Economics of European Integration

Lecture # 9

Monetary Integration I

Spring Semester 2009

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Why Studying History?

- Monetary union is the controversial end of a long process. History helps understand.
- Since paper money was invented, Europe's monetary history has been agitated. Each bad episode carries important lessons.
- Before paper money, Europe was a *de facto* monetary union. Understand how it worked helps understand how the new union works.

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Metallic Money

- Under metallic money (overlooking the difference between gold and silver) the whole world was really a monetary union.
- Previous explicit unions only agreed on the metal content of coins to simplify everyday trading.

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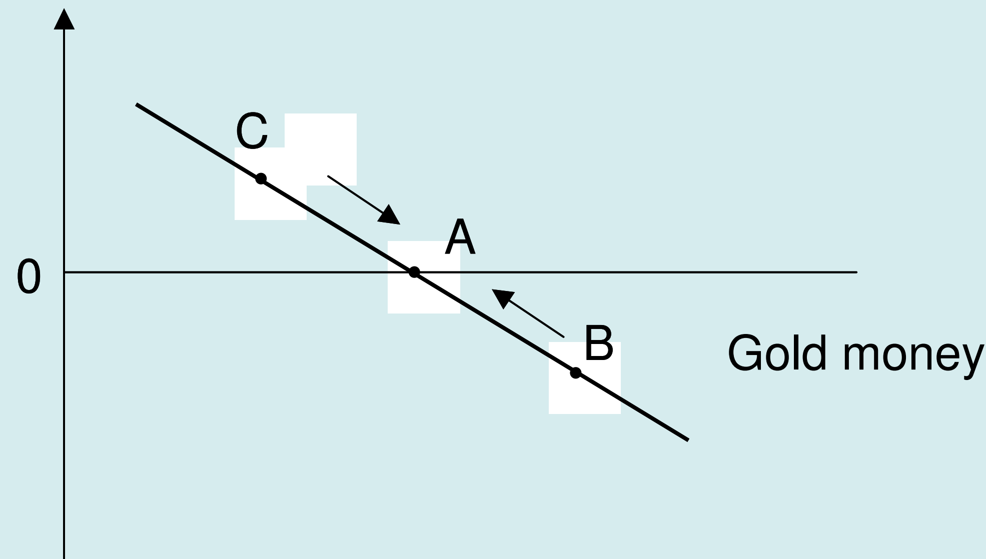
The Gold Standard and Hume's Mechanism

- Hume's mechanism implies an automatic change in the money stock to achieve balance of payments equilibrium.



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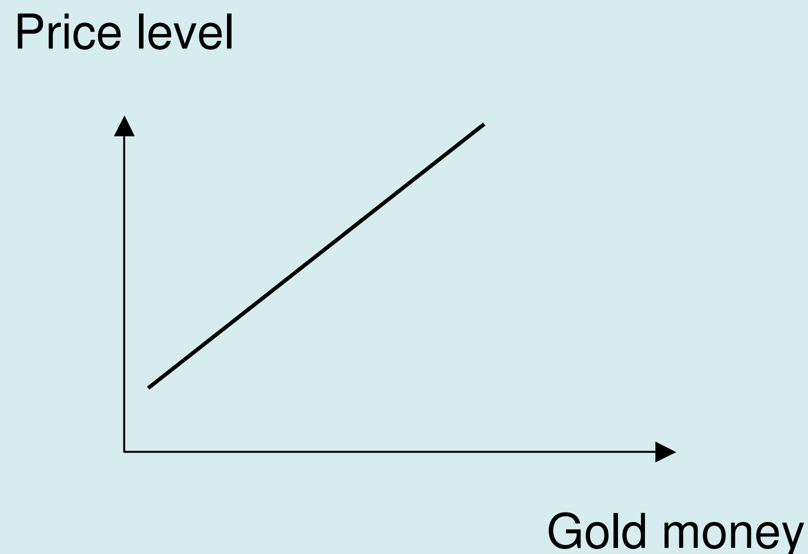
The Gold Standard and Hume's Mechanism: The Trade Account

- Money determines the price level (in the long run).



