchange rate area; it is an economic "country".**

- Two equations

- External Balance of Payments

$$(Exports-Imports)_{\epsilon} + (Net\ Transfers\ in^{-})_e + (Net\ Capital\ flows\ in)_{\epsilon} = \Delta\ Net\ foreign\ reserves$$

- Internal Balance of Payments

$$(Exports-Imports)_i + (Net\ Transfers\ in^{-})_i + (Net\ Capital\ flows\ in)_i = \Delta\ M_i$$

- With  $\sum_{i=1}^n M_i = M_{\epsilon}$

- A so-called current account deficit in a Member State may be financed by capital inflows provided by the banking system
- or it will lead to a reduction in the locally held money stock.
  - Such monetary outflow may cause lower prices and depress local demand.
  - It is equivalent to a general reduction in local wealth;
- but it does not imply that the situation is unsustainable.
  - It only means that it is uncomfortable.

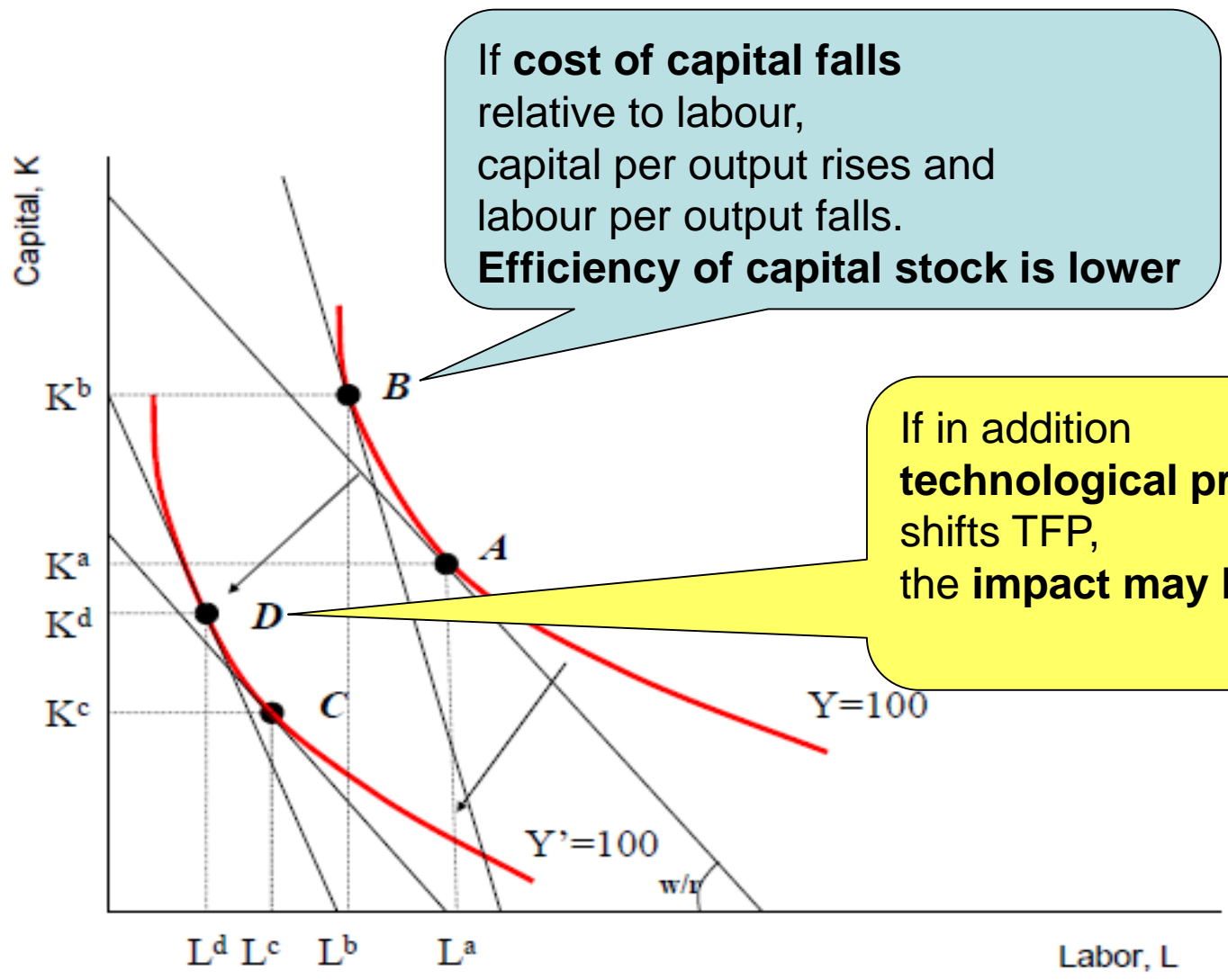
## C. Europe's restructuring process

# The dynamics of a single market

- Since the 1990s, Europe's economy is increasingly behaving like a fully integrated market
- In a single market with monetary stability, **capital and labour are allocated according to comparative advantages**
  - Relative factor prices
  - higher wages and lower interest rates encourage substitution of labour by capital
  - Hence labour productivity increases, capital productivity slows down



# Current accounts

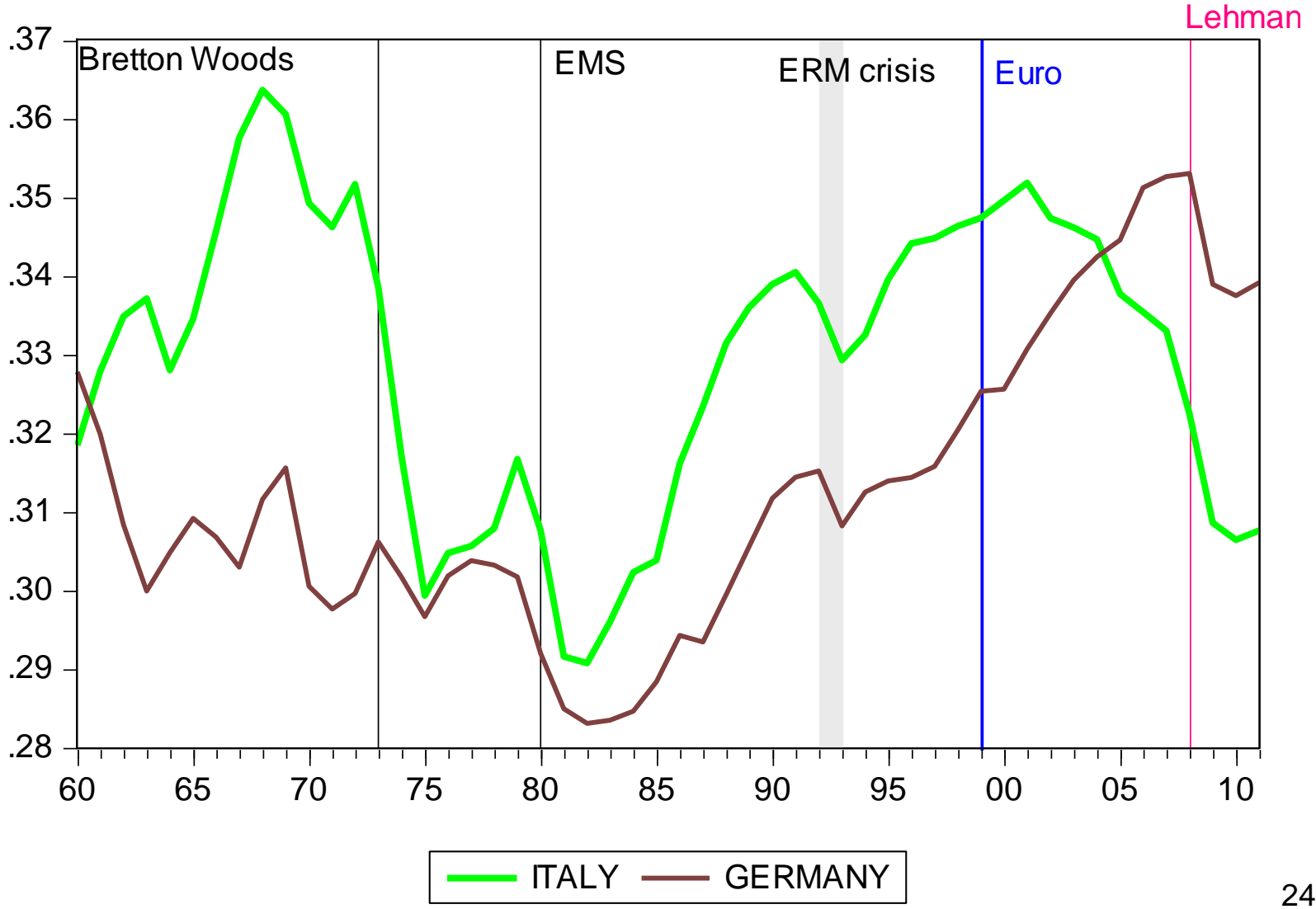


If **cost of capital falls** relative to labour, capital per output rises and labour per output falls.  
**Efficiency of capital stock is lower**

