

# Forming a Currency Zone: Some Economic Considerations

**Florin Aftalion**

Professor Emeritus, ESSEC Business  
School, Paris

# Issues

- What economic theories or observations can guide the decision to join the Euro Zone?
  - Optimum Currency Areas
  - Problems with differential inflation rates
  - Sovereign debt fiasco
- Costs/benefits for a small, less developed economy.

# Optimal Currency Areas (OCA)

- The theory was introduced by Robert Mundell (1961) in order to make the case for fixed exchange rates
- In 1970 Mundell presented "A Plan for a European Currency"
- OCA theory was further developed by Ronald McKinnon (1963), and Peter Kenen (1969)
- Robert Mundell: Nobel award in 1999.
- When countries come together to form a currency union there are:

# Benefits

- Elimination of transactions costs and exchange rate risk (between participating countries) should increase trade and investments between them
- Price transparency should benefit consumers and increase competition
- (Member countries will sell their debt in foreign markets at lower rates)

# Costs

- No independent monetary policy
- Exchange rates cannot be used as a policy tool
- Consequences of Asymmetric shocks: inflation and unemployment cannot be treated by a unique monetary policy
- The larger the total economy the higher the probability of Asymmetric shocks

- The loss of independent monetary and exchange rate policies is considered to be the most important cost in joining a monetary union
- Increased intra-industry trade and further economic integration should reduce country differences which cause asymmetric shocks.

# Adjustments to asymmetric shocks

- Costs of adjustments in a monetary union will be lower if labor markets and wages are flexible and if labor mobility is high.
  - Regional unemployment can be offset by labor moving to another region, and would not require direct policy intervention.
- The expected costs of forming a union would also be lower if the budgetary process is centralized, and the monetary union is vested with fiscal powers (i.e., a centralized budget).
  - This would allow the union to direct loans or aid to countries or regions suffering asymmetric shocks.



# Is the Monetary European Union an OCA?

- Labor immobility
- Wage rigidity
- No fiscal centralization
- Differences in industrial structures (and no convergence)
- When the MU was launched it was hoped that industrial structures would converge



