

### Was the Bretton Woods system the best exchange rate arrangement?

#### Monetary and Financial History 2017

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#### Agenda



- Introduction
  - Eichengreen, Barry (1993): Epilogue: Three Perspectives on the Bretton Woods System. In: Bordo, Michael;
    Eichengreen, Barry (eds.): A Retrospective on the Bretton Woods Systems: Lessons for International
    Monetary Reform. University Press of Chicago. pp. 621-58.
  - Research Question
  - Methodology
- Main Questions
  - Impact of Bretton Woods in terms of performance and stability
  - IMF and Bretton Woods
  - Capital Controls and Breakdown of the system
- Conclusion
  - Lessons learned?

#### Introduction



- Books collects papers from 1991 NBER conference on Bretton Woods and International Monetary Reforms
- The Bretton Woods Agreement
- About the article
- Methodology
- Research Questions
  - o Differences in questions about Bretton Woods posed in the 70ies and 90ies
  - Differences in answers to similar question
  - $\circ$   $\;$  Implications of Bretton Woods for international monetary reform

# How Good Was the Performance of the Bretton Woods System?



Favourable Macroeconomic performance: Real and Financial Variables

- GDP in the G7 countries grew by 4.2% p.a.
- GDP growth since 1974 has averaged 2.2% p.a.
- Low output variability
- Real exchange rates least variable
- Real interest rates were exceptionally stable → lowest deviation of short-term interest rates

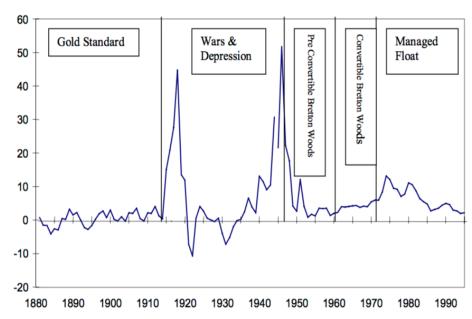
#### Macroeconomic Variables I



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Exchange Rate Volatility (1981-1995) % 60 Pre-Convertible Bretton Convertible Managed Wars & Gold Standard Float Depression 50 Bretton 40 Woods Woods 30 20 10 ٥ 1990 1880 1900 191 10 1920 1930 1940 1950 1960 1970 1980

95) \_\_\_\_\_ Inflation (1981-1995)

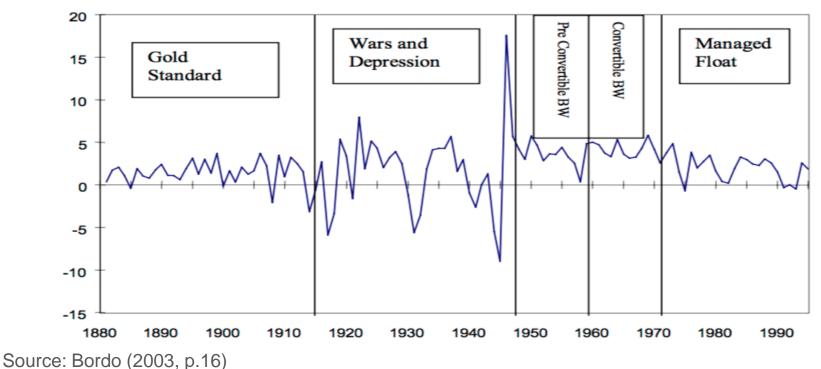


Source: Bordo (2003, p.15f.)

#### Macroeconomic Variables II



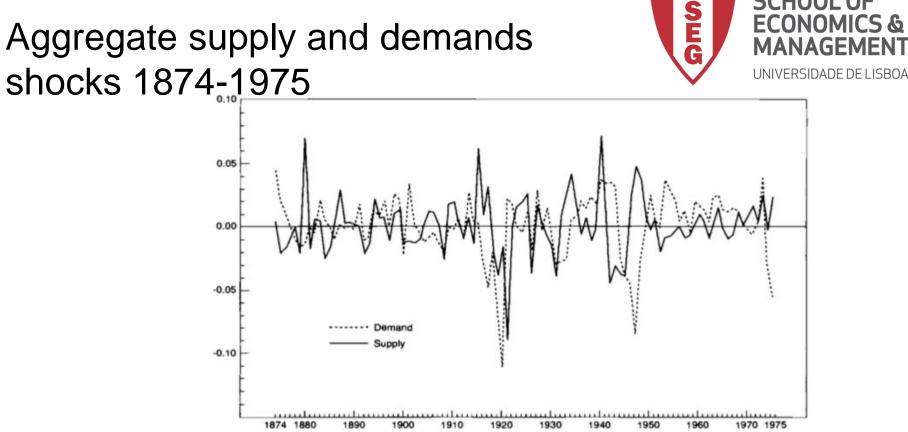
Real per Capita Income Growth (1881-1995)



#### Was the Stability of the Economic Environment Responsible for the Smooth Operation of Bretton Woods?



- Stability of economic growth incontestable
- Moderate supply and demand disturbances (shocks)
- However arguable due to the issue of causality



Source: Bordo and Eichengreen (1993, p. 629)

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#### Was the Smooth Operation of Bretton Woods Responsible for the Stability of the Economic Environment?



