

# Global Finance Issues & Policy

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## Optimal Currency Areas

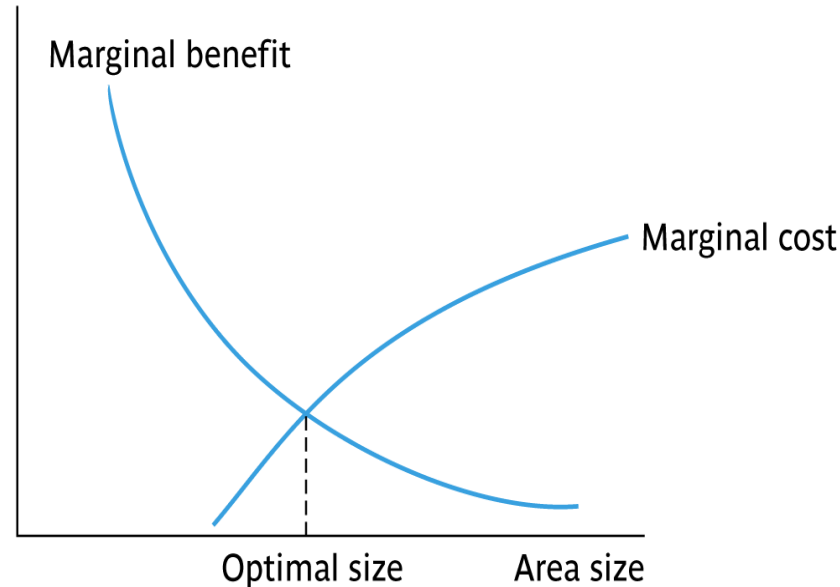
Chapter 15: *Economics of European Integration*, Baldwin R., & Wyplosz, C., 2012, 4th ed., McGraw-Hill.

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# Marginal Benefit vs. Marginal Cost

- **Marginal benefit**
  - advantage of increasing a currency area by one more country
  - It is positive but declining.
- **Marginal cost**
  - Disadvantage of adding one more country to the currency area.
  - Positive (due to diversity) and increasing.

Marginal costs and benefits



# Benefits of a Currency Area

- **Elimination of transaction costs**
  - Eliminates the need for currency conversions and hence the associated transactions costs.
  - If you started with one EU currency and exchanged it successively in all the currencies of the EU (before the Euro) and then exchanged it back into the initial currency, you would get less than 50% of the initial amount!
- **Price comparability**
  - Prices are comparable because goods and services are priced in the same currency.
- **Elimination of exchange rate risk**
  - Exchange rate risk associated with trade and investments is eliminated.

# Benefits of a Currency Area

- Quality monetary policy
  - Central bank is more independent - immune from political interference and pressures.
  - No country wants to see the central bank financing other countries.
  - Example: ECB

## Costs of a Currency Area

- Diversity in countries forming a currency area is costly because a common currency makes it impossible to react to each and every local peculiarity.

- Shocks and the exchange rate (fc per dc)

$$\text{RER} = EP/P^*$$

= Nominal exchange rate x domestic price/foreign price

- When a country runs a current account deficit, it has two options to make exports cheaper and lower the real exchange rate:
  - Depreciation of the nominal exchange rate (lower fc per dc)
  - Reduction in prices and wages
- But a country in the currency area does not have the depreciation option. It has to reduce prices and costs.
- But prices and costs are generally very sticky. Adjustments take time and create hardships.

# Costs of a Currency Area

- Asymmetric shocks

- Suppose there are two countries (A & B) in the union. A is hit by an adverse demand shock but not B. Prices are assumed to be sticky.
- Now the common currency depreciates to reflect the shock to A. But it will not depreciate to the level that would happen if A was not part of the union. New exchange rate will reflect the average effect on A&B.
- Example:

Without a common currency:

Adverse shock to A: A ↓ 10%, B stays the same

With a common currency:

Adverse shock to A: Common currency ↓ 5%

# Costs of a Currency Area

- Asymmetric shocks
  - The result:
    - Not enough adjustment for A to reflect its adverse demand shock leading to
      - excess production (supply).
      - recession and disinflation to correct prices and restore its real exchange rate to a lower level.
    - Unnecessary adjustment for country B resulting in
      - excess demand creating inflationary pressures
      - boom and inflation to correct prices to restore its real exchange rate to a higher level.
  - This is the unavoidable cost forming a currency union.
  - When asymmetric shocks happen, common exchange rate cannot insulate all countries in the union.

