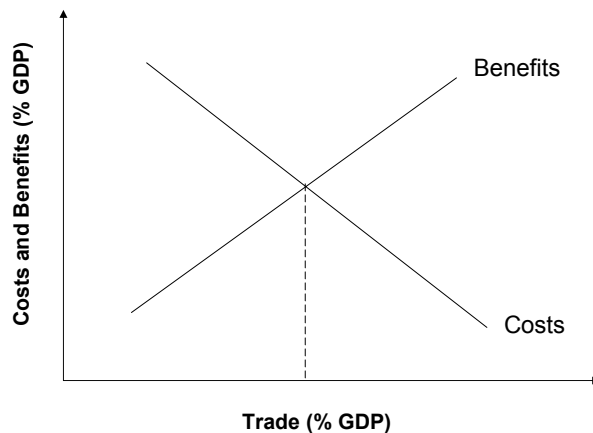
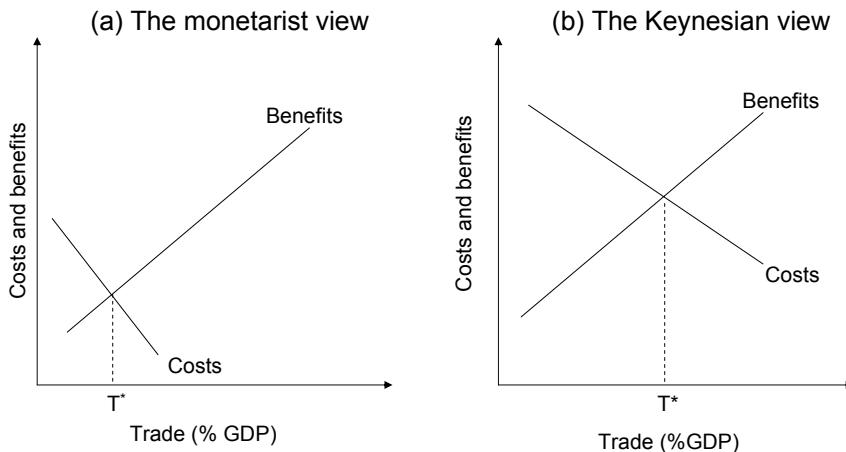


# Costs and Benefits Compared

## Costs and benefits of joining a monetary union



# Two views on costs



## The '*monetarist*' view

- Monetary policy (exchange rate) is ineffective as instruments to correct for asymmetric developments.
- Exchange-rate changes may even be responsible for asymmetric developments.
- The cost curve is close to the origin.
- Many countries in the world would gain by relinquishing their national currencies and joining a monetary union.

## The 'Keynesian' view

- The world is full of rigidities (inflexible wages and prices, low labor mobility),
- Therefore, monetary policy (exchange rate) is effective in eliminating disequilibria.
- The cost curve is far away from the origin,
- Relatively few countries should find it in their interest to join a monetary union, and some existing monetary unions had better break up.

- Since the early 1980s the 'monetarist' view has gained adherents, and has changed the view many economists have about the desirability of a monetary union.
- The popularity of monetarism helps to explain why EMU became a reality in the 1990s.

## Is EMU an optimal currency area?

- Things to consider:
  1. Intra-EU trade
  2. Degree of rigidities
  3. Degree of asymmetry of shocks.

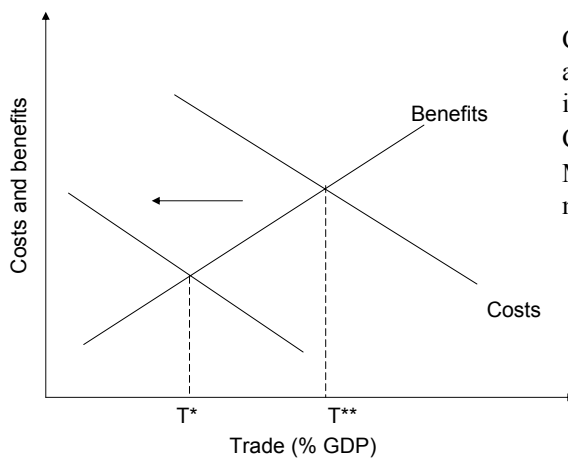
### a) Intra-EU trade

- Large differences in openness of EU countries with the rest of the Union.
- Countries with a large degree of openness relative to the other EU partners are likely to gain by being in EMU (Benelux, Central Europe).
- For countries with a small degree of openness (UK and Greece), it is less clear that they belong to an optimal currency area with the rest of the EU.
- It is not clear where to draw the line, however.