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The Interwar Period: The Worst Of All Worlds

- Paper money starts circulating widely.
- Yet the authorities attempt to carry on with the gold standard but:
  - no agreement on how to set exchange rates between paper monies
  - an imbalanced starting point with war legacies
    - high inflation
    - high public debts.

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The Interwar Period: Three Case Studies

- The British case: a refusal to devalue an overvalued currency breeds economic decline.
- The French case: devaluation, under-valuation and beggar-thy-neighbour policies, until others retaliate and the currency becomes overvalued.
- The German case: hyperinflation, devaluation and, finally, evading the choice of an appropriate exchange rate by resorting to ever-widening non-market controls.

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Lessons So Far

- We need a system, one way or another.
- The gold standard – monetary unions – delivers automatic return to equilibrium, but at the cost of booms and recessions.
- No agreement leads to misalignments, competitive devaluations and trade wars.
- Agreements require ‘rules of the game’, including a conductor.

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European Postwar Arrangements

- An overriding desire for exchange rate stability:
  - initially provided by the Bretton Woods system
  - the US dollar as anchor and the IMF as conductor.
- Once Bretton Woods collapsed, the Europeans were left on their own:
  - the timid Snake arrangement
  - the European Monetary System
  - the monetary union.

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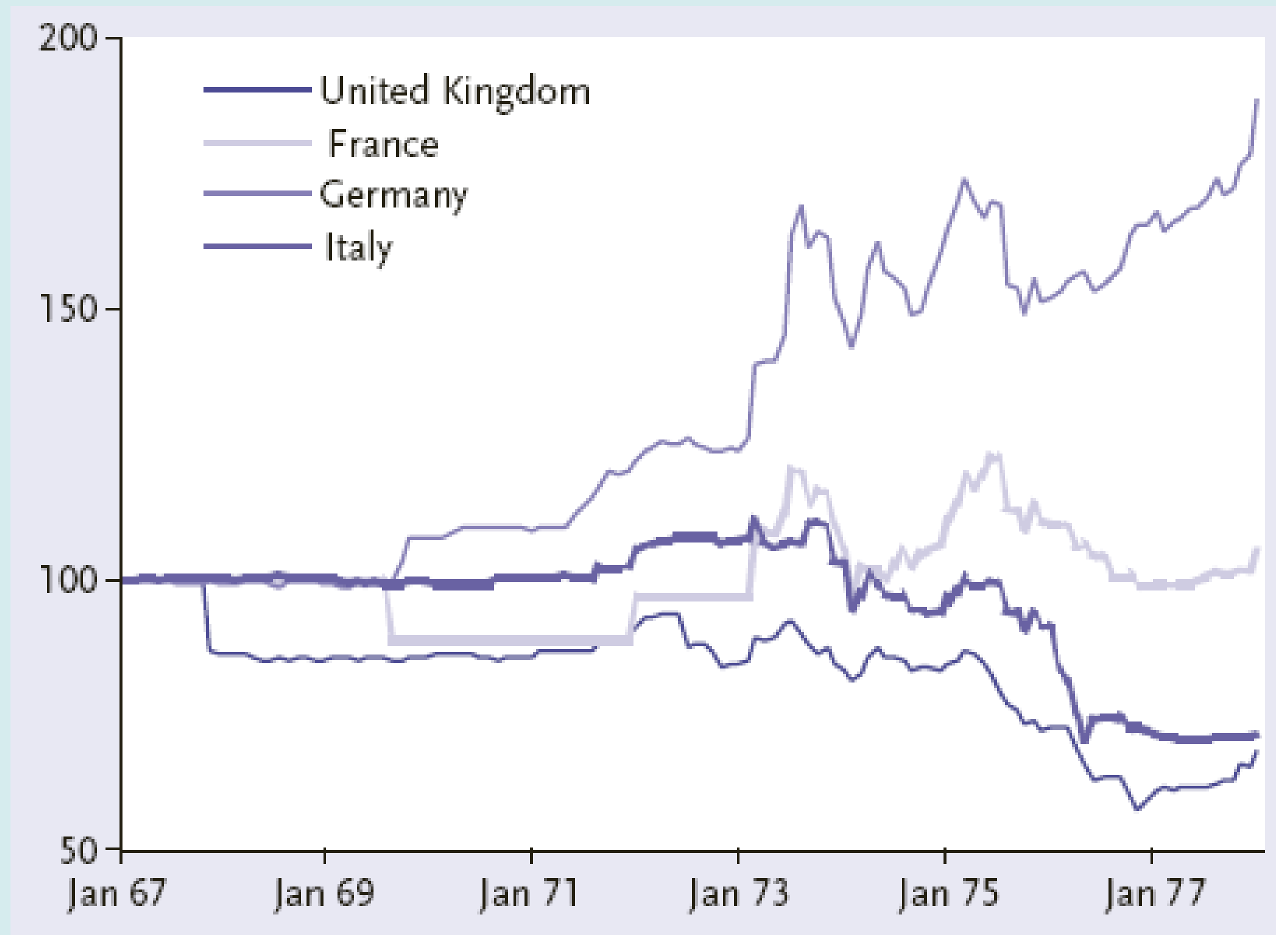
The Bretton Woods System Collapse

