

History of Economic Thought I

11: VI. The Age of Economics? (1)

Post-WWII Era

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Key points of this class

- Students will learn about the characteristics of "macroeconomics" and related fields established after World War II.
- Birth of academic divisions leading to the present day
- The Economics of the "American Century"
- From the heyday of so-called Keynesian Economics (Keynesian Economics) to its upheaval
- Milton Friedman as a challenger

Key Questions for this Class

- 1. Why did we have Bretton Woods?
- 2. Why did we have welfare state? Why was it called “Beveridge-Keynes coalition”?
- 3. What is Milton Friedman’s challenge, and why did he challenge?

Historical Background

- World War II (1939-1945)
 - unprecedented all-out warfare in history
 - Defeat of Fascism, Nazism, and Militarism
- Postwar Cold War (World War III) Structure
 - Conflict between the West, led by the U.S., and the East, led by the Soviet Union
- International economic system
 - Bretton Woods System (until 1971)
- Transformation of a Market Economy: "Keynes-Beveridge Coalition"
 - Increase in the size of government
 - U.S. Introduces Income Tax during Wartime
 - Establishment of the welfare state
 - Beveridge Report, United Kingdom (1944)
 - Introduction of macroeconomic policy management

Historical Background

- Postwar reconstruction
- Decolonization and Economic Development: The Rise of Asia, Africa, and Latin America
 - Bandung Conference (1955)
- International Organizations and Economic Aid
 - European Recovery Plan (Marshall Plan)
 - United Nations Development Programme (UNDP), United Nations Conference on Trade and Development (UNCTAD), World Bank, IMF
 - Aid Race in the Cold War

Keynes' Last Fight: The Road to Bretton Woods

- Bretton Woods, USA, 1944.
- Determined the framework for the international monetary system after World War II
 - creditor nation USA
- Keynes proposal:
 - Correcting the Deflationary Regime aspect of the Gold Standard: Policy Freedom
 - international central bank
- Harry Dexter White Proposal
 - Dollar-centered international monetary order: degree of exchange rate stability
 - IMF and World Bank
- Cf. Steil 2013