**Table 4.1:** Intra-Union Exports of EU-countries (% of GDP) in 2002

Belgium	51,9%
Hungary	39,4%
Estonia	38,3%
Netherlands	36,8%
Slovak Republic	36,0%
Czeck Republic	35,7%
Ireland	34,5%
Slovenia	27,8%
Austria	19,2%
Lituania	18,9%
Denmark	17,0%
Latvia	16,4%
Finland	14,8%
Poland	14,8%
Sweden	14,2%
Germany	13,8%
Portugal	13,3%
France	11,6%
Spain	9,9%
Italy	9,1%
UK	8,7%
Greece	2,3%

## b) Costs and benefits with decreasing rigidities

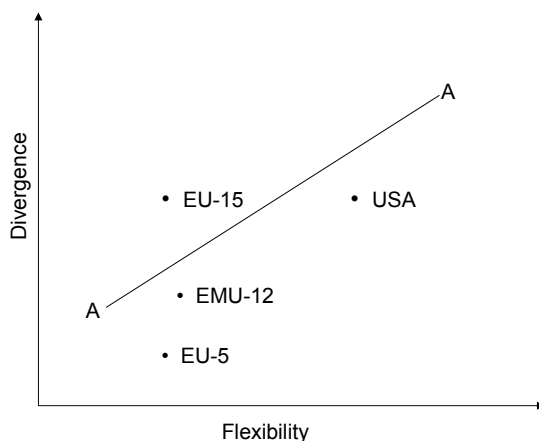


Consider a decline in wage and price rigidities and/or an increase in labor mobility:  
Cost curve shifts downwards  
Monetary union becomes more attractive

## Asymmetric shocks and labor market flexibility

- OCA Theory: the greater the degree of ‘real’ divergence (asymmetry), the greater the need for labor-market flexibility.
- This can be formalized graphically.
- No consensus (beyond the core countries) about how many countries in the EU form an OCA.
- Possible strategies:
  - reduce real divergence: greater coordination of economic policies or political union
  - increase flexibility of labor markets

## Asymmetric shocks and labour market flexibility in monetary unions

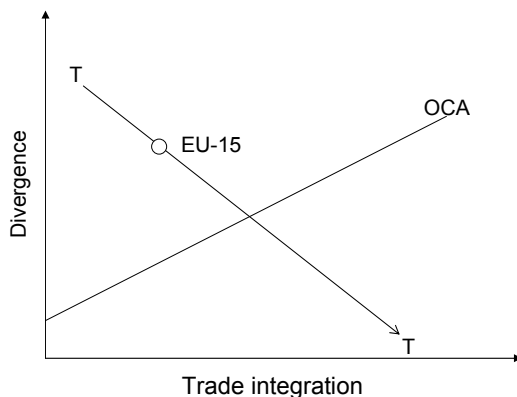


## **Labor-market adjustment to shocks: US vs Europe**

- Example: recessions in Michigan and Belgium during the early 1980s
- Unemployment increased both in Michigan and Belgium relative to the US and European average, respectively
- Adjustment:
  - Michigan: mainly through outward migration;
  - Belgium: mainly real depreciation (nominal depreciation and relative-price adjustment)

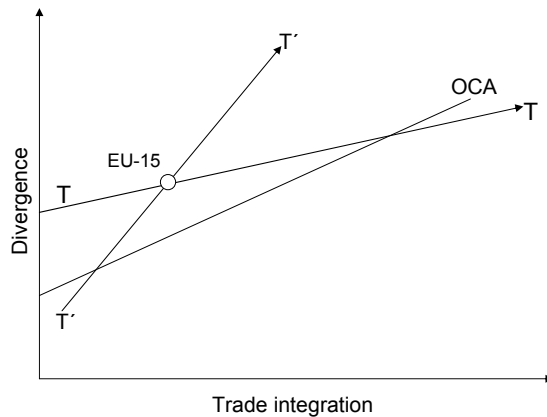
- This helped restore competitiveness, and started a gradual recovery
- In general, adjustment to shocks occurs through migration in the US (Blanchard and Katz, 1992) and through non-participation in Europe (Decressin and Fatas, 1995)
- In future, EMU countries such as Belgium will not be able to use nominal depreciation to counter asymmetric shocks.