If in addition **technological progress** shifts TFP, the **impact may be mitigated**

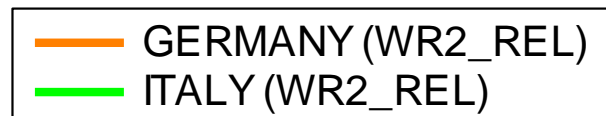
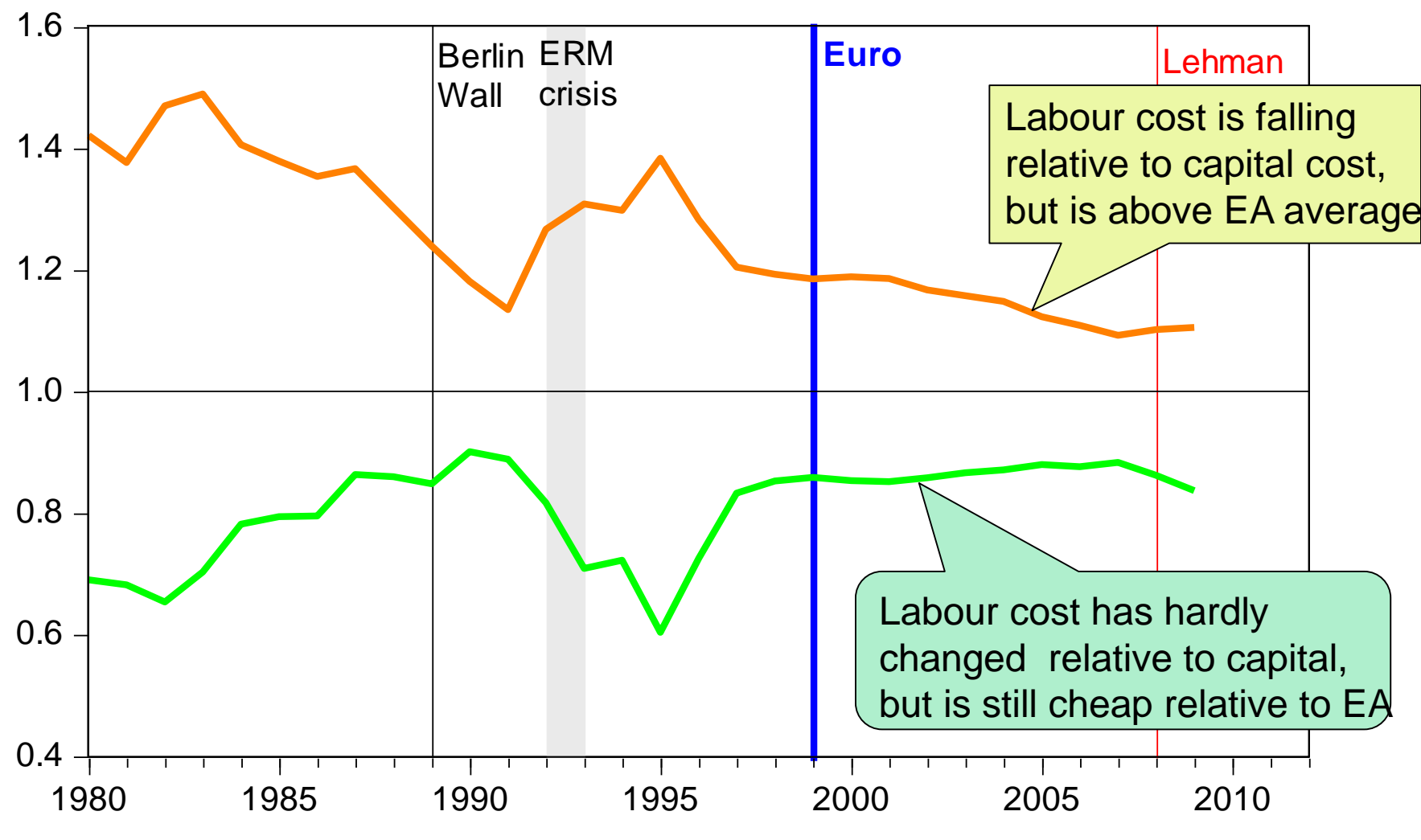
- With the introduction of the Euro, the cost of capital has converged to similar conditions
  - In the South
    - cost of capital has fallen
    - Average capital efficiency (ACE) has fallen
    - Labour productivity has improved (Greece) or remained stagnant (Portugal) or fallen (Italy, Spain)
    - Wages have risen
  - In the North
    - Cost of capital stayed constant
    - Wages have fallen relative to Euro Area
    - Average capital efficiency (ACE) has risen
    - Total factor productivity has risen

# Average Efficiency of Capital Stock





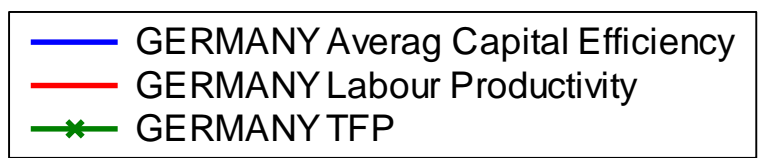
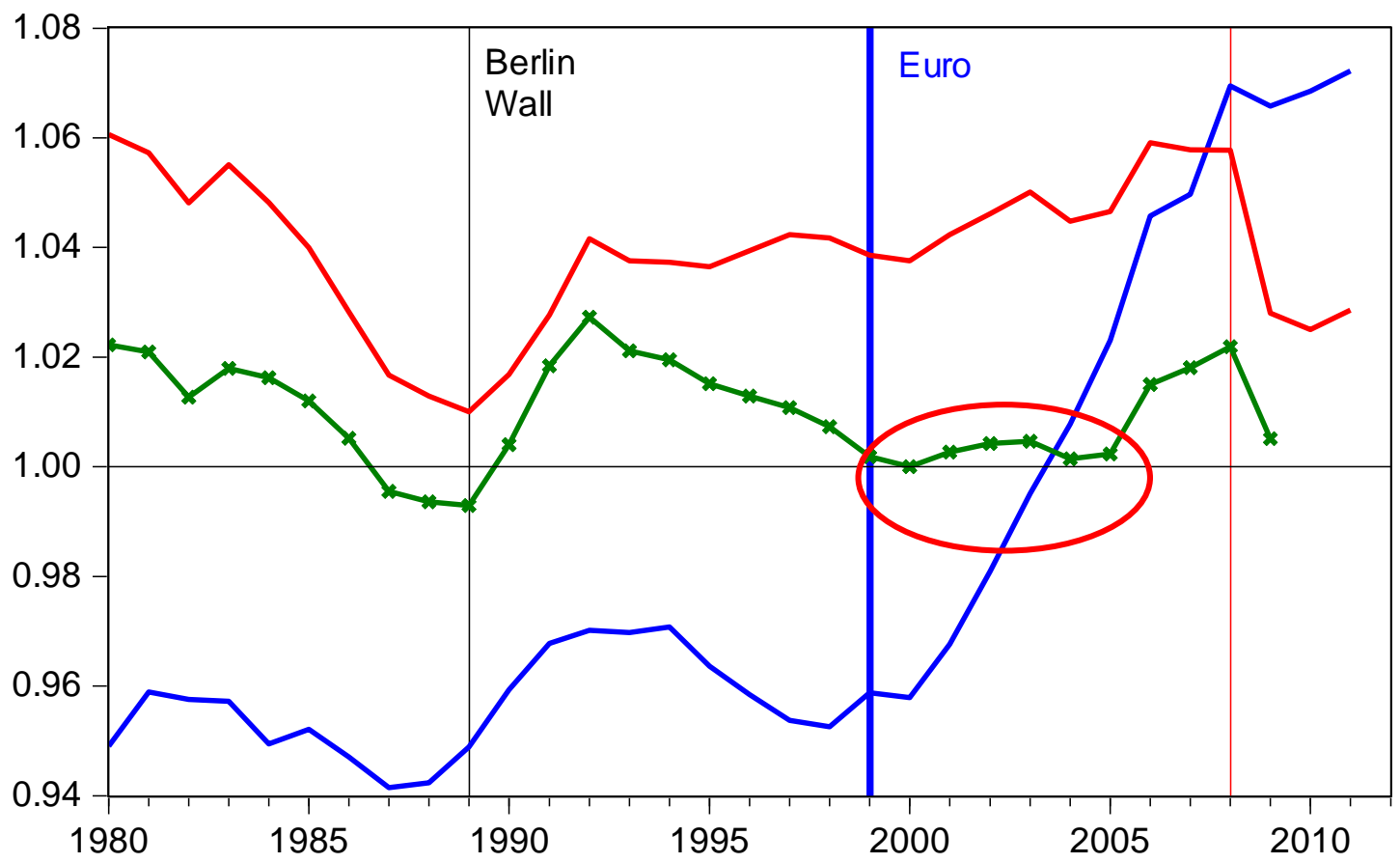
## Relative factor prices (wages/interest) compared to EA