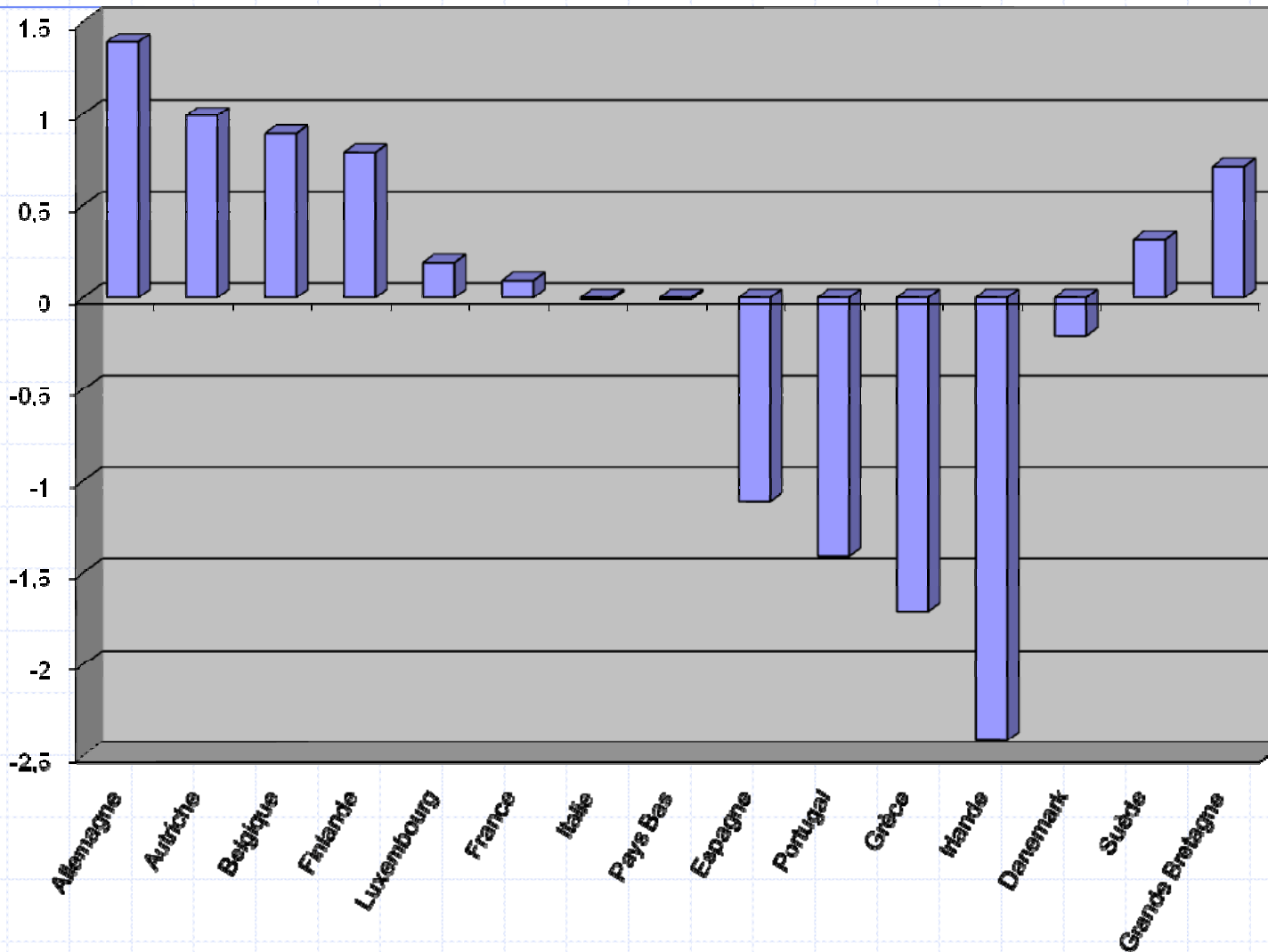
# Differential Inflation Impact

- Consumer price levels in wealthier countries are higher than in LDCs (the Balassa-Samuelson effect)
- **In the EU, as LDCs grow their price levels increase (relatively).** Relative prices of exchangeable goods remain constant. But: higher inflation in wages and real estate.
- Inflation differentials generate differences in **real interest rates**

# Inflation in MU countries 2001-2008

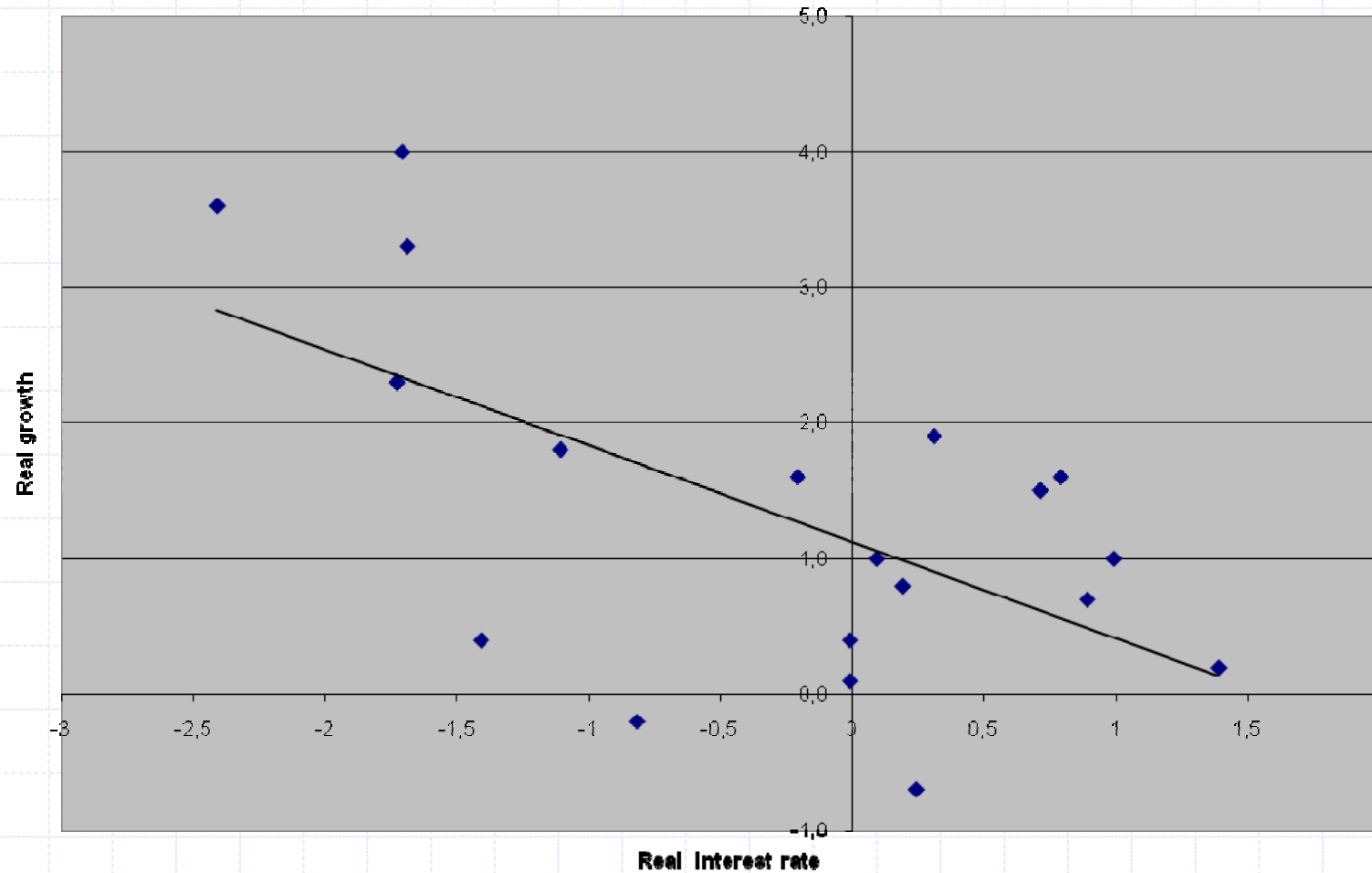
|            | Average<br>inflation % | Accumulated<br>inflation differential<br>with Germany % |
|------------|------------------------|---|
| Austria    | 2,1                    | 2,4%  |
| Belgium    | 2,3                    | 4,1%  |
| Finland    | 1,7                    | -0,8%   |
| France     | 1,9                    | 0,8%  |
| Germany    | 1,8                    | 0,0%  |
| Greece     | 3,4                    | 13,5%   |
| Ireland    | 3,8                    | 17,2%   |
| Italy      | 2,4                    | 4,9%  |
| Luxembourg | 2,5                    | 5,7%  |
| Netherland | 2,2                    | 3,2%  |
| Portugal   | 3,0                    | 10,0%   |
| Spain      | 3,3                    | 12,6%   |