# Costs of a Currency Area

- Symmetric shocks with asymmetric effects
  - Symmetric shocks may produce asymmetric effects
  - Possible reasons
    - Different socio-economic structures
    - Different labor market conditions and regulations
    - Relative importance of economic sectors
    - Differences in banking and financial sectors
    - Differences in debt levels



# The Optimum Currency Area Criteria

- The optimum currency area (OCA) theory derives practical criteria to understand which countries should share the same currency.

OCA Criteria	
Economic Criteria	
1. Labor mobility (Mundell)	Makes it easier to deal with asymmetric shocks
2. Product diversification (Kenen) (Economic symmetry)	Reduce the impact of asymmetric shocks
3. Openness (McKinnon) (Economic integration)	
Political Criteria	
4. Fiscal transfers	Make countries likely to help each other
5. Homogeneous preferences	
6. Solidarity	

# The Optimum Currency Area Criteria

- Labor Mobility

- **Optimum currency areas are those within which people move easily.**
- Unemployment in A (due to excess production) and inflationary pressures in B (due to short supply) could be solved by moving labor from A to B.
- Labor mobility is easier within national borders (culture, language, legislation, welfare, etc.) than across countries.
- Constraints to labor mobility across countries:
  - Cultural & language differences
  - Skill differences
  - Institutional and legal barriers
  - Moving physical capital needed to absorb labor takes years.

# The Optimum Currency Area Criteria

- Production Diversification (Economic Symmetry)
  - **Countries whose production and exports are widely diversified and of similar structure form an optimum currency area.**
  - Countries that are hit by asymmetric shocks are those that specialize in a narrow range of goods.
  - If countries in the union are well-diversified and produce similar goods (economic symmetry), then the shocks are likely to be symmetric, and it is less costly for a country to be in the union.

# The Optimum Currency Area Criteria

- Openness (Economic Integration)
  - **Countries that are very open to trade and trade heavily with each other form an optimum currency area.**
  - If countries trade heavily with each other, competition will equalize the prices of most goods when expressed in the same currency.
  - Thus, when prices are flexible, the exchange rate does not matter for competitiveness.

# The Optimum Currency Area Criteria

- Fiscal Transfers
  - **Countries that agree to compensate each other for adverse shocks form an optimum currency area.**
  - Transfers can act as an insurance that mitigates the costs of an asymmetric shock.
  - Implicit or explicit transfer mechanisms exist within national borders.
  - However, transfers involve moral hazard. Expectation of transfers provides less incentive for a country to avoid shocks.

# The Optimum Currency Area Criteria

- Homogeneous Preferences
  - **Currency union member countries must share a wide consensus on the way to deal with shocks.**
  - Member countries have to share the same preferences over policy responses to shocks.
  - But in reality, countries have differences in opinions on what policies are needed to deal with shocks.

