Exchange Rate Regimes

15.012 Applied Macro and International Economics

Alberto Cavallo

February 2011
Class Outline

• Fixed vs Flexible Exchange rates
  – Advantages and Disadvantages
  – Mixed regimes: crawling peg, dirty floating

• The International Monetary System

• Optimal Currency Areas
  – The Euro
<table>
<thead>
<tr>
<th><strong>FIXED</strong></th>
<th><strong>FLEXIBLE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disadvantages</strong></td>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td>Difficult to adjust to imbalances</td>
<td>ER adjusts to shocks and imbalances</td>
</tr>
<tr>
<td>Vulnerable to speculative attacks</td>
<td>Less vulnerable to speculative attacks</td>
</tr>
<tr>
<td>Monetary policy ineffective</td>
<td>Monetary policy effective</td>
</tr>
<tr>
<td>May need to raise interest rates or cause recession to defend the ER</td>
<td>No need to raise interest rates or cause recession to defend the ER</td>
</tr>
<tr>
<td><strong>Advantages</strong></td>
<td><strong>Disadvantages</strong></td>
</tr>
<tr>
<td>Stable ERs $\rightarrow$ facilitates Trade and Investment</td>
<td>Volatile ERs and prices $\rightarrow$ uncertain future</td>
</tr>
<tr>
<td>Credibility to fight inflation and reform</td>
<td>Harder to control or reduce inflation</td>
</tr>
<tr>
<td>Fiscal policy effective (higher rates, attracts dollars, increase in MS to avoid appreciation leads to more expansion)</td>
<td>Fiscal policy ineffective (higher rates, attracts capital, currency appreciates)</td>
</tr>
</tbody>
</table>
Monetary and Fiscal Policy

• Flexible E-rate → monetary policy is more effective
• Fixed E-rate → fiscal policy is more effective
  – Why? ↑ G → ↑IS → ↑i → attracts foreign capital → CB must buy the extra dollars & print local currency to maintain E → so also expansionary monetary policy → doble effect on Y (fiscal + monetary)
• Still, when choosing an E-rate regime, the discussion is mostly about monetary policy
  – Fiscal policy takes longer to have effects (lags)
  – In theory fiscal may be effective with fixed-e rates, but countries that introduce fixed regimes usually have no ability (tax or borrowing capacity) to have expansive fiscal policy at all
Range of E-Rate Regimes

• Dollarization: using foreign currency (eg. Ecuador)
• Currency Board: Fixed E-rate + 100% reserves
• Fixed E-Rate
• Crawling Peg: series of announced devaluations
• Managed “Dirty” Floating: within +/- bands
• Flexible (floating) E-rates
Fixed vs Flexible

• If you peg, against which currency? Dollar, Euro?
  – The “trade stability” argument suggest fixing against the currency of a large trading partner (if it is a stable currency)

• Some countries choose fixed rates not for stability or credibility, but to pursue an “undervalued” E-rate policy → promote exports
  – Trying to impact Real E-rate
  – Disadvantage? → inflation (prices catch up)

• Who can really use Flexible E-Rates?
  – Countries with credibility on the use of monetary policy → no history of mismanagement and inflation
Flexible E-rates and Inflation Targeting

• Countries with flexible e-rates can gear their monetary policies towards “inflation targeting” (IT)
  – Examples: New Zealand, England, Sweden, Canada, Chile, Brazil, Israel
    CB sets a “target” rate of inflation and adjust policy to match it
  – Important to have credible announcements
  – Since the recent financial crisis \( \rightarrow \) CBs are focusing increasingly on output and financial stability
Short History of the International Monetary System

• 1880s-WWI : Gold Standard
  – Every country at fixed e-rate with gold. Price stability, surge in worldwide trade.
• WWI-1940s: Interwar Gold-Exchange & Dirty Float
  – WWI → countries printed money → later, returning to old parity was too hard (too much contraction needed). Some like UK did it. Other countries pegged to a mixture of gold and foreign exchange. Overall, failed attempts to restore credibility of the gold standard.
  – 1930s & Great Depression → most countries abandoned their pegs
• 1945-1971: Bretton Woods
  – Dollar pegs to gold & other countries peg to the dollar.
  – US plays central role: monetary policy affects all other countries
  – 60’s Dollar depreciation → countries request gold → US lost gold reserves → in 1971 Nixon has to close “the gold window” (the dollar floats)
Short History of the International Monetary System

• 1970s: Floating Exchange rates, Oil Shocks and Inflation
• 1979: ERM in Europe, eventually the Euro in 1999
• 1980s/90s:
  – Volker and a strong dollar → 1985 Plaza Accord → dollar starts to depreciate → 1987 Louvre Accord
  – Developed countries: free or managed floating
  – Developing countries: fixed-exchange rates for stability and credibility
Present and Future

• Today, many countries officially have “free floating” regimes, but intervene actively to avoid swings in E-rates → need to balance between E and inflation

• Success or failure of the Euro can have a strong impact on the future of the international monetary system
Optimal Currency Areas

• Mundell (1961)
• A single currency makes more sense if:
  – Countries have more trade between themselves
  – Subject to similar shocks (not asymmetric)
  – Labor/Capital can move freely between them
  – There is a fiscal mechanism to help struggling countries and compensate for the lack of country-level monetary policy
The Euro

• ERM 1979-early 90s
  – Managed float among European countries
  – German Mark is the reference currency in practice
  – 1990 Germany reunification → higher rates in Germany to avoid inflation → UK in recession → UK cannot expand money supply (fixed E-rate) → has to leave ERM in 1993
  – So ERM bands were enlarged (+/-15%)
Economic Integration

• Border controls scaled back or eliminated
• Standardization of regulations
• National procurement (government purchases)
• Harmonization of value-added taxes
• Services
  – Deregulation of financial markets
  – Rights of establishment and marketing across borders
Maastricht 1991

• Maastricht Criteria to join monetary union:
  – **Inflation**: no more than 1.5% above the average inflation rate of the lowest 3 inflation countries in the EU
  – **Interest rates**: the long-term rate should be no more than 2% above the average of the 3 countries with the lowest inflation
  – **Budget deficit**: no more than 3% of GDP
  – **National debt**: no more than 60% of GDP
  – **Exchange rates**: currency within the normal bands of the ERM with no re-alignments for at least 2 years
The EU Countries

16 in the Euro:
France, Germany,
Italy, Austria, Spain,
Benelux, Portugal,
Ireland, Finland,
Greece, Slovenia,
Cyprus, Malta, Slovakia

Opted out of Euro:
Sweden, Denmark,
UK

Not in EU:
Iceland, Switzerland,
Norway
The Euro

• January 1\textsuperscript{st} 1999
• Countries adopt the Euro and cede monetary policy to the European Central Bank
• ECB mandate: price stability (not E-stability)