- Output stability as a result of formulation of monetary and fiscal policies
- Stable money growth rates for the G7 countries
- Exchange rate stability
- High variability of the growth of real public spending

#### Growth rates of money supply p.a.

	U.S.	Canada	Japan	France	Germany	Italy	U.K.
Gold standard (1881–1913)							
Mean	1.8	0.4	4.6	0	.6	.6	.3
Standard deviation	5.0	1.4	5.5	5.0	2.6	3.2	3.1
Grand mean	1.0						
Convergence	1.0						
Interwar (1919–38)							
Mean	.6	1.1	.5	6.4	1.3	3.6	.8
Standard deviation	8.6	4.7	9.7	8.5	10.1	6.2	4.7
Grand mean	2.0						
Convergence	1.7						
Bretton Woods (1946-70)							
Mean	6.3	6.0	17.3	11.5	12.8	13.3	3.2
Standard deviation	5.8	4.0	15.9	7.5	6.0	7.8	3.2
Grand mean	10.1						
Convergence	4.2						
Preconvertible Bretton Woods (19	94658)						
Mean	6.4	5.0	18.2	14.7	17.6	15.9	1.7
Standard deviation	8.3	3.9	18.5	7.2	5.6	10.5	2.9
Grand mean	11.4						
Convergence	6.0						
Postconvertible Bretton Woods (1	959–70)						
Mean	7.0	9.4	14.6	8.6	10.9	12.4	5.5
Standard deviation	1.5	4.3	2.5	6.6	4.7	2.0	2.9
Grand mean	9.8						
Convergence	2.5						
Floating (1974-89)							
Mean	8.6	11.0	5.7	8.8	5.7	13.4	13.5
Standard deviation	2.4	5.5	6.2	3.4	4.5	4.9	5.6
Grand mean	9.5						
Convergence	2.7						
Source: Bordo and Eicheng	green (1993, p	. 630)					



### Real Government Spending p.a. (%)



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	Real Government Spending Growth						
Gold standard (1881–1913)					_		
Mean	3.2	5.7	10.3	1.5	5.6	4.5	2.5
Standard deviation	9.3	13.4	31.2	5.4	9.3	2.4	.8
Grand mean	4.6						
Convergence	2.0						
Interwar (1919–38)							
Mean	1.3	.6	10.3	4.8	6.5	6.8	-3.1
Standard deviation	23.8	13.7	14.6	22.2	11.4	47.8	14.2
Grand mean	3.6						
Convergence	3.8						
Bretton Woods (1946-70)							
Mean	1.1	1.8	7.0	7.6	7.9	8.6	.2
Standard deviation	17.6	13.9	11.2	18.0	13.6	10.6	9.5

Source: Bordo and Eichengreen (1993, p. 630)

### What Was the Role of the IMF in the Operation of the Bretton Woods System?



- The IMF influenced economies through various channels:
- Provided "commitment technology"
- Benefits and costs of alternative courses changed
- Pecuniary incentives: two sides
- Future financial resources
- "Seal of approval"
- Acquisition and dissemination of information

### What Explains the Maintenance of Capital Controls?



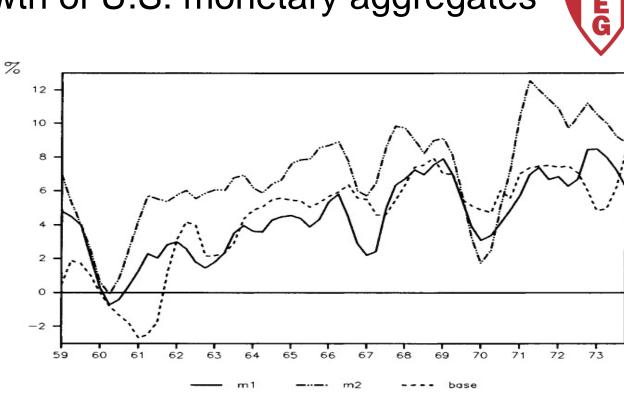
- Imported from WW II and maintained in Bretton Woods
- Allowed divergent national policies and exchange rate stability
- Capital controls increased the cost of financial arbitrage
- Effectiveness reduced along time, financial agents found ways of bypassing it

## What Caused the Breakdown of Bretton Woods?



No single explanation, different causes led to it, mainly:

- Policy imbalances
  - U.S. excessive expansionary monetary policy
  - $\circ~$  Growth divergence between M2 and base
  - U.S. balance of payments deficits
  - U.S external liabilities surpassed U.S. monetary gold reserves
  - Dollar destabilization
- Flaws in the structure of the system
  - Risk of a gold run
  - Chance of a speculative attack on the dollar



#### Growth of U.S. monetary aggregates



Source: Bordo and Eichengreen (1993, p. 646)

#### **Conclusion I**



- What are the Lessons for the International Monetary Reform?
  - o Missing financial integration
    - "Convergence debate"
    - "The years of Bretton Woods inconvertibility (1946-58) confirm the feasibility of running a fixed rate system in the absence of convergence; at the same time they support those who argue that the maintenance of stable nominal rates in the absence of convergence can require capital controls and other expedients incompatible with reaping the full benefits of exchange rate stability" (Eichengreen 1993, 650).
  - Important factors: credibility-enhancing mechanisms and the rapid adjustment
  - International monetary reforms as part of a wider political and economic bargain

#### **Conclusion II**



- Is Bretton Woods the best exchange rate arrangement?
- Pros:
  - o Economic performance in real variables was good under Bretton Woods
    - GDP growth
    - Low output variability
    - Stable real exchange and interest rates
  - o More than just pegged exchange rates
    - Liberalized trade
    - Encouraged investment
    - Support unemployment
- Cons:
  - Causality is difficult to prove
    - Low aggregate supply and demand shocks
  - Limited financial integration due to Exchange Rate risk
  - Policy imbalance and Structure Flaws caused breakdown

#### References



Bordo, Michael D (2003): Exchange rate regime choice in historical perspective. NBER working paper series-working paper 9654.

Eichengreen, Barry (1993): Epilogue: Three Perspectives on the Bretton Woods System. In: Bordo, Michael; Eichengreen, Barry (eds.): A Retrospective on the Bretton Woods Systems: Lessons for International Monetary Reform. University Press of Chicago. pp. 621-58.

