EC 312 International Economics 2003 Handout No. 10

Monetary Union and the Euro Question

Content:

- Monetary Union Basics- distilled mainly from de Grauwe
- Some Aspects of the British dilemma – based mainly on the 1998 While Paper and the Five Tests

Monetary Union - Commonality with issues about Pegging ERs –Agenor, 2000 Ch 4

- **Size** and **degree of openness** of the economy: the higher the share of trade in output, the higher the costs of exchange rate volatility, the more likely is a small country to follow a pegged exchange rate regime.
- Level of **inflation:** a country maintaining a rate of inflation that is higher than that of its trading partners needs to maintain a flexible exchange rate.
- Degree of **price** and **wage flexibility:** the more rigid real wages are, the greater the need for exchange rate flexibility to respond to external shocks.

Continued

- Degree of **financial development:** if financial markets are poor and thin, a flexible exchange rate regime may lead to large fluctuations in the exchange rate.
- Degree of **credibility of policymakers:** the weaker is the **anti-inflation reputation** of the central bank, the stronger the case for pegging the exchange rate in order to build confidence that inflation will be controlled.
- Degree of **capital mobility:**
  - ➔ the more open the economy is to capital movements, the more difficult it is to defend and maintain a fixed exchange rate regime.

Continued

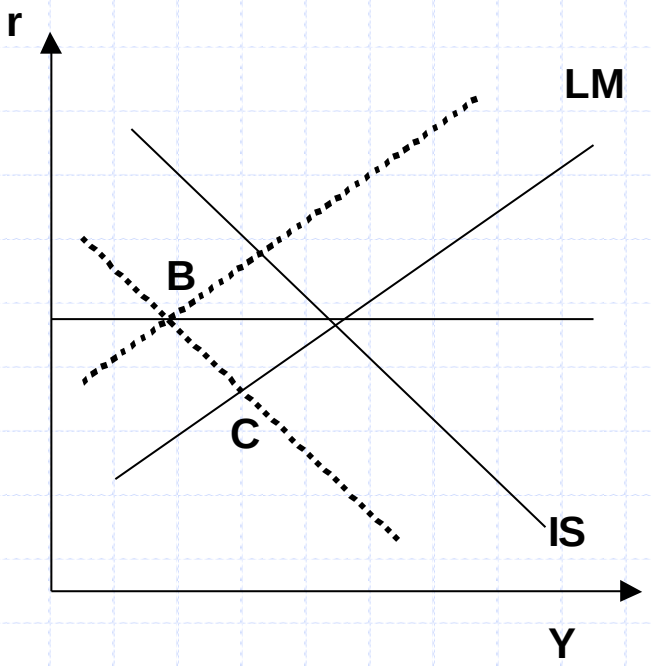
- **Open-economy trilemma** (Obstfeld, 1998):
  - a country cannot simultaneously maintain fixed exchange rates and an open capital market while pursuing a monetary policy geared toward domestic economic objectives.
  - The more important the exchange rate is as a policy goal, the more constrained monetary policy is in pursing other policy objectives.