- Initial divergence.



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The Snake Arrangement

- Agreeing on stabilizing intra-European bilateral parities.
- No enforcement mechanism: too fragile to survive.

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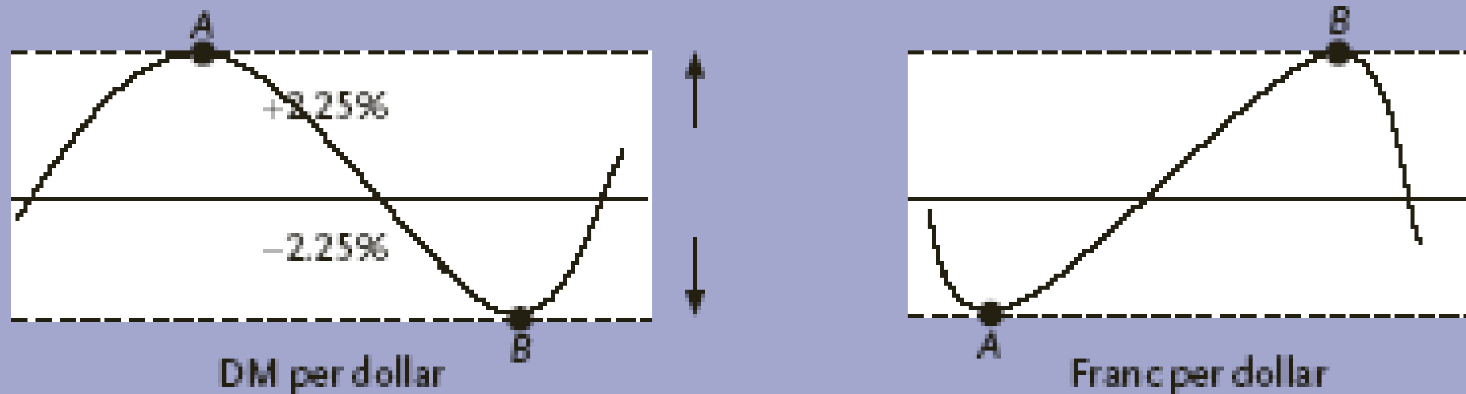
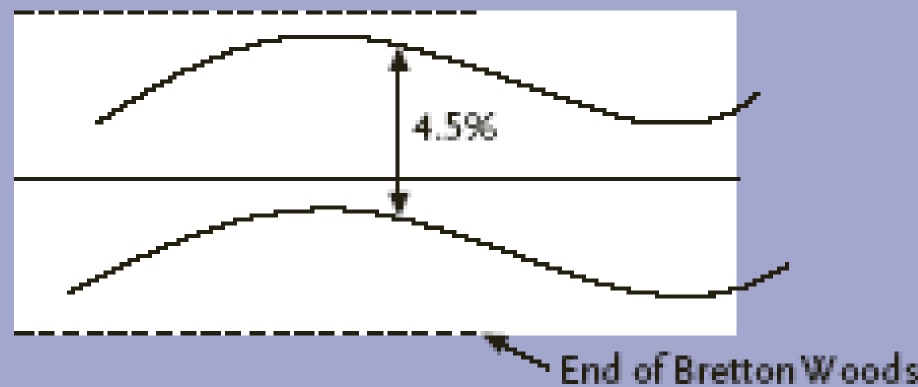
The European Snake

1. Without the Snake



2. The Snake in the tunnel



SOURCE: IMF.