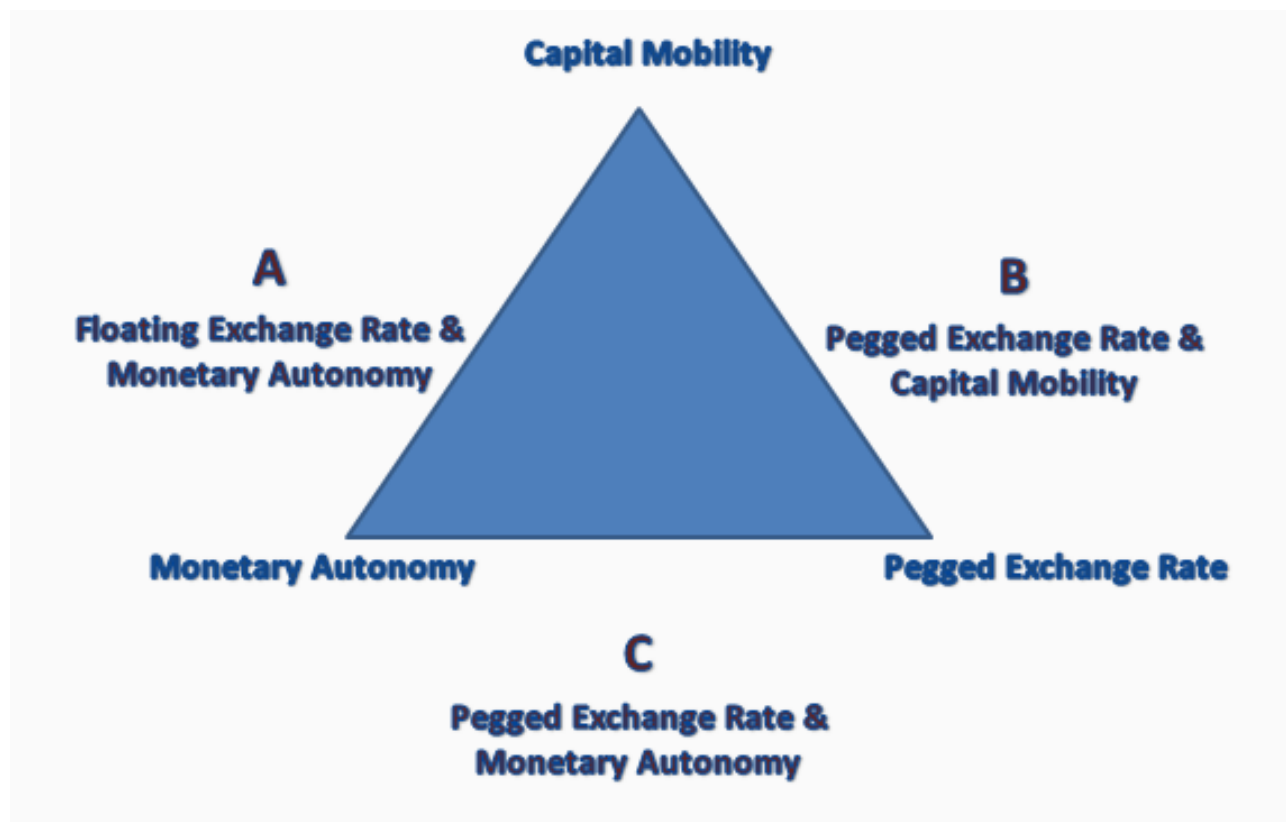


Bretton Woods System

- The "lessons" of the Great Depression: rapid exchange rate fluctuations and international capital flows
 - Nurkse 1944
 - The difficulty in getting the "lessons learned" right. True, fixed exchange rate system is the problem. However, it regulates capital movement.
 - Formation of "myths" in other areas: effectiveness of fiscal policies, regulations and controls
- Two policy goals: stability and freedom
- Fixed exchange rate system
 - Gold-dollar standard (Article 4.1): only dollars are convertible to gold. A kind of "gold exchange standard". Relaxation of restrictions stemming from the quantity of gold => to a later issue.
- Regulate international capital movement for exchange rate stability

The Trilemma of International Finance

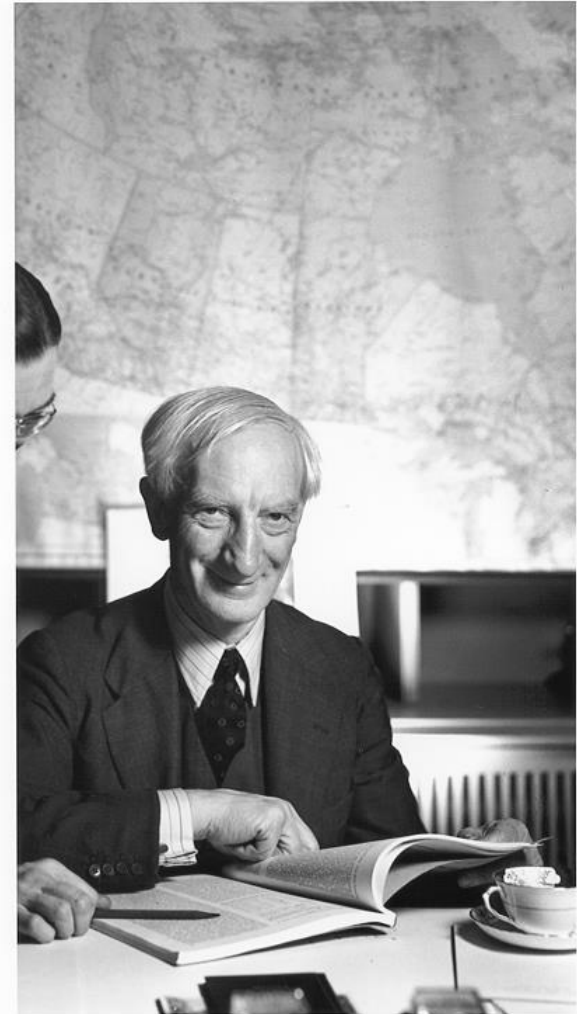
Impossible Trinity, or Trilemma



Lord William Henry Beveridge (1879-1963)

Oxford University graduate

- From the bureaucracy (Board of Commerce): research on unemployment issues
- President of LSE (1919-1937)
- *Unemployment: A problem of industry* (1909)
- *Unemployment*, Revised edition (1931)



Beveridge Report (1)

- Official name: Social Insurance and Allied Services
- Announced December 1, 1942
- Its Principles
 - The five great evils: want, disease, ignorance, Squalor and Idleness.
 - Want is the worst and most likely to become extinct
 - Social security as a means to end poverty
 - Purpose of Social Security: Guarantee of minimum income with respect to interruptions in income, loss of earning capacity, and special expenditures
- The premise
 - Child benefits, comprehensive health services, full employment

