

Topics for Today

- 1.) European Monetary Union
- 2.) Mundell's "Optimum Currency Area" Criteria

An EU Timeline

- 1.) 1957 - Treaty of Rome / EEC formed
Customs Union
(France, (West) Germany, Italy, Benelux)
- 2.) 1973 - UK, Ireland, Denmark join EU
- 3.) 1979 - EMS/Ecu. Pegged ex. rates.
(France, Germany, Italy, Benelux,
Denmark, Ireland)
- 4.) 1981 - Greece joins EU.
- 5.) 1986 - Spain + Portugal join EU + EMS.
- 6.) 1986/1992 - Single European Act.
Relaxation of unanimity requirement
Gradual removal of internal
barriers to goods + factor flows.

- 7.) 1992 - Maastricht Treaty / Convergence Criteria
Defines timeline for Monetary Union.
- 8.) 1992-93 - Currency Crises / UK leaves EMS after
only 2 years.
- 9.) 1995 - Austria, Sweden, Finland join EU
(15 member countries now).
- 10.) 1997 - Stability + Growth Pact. Imposes
restrictions on national fiscal policies
in order to support Monetary Union.
- 11.) 1999 - ECB / euro
(11 countries, Greece in 2001)
- 12.) 2002 - Euro notes + coins issued.
- 13.) 2004 - 10 new members join EU
(Czech Rep., Estonia, Cyprus, Latvia,
Lithuania, Hungary, Malta, Poland,
Slovenia, Slovakia)
- 14.) 2007 - Bulgaria + Romania join EU.
Slovenia adopts euro.
- 15.) 2008 - Cyprus + Malta adopt euro.

The European Central Bank

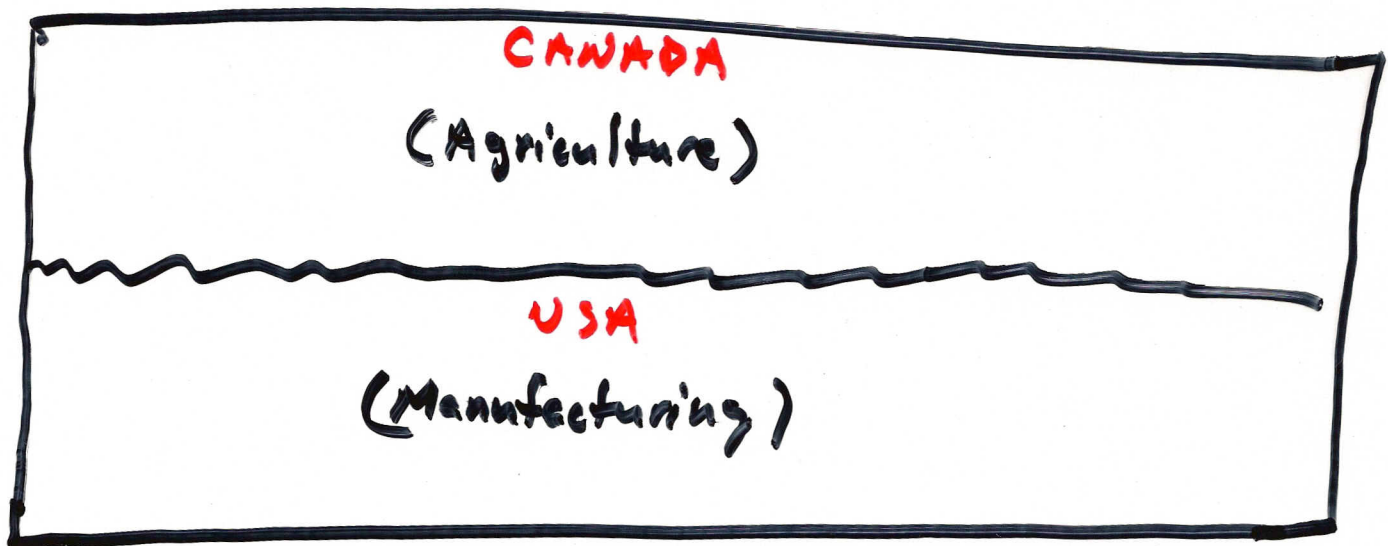
- In many ways, the ECB is the world's most independent Central Bank. No single country has much influence over it.
- It is located in Frankfurt (not Brussels).
- Its structure resembles the U.S. Federal Reserve System
- European monetary policy is set by a "Governing Council", consisting of a 6 member executive board, and the governors of the national Central Banks of the 15 euro member countries.
- The executive board is appointed by the heads of state of the euro area countries. They serve nonrenewable 8-year terms. By informal agreement, 4 must be from France, Germany, Italy + Spain
- Currently, voting is by simple majority rule (with equal weights!). This is likely to change soon.