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The EMS: Super Snake

- Complements bilateral exchange rate commitments with a support mechanism.
- Allows for prompt realignments to avoid misalignments.
- Emergence of the Deutschemark as the system's anchor.

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Lessons From History

	Gold Standard	Inter-war	Bretton Woods	EMS	EMU
Long-lasting misalignments must be avoided	✓		✓	✓	
Systems need to be built coherently	✓		✓	✓	✓
Policy misbehaviour must be ruled out					✓
Systems must be robust				✓	✓
Any monetary system needs a conductor	✓		✓	✓	✓

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The Question and The Answer

- The question: what to do with the exchange rates:
  - viewpoint of an individual country, in contrast with Chapter 13 which looks at systems
  - underlines the principles to evaluate the merits of a monetary union.
- The answer: there is no best arrangement:
  - a matter of trade-offs.

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Three Basic Principles

- Long term: neutrality of money.
- Short term: non-neutrality of money.
- Interest parity condition.

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Long Term: Neutrality of Money

- In the long run, money, the price level and the exchange rate tend to move proportionately.

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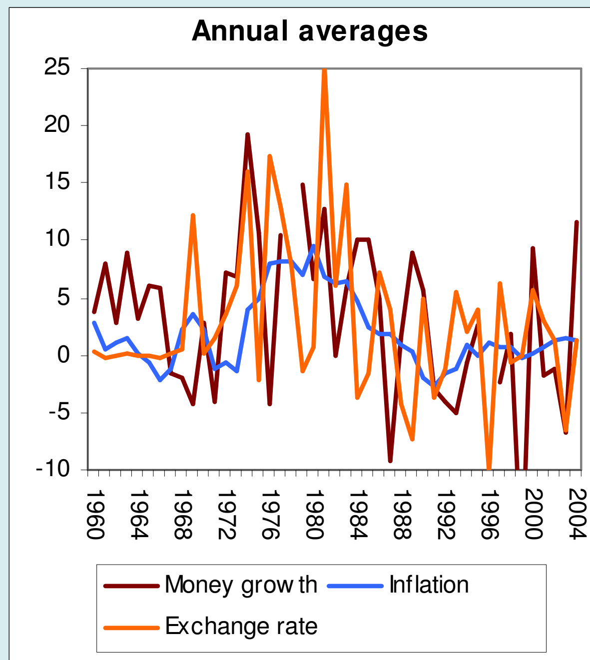
Long Term: Neutrality of Money

Comparison between France and Switzerland

Growth rate in France less growth rate in Switzerland



Year to year:
Nothing really visible

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Long Term: Neutrality of Money

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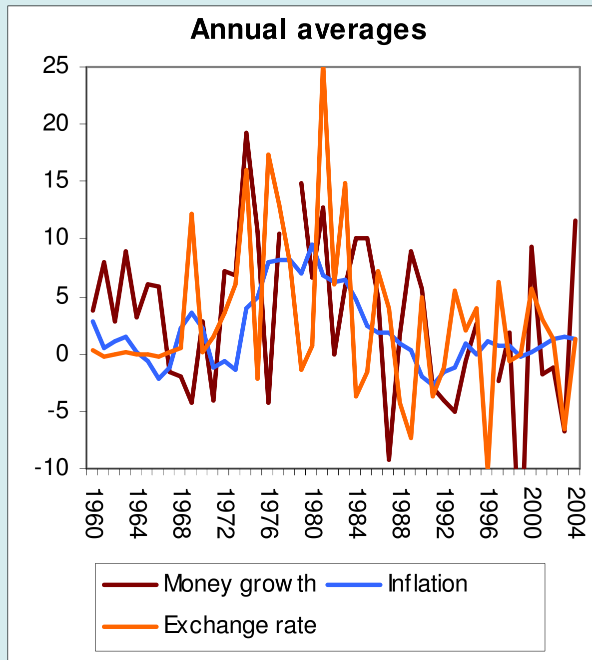
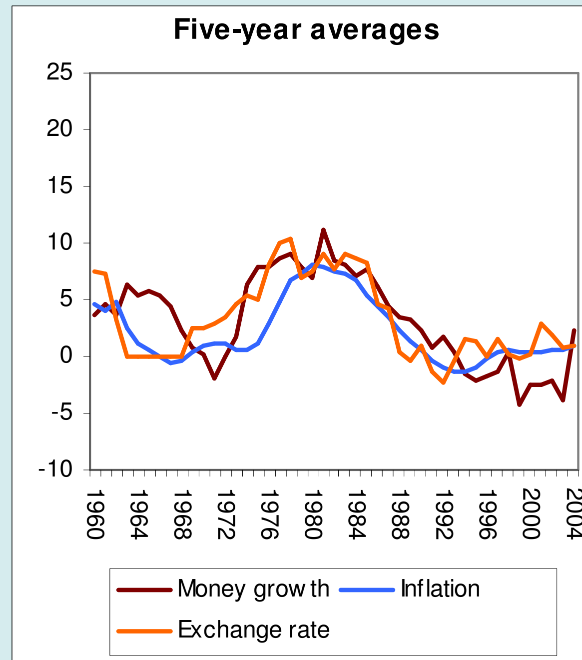
Growth rate in France less growth rate in Switzerland





