Optimum Currency Areas: Mundell 1 (1961) versus Mundell II (1973)

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15 October 2008

The Success of the Euro Area

Almost all observers agree that the Euro has been a great economic success.

In the last decade, the Euro Area has shown

- Low and fairly uniform rates of inflation
- Unification of financial markets—particularly bonds and stocks
- Big reduction in risk premiums in interest rates in countries around Germany

The Paradox of the Euro Area

Why were economists (more than politicians) so divided, before 1 January 1999, about the benefits of European Monetary Union?

- Strongly hostile, Feldstein and Friedman
- Sophisticated doubter, Barry Eichengreen in *European Monetary Integration, 1997*
- Common complaint of the doubters: “a one- size-fits-all monetary policy can’t possibly be optimal for diverse European countries”
- Doubters in thrall to Mundell I (AER 1961)

Mundell 1 (AER 1961)

Currency areas should be small and homogeneous to

- Facilitate internal labor mobility to offset inflexible exchange rates
- Avoid asymmetric macro economic shocks among member countries
- LDCs with one or two primary exports should float to offset terms-of-trade shocks (Kenen 1969)

Presumption of stationary expectations in price levels, exchange and interest rates. Keynesian fine-tuning of domestic monetary and fiscal policies protected by a floating exchange rate with the rest of the world (ROW)

Caveat: In a highly open “small” economy, its price level is impacted by exchange fluctuations—which are ineffective in controlling the net trade balance (McKinnon 1963)

Mundell I (continued)

- Among diverse economies in large currency areas, asymmetrical macroeconomic shocks are likely
- But, with fixed exchange rates among them, any one country or region is prevented from tailoring its monetary policy to offset an idiosyncratic shock
- Thus a flexible exchange rate with ROW is better
- The late 1960s consensus among Keynesians (Meade) and monetarists (Friedman, Johnson) favored floating.

Implicit presumption: a flexible exchange rate adjusts smoothly to divergent domestic and foreign monetary policies, and is not itself a source of disturbance. Upset by the wild exchange rate fluctuations of the 1970s

Mundell II

Our economics profession is largely still in thrall to Mundell I. But Robert Mundell in 1970 presented two papers favoring a common currency connecting diverse economies

(1) “Uncommon Arguments for Common Currencies” (not published until 1973)

(2) “A Plan for a European Currency” (1973)

Key Ideas

- Asymmetric macro economic shocks are more naturally offsetting within a single currency domain with lesser need for regional fine tuning,
- Better integration of capital markets under credibly fixed exchange rates encourages risk sharing through portfolio diversification across regions or countries

Implicit Assumptions

De Grauwe (2003) points out that

- Mundell I implicitly assumes foreign exchange markets are efficient under flexible rates
- Mundell II implicitly assumes that the international capital market is efficient once exchange rates are irrevocably fixed

Let us start analyzing foreign exchange market efficiency under Mundell 1, and then analyze capital market efficiency under Mundell II

Deconstructing Mundell I

Capital controls in 1950s and 1960s

- limited possibility of portfolio diversification
- regional or national fine tuning was feasible?
- But a floating exchange rate was impossible

Question: How and who would manage a flexible exchange rate? if country A suffers a downward a shift in aggregate demand but B does not, would B tolerate an appreciation? Mutual cooperation in managing exchange rates was not addressed in Mundell 1

Mundell I and Floating Exchange Rates

- Floating rates without capital controls show excess volatility (De Grauwe & Grimaldi 2006)
- Aggravated if trading partners differentiate their monetary policies from each other
- A forward-looking floating exchange rate limits the scope for any one country to insulate its own monetary policies from its neighbors

Currency Asymmetry: Center and Periphery (C & P)

Without a common money, asymmetry among national currencies develops naturally

- Today's world dollar standard
- The D-Mark in Europe before EMU
- ERM II after EMU

Potential advantages:

- Resolves the N-1 problem if center country remains passive with an open capital market
- Anchors the common price level if the center's monetary policy is stable

Disadvantages of the C & P Model

- Leads to currency mismatches within peripheral countries
  - *Original sin* in debtors (Argentina, Poland?)
  - *Conflicted virtue* in creditors (China, Japan)
- Imperfect integration of world capital markets with residual currency risk, home bias
- Vulnerable to financial upheavals in the center country—Nixon shock 1971, Greenspan-Bernanke shock 2003-04, German reunification 1991.

Mundell II and International Risk Sharing with a Common Currency

- Arrow Impossibility Theorem: Risk sharing can never be complete because of the nonviability of a complete set of insurance contracts for all states of nature, eg. AIG's failure with CDOs.
- Absent such Arrow securities, a common money still ameliorates idiosyncratic shocks across regions or countries

  -"regional" currencies exchange at par (Mundell, 1993)

International Risk Sharing with a Common Money (continued)

- In bond markets, capital constraints on local financial intermediaries with domestic-currency liabilities are relaxed.

  Example: the incredible growth of the euro bond market since 1 January 1999.
- In stock markets, eliminating currency risk reduces home bias because stock pickers can focus on inherent economic risks of each stock in a diversified international portfolio

Endogeneity of OCA Criteria

- Common currency increases trade so as to reduce the probability of asynchronous shocks

  (Frankel and Rose 1998)
- Caveats

  -common currency must be well anchored (the ECB has done surprisingly well)

  -free flowing international capital must be regulated to prevent bubbles and crashes

Implications for Poland

- Poland is fortunate in having the option of joining the euro system
- Use the promise of joining the euro as a political lever to make needed economic reforms—e.g., raising the retirement age, budgetary improvements, and so on.
- Possible hang up, the ever-appreciating zloty (join ERM II ?)