Example: Foreign (real) Output Shock

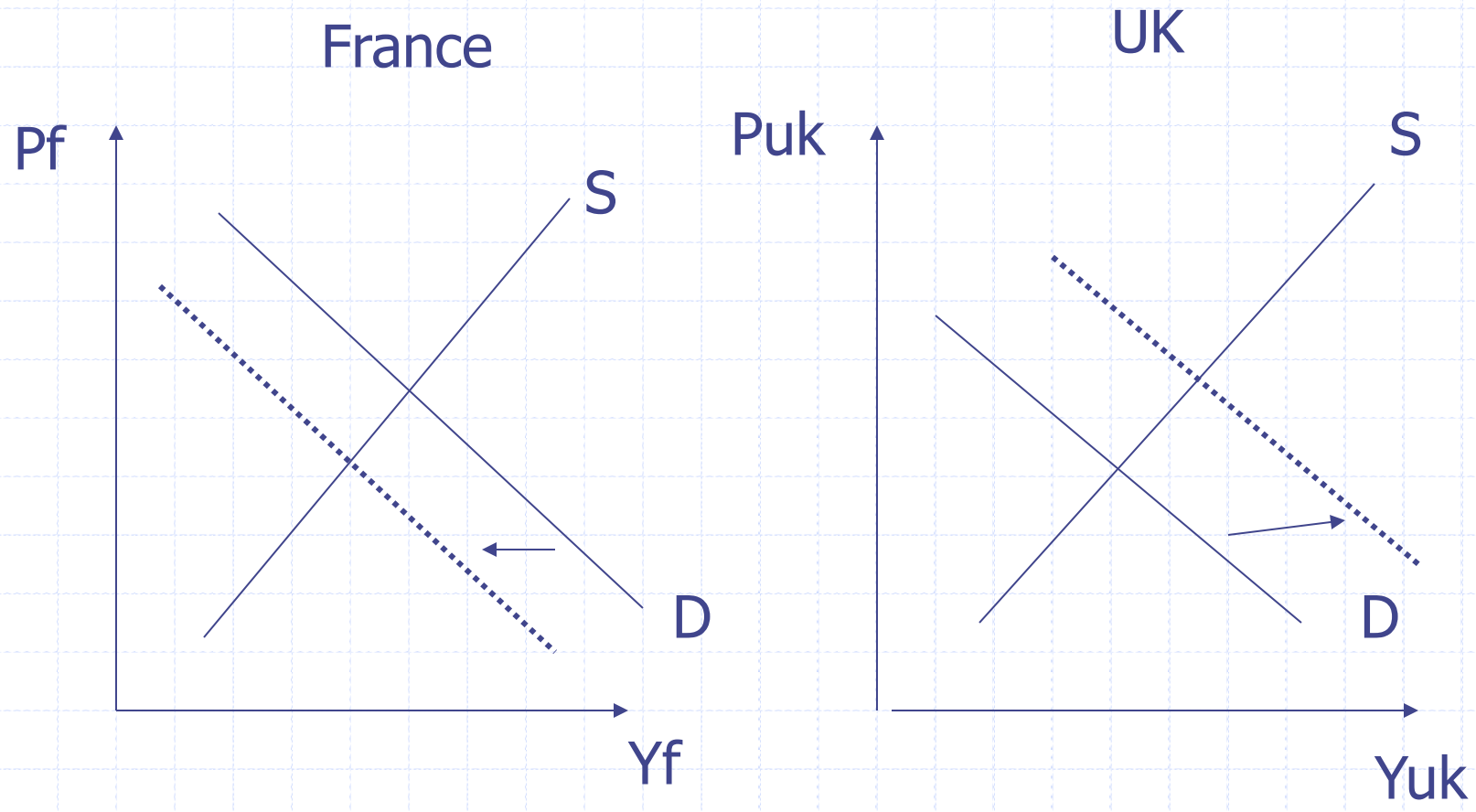
Lower foreign demand for our goods results in shift in IS curve. With FIXED ER there is also an induced reduction in Money Supply and LM – new equilbrium is at B

With a flexible rate the new equilibrium is at C (i.e far more insulation from the shock)

Ditto a Monetary Shock



Basic Adjustment in a Union (e.g. Mundell AER 1961 and McKinnon AER 1963)



Effects

Demand Shifts Shown are

(1) Lower "Y" in France implying Higher Unemployment

(2) Higher "Y" in UK

(3) Current Account Deficit in France and a Surplus in UK (assuming we start from Balance)

Probably (4) Worse Fiscal Deficit in France and Better Fiscal Position in UK

Possible Adjustment Mechanisms

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1] Wage Flexibility i.e. Lower Wages in France etc (shifts Supply curve to right in France and left in UK)

2] Labour Mobility i.e. Smaller Ls in France and Larger Ls in UK (gives some corrective upward pressure on Wages in France and vice versa in UK)

3] Inflation in UK and Deflation in France (again will move Supply curves in opposing directions)

(But Ineffective if Offset by Explicit Domestic Policy)

4]Exchange Rate Changes – Depreciation in France (Euro) and Appreciation in UK (£) – corrects the initial loss of demand in France IF a REAL devaluation is achieved.