Five-year averages: Something emerges

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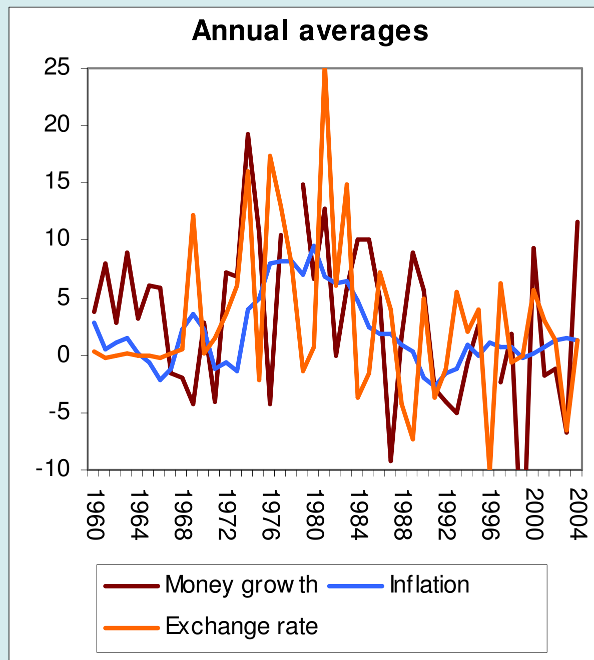
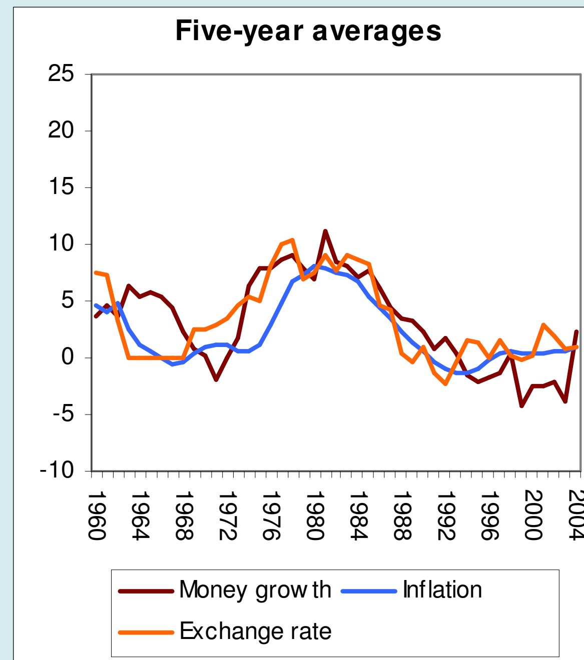
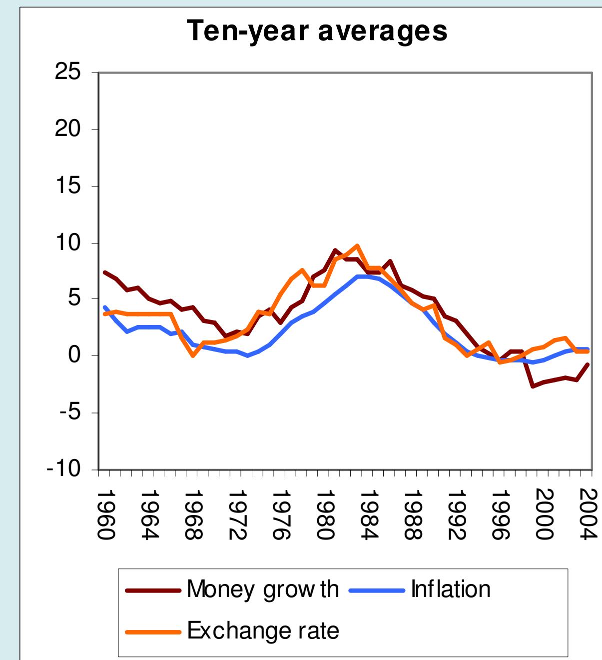
Long Term: Neutrality of Money