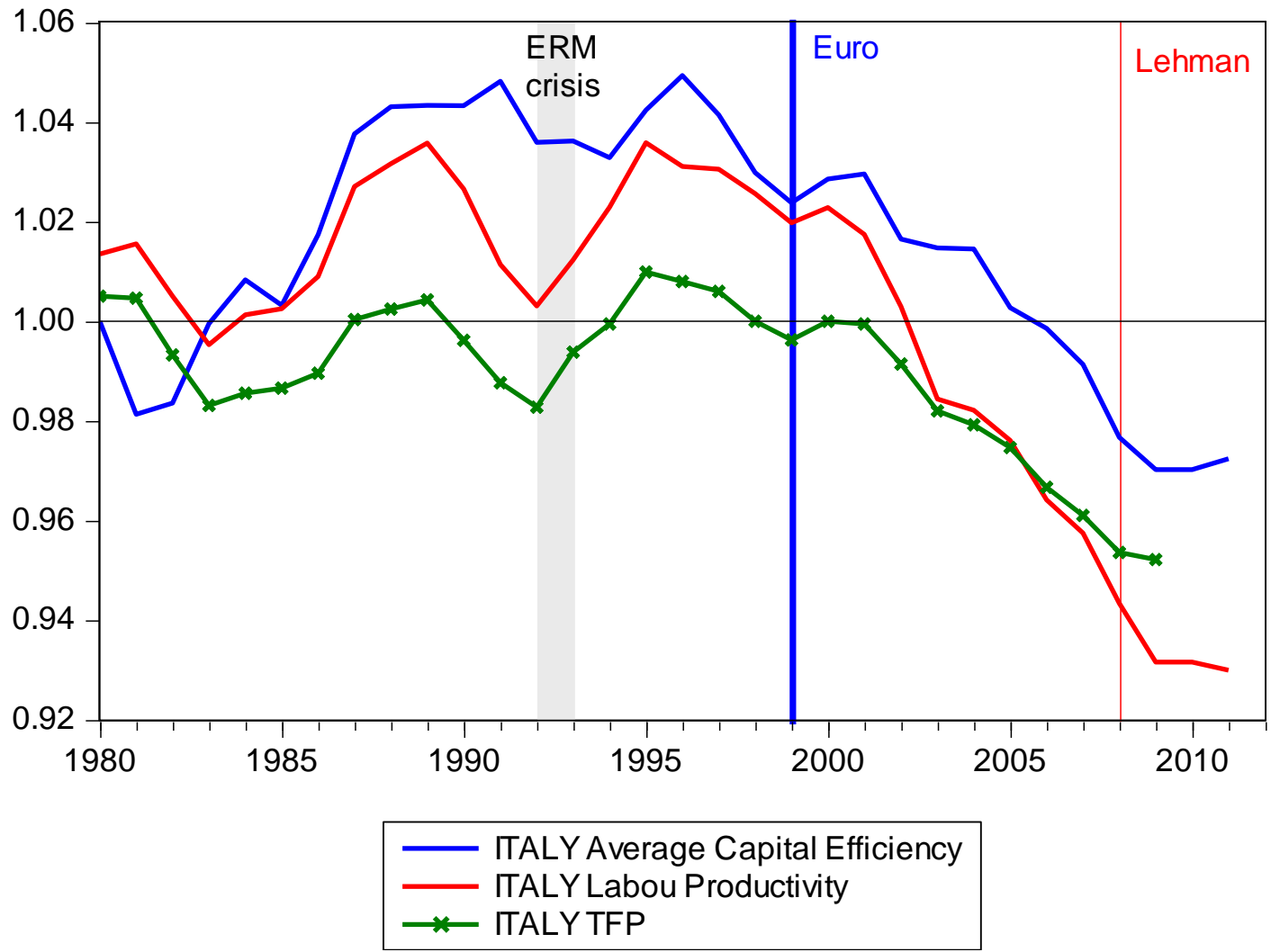
- The effects have been heterogeneous with respect to capital efficiency, labour productivity, TFP and wage pressures

# German productivity indicators

relative to Euro Area



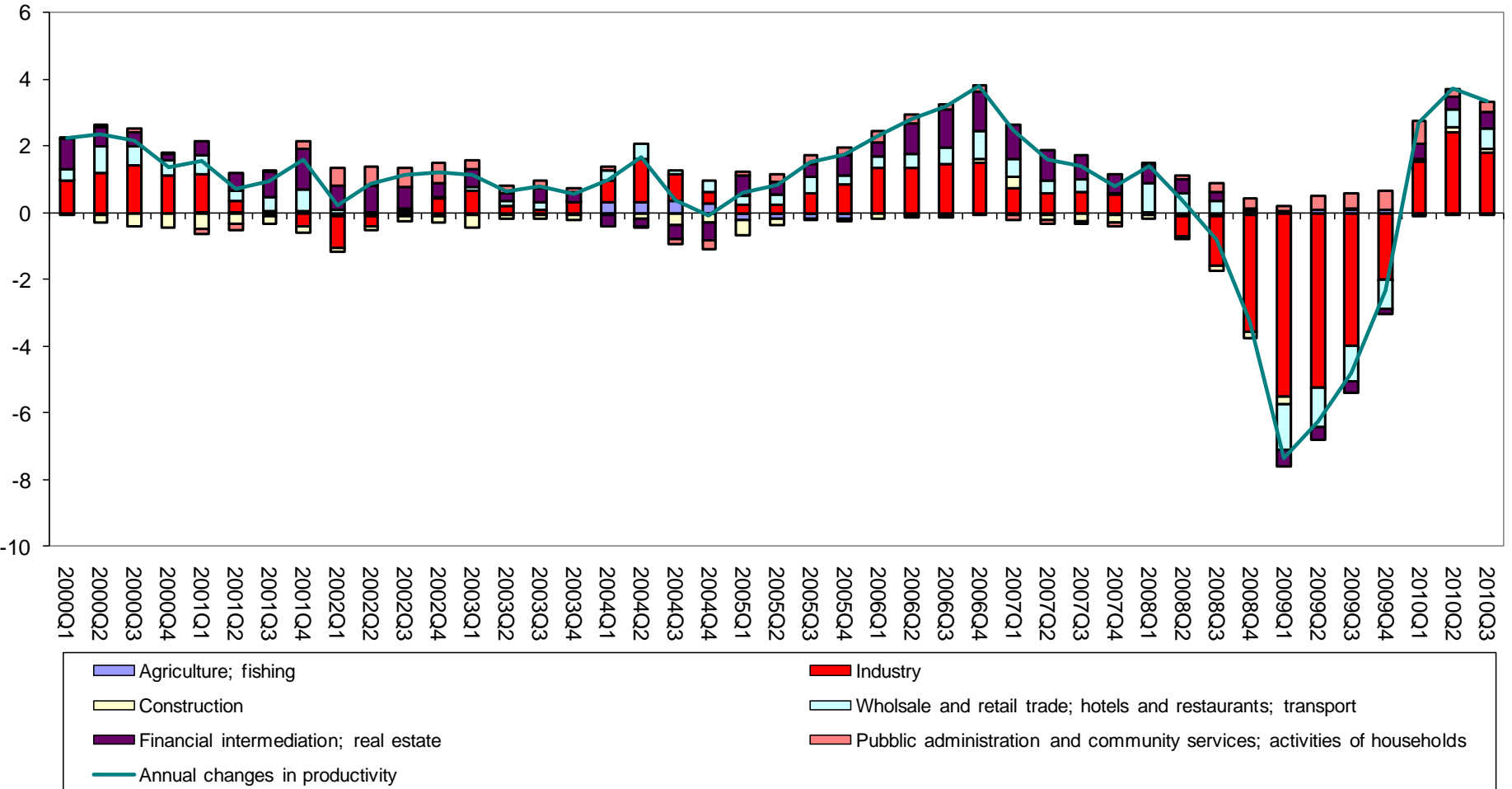
# Italian productivity indicators relative to Euro Area