## Optimistic (European Commission) view of costs and benefits in the long run



- Downward sloping line ( $TT$ ): trade integration increases  $\rightarrow$  economic divergence between the countries involved declines,
- Upward sloping line ( $OCA$ ):
  - An increase in divergence must be compensated by more integration to make a monetary union worthwhile (in terms of costs and benefits)
  - Points on  $OCA$  line are combinations of divergence and integration for which monetary union has zero net gain

## Pessimistic (Krugman) view of costs and benefits in the long run



- Two possibilities for the long-term prospects of monetary union:
  - $TT$  line: EU-25 may not be an optimum currency area today but it will move into the  $OCA$  zone over time.
  - $T'T'$  line: Integration brings us increasingly farther away from the  $OCA$  zone. The net gains of a monetary union do not increase fast enough with the degree of integration.

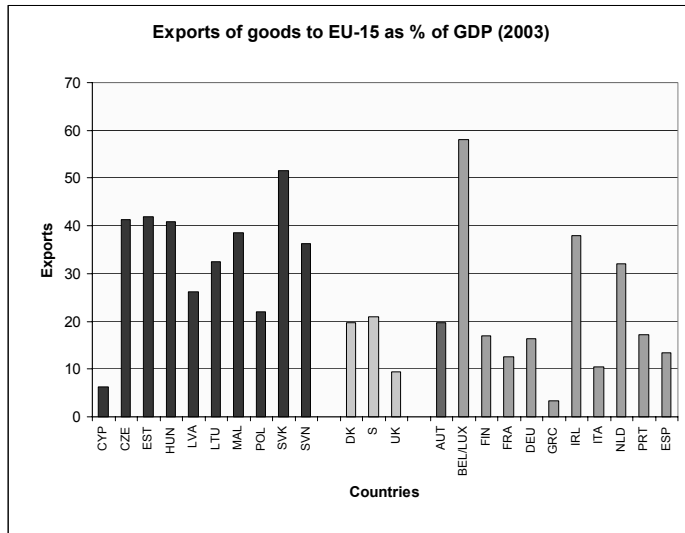
## Endogeniety of monetary union

- A decision by an individual country to join EMU, even if it does not satisfy the *OCA* criteria, can have a self-fulfilling character.
- In this case the process of integration is sped up by the very decision to join the monetary union, so that this new country grouping moves faster into the *OCA* zone.
- *OCA* becomes endogenous

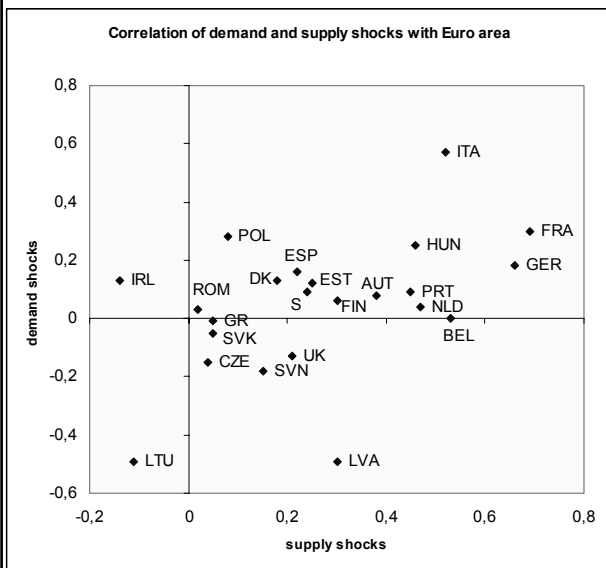
## The challenge of enlargement of EMU

- Two challenges
  - enlargement poses problems for the 12 present members
  - enlargement poses problems for the newcomers.
- We analyze two issues
  - Is the Eurozone of 25 members an optimal currency area?
  - How is enlargement going to affect the cost-benefit calculus of present members?

# Trade: Newcomers depend heavily on trade with the EU



# Symmetry of shocks



Each point represents correlation between demand and supply shocks of particular country with the euro-zone average. Many CE-countries' demand shocks are negatively correlated with EU demand shocks. Low correlation of supply shocks between CE-countries and EU. Asymmetry in demand shocks may be reduced in MU, asymmetries in supply shocks more likely to stay. Source: Korhonen and Fidrmuc (2001)