Comparison between France and Switzerland

Growth rate in France less growth rate in Switzerland







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PPP: An Implication of Long Term Neutrality

- The real exchange rate:
  - defined as $\lambda = EP/P^*$
  - PPP: E offsets changes in P/P*
  - so λ is constant.
- Equivalently: $$\frac{\Delta E}{E} = \frac{\Delta P^*}{P^*} - \frac{\Delta P}{P}$$
- Many caveats, though.

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PPP: An Implication of Long Term Neutrality

France and Switzerland: averages 1951-2004

Average money growth: France less Switzerland	2.5
Average inflation: France less Switzerland	2.4
Average appreciation CHF vs. FRF	3.0

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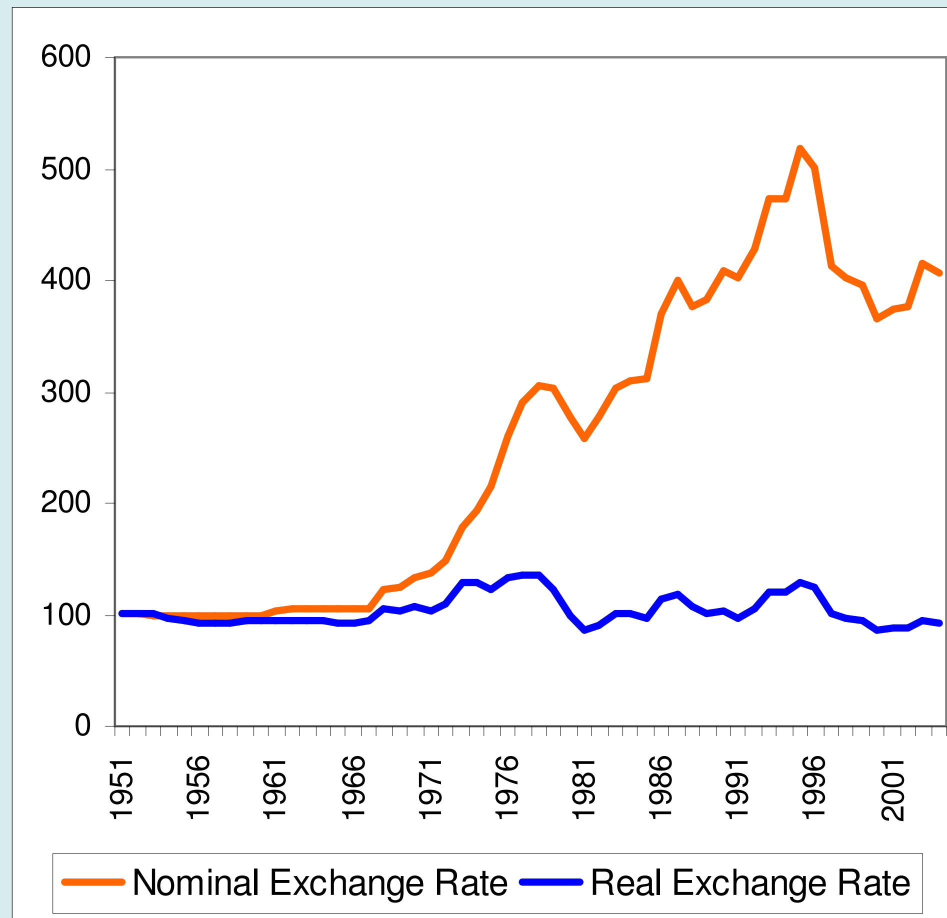
PPP: An Implication of Long Term Neutrality