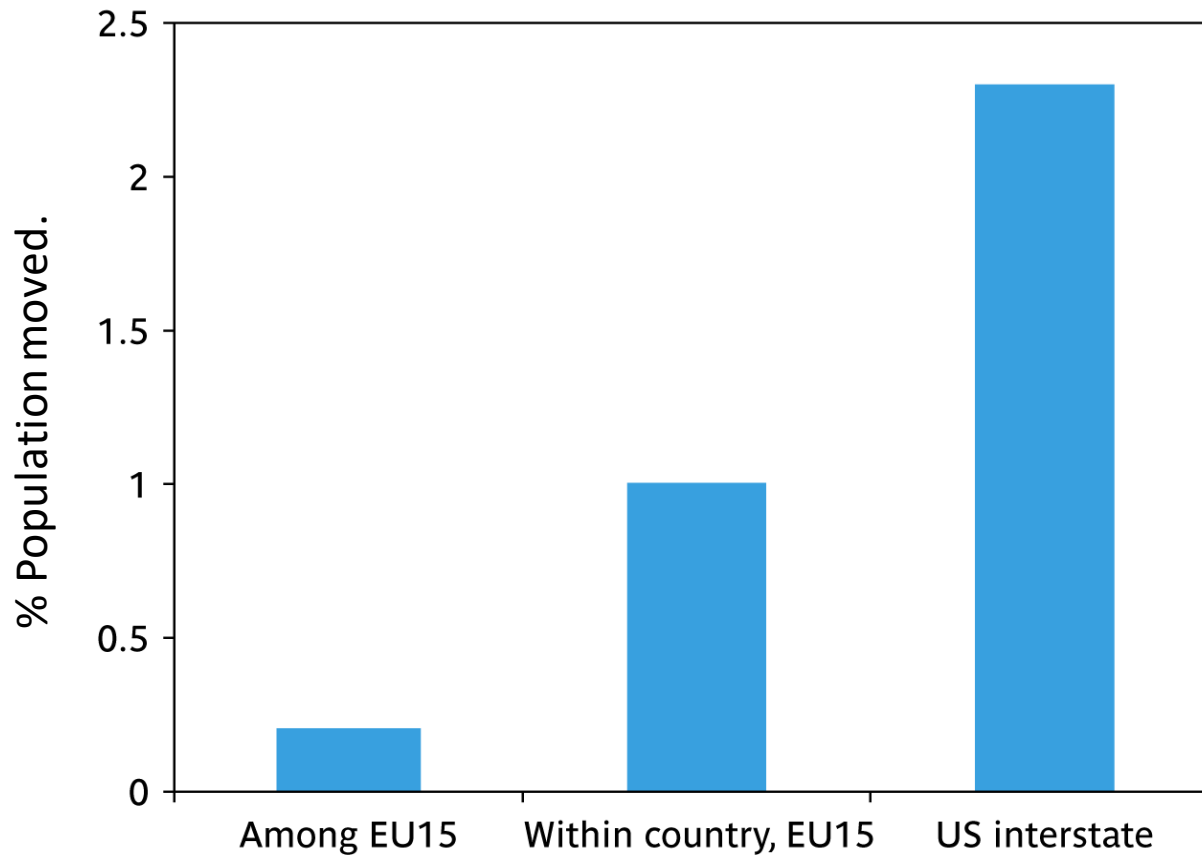
# The Optimum Currency Area Criteria

- Solidarity

- **When the common monetary policy gives rise to conflicts of national interests, the countries that form a currency area need to accept the costs in the name of a common destiny.**
- Disagreements are unavoidable and may follow national lines: people must accept that they will be living together and extend their sense of solidarity to the whole union.

# Is Europe an optimum currency area?

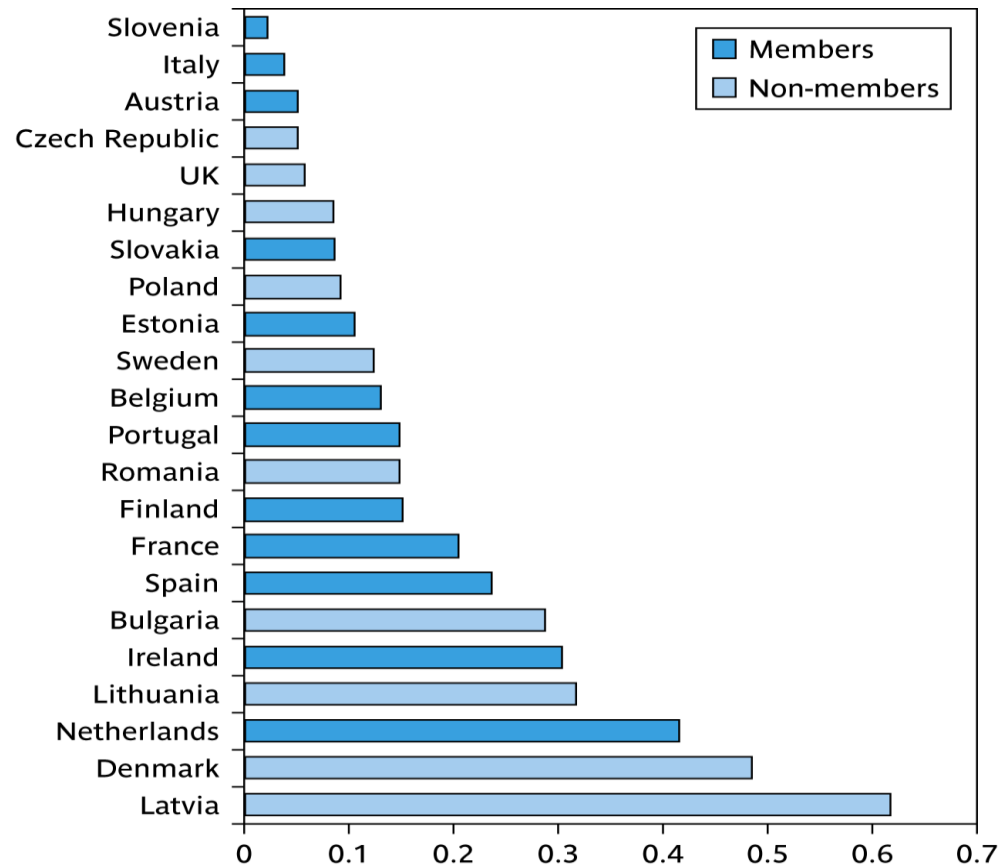
- Labor mobility
  - Europeans move little! (2008)
  - Condition not fulfilled.