# Real Interest Rates MU in 2003



# Real growth in 19 countries

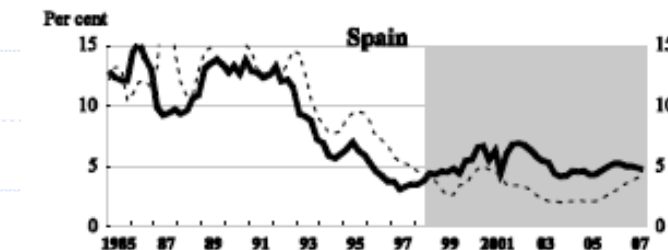
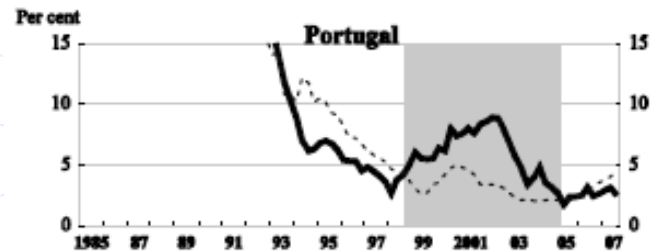
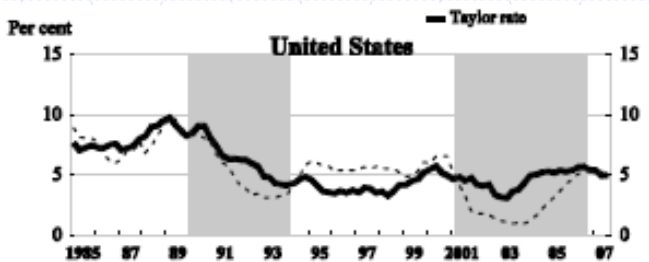
## BS windfall effect