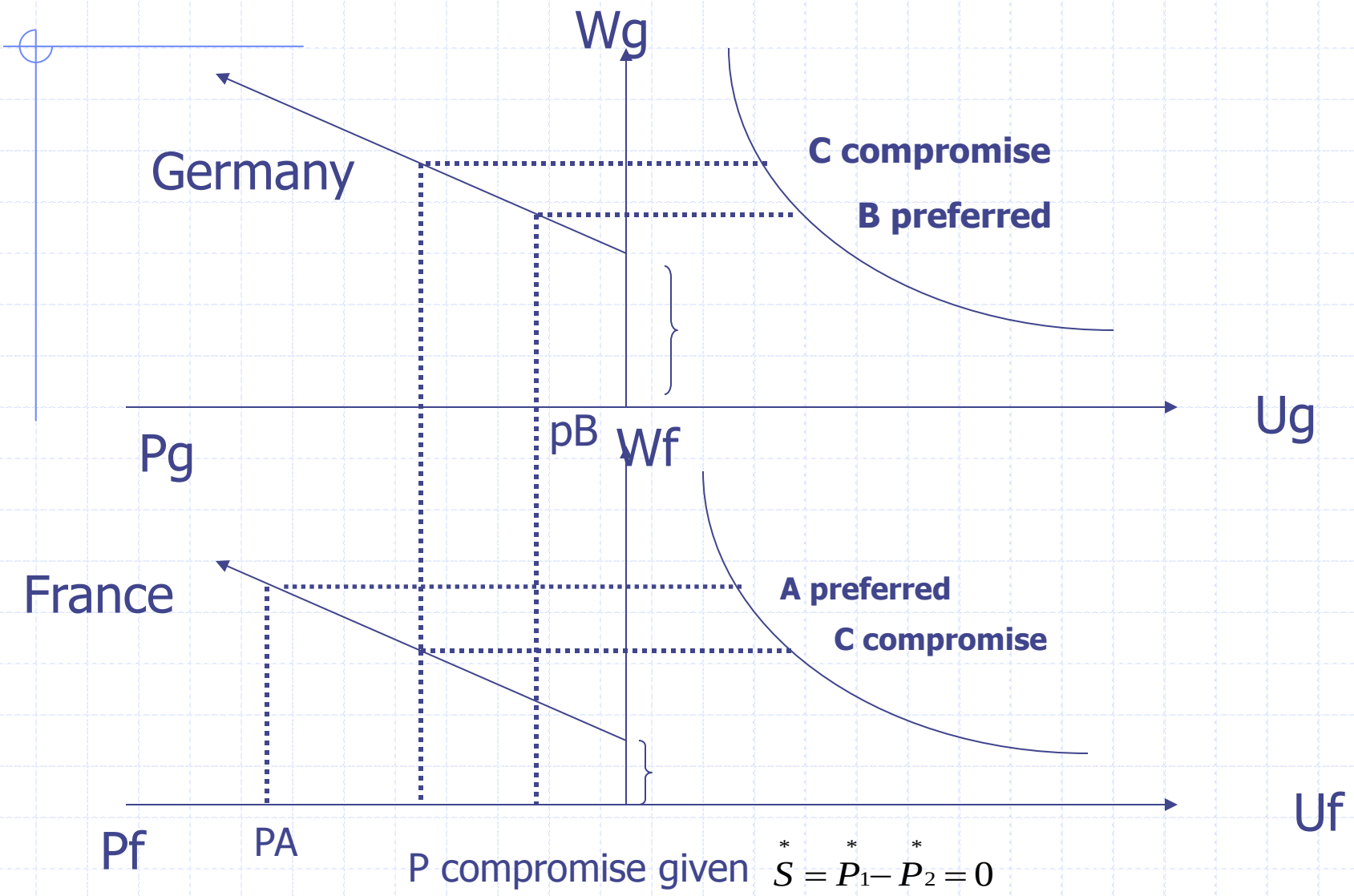
Some Basic MU Conclusions Follow from this Logic

Case for Single Currency is Good if 1] and 2] apply – preferably both

But IF Wages are Rigid and labour is Immobile between Countries the Fixed ER is likely to require a larger burden of Inflation for the expanding economy and Deflation & Unemployment for the Contracting Economy. Then freedom to change the ER looks like a more necessary instrument

McKinnon adds that in VERY Open economies, it is unlikely that ≙ ER will lead to any significant ≙RER (i.e.Pt/Pnt). This is because Pt will be a large element in the overall CPI and so will be highly likely to feed through quickly (via Wage demands) into higher Pnt and so to the overall price index. So it makes less difference whether the ER is unified with that of the other currency or not.