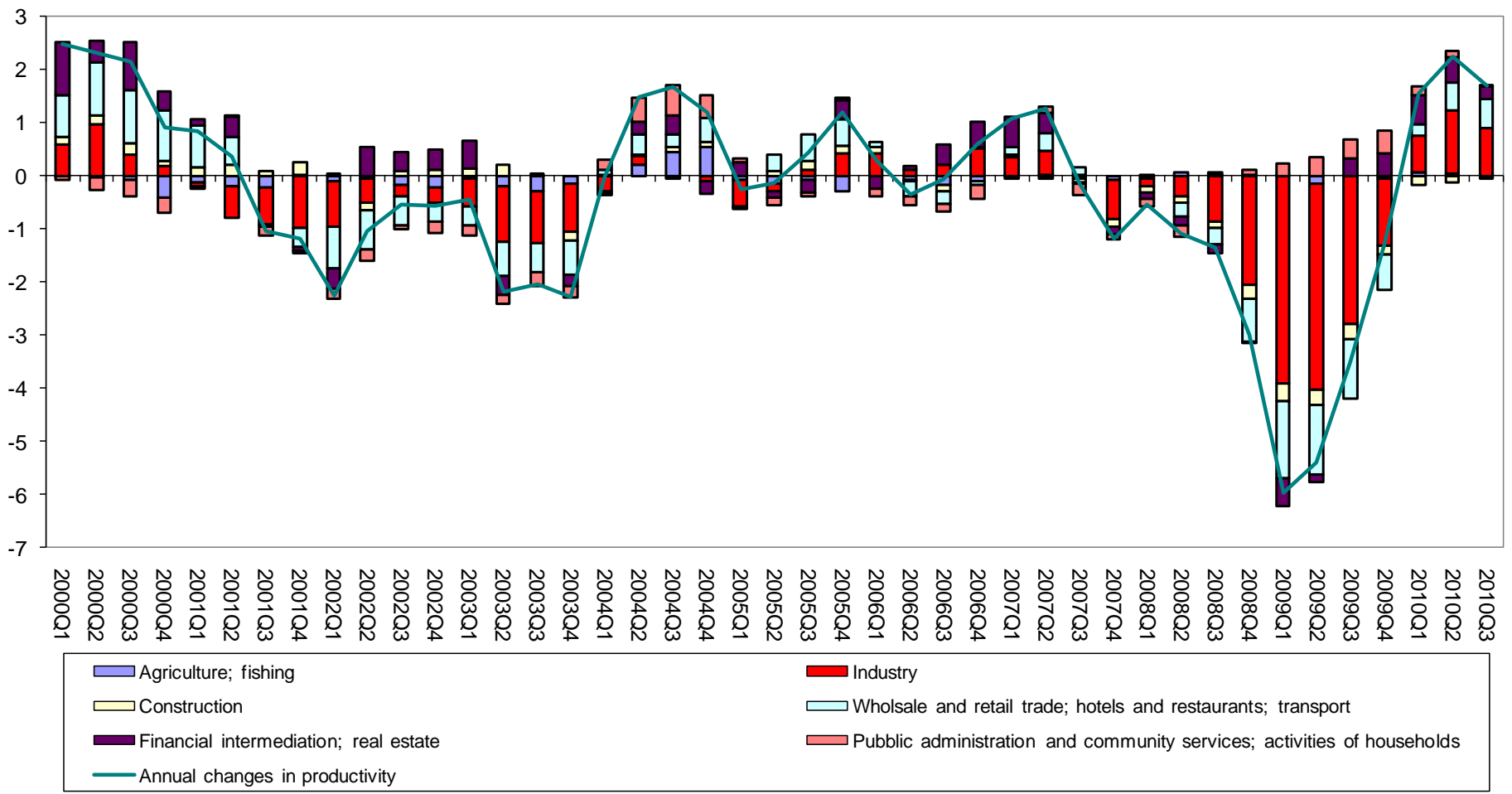
- Across Europe there is a profound process of structural re-allocation of resources and comparative advantages
  - **Germany**, NL, emerge as the centre for manufacturing
  - **Italy** and France de-industrialize
  - Greece TFP, ACE and labour productivity have improved prior to the crisis
    - Greece specialises on tourism
- Evidence from the contribution of sectors to **labour productivity**

- **Labour productivity by sectors**
  - In **Germany** it is positively driven by industry and financial services
    - Same for Netherlands
  - In **Italy** it is negatively driven by industry, transport and tourism
    - Same for Spain and France
  - In **Greece** it is positively driven by tourism

Germany: Contributions to the growth of productivity by individual sectors.  
(2000.01-2010.03)

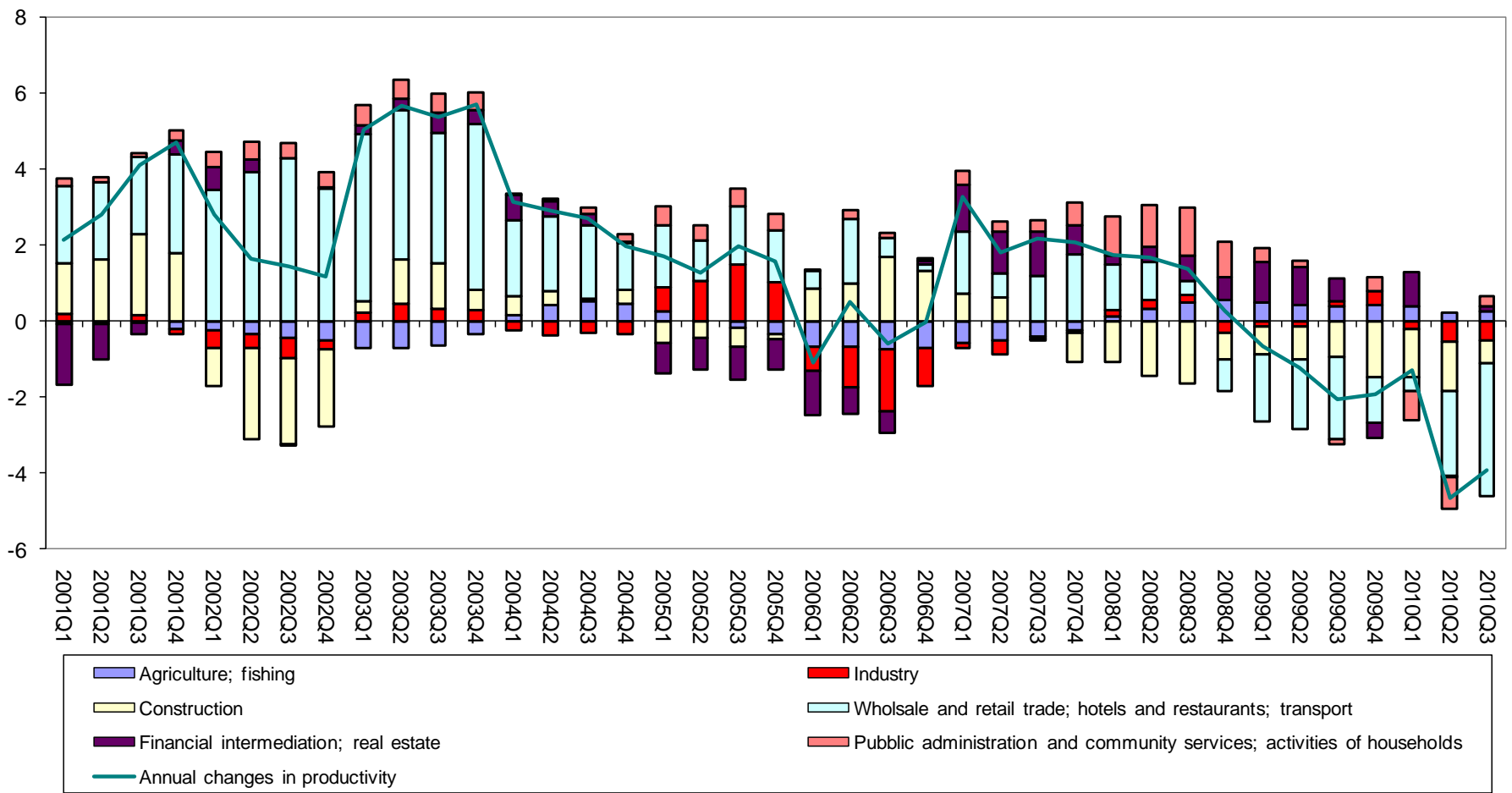


**Italy: Contributions to the growth of productivity by individual sectors.**  
(2000.01-2010.03)





**Greece: Contributions to the growth of productivity by individual sectors.**  
(2001.01-2010.03)



- **Conclusion**
  - Europe's economy works like the USA:
  - Comparative advantages allocate labour and capital
    - Some regions will concentrate on tradable goods
    - Others on non-tradable
  - The current account balance will reflect this new resource allocation
    - Not every region need to have the same production mix
    - Heterogeneity is a sign of efficiency
  - **Current account imbalances may become persistent and that is good**
  - **Sustainability assured by efficient financial markets**