# Consequences

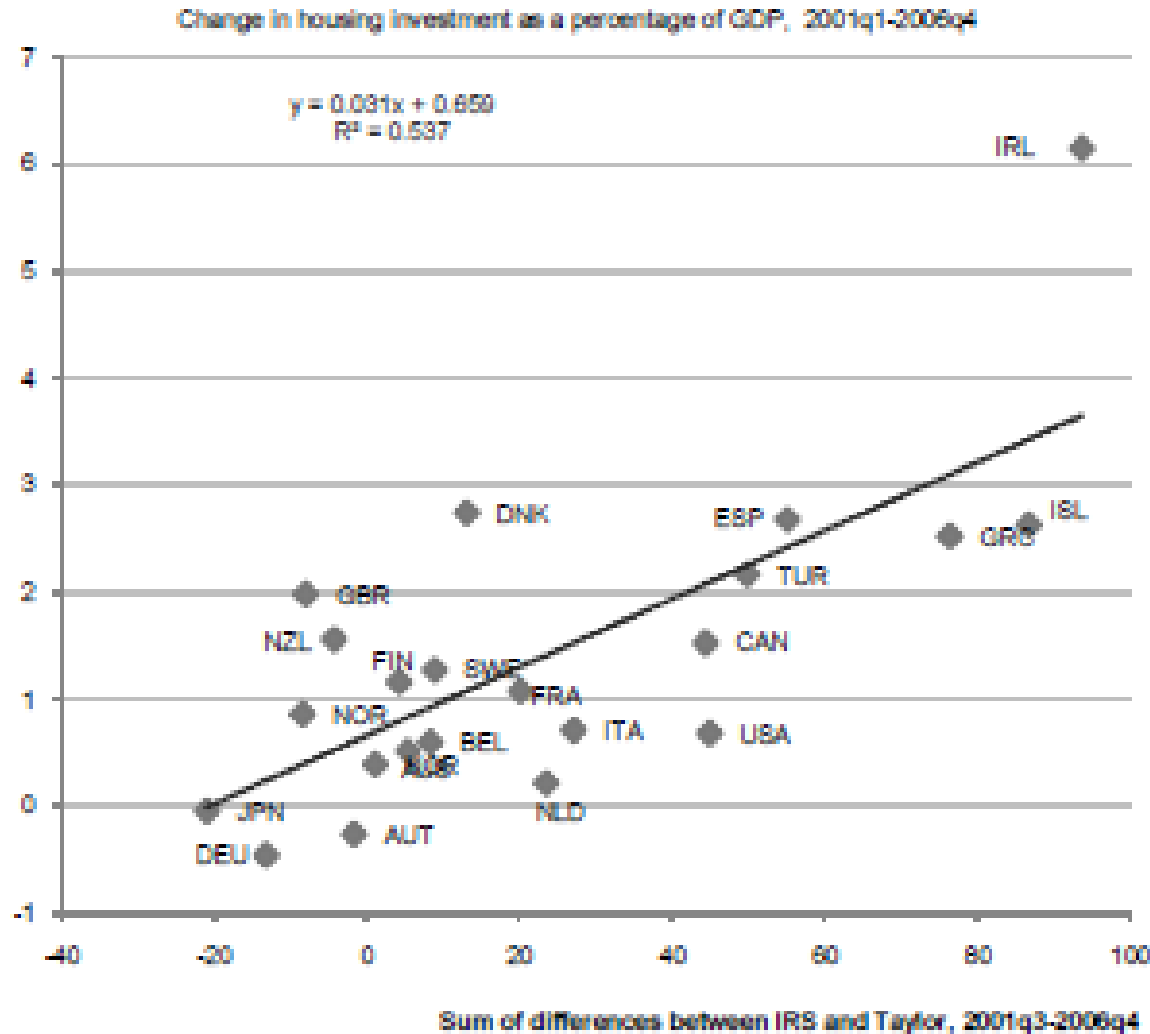
- Inflation differentials especially in non exchangeable goods (real estate)
- Growth differentials
- Non sustainable wage differentials between EuroZone countries

# Taylor Rule and Real Interest Rates



MONETARY POLICY, MARKET EXCESSES AND FINANCIAL TURMOIL  
 Rudiger Ahrend, Boris Cournède and Robert Price