But MU Does require a compromised equilibrium IF Inflation Trade-Offs Differ



Implications

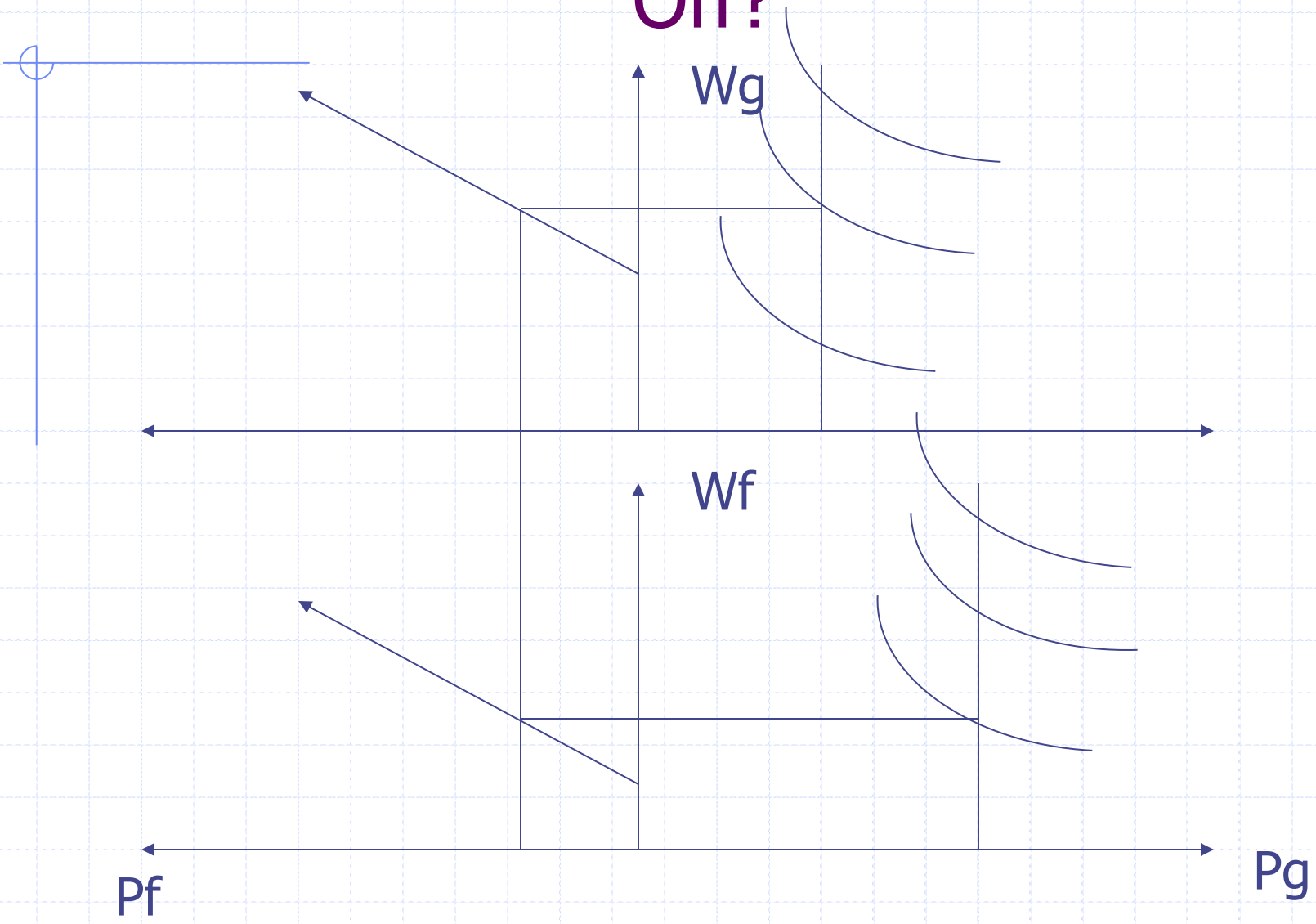
In the previous slide, the different (1) Wage:Price Relationships and (2) different Inflation:Unemployment trade-offs, Imply:

(a) the MU forces a compromise on both countries

(b) the higher productivity country enjoys higher wages at the compromised equilibrium

(c) one country has to live with higher Unemployment (than previously preferred)

What About the Longer-Term Trade-Off?