Germany and the UK (1951-2004)



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Caveat: The Balassa-Samuelson Effect

Average annual changes *vis-à-vis* the Eurozone
(1993-2005, % per annum)

	Czech Rep.	Hungary	Poland	Slovak Rep.
Real appreciation	4.4	3.4	2.9	3.5
Inflation differential	3.6	10.3	8.7	4.2
Nominal appreciation	0.8	-6.9	-5.8	-0.7

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Short Term Non-Neutrality of Money

- From AD-AS: the short-run AS schedule.
- So monetary policy matters in the short run.
- Channels of monetary policy:
  - the interest rate channel
  - the credit channel
  - the stock market channel
  - the exchange rate channel.

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Exchange Rate Regimes and Policy Effectiveness

- Fixed exchange rate: no independent monetary policy:
  - money is endogenous.

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Exchange Rate Regimes and Policy Effectiveness

- Fixed exchange rate: no independent monetary policy.
- Flexible exchange rate: no effect of fiscal policy:
  - the exchange rate offets fiscal policy effects.

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Exchange Rate Regimes and Policy Effectiveness

	Monetary policy	Fiscal policy
Fixed exchange rate	Ineffective	Effective
Flexible exchange rate	Effective	Ineffective

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When Does the Regime Matter?

- In the short run, changes in E are mirrored in changes in $\lambda = EP/P^*$: P and P* are sticky.
- In the long run, λ is independent of E: P adjusts.

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When Does the Regime Matter?

- In the short run, changes in E are mirrored in changes in $\lambda = EP/P^*$: P and P^* are sticky.
- In the long run, λ is independent of E: P adjusts.
- If P is fully flexible, the long run comes about immediately and the nominal exchange rate does not affect the real economy.
- Put differently, the choice of an exchange rate regime has mostly short-run effects because prices are sticky.

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What's On The Menu?

- Free floating.
- Managed floating.
- Target zones.
- Crawling pegs.
- Fixed and adjustable.
- Currency boards.
- Dollarization/euroization.
- Monetary union.

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The Choice of an Exchange Rate Regime

- The monetary policy instrument:
  - can be useful to deal with cyclical disturbances
  - can be misused (inflation).
- The fiscal policy instrument:
  - can also deal with cycles but is often politicised
  - can be misused (public debts, political cycles).

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The Choice of an Exchange Rate Regime

- Exchange rate stability:
  - freely floating exchange rates move 'too much'
  - fixed exchange rates eventually become misaligned.

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The Old Debate: Fixed vs Float

- The case for flexible rates:
  - with sticky prices, need exchange rate flexibility to deal with shocks
  - remove the exchange rate from politicisation
  - monetary policy is too useful to be jettisoned.

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The Old Debate: Fixed vs Float

- The case for fixed rates:
  - flexible rates move too much (financial markets are often hectic)
  - exchange rate volatility: a source of uncertainty
  - a way of disciplining monetary policy
  - in presence of shocks, always possible to realign.

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The New Debate: The Two-Corners Solution

- Only pure floats or hard pegs are robust:
  - intermediate arrangements (soft pegs) invite government manipulations, over or under valuations and speculative attacks
  - pure floats remove the exchange rate from the policy domain
  - hard pegs are unassailable (well, until Argentina's currency board collapsed…).

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The New Debate: The Two-Corners Solution

- In line with theory:
  - soft pegs are half-hearted monetary policy commitments, so they ultimately fail.

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The Two-Corners Solution and The Real World

- Fear of floating:
  - many countries officially float but in fact intervene quite a bit.
- Fear of fixing:
  - many countries declare a peg but let the exchange rate move out of official bounds.