Beveridge Report (2)

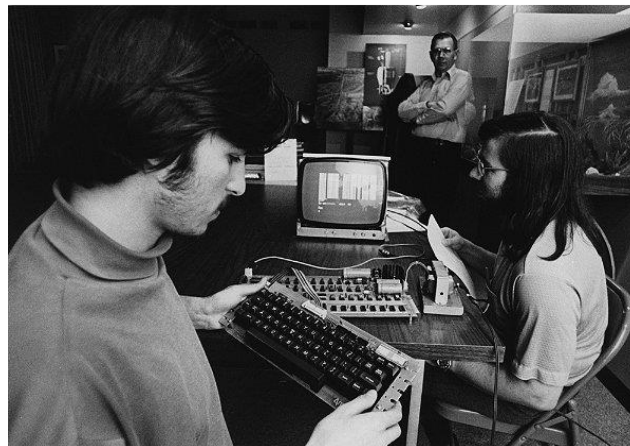
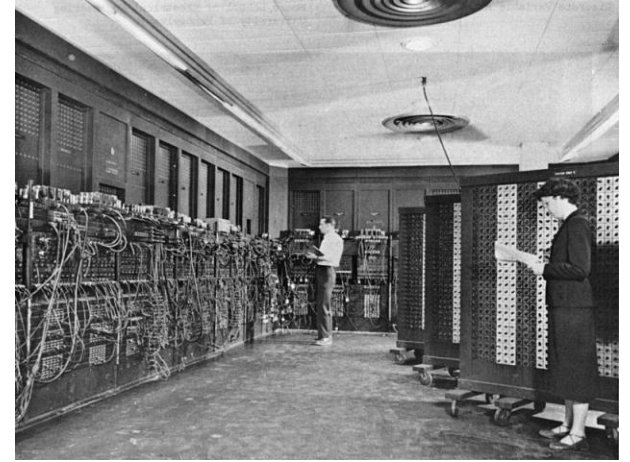
- Three-level classification
- (1) Primary means: social insurance for basic needs.
 - Mandatory Contribution Principles. Uniform benefits, uniform contributions, uniform administrative responsibility, appropriate benefit amounts, inclusiveness, etc. National Minimum Guarantee.
- (2) Secondary means: Public assistance for special cases.
 - Cash benefits from the treasury. Rigorous means test.
- (3) Encouragement of private savings as a complementary means.
 - The individual's willingness to act, opportunity, and responsibility must not be suppressed.

The Economics of the "American Century"

- 1. the Americanization of the world
 - Rapid development of the higher education system
 - Increase in college enrollment rates
 - GI Bill
 - Textbooks and journals
 - Practical, application-oriented economists
 - Policy Involvement
 - 1946: Passage of the Employment Act and establishment of the Economic Advisory Board
 - Quantitative, data-oriented
 - NBER
 - Government and military involvement
 - Mirowski 2002
 - international organization
- 2. the Globalization of the U.S.
 - The Role of Exiled Intellectuals Cf. Koser 1988

Development of computers

- The Computer
 - ENIAC (1946)
- Increased computation speed
- PC Revolution
 - Apple II: 1977