## II. Cost competitiveness: the real issue

**Does this mean that Europe must passively endure markets dynamics without policy choices?**

- No!
- Improving regional competitiveness will affect the distribution of comparative advantages

## A. Defining competitiveness

## How can we measure competitiveness?

### 1. Changes in market share

- Demand for products
- Demand from expanding import markets
- Supply-side effects

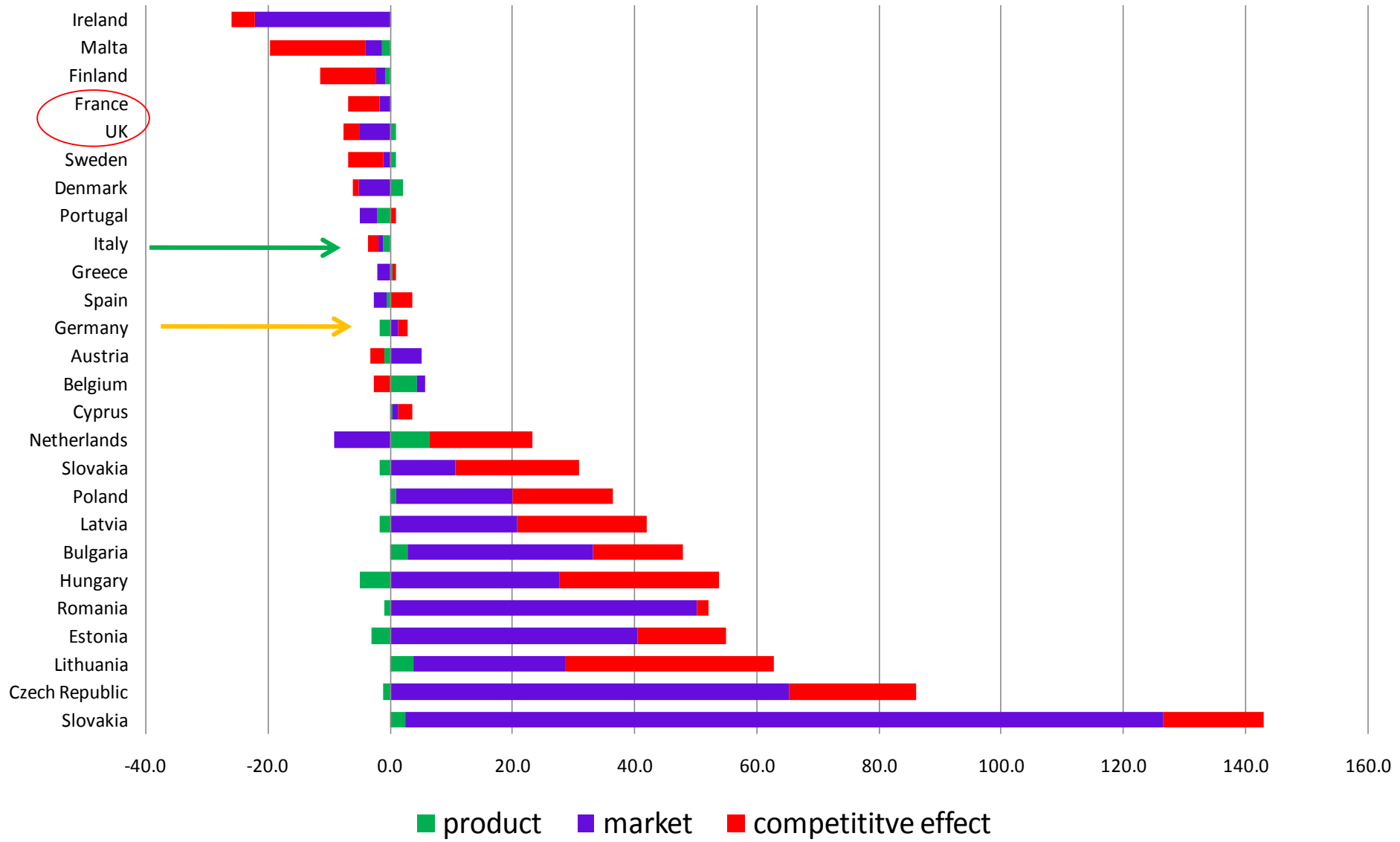
# Cost competitiveness

**Table 3. Market share gains and losses**

<i>Bn €</i>	<i>Total</i>	<i>Product</i>	<i>Market</i>	<i>Competition</i>
Austria	3.5	-1.9	10.1	-4.7
Belgium	7.6	11.3	3.4	-7.1
Cyprus	0.3	0.0	0.1	0.2
Germany	24.0	-35.3	26.8	32.5
Spain	5.8	-3.8	-11.2	20.8
Finland	-14.0	-0.9	-1.8	-11.3
France	-92.5	2.6	-24.0	-71.1
Greece	-1.4	0.6	-2.8	0.8
Ireland	-23.5	0.0	-20.0	-3.4
Italy	-41.5	-13.9	-6.7	-20.9
Malta	-0.7	0.0	-0.1	-0.6
Netherlands	54.4	25.4	-35.4	64.5
Portugal	-4.7	-2.6	-3.2	1.2
Slovenia	6.0	-0.4	2.2	4.2
Slovakia	27.4	0.5	23.8	3.1
<b>Euro Area</b>	<b>-49.2</b>	<b>-18.4</b>	<b>-38.8</b>	<b>8.1</b>
Denmark	-6.6	3.4	-8.5	-1.6
UK	-92.9	13.7	-69.8	-36.8
Sweden	-14.4	2.5	-2.9	-14.0
<b>Opt out MS</b>	<b>-113.9</b>	<b>19.7</b>	<b>-81.3</b>	<b>-52.4</b>
Bulgaria	5.9	0.3	3.8	1.8
Czech Republic	47.9	-0.6	36.9	11.7
Estonia	2.8	-0.2	2.2	0.8
Hungary	22.5	-2.3	12.8	12.1
Lithuania	6.5	0.4	2.6	3.5
Latvia	2.7	-0.1	1.4	1.4
Poland	57.5	1.5	30.0	26.0
Romania	17.2	-0.4	17.0	0.6
<b>NMS</b>	<b>163.1</b>	<b>-1.3</b>	<b>106.5</b>	<b>57.9</b>