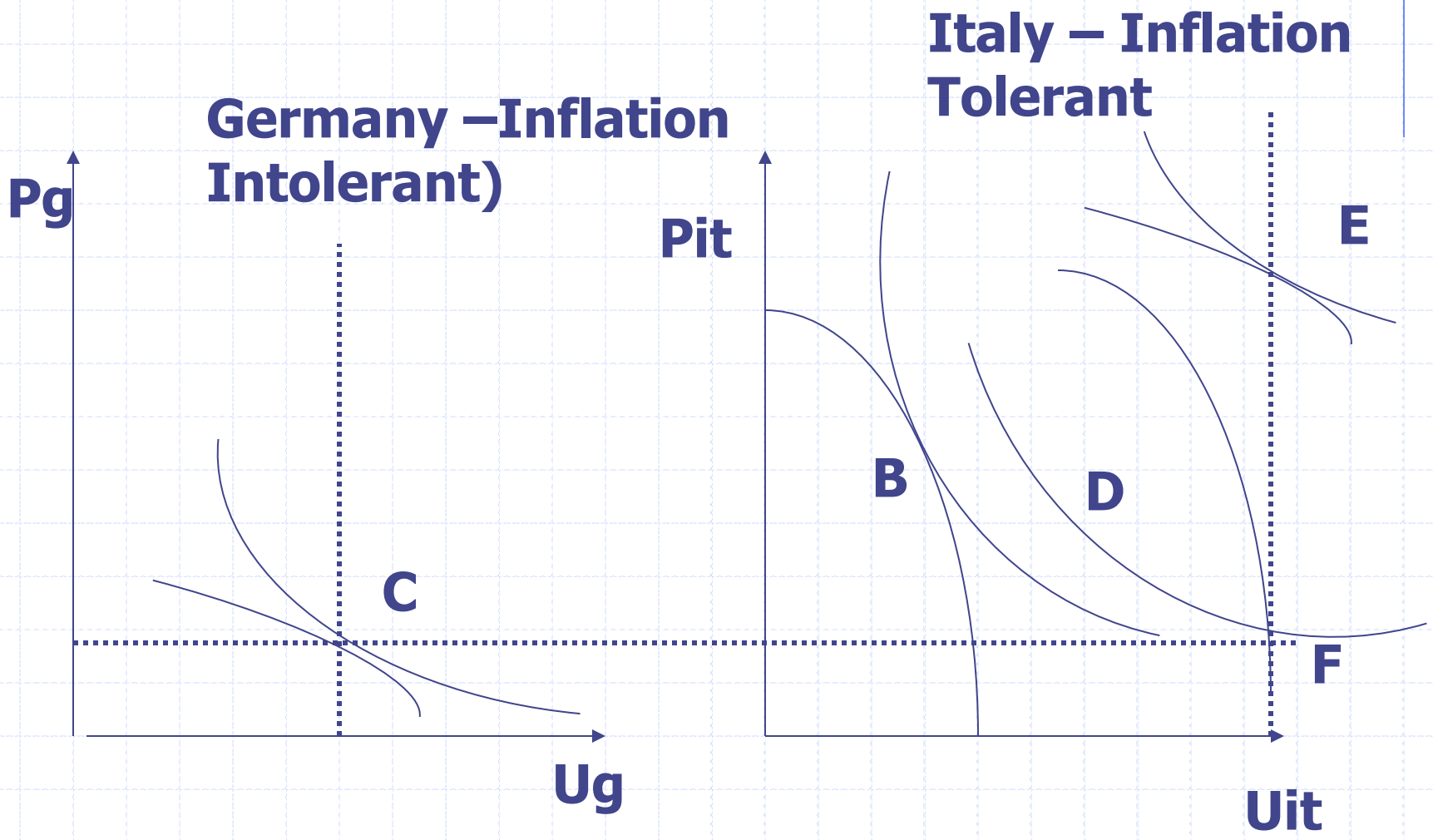
Implications

When $\overset{*}{S} = \overset{*}{P}_1 - \overset{*}{P}_2 = 0$

The higher productivity in one country still ensures higher wage growth while different "natural rates" ensure that unemployment rates also differ.

i.e structural performance differences between countries will not be eliminated just by MU. If large these can be a source of considerable political tension i.e. in determining the compromise inflation rate.

