International Currency Experiences: National and Global Choices

✦ International currency experiences in the 20th C.
  » The Gold Standard period
  » The interwar 1920-1930 period
  » The Bretton Woods period
  » Post Bretton Woods floating rate period
✦ Choices for an exchange rate system
  » The need for rules in the international monetary system
  » Arguments for fixed versus floating exchange rates
✦ The theory of optimum currency areas
  » European Economic and Monetary Union (EMU)
  » The path to EMU, benefits of EMU, what risks lay ahead?

The Gold Standard Era, 1870-1914

✦ Nations set official "mint parity"
  » US: $1 = 23.22 fine grains of gold; 480 fine grains = 1 troy ounce ⇒ $20.67 = one ounce of gold
  » Given mint parities in UK, France, Germany, …. exchange rates were 4.856 US$/£, 5.183 FFr/US$, and 4.198 DM/US$
✦ No restrictions on import or export of gold
✦ National paper currency and coins issued only with gold backing (free convertibility)
✦ International adjustment via Price-Specie flow
  » Low goods price ⇒ export goods ⇒ import gold ⇒ prices ↑
✦ Problem: money supply depends on gold discoveries
  » No separate monetary policy, domestic price level ↑ ↓
The Interwar Period, 1914-1938

✦ Chaotic times for the international monetary system
  » UK - Pledges to restore pre-war parity of $4.86 / £
    ◆ To achieve goal, UK needs low inflation ⇒ economic contraction
  » France, Italy others allow currencies to float in early 1920s
    ◆ Extreme volatility, currencies lose value as domestic inflation ↑
  » Germany, massive “hyper” inflation accompany war reparations
  » 1929 (stock market crash); 1930 (Creditanstalt fails); 1933+ Great Depression
    ◆ UK goes off gold standard in 1931, £ devalues
    ◆ US devalues to $35/ounce gold in 1934
    ◆ World worries about “beggar-thy-neighbor” policies

✦ Lessons of the interwar period
  » Fear of floating (Nurkse report in 1944 to League of Nations)
  » Futility of fixing a rate in the face of shocks (as UK did in 1920s)
The Bretton Woods Period, 1944-1973

The Spirit of the Bretton Woods Agreement
- Fix official par value of currency in terms of gold, or a currency pegged to gold
- Limit short-run variability to +/- 1% of par value, but allow option to adjust par value unilaterally if IMF concurs
- Currencies are convertible for current account transactions, but some capital controls on speculative capital account transactions
- Countries can use reserves or borrowing from the IMF to finance temporary balance of payments deficits
- National macroeconomic policy autonomy permitted; countries can pursue their own price level and employment-growth objectives

The Reality of the Bretton Woods Agreement
- Industrial countries other than the US
  - Countries fixed official par values in terms of US$
  - US$ became international reserve currency
  - To preserve the peg, domestic monetary policy had to be subordinated to external exchange rate policy
- United States
  - Remained passive in the foreign exchange market; allowed free trade but no balance of payments or FX target level
    - The redundancy problem: N countries ⇒ N-1 independent policies or rates; Nth country must stay passive
  - U.S. needed to provide a stable price level for rest of world
  - U.S. needed to be international creditor and avoid fiscal deficits
    - Because US debts could be converted to gold at fixed rate
Why Did Bretton Woods Collapse?

US inflation accelerated in the 1960s, lost competitiveness, ran fiscal deficits and BOP deficits.

US debts (liabilities to foreigners) accumulated and exceeded US gold stock at $35/ounce - Triffin Dilemma.

US monetary policy no longer “fits” rest of world.

The “unholy trinity” - a country cannot at once have (1) pegged rates, (2) free capital movements, and (3) independent monetary policy.

Post Bretton Woods Period, 1973-date

“Limited Anarchy”

A mixture of free floating, managed floating, pegged rates, currency boards, and movements toward monetary union.

Slow realization that monetary independence is not a license to have any monetary policy.

Volatile monetary policy, with differences in fiscal policies, technological changes, resource discoveries, … ⇒ volatile exchange rates that may impede trade and capital flows.

Countries need to plan and coordinate with other countries to maintain exchange rates with limited volatility.

