

# The Benefits of a Common Currency

## Introduction

- The costs of EMU have mostly to do with macroeconomic management: adjustment to asymmetric shocks in the absence of independent monetary policy
- The benefits are mostly microeconomic in nature: efficiency gains

## Sources of benefits

- Lower transactions costs
- Price transparency
- Lower exchange-rate uncertainty
- Benefits of an international currency
- Does monetary union lead to more economic growth?

## Transactions costs

- Elimination of foreign-exchange markets within the union eliminates cost of exchanging one currency into another
- Cost reductions amounts to 0.25 to 0.5% of GDP (according to European Commission)
- Full cost reduction is only achieved when payments systems are fully integrated
- These gains may come at the expense of the banking sector

## Price transparency

- Price dispersion is much larger across countries than within countries
- Engel and Rogers (1995): US-Canadian border is equivalent to 2500 miles of distance
- Common currency (common unit of account) facilitates price comparisons
- Consumer “shop around” more
- Competition increases
- Prices decline and consumers gain

## Did the euro increase price transparency?

- Large price differentials continue to exist
- These have to do with transactions costs at the retail level and product differentiation
- Euro is unlikely to change this
- Euro may work indirectly by triggering further market integration in particular sectors, e.g. banking, insurance

**Table 3.1: Relative difference in intra- and inter-country price dispersion for selected products (excluding VAT), 2000**

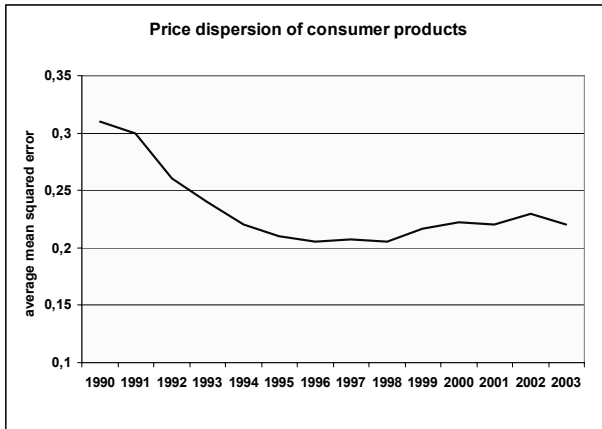
	Dispersion across Countries (inter-country)	Average dispersion inside countries (intra-country)
<i>Supermarket products</i>		
EVIAN MINERAL WATER	43%	4%
REXONA DEODORANT	21%	2%
SENSODYNE TOOTHPASTE	21%	2%
MARS BARS (SINGLE)	21%	2%
MARS BARS (MULTIPACK)	22%	3%
COCA COLA	21%	4%
PEDIGREE PAL DOG FOOD	10%	2%
PLENITUDE FACE CARE	21%	5%
COLGATE TOOTHPASTE	14%	4%
BONNE MAMAN MARMELADE	19%	6%

**Table 3.1: Relative difference in intra- and inter-country price dispersion for selected products (excluding VAT), 2000**

	Dispersion across Countries (inter-country)	Average dispersion inside countries (intra-country)
<i>Electronic products</i>		
PHILIPS AUDIO SYSTEM	28%	20%
SONY AUDIO SYSTEM	38%	25%
CANON CAMCORDER	32%	6%
PANASONIC PORTABLE CD	40%	11%
PHILIPS PORTABLE CD	56%	20%
PIONEER CD PLAYER	34%	12%
SONY CD PLAYER	28%	12%
PHILLIPS TV (14 inch)	41%	22%
SONY TV (14 inch)	33%	19%
PANASONIC TV (28 inch)	25%	24%
PHILIPS TV (28 inch)	61%	49%
JVC VCR	30%	16%
PANASONIC VCR	22%	26%
SONY VCR	44%	25%

Source: European Commission, *Price dispersion in the internal market*, and *Price differentials for supermarket goods in the EU*. Both documents can be downloaded from [www.europa.eu.int](http://www.europa.eu.int)

# The euro and price convergence



- Considerable price convergence up until 1999
- Introduction of euro has not lead to further price convergence

Source: Engel and Rogers (2004)

# The introduction of the euro and perceived price increases

- The introduction of the euro was associated with large price increases
  - Especially for foodstuffs and catering
- Result: the euro became relatively unpopular in a number of EMU countries
  - Especially Italy, Germany and Greece

## Explanations for price increases

- **Collective action:**
  - It is usually difficult to raise prices in competitive markets
  - Introduction of the Euro and price conversions facilitated collective action
- **Menu costs:**
  - Price changes are costly and therefore happen infrequently (despite changes in costs)
  - Introduction of the Euro lead to most price revisions to occur simultaneously at the time of the changeover (Gaiotti and Lippi, 2005)

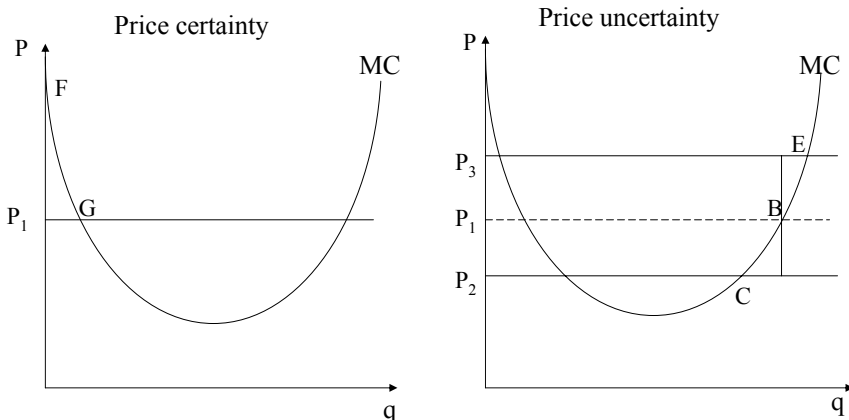
- **Adverse cost developments:**
  - Prices of foodstuffs and wage costs increased at above-average rates during 2000-2002 (Gaiotti and Lippi, 2005)
- **Money illusion**
  - Kooreman et al. (2004): charitable contributions in Dutch house-to-house collections increased by 11% in 2002 and 5% in 2003 (well above inflation)

