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
Money 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