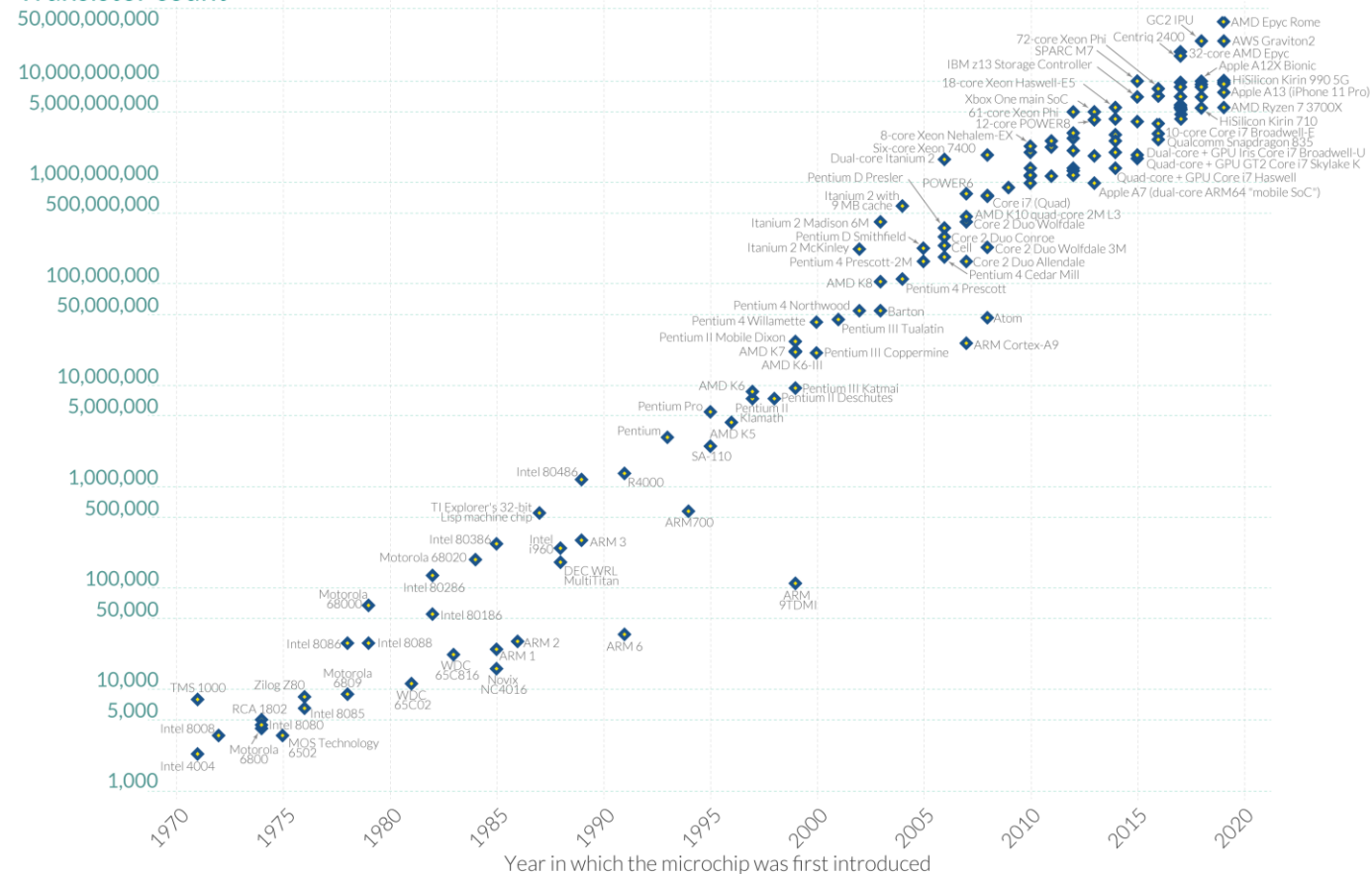
Moore's Law

Moore's Law: The number of transistors on microchips has doubled every two years

Moore's law describes the empirical regularity that the number of transistors on integrated circuits doubles approximately every two years. This advancement is important for other aspects of technological progress in computing – such as processing speed or the price of computers.

Our World
in Data

Transistor count



Data source: Wikipedia (wikipedia.org/wiki/Transistor_count)