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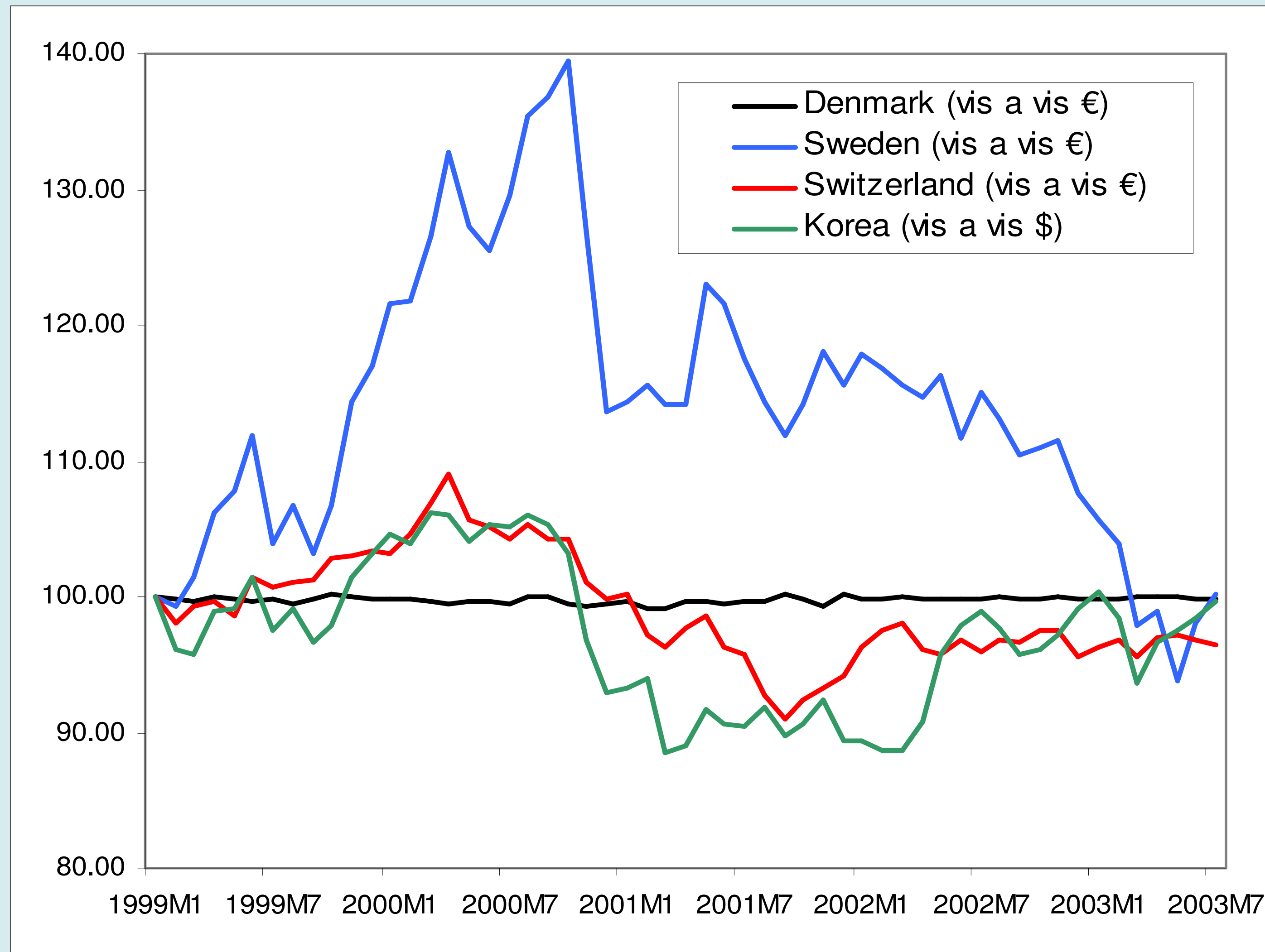
Fear of Floating



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The Two-Corners Solution and The Real World

- Fear of floating is deeply ingrained in many European countries.
- Fear of fixing partly explains the disenchantment with the EMS and some reluctance towards monetary union.

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Conclusions

- A menu hard to pick from: trade-offs are everywhere.
- All of this takes the view from a single country.
- Systems involve many countries and rest on agreed upon rules, including mutual support.
- Since the end of Bretton Woods, there is no world monetary system.
- This leaves room for regional monetary systems. Enters Europe's experience.

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