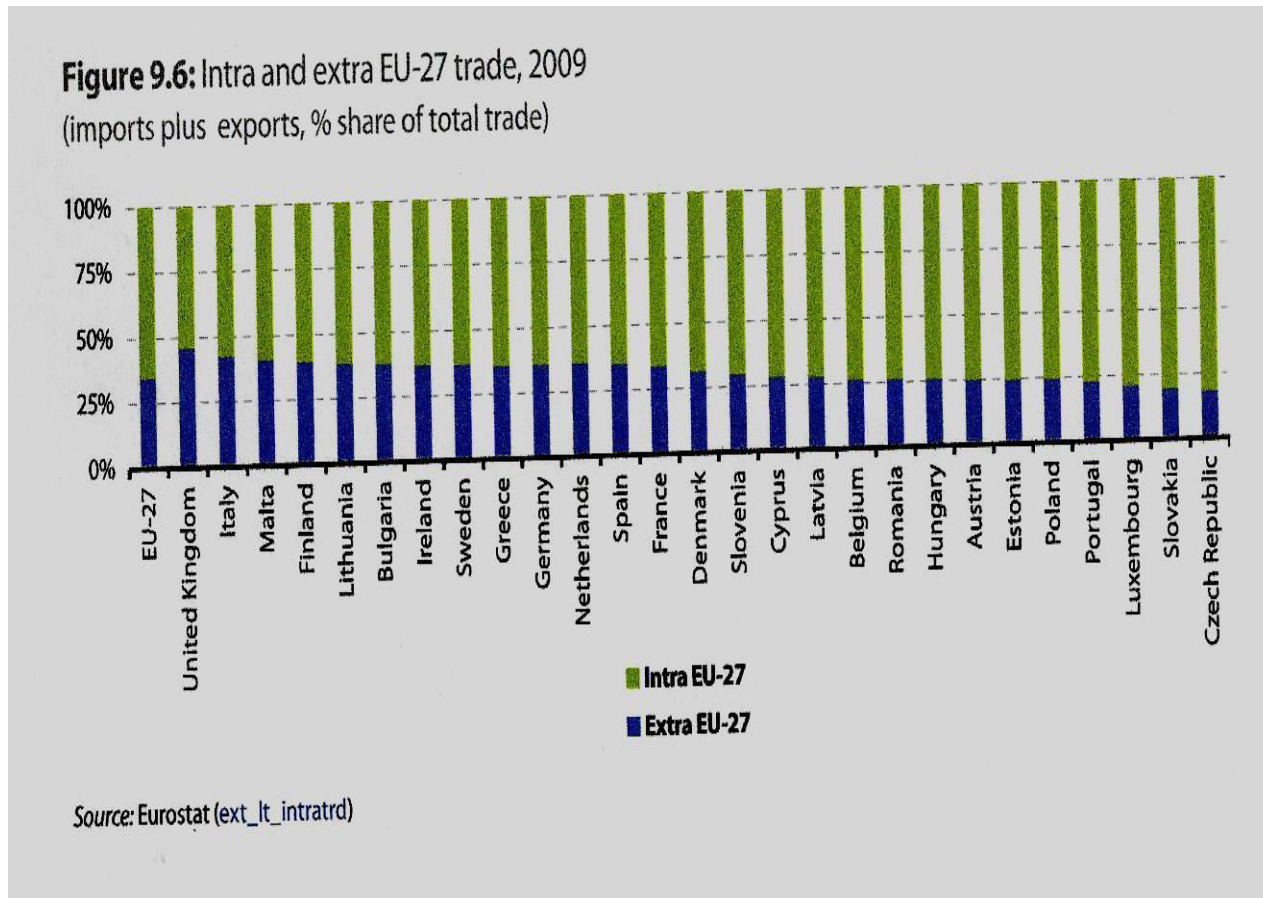
# Is Europe an optimum currency area?