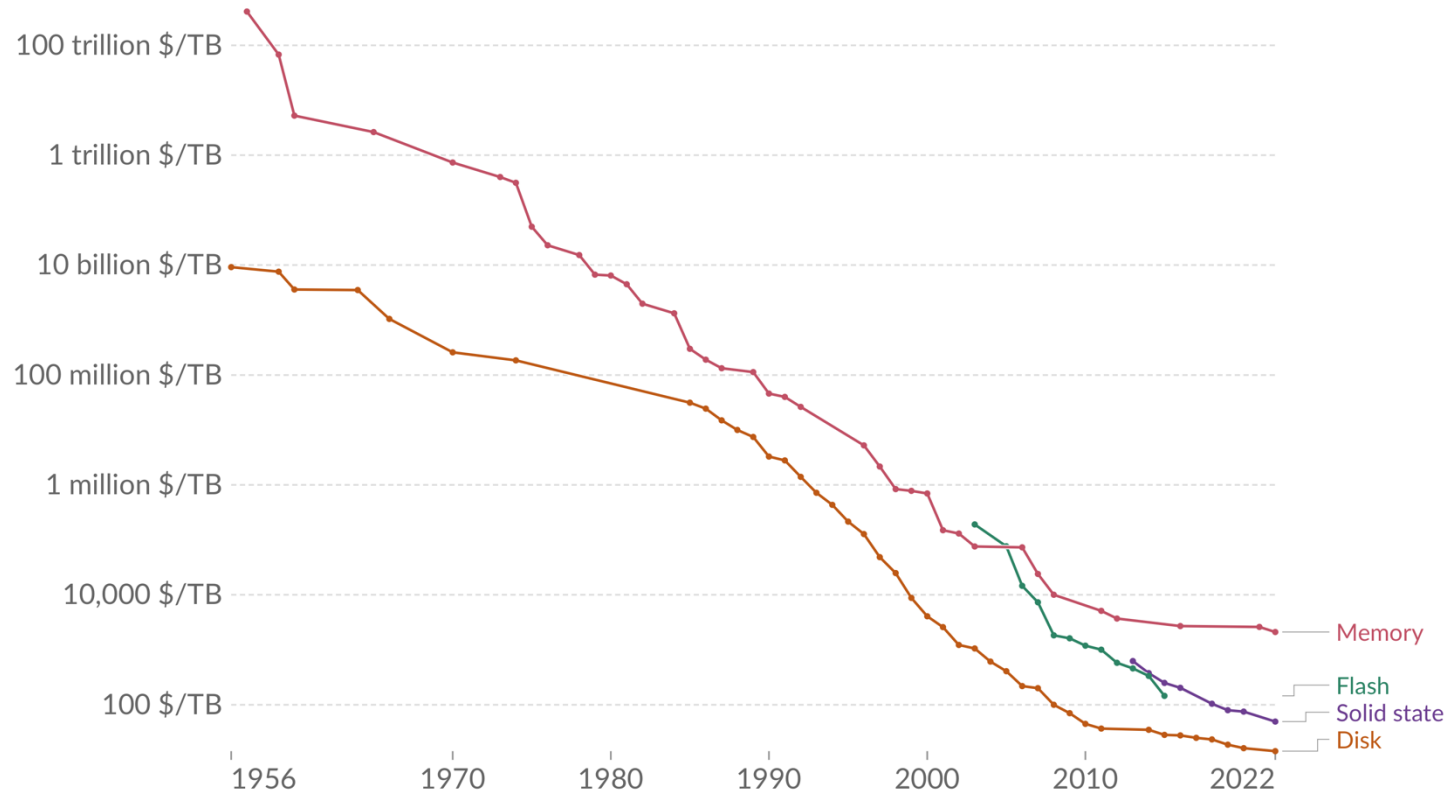
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Lower calculation costs

Historical cost of computer memory and storage

This data is expressed in US dollars per terabyte (TB). It is not adjusted for inflation.



Data source: John C. McCallum (2022)

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Note: For each year, the time series shows the cheapest historical price recorded until that year.

Economics after the "Revolution"

- *The Keynesian Revolution* (Laurence R. Klein)
- From a modern perspective, "revolution" may be questionable. Continuity and rupture.
- But to the people of the time, it was a "revolution". Economists after the Great Depression Cf. Parker 2005
 - Paul A. Samuelson famously said:
 - “*The General Theory* caught most economists under the age of 35 with the unexpected virulence of a disease first attacking and decimating an isolated tribe of South Sea islanders. Economists beyond 50 turned out to be quite immune to the ailment. With time, most economists in-between began to run the fever, often without knowing or admitting their condition.”
 - The exception is Alvin Hansen
- Milton Friedman's different recollections

Efforts to understand Keynes' *General Theory*

- What happened first: Development of concepts and terminology
 - Distinguishing between ex ante and ex post: what is the equality between savings and investment? Contributions of the Swedish School.
 - Marginal efficiency of "capital" \Rightarrow Marginal efficiency of "investment"
- 45-degree line analysis (Samuelson)
- The Bifurcation of American Keynesians and British Keynesians (Cambridge, Mass. vs. Cambridge, UK.)

British Keynesians

- Post-Keynesians
- Those who interpreted the Keynesian revolution literally
- Keynes' juniors at Cambridge University.
 - Richard Kahn, Nicholas Kaldor, Joan Robinson et al.
 - Skepticism about market economy, skepticism about capitalism: emphasizes instability and imperfections of market economy
 - Oriented toward planned and controlled economy
- Politically leftist. Involved in the British Labour government. Especially Kaldor.
- But like James Meade, there were other Keynesians in England.