Mundell's Optimum Currency Area Criteria

Last time we saw how flexible ex. rates can act as a "shock absorber".

Implicit in this argument is the assumption that shocks are national in origin.

For example, consider the case of the U.S. & Canada



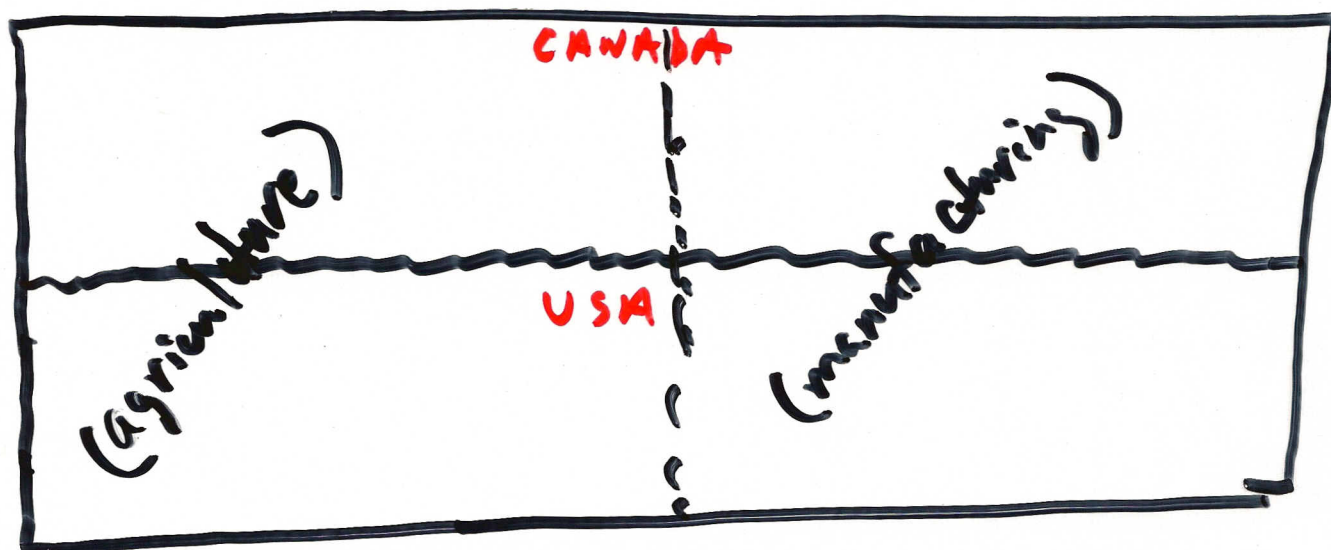
Suppose there is a decline in the demand for agriculture

The adverse effects on Canada are mitigated by a currency depreciation that partially shifts demand back toward agriculture.

Mundell pointed to a potential problem with this argument.

He asked, "What if the structure of production is organized East/West rather than North/South?"

In particular, suppose our map looks like this,



Now a depreciation of the C\$ is not the right response. It produces inflation + excess demand in the Canadian East, and it makes a bad situation even worse in the American West.

Clearly, what is needed is a "Western dollar" and an "Eastern dollar", not a U.S. + Canadian dollar!

More generally, Mundell argued that the Optimum Currency Area is an economic region, not (necessarily) a country.

