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 – (trade within area)/(area GDP)
  - Allocative efficiency: relative prices reflect relative costs
- Monetary efficiency gain could increase within-area trade since union reduces transactions costs
  
  * 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, enhancing allocative 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)

  – Prior to monetary union:

    * 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 and not a member
  - 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

- Five additional countries have joined since 2007

- Countries exchanged individual currencies for Euro in January 2002

- Fiscal rules were violated and no fines were imposed
4.4 Greek Crisis 2010

- Worldwide financial crisis generally increased government budget deficits
  
  - Tax revenues fell due to recessions
  
  - Government spending and transfer payments increased to offset recessions

- Increase in government debt was particularly severe in Greece (and in some other Euro countries)

- Creditors began to fear that Greece could not repay and required higher interest rates
• Eventually creditors refused to buy Greek debt
  – Greece had maturing debt which it could not repay without new loans
  – Additional official loans bridged gap for a while
  – Problem was too much debt, so additional debt did not ease the problem

• Greece has
  – made severe budget cuts (perhaps too severe - Laffer Curve)
  – defaulted on its debt, agreeing to pay private creditors only .5 for each 1.00 euro