Gain/Loss for Market Share in % of MS GDP of 1999



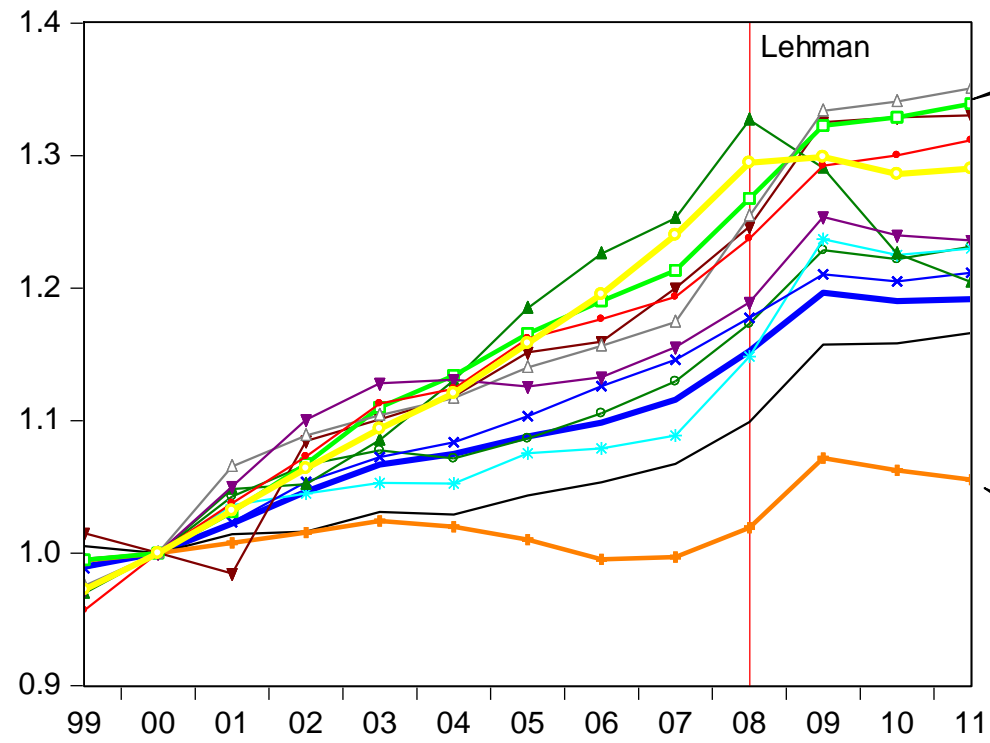


## How can we measure competitiveness?

### 2. Relative prices (inflation)

- Unit Labour Costs (ULC) indices
  - Relative to some standard of measurement
- Real effective exchange rates relative to ULC relative to 35 trading partners (Commission)

## Unit Labour Cost Developments in the Euro Area



Italy

ULC price gap: 22%

Germany

- Euro area (12 countries)
- BELGIUM
- FRANCE
- GREECE
- ITALY
- NETHERLANDS
- SPAIN
- AUSTRIA
- FINLAND
- GERMANY
- IRELAND
- LUXEMBOURG
- PORTUGAL

## B. Equilibrium unit labour cost levels

- REER index is also a flawed concept
  - What matters are ULC **levels**
  - What is the right level?
- Labour cost is one element in total cost
  - We also need the cost of capital
- In **equilibrium** of efficient markets: rates of return on capital equalise
  - Hence: competitiveness benchmark depends on ULC and **average capital efficiency (ACE)**
  - When capital productivity is low, ULC must fall
  - When capital productivity is high, ULC can rise

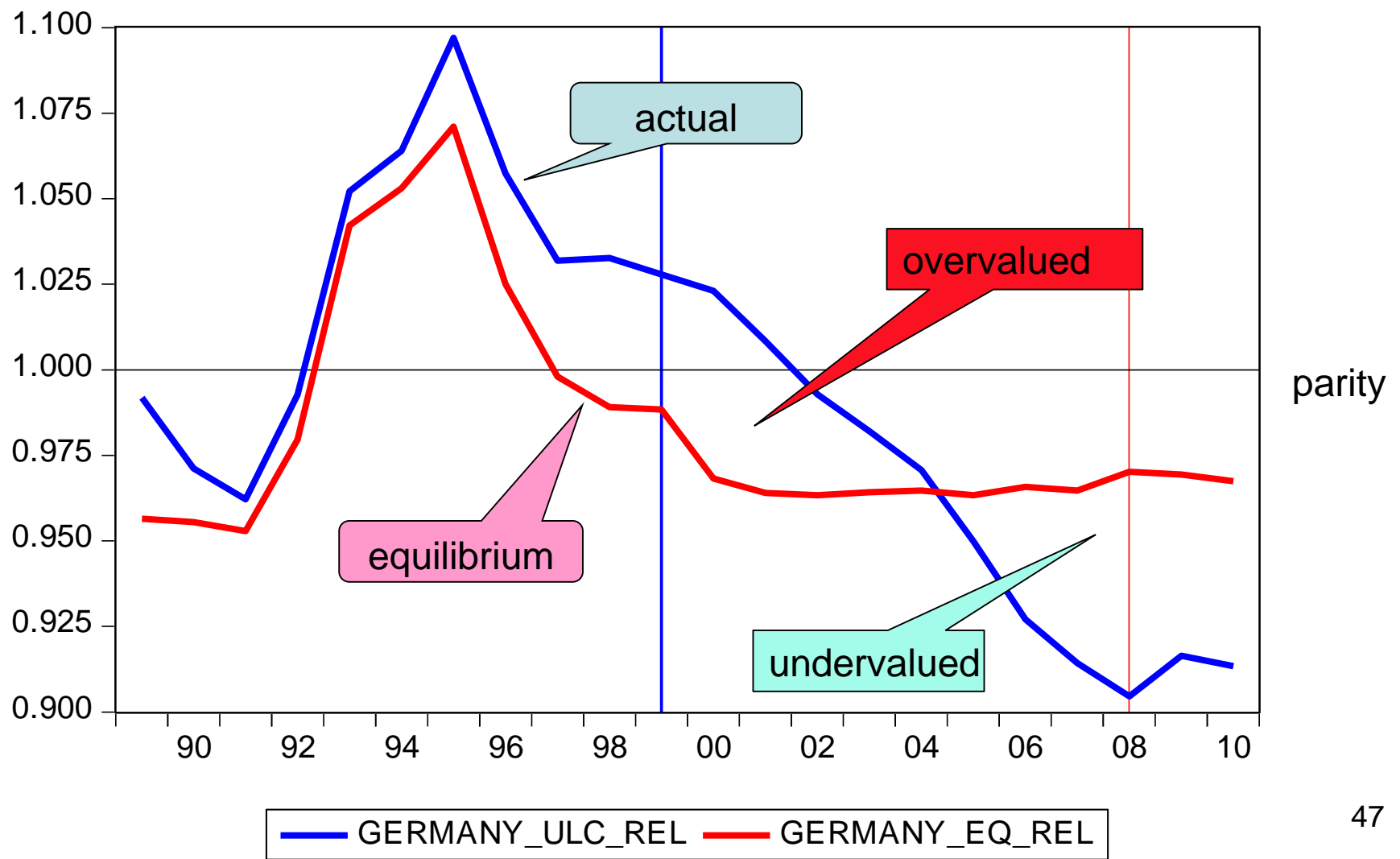
# The Return on capital and ULC

$$\begin{aligned}
 R &= \text{profit margin} * ACE = \\
 &= (1 - \text{wageshare}) * ACE = \\
 &= \frac{Py - wL}{Py} \frac{Py}{P_k K} \\
 \\
 \text{Wage share} &= RULC = \frac{ULC}{P} \\
 \\
 ULC &= \frac{wL}{y} = \frac{\text{nominal wage}}{\text{labour productivity}}
 \end{aligned}$$