# Housing Investment versus deviation from Taylor Rule





# Greece Credit Default Swap

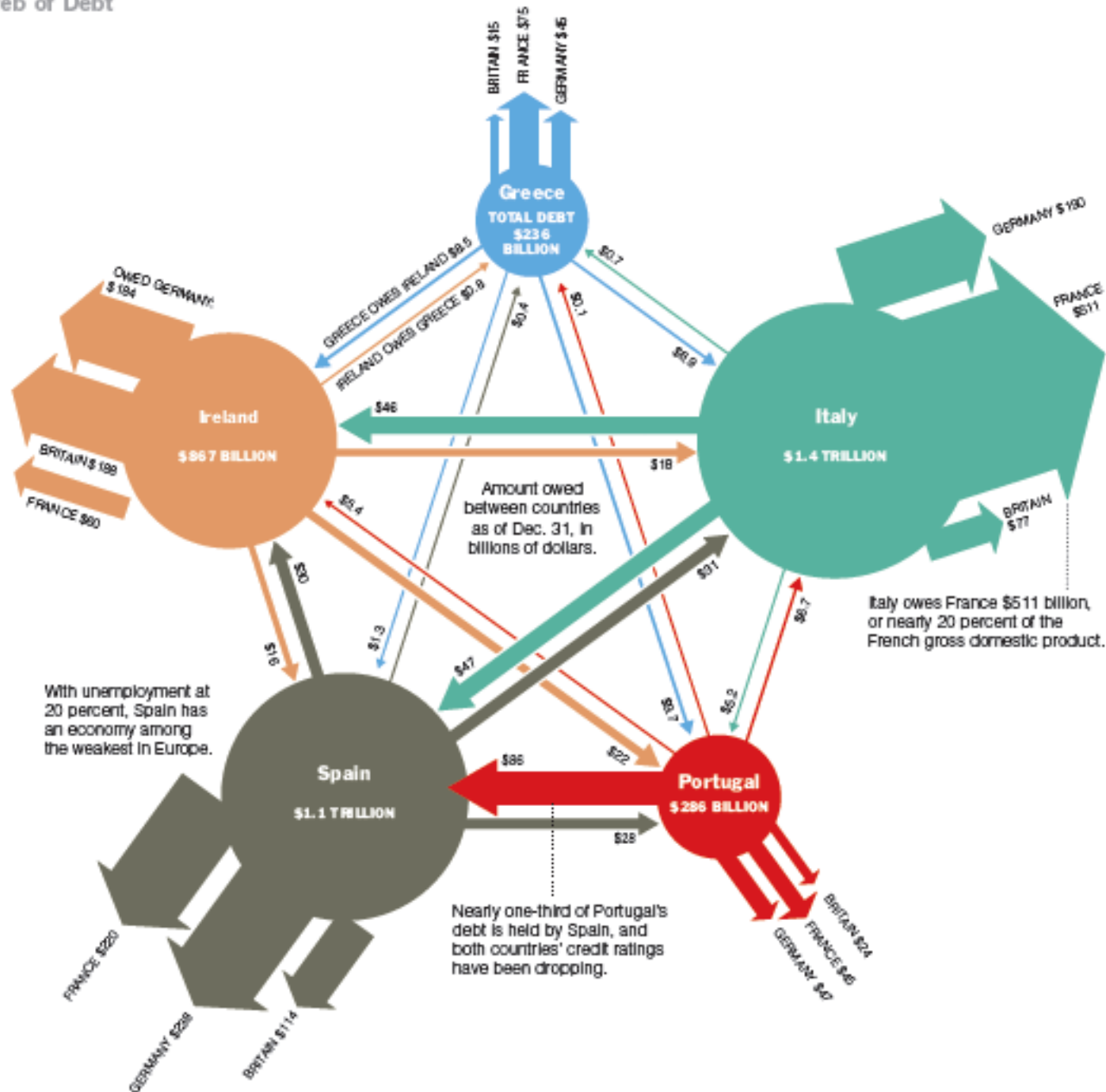


Greece credit default swap represents the annual cost, in basis points, to insure against a default of Greek sovereign debt over the term of a 5-year swap agreement. Source: Bloomberg, FMRCo (MARE) as of 5/28/10.

# Sovereign Debt Interest Rates



Chart 1: Europe's Web of Debt



Source: Bank for International Settlements.

Florin Aftalion

# The Case for a LDC Joining the EuroZone

## Costs

- ◆ No independent monetary policy
- ◆ No devaluation to increase exports
- ◆ BS-Inflation control

➤ Benefits conditional on the hardening of the Maastricht criteria

## Benefits

- ◆ More investments from abroad
- ◆ Increased inter-community exports
- ◆ Cheaper Government borrowing
- ◆ Or, if problems, bailout by the Union

|                    |      |
|--------------------|------|
| Belgium/Luxembourg | 66,7 |
| Slovakia           | 58,9 |
| Czech Republic     | 54,1 |
| Netherlands        | 51,1 |
| Estonia            | 45,6 |
| Hungary            | 43,7 |
| Slovenia           | 37,3 |
| Ireland            | 34,7 |
| Lithuania          | 30,1 |
| Austria            | 28,1 |
| Latvia             | 24,6 |
| Denmark            | 23,1 |
| Poland             | 23,1 |
| Germany            | 22,0 |
| Sweden             | 21,2 |
| Malta              | 21,0 |
| Finland            | 19,1 |
| Portugal           | 16,6 |
| France             | 13,7 |
| Italy              | 12,2 |
| Spain              | 12,0 |
| United Kingdom     | 9,8  |
| Cyprus             | 6,1  |
| Greece             | 4,0  |

## Intra-union exports of EU countries (% of GDP) in 2005

- Large differences in openness of EU countries with the rest of the Union
- 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
- Cost-benefit analysis is likely to show net benefits of being in EMU for Benelux, and small central European countries



# The End