Neo-Classical Synthesis

- American Keynesians: Samuelson, Robert Solow, James Tobin, Arthur Okun
- General equilibrium theory: simultaneous determination of general equilibrium for goods, assets, and labor markets
 - Hicks, Samuelson
- “Synthesis” of macro and micro: microeconomic foundations
 - Consumption function: Ando=Modigliani (Life-cycle), Friedman (Permanent Income)
 - Investment function: Dale Jorgenson (adjustment cost), Tobin (Q theory)
 - Liquidity preference function: Tobin (Portfolio Selection)
 - But what about the labor market?

IS-LM Model

- Other scholars have envisioned similar models
 - Cf. Darity and Young (1995)
- Its Characteristics
 - Static general equilibrium national income determination model
 - IS Curve: Equilibrium conditions for goods markets
 - LM curve: equilibrium conditions in the money market
 - What about the labor market?
 - Tools for Policy Analysis
 - The "liquidity trap."
 - Educational Tools
- What was lost?
 - Dynamics, coordination, intertemporal resource allocation choices, expectations;
 - Cf. Backhouse and Laidler 2004

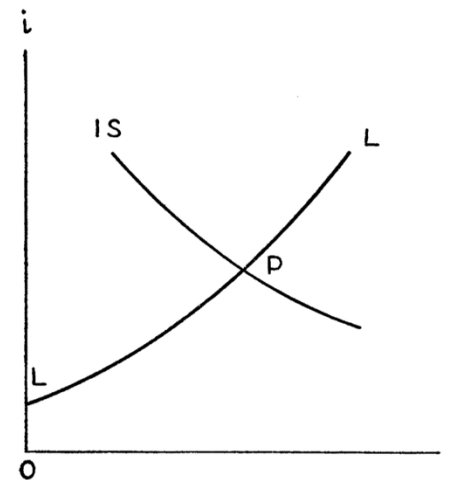


FIGURE 1

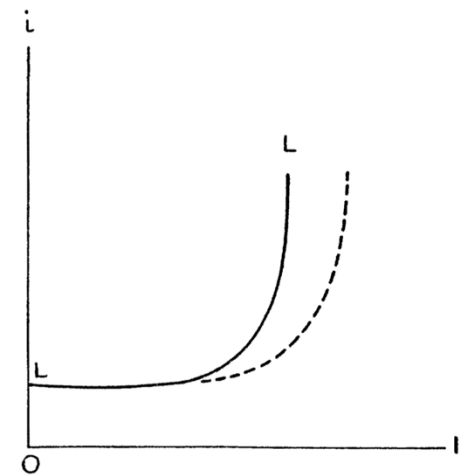


FIGURE 2

The Dynamization of Keynesian Economics

Initial model: Harrod-Dormer model

Dormer himself later recanted.

Focus on the productivity-enhancing effects of investment

Investment \Rightarrow increased capital equipment \Rightarrow increased total supply

Vigilance against overcapacity

Unstable growth: divergence between real growth rate G , natural growth rate G_n (full employment of labor), and guaranteed growth rate G_w (full employment of capital)

The Rise of Development Economics:

Strange fusion of classical (long-term macro) and Keynesian (market failure) schools of thought