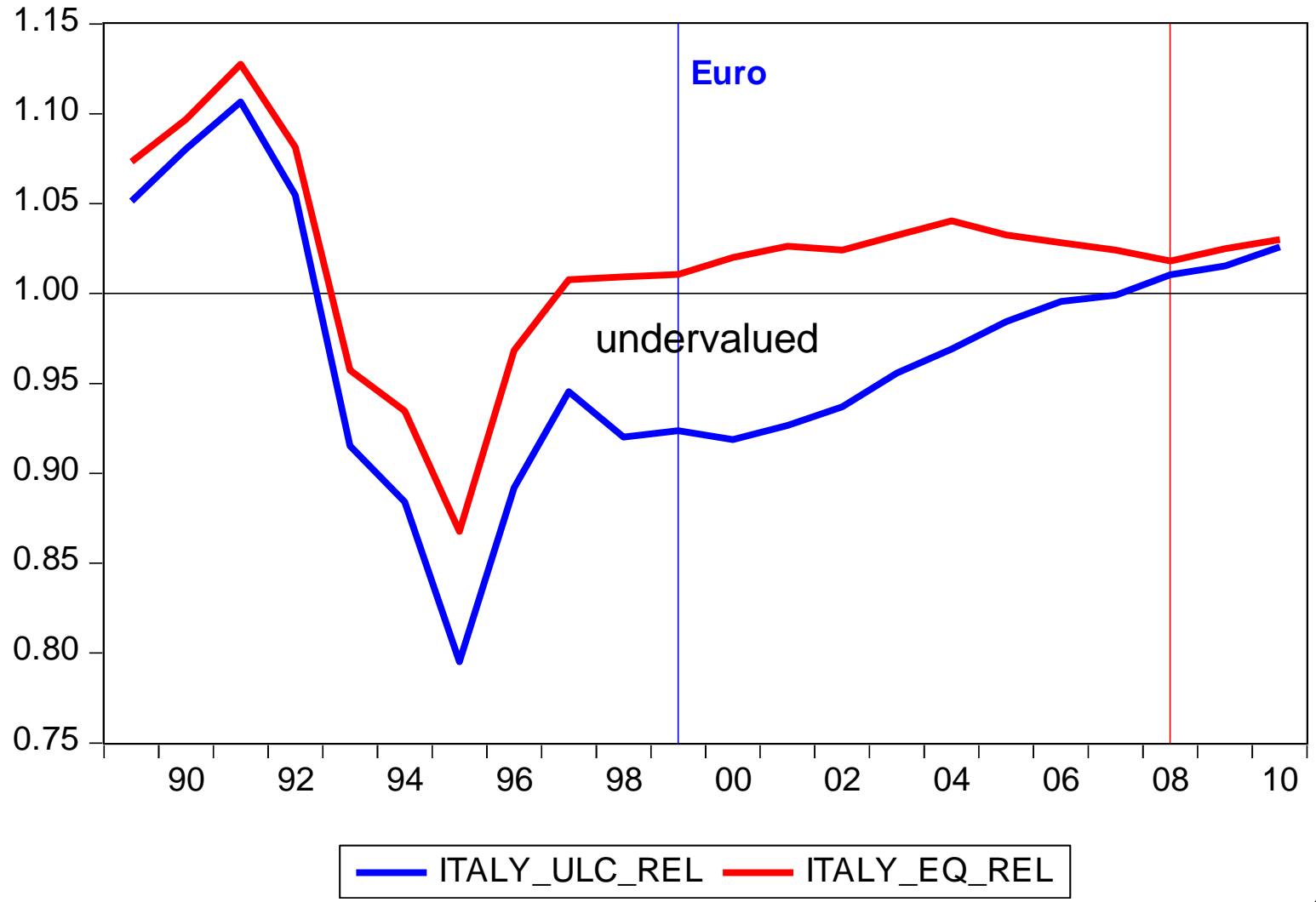
## The Return on capital and ULC

- Within the Euro Area the **standard** of measurement must be the Euro Area average
- Equilibrium ULC levels **relative** to EA and actual
- Over- and undervaluation relative to this standard
- A unified **index** indicates the degree of over- and undervaluation