## Lower exchange-rate uncertainty

- Euro eliminates exchange-rate uncertainty
- Uncertainty *may* increase firm profits
- Exchange-rate uncertainty: exports as an option, firms export when it is profitable to them, value of this option rises with the underlying uncertainty
- Similarly, consumer welfare *may* be higher with exchange-rate uncertainty
- If risk aversion is sufficiently high, certainty is preferred

## Exchange-rate uncertainty and firm profits

- Take individual firm under perfect competition
- Assume firm can adjust output flexibly
- Expected firm profit is higher under price uncertainty

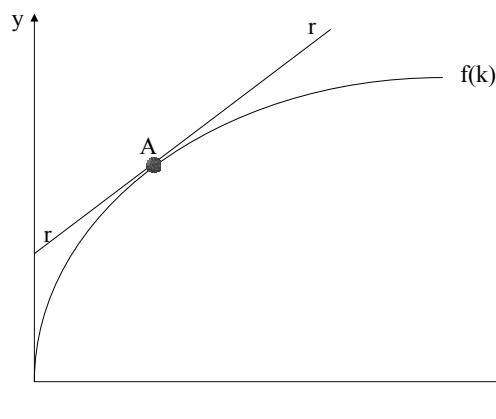


## Exchange rate uncertainty and the price mechanism

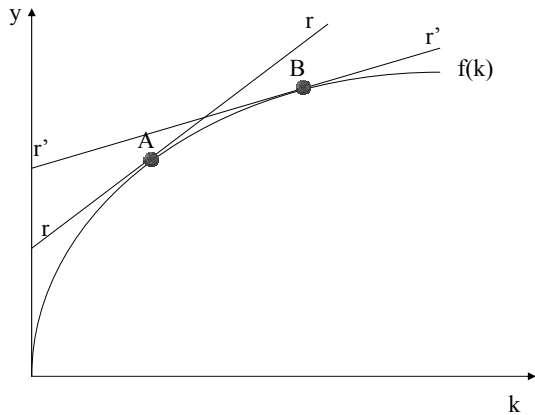
- Exchange variability reduces the quality of price signals in allocating resources
- Production and investment decisions based on one exchange rate may turn out sub-optimal if the exchange rate changes
- That leads to misallocation of resources
- Exchange-rate uncertainty increases the interest rate: moral hazard and adverse selection issues

## Monetary integration and economic growth

- Neo-classical growth model

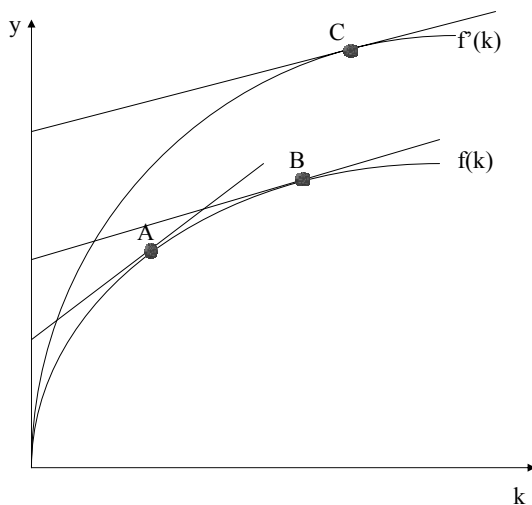


## Potential growth effects of monetary union



- MU eliminates exchange risk and may reduce systemic risk. If so, real interest rate declines
- rr-line becomes flatter
- Economy moves from A to B
- Per capita income increases because of capital accumulation
- Economic growth increases during transition from A to B

## Endogenous growth and monetary union



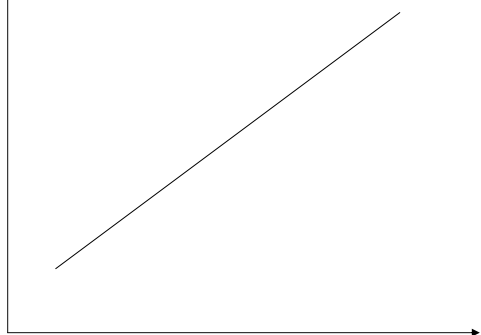
- Capital accumulation can lead to technological innovation
- Production function  $f(k)$  then shifts up, raising economic growth

## Benefits of an international currency

- International use of the dollar creates seigniorage gains for the US
- Similarly, if euro becomes an international currency, seigniorage gains will follow for Euroland
- Similar gains would accrue if some non-EU countries adopt the euro as their currency (e.g. former Yugoslavia)
- These gains, however, are modest; in the case of the US: less than 0.5% of GDP per year

## Benefits of monetary integration and openness

Benefits  
(% of GDP)



Trade (% of GDP)

Benefits of monetary union are likely to be larger for relatively open economies

In absence of monetary union, transactions costs and exchange risk are larger for firms in very open economies

Monetary union will be more beneficial for firms in very open economies  
Upward sloping benefit line