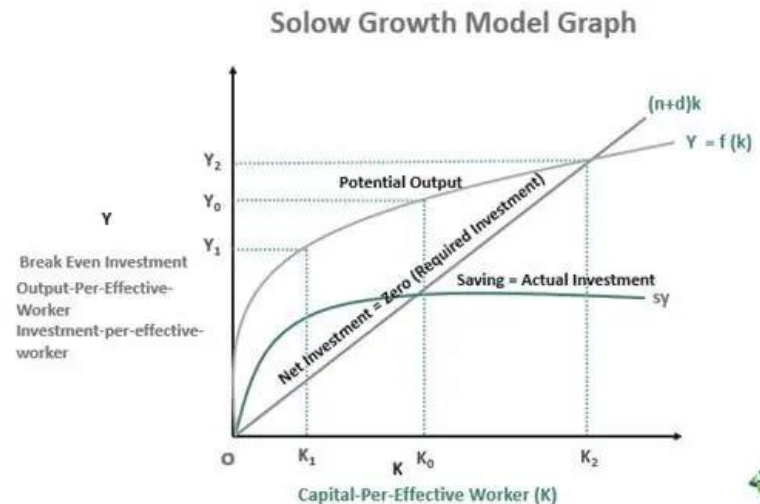
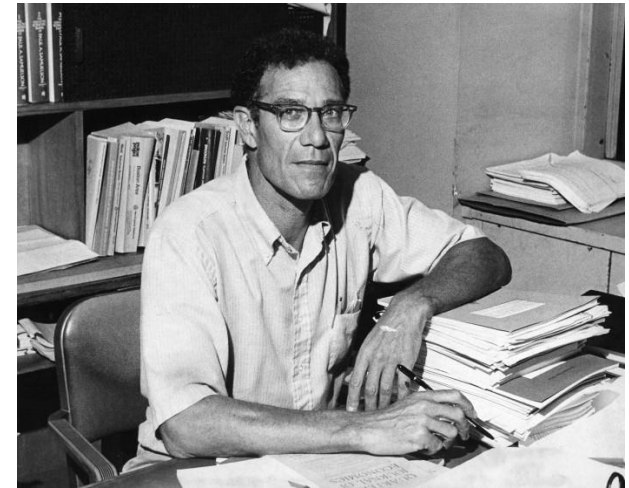
Supply Constraint Hypothesis and the Vicious Cycle of Poverty

Justification of Development Assistance Programs

The Dynamization of Keynesian Economics (2)

Neoclassical Growth Theory

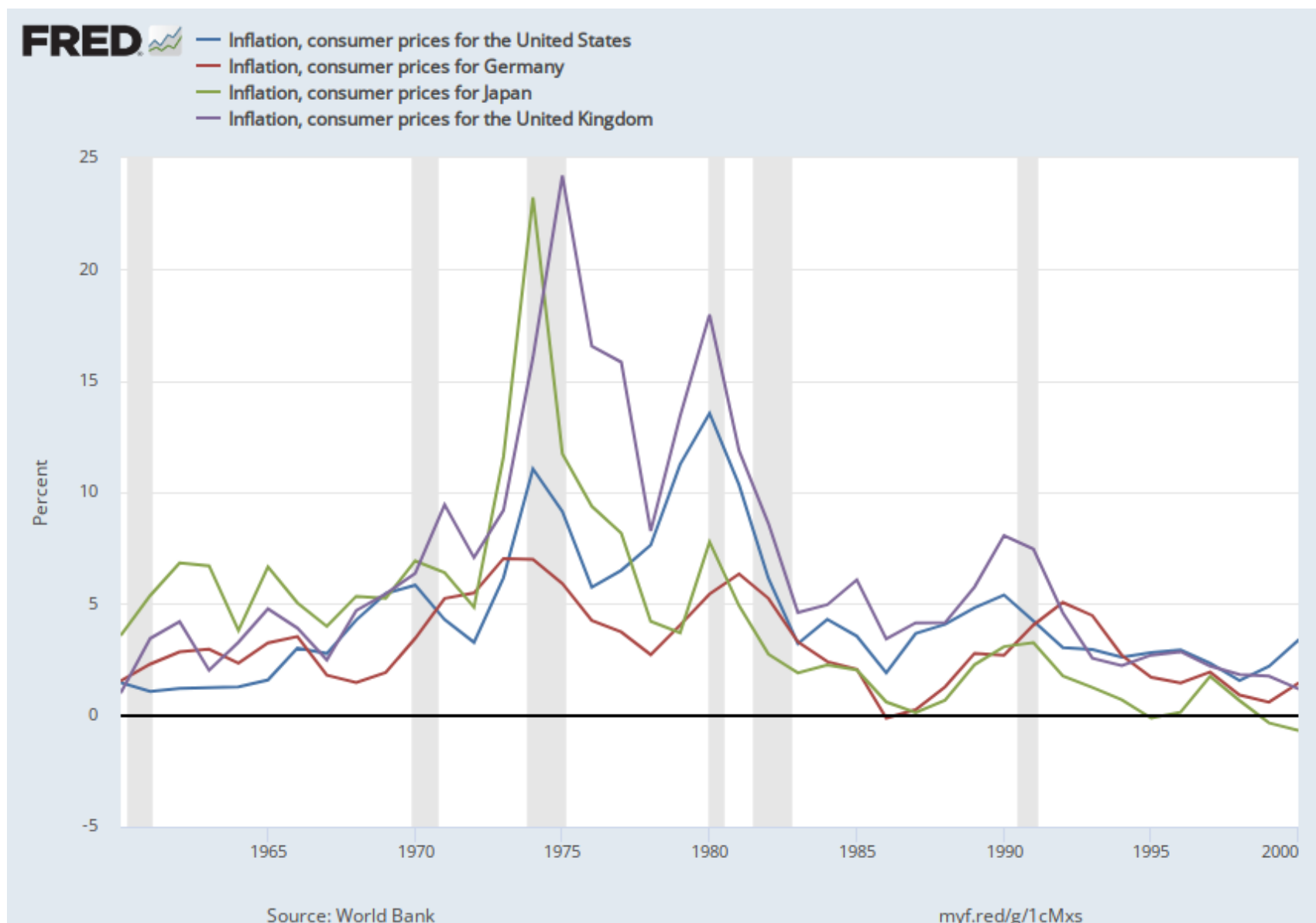
- Robert Solow (1924-)
 - Solow 1956, Solow 1957
- Trevor Winchester Swan (1918 - 1989)
 - Swan 1956
- Neoclassical production function
- Growth rate of Y = Growth rate of labor + Growth rate of capital + Growth rate of residual (Solow residual)
- Growth rate of Y per capita at steady state = growth rate of residuals



