

European Monetary Union

Chapter 20

1. Theory of Optimum Currency Areas

2. Background for European Monetary Union

1 Theory of Optimum Currency Areas

1.1 Economic benefits of a single currency

- **Monetary efficiency gain**

- Reduce transactions cost for trades using the single currency
- Gains are greater the greater the economic integration among members
 - one measure – $(\text{trade within area}) / (\text{area GDP})$

- Monetary efficiency gain could increase within-area trade
 - * Trade creation - more trade according to true comparative advantage
 - * Trade diversion - more trade due to cost advantages even though not according to comparative advantage
- Single currency could reduce relative price disparity created by confusion due to multiple currencies, increasing efficiency

- Reduction in inflation
 - Benefit for countries with high inflation
 - Unless high inflation and seigniorage revenues are the best ways for them to raise revenue

- Vehicle currency status
 - Countries hold Euro reserves, generating seigniorage revenues for currency area
 - Transactions costs in buying and selling Euros lower
 - Euro interest rates are lower since Euro assets are more liquid

- Currency crises within the currency area become impossible (debt crises are possible)
 - Increased capital mobility increased possibility of currency crises in recession
 - Countries could want to use expansionary monetary policy with devaluation to end recession
 - Expectations forced countries to choose between increase in interest rates in recession or devaluation
 - Therefore, under fixed exchange rates stabilization becomes more difficult

- Fiscal transfers
 - Benefit only for poorer countries
 - These tend to be high inflation (seigniorage) countries

1.1.1 Economic costs of a single currency

- **Lose monetary policy**

- Symmetric shocks - union monetary policy works
- Asymmetric shocks - those which change equilibrium q
 - * Flexible prices
 - * Mobile labor

- With loss of monetary policy comes loss of lender of last resort facility to prevent bank runs
- Fiscal restraint limits fiscal policy
 - Countries want some assurance that members will not run government budget deficits and pressure the ECB to finance them with seigniorage
 - One country's fiscal deficit could destabilize prices for all or create a debt crisis

2 Is Europe an Optimum Currency Union?

requires the benefits, primarily monetary efficiency gains, exceed the costs, primarily loss of monetary policy

2.1 How large are the monetary efficiency gains?

- In 1990's exports by member countries to other member countries were only 10-20% of GDP and this did not increase dramatically after the removal of remaining trade barriers in 1992.
- Vehicle currency status is increasing as countries begin to hold Euro's as reserves

2.2 How large are the costs of losing independent monetary policy?

- Asymmetric shocks because countries are highly diverse
 - Modern industrial countries include France, Germany, Belgium, and others
 - Poorer higher inflation countries include Spain, Portugal, Greece
 - Norway is an oil producer
 - Finland is a lumber producer

- Wage and price flexibility is low
- Labor mobility is low
- Potential benefits of losing independent monetary policy if a high inflation country

3 Is the US an Optimum Currency Area?

3.1 Monetary Efficiency Gains

- Large fraction of trade is within US - still a relatively closed economy
- Vehicle currency status

3.2 Loss of independent monetary policy for states

- Asymmetric shocks because states are highly diverse
- Wage and price flexibility is higher
- Labor is more mobile
- Extensive system of fiscal transfers

4 Background for the EMU

4.1 Motivation

- Economic - single European market
 - monetary union
 - trade union
- Political - more powerful European voice
 - G-3 replaces G-7 (or G-8)
 - Economic ties increase cost of conflict (war)

4.2 Monetary Policy in the Union - European Central Bank

- Technocrats, not politicians
- Explicit inflation target

4.3 Fiscal Policy in the Member Countries

4.3.1 Monetary expansion generates government revenue - seigniorage

- Germany wants seigniorage limited to .5% of GDP
- Less than countries like France have been accustomed to
- Want rules to prevent countries from encountering budget difficulties and asking central bank for more seigniorage

4.3.2 Maastricht Treaty 1992

- Convergence criteria for admission to the union
- No self-initiated devaluations
- Inflation less than 1.5 percentage points above average inflation rates of three lowest-inflation members
- Limit government deficits to less than 3% of GDP
- Limit government debt to less than 60% of GDP

4.3.3 Stability and Growth Pact 1996

- Fines for violating Maastricht rules
- Medium term budget balance or surplus

4.3.4 Euro launched in January 1999

- Initially had 11 countries and Greece joined two years later
- Countries exchanged individual currencies for Euro in January 2002
- Fiscal rules have been violated and no fines have been imposed