## Adjustment Mechanisms

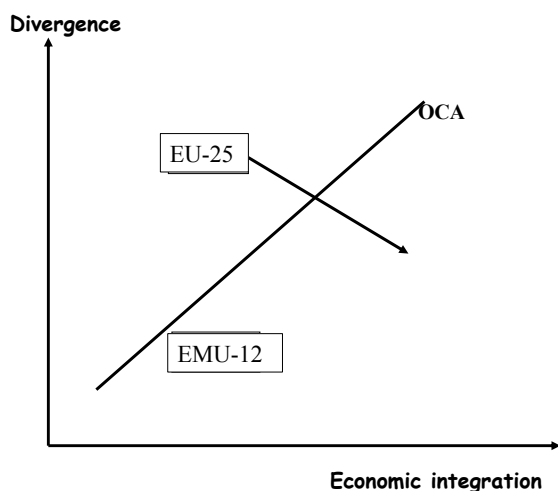
- Labor mobility helps counter asymmetric shocks
- Migration rates in the CEE countries are low, and have been falling lately despite rising regional disparities,
- Labor mobility appears to respond little to regional unemployment and wage differentials. (See Fidrmuc, 2004.)
- The EU imposed further restrictions on intra-union mobility as part of the conditions of accession

- Thus, not all CE-countries may be part of an optimal currency area with the rest of the European Union.
- Despite relatively large openness of the CE-countries vis-à-vis the EU, many are subjected to relatively large asymmetric shocks, so that it is not obvious that they would gain from entering EMU.
- However, for some of these countries entering EMU might be the best possible way to import monetary and price stability.

## Political Economy of EMU Entry

- Sweden held a referendum on its EMU entry in September 2003
- 55.9% were against, 42.0% in favor; turnout 82.6%
- Lars Jonung (2004): analysis of the referendum from the perspective of the OCA theory
- Support: workers in the tradable sector, fast-growing regions, high-income and educated voters
- Opposition: non-tradable sector, low-income earners, unemployed, and less educated
- Doyle and Fidrmuc (2005): similar findings for accession referenda in the new EU members

## Optimality of the existing Euro area after enlargement



- EU-25 is located higher up on the downward sloping line: more asymmetric shocks than EU-12.
- In enlarged euro area, the present members will have to wait longer until they reach the OCA zone.
- The current members will perceive the policies of the ECB as less receptive to their national shocks than before the enlargement.
- In a highly diverse EMU, the ECB will respond largely to *global* rather than *country-specific* shocks

## Should the UK join EMU?

- Costs of a monetary union:
  - *Openness*: the UK has a low degree of openness towards the rest of the EU
  - *Asymmetry of shocks*: demand shocks in the UK are negatively correlated with the demand shocks in Euroland.
  - *Flexibility*: there is greater flexibility in the UK labour markets than in the euro zone. Thus easier adjustment in UK than in euro zone
- It is unclear whether EMU membership is optimal for the UK

## UK and EMU membership

- UK negotiated a formal opt-out from the obligation to pursue EMU membership
- UK policy set out in 1997
- UK committed in principle to join the EMU
- But would only join if there is a *clear and unambiguous economic case* for joining
- To assess whether there is such a case, the Treasury devised 5 economic tests
- If all 5 tests are passed, the final decision is to be made by the British people in a referendum

## UK Treasury's Five Economic Test

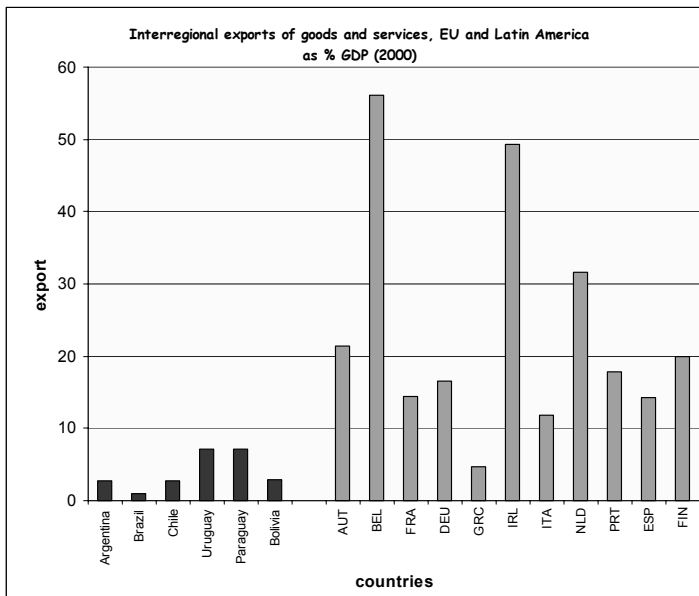
1. Convergence in business cycles and economic structures: *There has been convergence but not yet enough, and important differences remain, especially in the housing market → euro-area interest rates unlikely to be optimal for the UK.* ☹
2. Flexibility if problems emerge: *UK labor market is more flexible than others, but still not sufficiently so.* ☹
3. Investment: *UK membership in the euro-zone would boost FDI inflows to the UK.* ☺