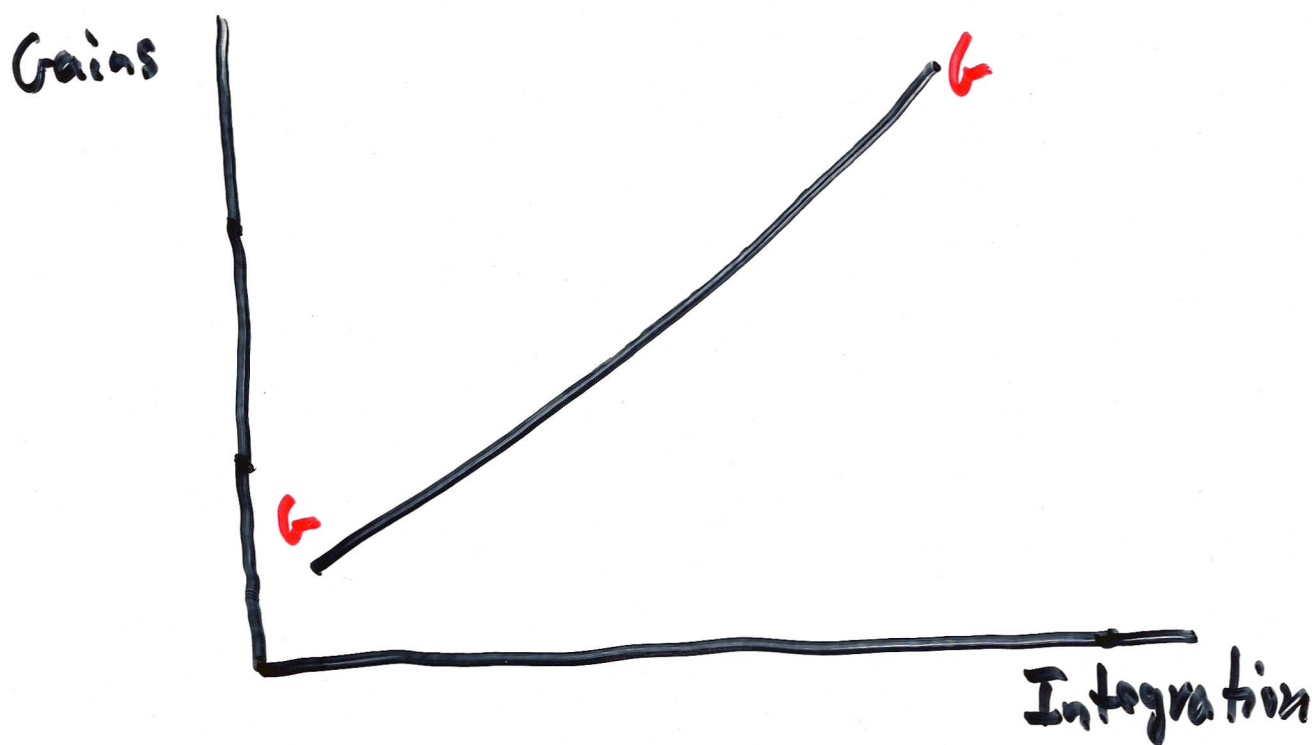
From just a stabilization perspective, it would seem desirable to have many currencies and exchange rates. This would provide some insurance against fluctuations in local economic conditions.

However, stabilization is only half the story. Having many currencies would be a headache in terms of transactions costs. (Just imagine if each U.S. state had its own currency!). Clearly, there are some efficiency gains from having a single currency.

Mundell's Optimum Currency Area criteria studies the balance between the efficiency gains from using a common currency and the potential stabilization loss incurred by losing the ability to adjust ex. rates.

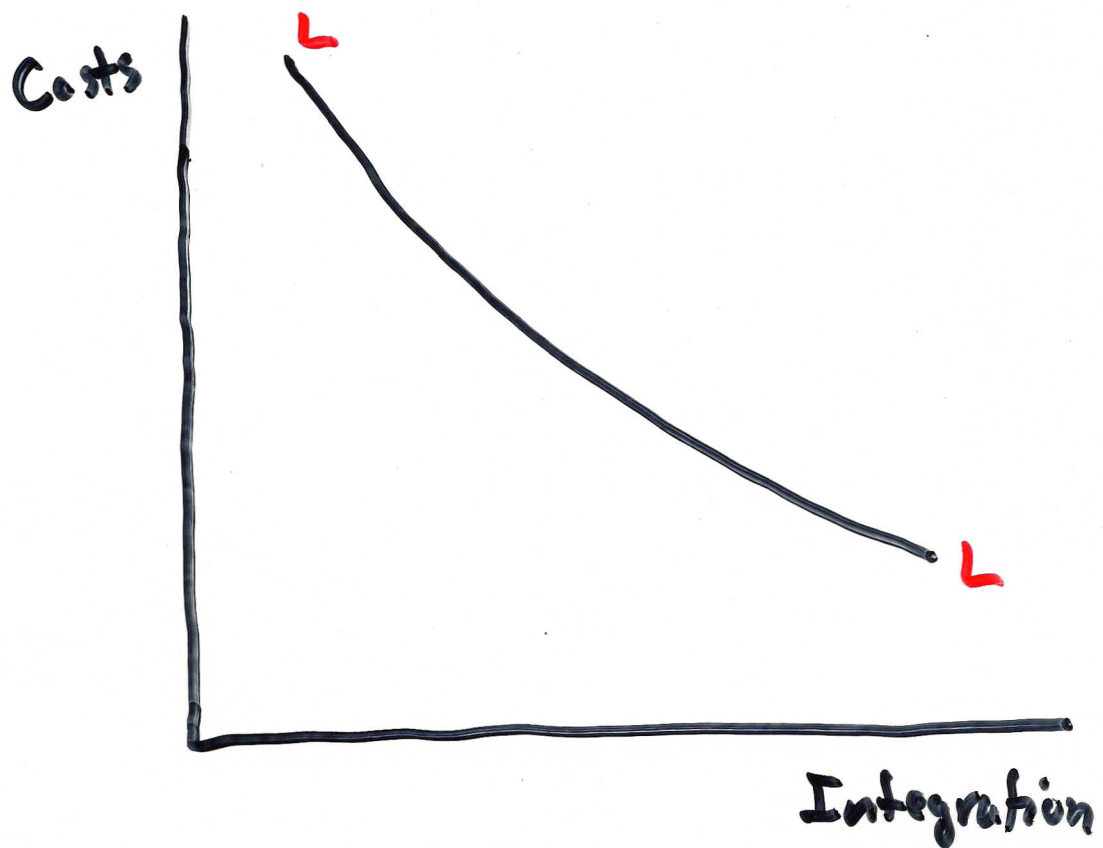
The crucial factor determining the relative costs + benefits of a common currency is how closely integrated the 2 regions are, in terms of both goods + factor markets.