Considerations based on Time Inconsistency-Barro and Gordon



Choices for Italy

- Without MU, there is a possibility that commitment to Lower Inflation could move her from points such as B to points like F (I.e. converging on German inflation)
- But IS such as commitment credible
- With NO MU there is a strong incentive to drift to point such as D and then on up to E
- Full MU provides a far stronger signal of credibility to the commitment to achieve “F”

Some Interim Conclusions

1] Differences between Countries (e.g. in Productivity, Inflation Preferences etc) do NOT disappear with Monetary Union. If large these differences can greatly complicate the operation of an MU

2] Large initial differences in Inflation will be particularly problematic – see next slide

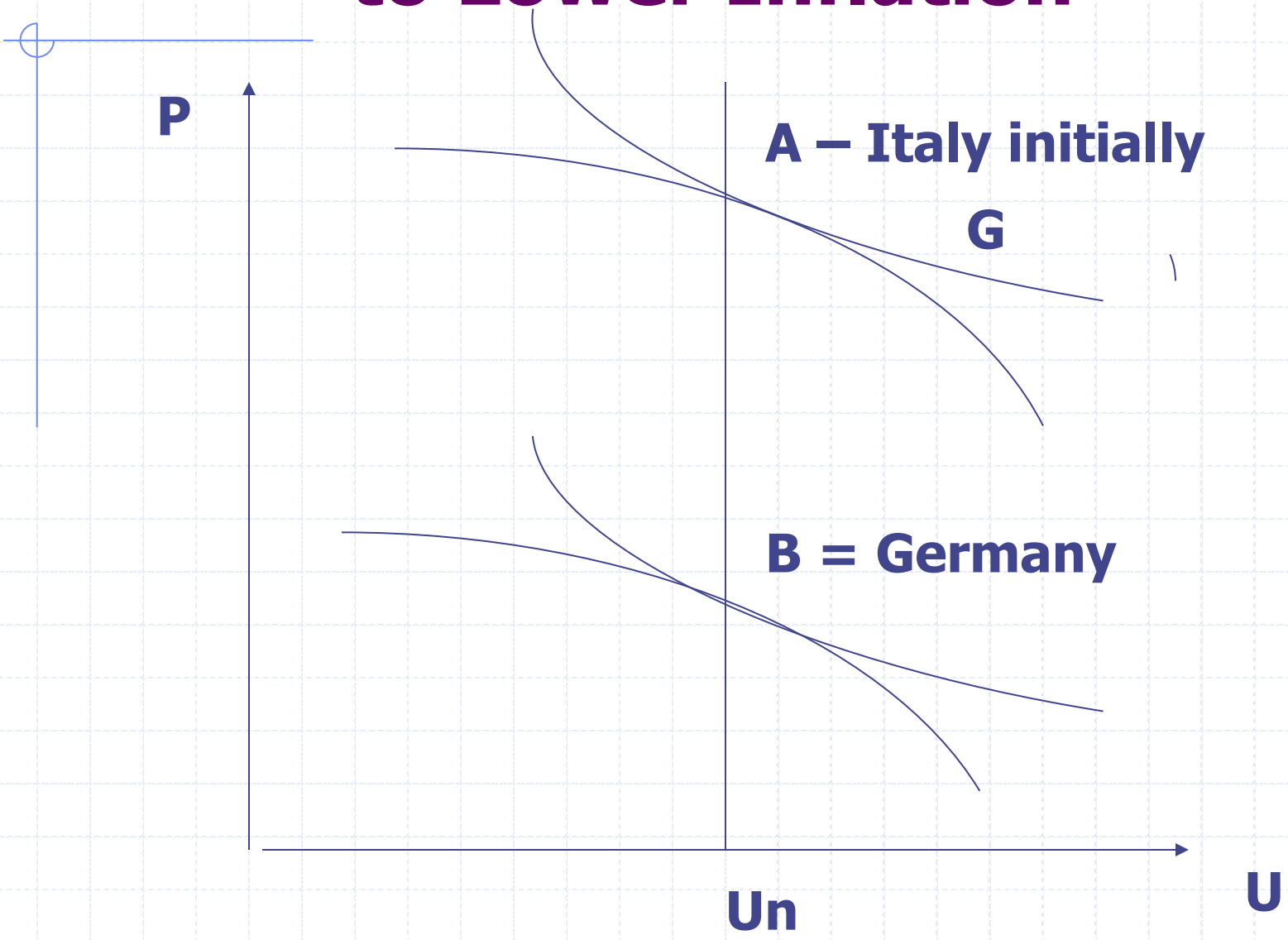
2] Even though Long-Term Effects of ER Depreciation are argued to have few permanent effects on Real variables (Vertical Phillips Curve) they may help to reduce the Short Term Pain of Adjustment especially when Prices and Wages are inflexible.