Despite the desire for exchange rate stability, more countries allow their countries to float in the 1990s.
Exchange rate arrangements in the 90s

The need for rules in the international monetary system

- **Without rules**
  - Countries can use the international monetary system to gain an unfair trading advantage (by picking undervalued rates)
  - Countries can use a pegged rate system to “export” excess monetary expansion (inflation) to partner countries
  - Countries that have undisciplined monetary and fiscal policies can create exchange rate volatility that undermines international trade and capital flows among all countries

- **With rules**
  - The international monetary system can be a resource that promotes trade and capital flows for all countries
  - The international monetary system can promote efficient allocation of capital worldwide
Arguments for fixed versus floating exchange rates

✦ The case for floating exchange rates
  » Monetary policy autonomy: No external constraint on domestic monetary policy (policy independence)
  » Symmetry: Between the United States and other countries, between deficit and surplus countries
  » FX rates as automatic stabilizers: No need for active policy intervention, FX rates move continuously toward equilibrium

✦ Related arguments
  » Small FX changes can be hedged
  » Profitable speculation will be stabilizing
  » Historically, pegged rate has not constrained policy makers
  » Bigger changes under peg make hedging cost high
  » No reserves needed

 Arguments for fixed versus floating exchange rates

✦ The case for against floating exchange rates
  » Policy discipline: greater under pegged rates, abandoning the peg invites uncoordinated fiscal and monetary policies
  » Destabilizing speculation: without a peg, speculators create excessive volatility
  » Injury to international commerce: from FX volatility
  » Uncoordinated economic policies: more likely with float
  » Greater policy autonomy is an illusion: benefits of autonomy may be low, especially if policy changes are anticipated

✦ Related arguments
  » Floating invites loss of policy restraint, loss of discipline
  » Floating invites vicious circles: inflation-devaluation spiral
  » No real benefit from floating - FX changes primarily nominal
The theory of optimum currency areas

✦ One central bank ⇒ one money ⇒ one monetary policy
✦ What is the optimal number of central banks, moneys and monetary policies for an economic region?
  » Efficiency cost of changing money
    ◆ 1 central bank - very high efficiency
    ◆ 1,000 central banks - very low efficiency
  » Tailoring monetary policy to a region
    ◆ 1 central bank - low efficiency, one policy for the whole world
    ◆ 1,000 central banks - higher efficiency, policies for small regions
✦ Conclusion: pick “N” central banks to optimize “efficiency / tailoring” trade-off

Criteria for designing currency areas: Regions A and B

✦ One central bank and one currency where:
  » High labor and capital factor mobility within region
  » Business cycles are in phase (no need for multiple monetary policies)
  » Trade / GDP is high; need for capital flows high
  » LOGIC OF ABOVE: No need to have exchange rate between A & B to accommodate different business conditions in A & B, because factors move or fiscal policies shift to speed adjustment

✦ Two central banks and two currencies linked by adjustable peg or float when:
  » Factors are immobile between countries
  » Business cycles are out-of-phase (two money policies useful)
  » LOGIC: Need an exchange rate to act as an elastic buffer when other links (factor mobility) between A and B are unavailable
The path to EMU

♦ Origins with EFTA, EEC, EC, EU in 1950s (Chap 11)
♦ 1979 - European Monetary System (EMS)
  » A cooperation arrangement among 8 EU nations to fix
    European cross exchange rates within limits
  » Initially, a failure - 11 realignments from 1979-1987
  » Then 5 years of no realignments
  » Mid-1992 & 1993 - serious crisis, large realignments, UK
    drops out, bands widened for Italy
  » Crisis puts future of EMU in serious doubt

The path to EMU

♦ 1991 - Maastricht Treaty, sets EU on path to EMU
  » Convergence criteria
    ♦ Budget deficit < 3% of GDP
    ♦ Public debt < 60% of GDP
    ♦ Inflation within 1.5% of lowest 3 countries
    ♦ Long-term bond yield within 2% of lowest 3 countries
    ♦ No devaluation against other EMS countries for 2 years
  » If all criteria are met, then country can enter EMU
♦ 1992-1998
  » Countries make substantial progress on convergence, but
    very few actually (strictly) satisfy all criteria
  » Euro-fudge: May 1998, EU decides that countries making
    “substantial progress toward convergence” are accepted
Benefits and Risks to EMU

Benefits of EMU
- 11 countries share one money and one central bank
- One money ⇒ No Euro exchange risk or transaction costs
- Promotes capital mobility, price competition around EMU
- Scale economies - one large European capital market

Risks of EMU
- EMU is economic and monetary union, not political union so countries retain national sovereignty on many issues
- What if shocks are uneven? Suppose Spain is in recession when German economy is accelerating? One monetary policy cannot fit all countries at all times
- Will process of making monetary policy lead to divisions?
- Limited scope for fiscal transfers to aid slower economies

Summary on International Currency Experiences

Exchange rate system is a critical national choice
- Choice is not simply fixed vs. floating, many variations
- Countries decide by complex process of looking at trade flows, capital flows, synchronization of business cycles, flexibility of goods prices, factor mobility, etc.
- Countries desire exchange rate that permits international competitiveness in trade, and low volatility to reduce risks

The international monetary system reflects the various exchange rate systems and rules of conduct
- Rules are essential so that the international monetary system is not used by some countries to disadvantage others
- The system has gone through major changes through the 20th C
- EMU is a major experiment: Countries give up their separate monetary policies to capture the benefits of a common currency