Clearly, if there is little trade between the regions, then the efficiency gains will be small. Conversely, if there is a lot of trade, then the gains will be large.

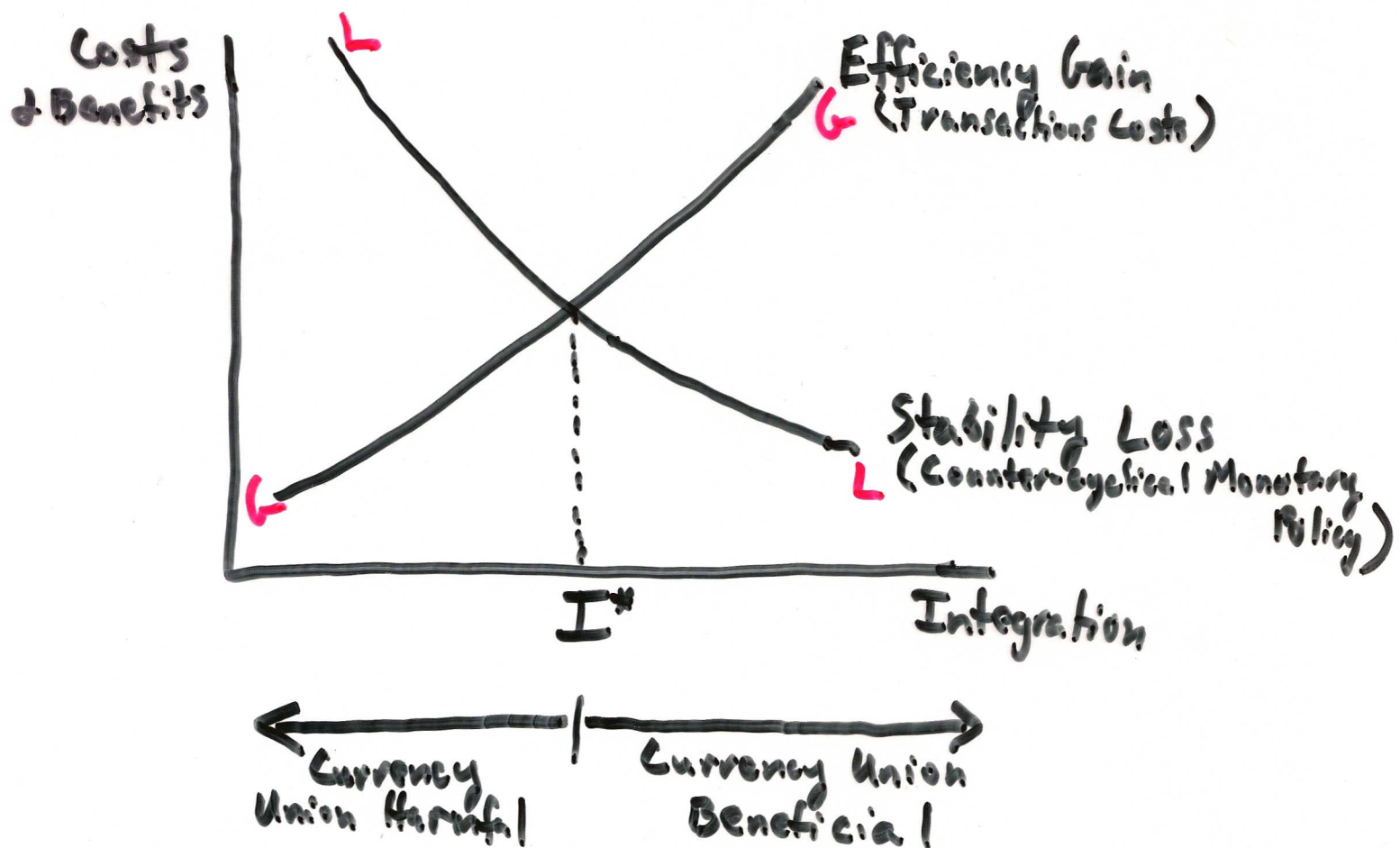


At the same time, the stabilization loss from joining a Monetary Union is likely to be a decreasing function of integration.

The closer two regions are linked in terms of goods markets, the less likely they are to confront region-specific shocks. The closer they are linked in terms of factor markets, the easier it will be to adjust to what region-specific shocks there are.



Optimum Currency Areas

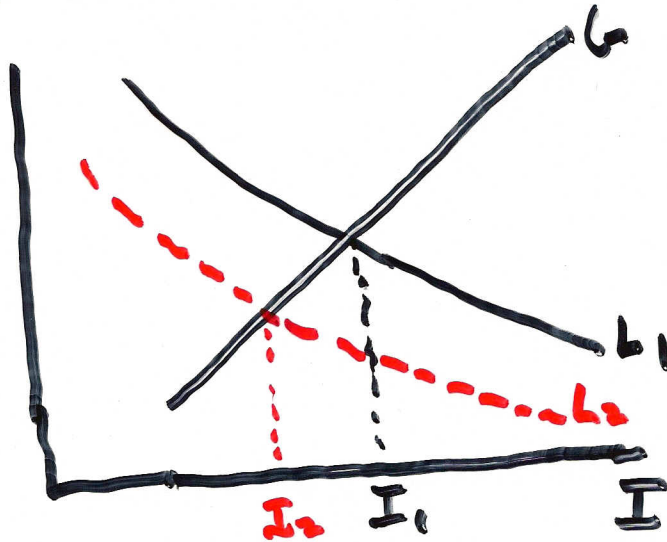


4 Main Criteria

- 1.) Extent of Bilateral Trade
Trade $\uparrow \Rightarrow$ CU more desirable