- Diversification and trade dissimilarity
- Trade dissimilarity index (2007)



# Is Europe an optimum currency area?

- Openness (Economic Integration)



# Is Europe an optimum currency area?

- Fiscal transfers

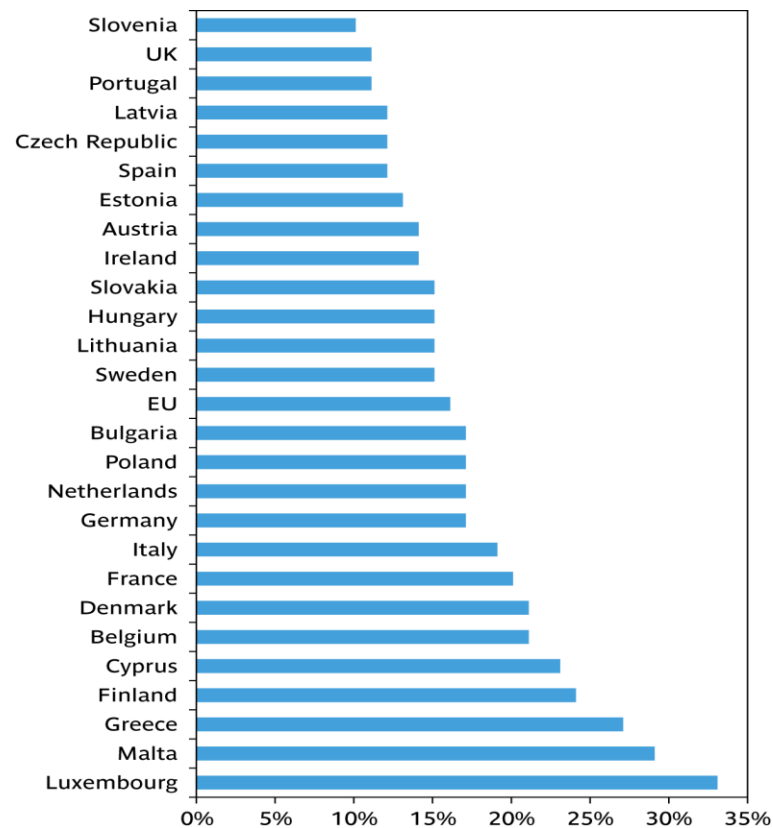
- Up until the debt crisis, there was no transfer system in the EU
- EU budget is small (slightly above 1% of GDP) and almost entirely spent on operating expenses, common agricultural policy (CAP), and Structural Funds that support the poorer regions.
- Crisis led to the creation of the European bailout funds (ESM- European Stability Mechanism), which recognizes that monetary union needs transfers.

- Homogeneous preferences

- Based on past inflation rates, it does not seem that countries share similar views on monetary policy.
- Similar story when looking at public debt.

# Is Europe an optimum currency area?

- Solidarity vs. nationalism
- How “often” do you feel European? (2006)



# Is Europe an optimum currency area?

- So, is Europe an optimum currency area? Mixed performance:

Table 15.1 OCA scorecard

Criterion	Satisfied?
Labour mobility	No
Trade openness	Yes
Product diversification	Yes
Fiscal transfers	No
Homogeneity of preferences	Partly
Commonality of destiny	?

- The single currency project has been and remains controversial.

The partial fulfillment of the OCA criteria implies that, given that the decision to go ahead has been taken, there will be costs.

## Will Europe become an optimum currency area?

- The fact that the single currency exists can change the situation:
  - Effects on trade: Baldwin et al. (2008) conclude that, so far, the euro has probably increased trade by some 5%.
  - Effects on labor markets: few expect labor mobility to increase dramatically in the near future but the single market may encourage reforms to make European labor markets more flexible.
  - Fiscal transfers: much the same applies to fiscal transfers.
- BUT monetary union is not only about economics!
  - Political considerations have been paramount in launching the euro: political leaders agreed on the monetary union without thinking in terms of the OCA theory. Their intention was to move one step further in the direction of an 'ever-closer union.'