Continued

3] There is much debate about whether there is sufficient Wage and Price Flexibility and labour Mobility in Europe to meet the conditions for successful MU

4] MU works best is shocks to the area are symmetric across countries (e.g. this will happen when there is limited industrial concentration). Much argument about whether this condition is met

Costs of Achieving Commitment to Lower Inflation



Elements of the Problem for High Inflation Economy

- **The Move from A to B requires a route via points such as G**
- **But at G, Italian inflation is still higher than Germany's – so poor competitiveness for Italy given fixed "S"**
- **Also at G inflation expecations are higher – this would be expected to translate into higher interest rates (given UIP)**
- **If there is real cedibility about the fixed "S" capital should flow to Italy providing a induced increase in Monetary aggregates and upward pressure on "P".**
- **But Italy wants lower "P"**

Notes on Alternative Anti-Inflation Devices (Pegs & Monetary Targets)

- Agénor and Montiel (1999): under imperfect capital mobility, disinflation through a reduction in the nominal devaluation rate or a fall in the rate of growth of domestic credit are **not equivalent.**

  Choice between the **exchange rate** and the **money supply** as a nominal anchor depends on three main considerations:

- **degree of controllability** and the effectiveness of the instrument in bringing down inflation;
- **adjustment path** of the economy and the **relative costs** associated with each instrument;
- **degree of credibility** that each instrument commands, and its relationship with fiscal policy.

1.Controllability and Effectiveness

- Policymakers cannot control directly the money supply, but fixing the exchange rate can be done relatively fast and without substantial costs.
- When **money demand** is subject to large random shocks and **velocity** is unstable, the effectiveness of the money supply as an anchor is reduced.
- But an exchange rate peg will anchor the price level through its direct impact on **prices of tradables**.
- So fixing the exchange rate rather than the money stock may appear preferable.

2. Adjustment Paths and Relative Costs

- Money -based and exchange-rate-based stabilization programs differ significantly.

  Calvo and Végh (1993):
- Exchange-rate-based stabilization programs lead to an initial **expansion** and a **recession** later on.
- Money-based programs cause **initial contraction** in output.
- Former pattern: **boom-recession cycle** since credibility of the stabilization program is low and perceived as **temporary**.
- Agents, to take advantage of temporarily low prices of tradable goods, increase spending.

3. Credibility, Fiscal Commitment, and Flexibility

- Degree of credibility of the money supply and the exchange rate is important in choosing a nominal anchor.

  Credibility depends on:

- policymakers' ability to convey clear signals about their **policy preferences;**
- degree of controllability of policy instruments and the dynamic adjustment path of the economy, as discussed earlier.

Continued

- Public **observability** of the exchange rate as opposed to monetary and credit aggregates enhances the credibility of an exchange rate anchor.
- Money-based stabilization by an **immediate recession** may lose credibility rapidly, if the short-term output and employment cost is high.
- When the exchange rate is used as a nominal anchor, **residual inflation** in home goods prices may remain high combined with the expansion of aggregate demand, it may lead to a **real appreciation.**
- This directly weakens credibility.

Continued

- When lack of credibility is pervasive, the choice between money and the exchange rate may not matter; inflation will remain high regardless of the anchor.
- An exchange-rate rule is, however, more successful in reducing inflation if there is **some** degree of credibility; initial expansion and the upward pressure on the real exchange rate will be dampened.
- Exchange rate anchor may induce a higher commitment to undertake stabilization measures: **fiscal adjustment**.

Continued

- If there are doubts about the government's commitment to fiscal restraint, an exchange rate peg would also lack credibility.
- Végh (1992): ten exchange-rate-based programs aimed at stopping high chronic inflation.
- Seven of them were failures:
  - In two cases: failure was due to real appreciation of the currency following slow convergence of inflation, in spite of achieving fiscal balance.
  - In the remaining five: **failure to implement a lasting fiscal adjustment** was the main factor.

Finally: Inflation Targeting

Examples.

- **New Zealand Since 1990**
- **UK Since 1992**
- **SPAIN Since 1994**

Advantages Include:

- **The Flexibility To Respond To Domestic Considerations And To External Shocks**
- **Velocity Instability Matters Less - No Stable Money Demand Function Is Implied**
- **An Inflation Target Is Easily Understood And Easily Checked**
- **Enhanced Central Bank Accountability Avoids The Time Inconsistency Problem**
- **Political Pressures Are Sidelined**

Benefits

So far focus has mainly been on COSTS of MU. But the argument is often driven by considerations of benefits.

See Next Few Slides