- 2.) Correlation of Business Cycles
Correlation $\uparrow \Rightarrow$ CU more desirable
- 3.) Degree of Factor Mobility
Factor Mobility $\uparrow \Rightarrow$ CU more desirable
- 4.) Fiscal Transfers / Risk-Sharing
Fiscal Transfers $\uparrow \Rightarrow$ CU more desirable

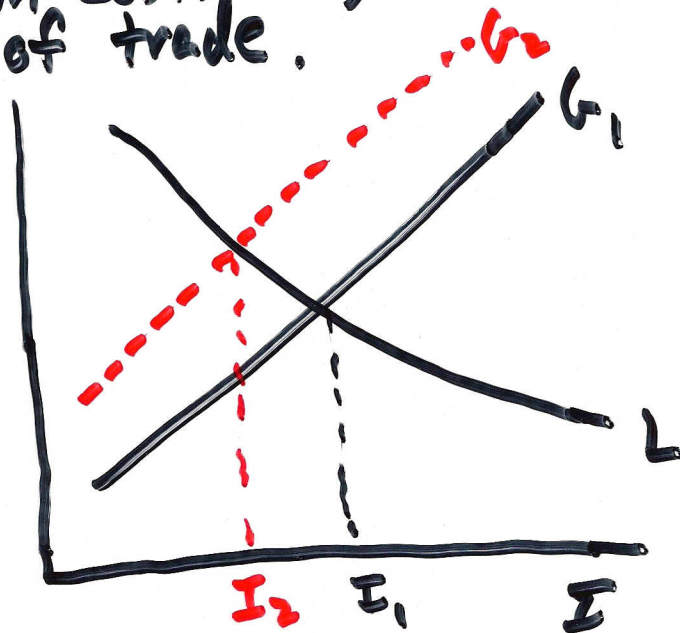
Examples

- ① Suppose legislation is passed making it easier for workers to take jobs in other countries.



This makes it more likely the Monetary Union will be beneficial, since it reduces the stabilization loss.

- ② Suppose that trade barriers are removed, or transportation costs fall, which leads to an expansion of trade.



The increased volume of trade makes the efficiency gains larger.