## UK Treasury's Five Economic Test

4. Financial Service and the City: *Euro-zone membership would strengthen the competitive position of the City.* ☺
5. Growth, stability and employment: *Joining the EMU would allow the UK to benefit through increased trade, investment, competition (→ lower prices) and productivity growth.* ☺
  - Treasury's proposal: *Joining now would not be in the national economic interest.*
  - Source: HM Treasury, *UK membership of the single currency: An assessment of the five economic tests*, June 2003.

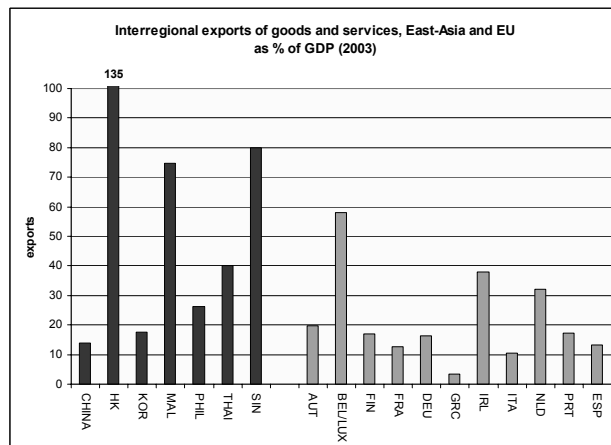
# Is Latin America an OCA?

- Monetary instability has made idea of forming a monetary union in Latin America popular
- Costs of monetary union in Latin America:
- Latin American countries have very low levels of trade with each other



- Degree of synchronization of output movements is low in Latin America, and asymmetric shocks are relatively large.
- Very little empirical evidence has been undertaken to measure the degree of flexibility of labor markets
- Main driving force for popularity of MU is the hope to import price stability
- If monetary union comes about it will have to provide the right institutions for guaranteeing price stability

## Is East Asia an OCA?

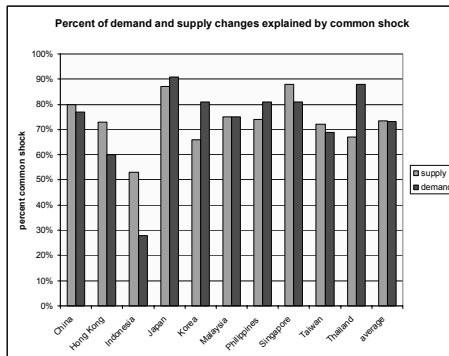


Source: IMF, IFS and Xu Ning(2004)

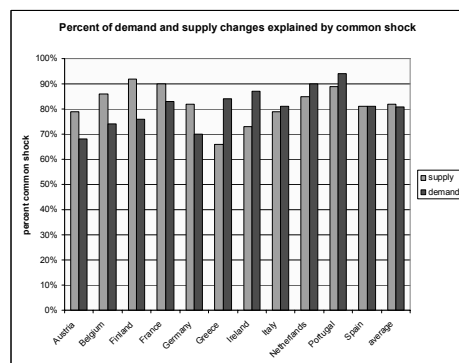
Note: the exports of the East-Asian countries is to ASEAN plus China, Korea and Japan. The data for China relate to 2001.

# Shocks are not more asymmetric in Asia than in Eurozone

## Asia



## Eurozone



- Economic conditions for monetary union in East Asia seem to be satisfied
- Main stumbling block is political
- Desire for political unification is weak
- Contrast with Europe is great: process of political unification in Europe has been going on since 1960

## Conclusion

- It is unlikely that the EU as a whole constitutes an optimal monetary union.
- As integration moves on, the number of countries that are likely to benefit from monetary union will increase.
- Enlargement of the Euro-zone to 25 countries creates serious challenges.
  - Euro-25 is probably not an OCA, but may become one
  - enlargement will change the cost benefit calculus of existing members of the Euro-zone. Some of these member countries may find out that the enlargement makes the monetary union less attractive.

- It is unlikely that Latin America and East Asia will become monetary unions soon, although reasons are different.
- Our analysis has been based on an *economic* cost-benefit analysis. Countries may also decide to adopt a common currency for *political* reasons.
- The economic cost-benefit analysis remains useful, because it gives an idea of the price some countries will have to pay to achieve these political objectives.