## Germany

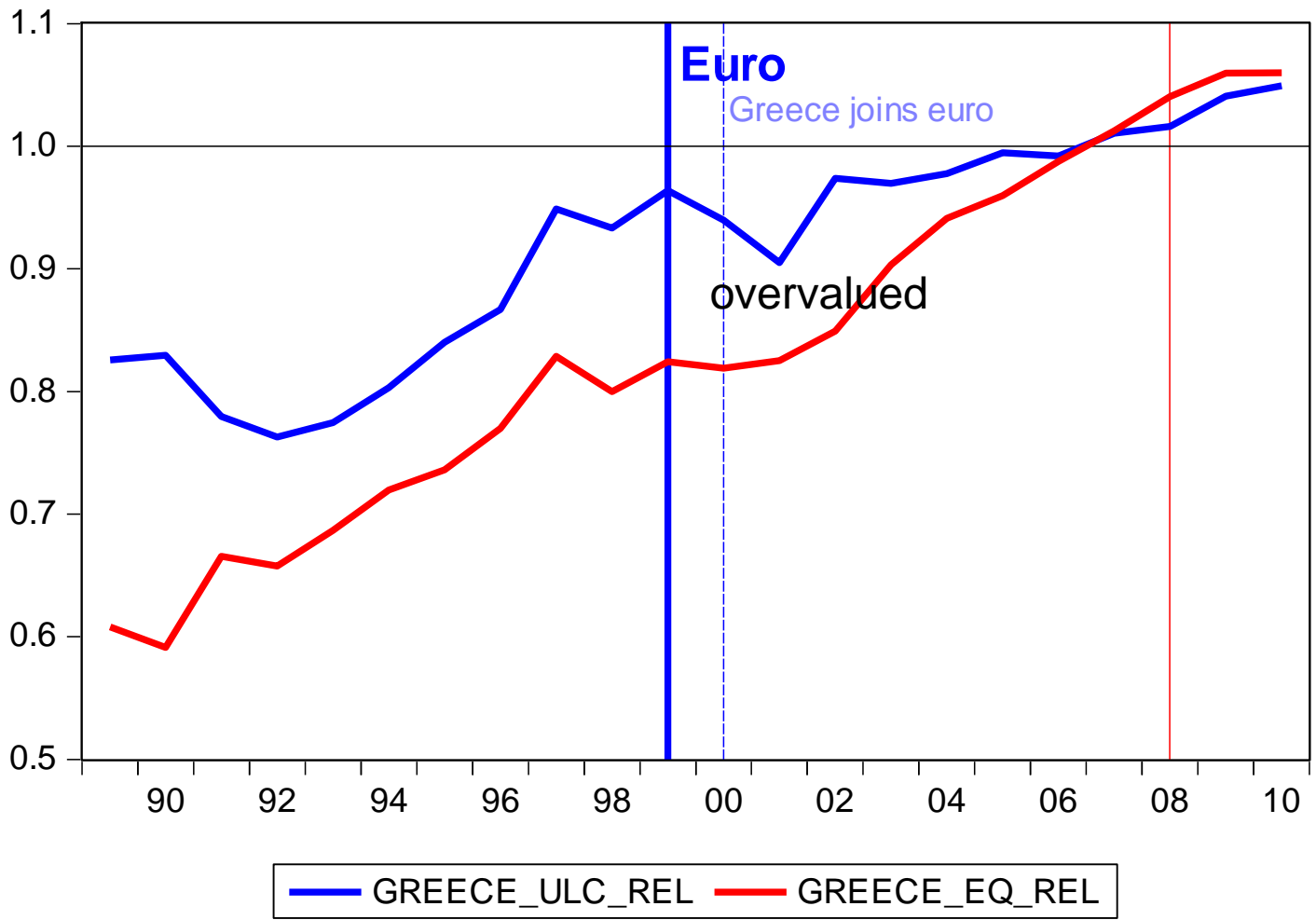


## Italy



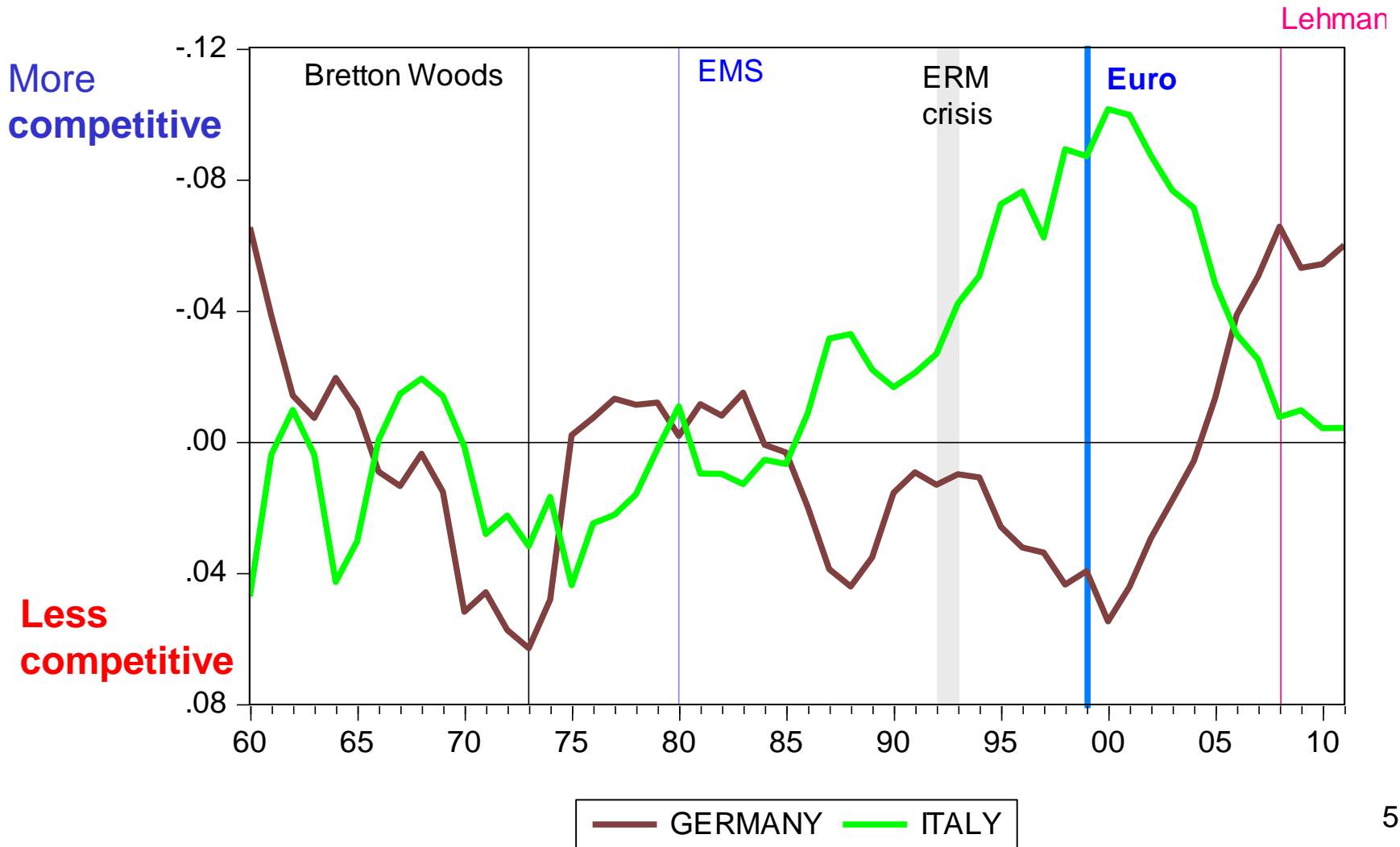


## Greece



## Competitiveness indicator

### Italy vs. Germany



## **C. Competitiveness and macroeconomic performance**

## Implications for wage bargaining

- The old rule does not work
  - $\Delta \text{ wage} = \Delta \text{ labour productivity} + \text{inflation target}$
  - This is a rule for constant wage share
  - It does not take into consideration ACE
- If interest rates go down, or wages go up:
  - ACE also goes down and wages have to fall
  - But labour productivity is up!
  - loss of competitiveness
- If wages go down
  - ACE will go up, labour productivity is down
  - Effect on competitiveness is uncertain

## Does competitiveness matter for economic growth in the Euro Area?

- We estimate economic growth as a function of
  - Private investment
  - Public investment
  - Yield curve
  - Competitiveness
- And find
  - Private investment drives growth
  - Public investment is not significant
  - Competitiveness and yield curve have become highly significant in EMU

## Without time dummies

	1971-2010			EU15 Pre EMU			EMU			NMS 1993-2010
	$\Delta \ln \text{GDP}_{t-1}$	0.136 (1.27)	0.283* (1.95)	0.525*** (3.79)	-0.054 (-0.30)	-0.090 (-0.41)	0.310 (1.20)	0.100 (0.81)	0.672*** (3.74)	0.636*** (3.90)
$\Delta(\text{GovI}/\text{GDP})_t$	-0.003 (-0.32)	-0.011 (-1.01)	-0.009 (-0.85)	-0.002 (-0.20)	-0.003 (-0.31)	0.001 (0.12)	0.018 (1.12)	0.003 (0.20)	-0.017 (-1.24)	0.049** (2.01)
$\Delta(\text{PrivI}/\text{GDP})_t$	0.008*** (3.98)	0.008*** (3.62)	0.005** (2.53)	0.009*** (3.53)	0.009*** (3.41)	0.006** (2.16)	0.015*** (5.89)	0.013*** (4.50)	0.009*** (3.74)	0.016*** (4.04)
$\Delta \text{yield}_t$		-0.002*** (-2.66)	-0.002*** (-2.63)		-0.002** (-2.57)	-0.001 (-1.48)		-0.003 (-1.16)	<b>-0.004**</b> (-2.23)	
$\Delta \ln \text{Comp}_t$			-0.308*** (-6.28)			-0.253*** (-3.54)			<b>-0.438***</b> (-8.32)	
time dummies	no	no	no	no	no	no	no	no	no	no
R <sup>2</sup>	0.380	0.425	0.493	0.335	0.341	0.410	0.483	0.642	<b>0.738</b>	0.338
N	511	456	456	315	274	274	196	182	182	152
Under id.	33.8***	29.7***	30.7***	13.9***	15.1***	9.3***	10.7***	10.2***	9.7***	5.4**
Weak id.	15.5***	12.1***	12.5***	5.5**	5.5**	3.1*	4.7**	4.9**	4.4*	2.0

Fixed Effects Instrumental Variables estimates. T statistics in parenthesis; \* significant at 10% level; \*\* significant at 5% level; \*\*\* significant at 1% level. Instrument used: lag 1 of  $\Delta \ln \text{GDP}$ , lag 2 of  $\text{govI}/\text{GDP}$  and  $\text{privI}/\text{GDP}$ . For under identification and weak identification we report the Kleibergen-Paap rk LM and Wald statistics

## Competitiveness might influence fiscal policy

- By raising growth and revenue
- By lower revenue through tax cuts
- By raising expenditure to subsidise competitiveness

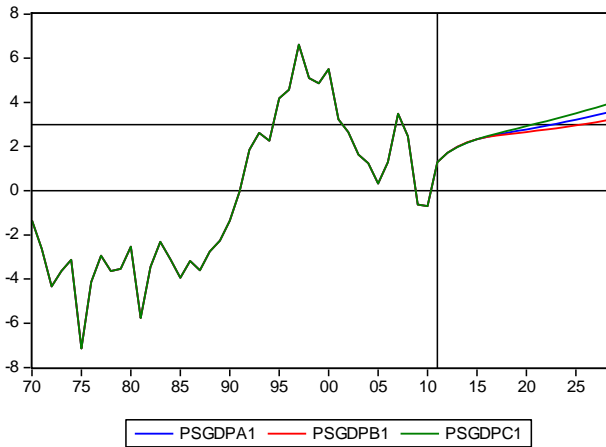
## A simulation

- Estimate revenue and primary expenditure function
- Difference gives expected structural position
- Debt sustainability requires primary surplus sufficient to service debt
- 3 Scenarios
  - Same growth and same competitiveness
  - Higher growth and ½ point competitiveness improvement
  - Lower growth and ½ point competitiveness loss

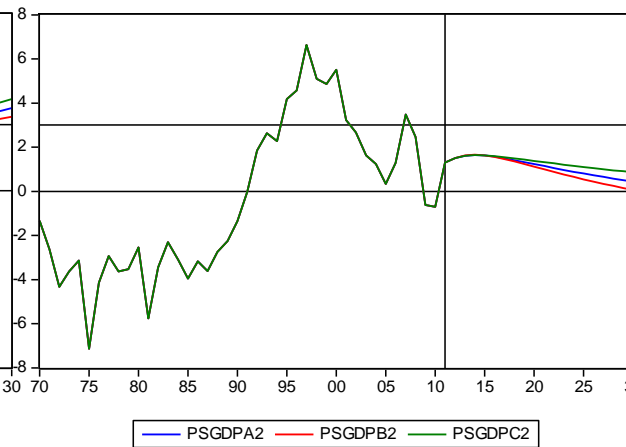


- Germany's public finances are not affected by competitiveness
- Italy's public finances are only sustainable, if it improves its competitiveness**

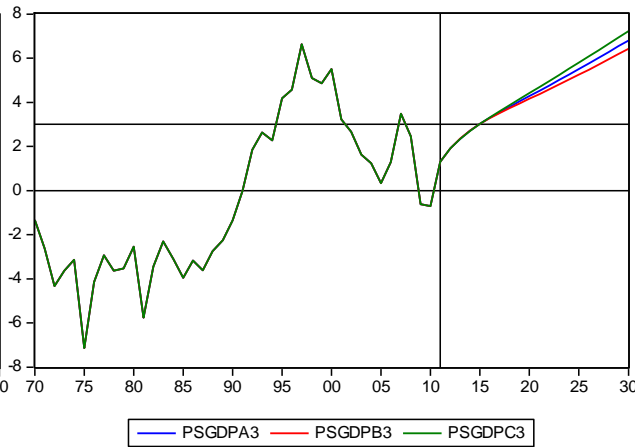
Unchanged competitiveness



Lower competitiveness



Higher competitiveness



**Conclusion: what to do?**

- **Internal imbalances are a market result**
- Current account imbalances are only cause for concern if they result from distortions in cost competitiveness
- Cost competitiveness depends on more than wage setting
  - Labour productivity
  - Average capital efficiency
  - Technological progress

### **In a social market economy:**

- government must correct distortions
- in the common interest

## **Where is the European Government?**

**Thank you!**

**Viva la Repubblica europea!**