From the 60's to the 70's

- The Growing Sixties and the Gloomy Seventies
 - The 60's era of rapid growth
 - Death of the business cycle?
- Again price fluctuations and the crisis of the international monetary system
 - Collapse of the Bretton Woods regime in 1971
 - From 1973, we moved to a world of floating exchange rates.
- 70s: Global inflation (The Great Inflation)
 - U.S.: Stagflation
 - United Kingdom: British Disease
 - Japan: quelled the "crazy price increase" of 1974 and became the best performer of the developed world.
- Growing skepticism toward development strategies and development assistance
 - Soviet, Indian, and Chinese stagnation
 - Cf. Easterly (2001)

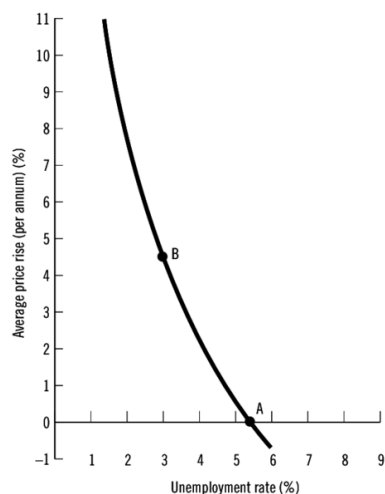
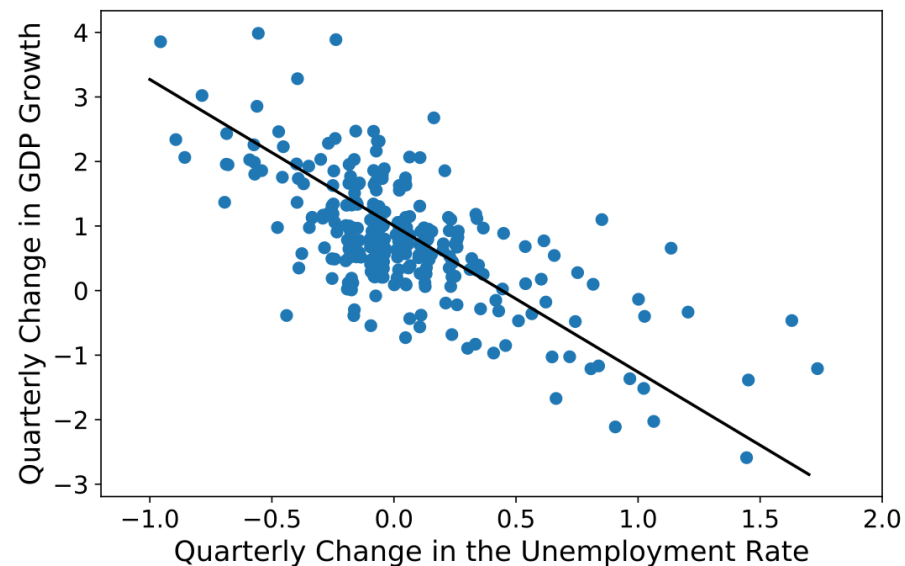
The Great Inflation



Macroeconomics Consensus of the 60's

- 1. IS-LM model
- 2. Phillips Curve
 - Linking price changes and unemployment rates
 - Originally the relationship between wage changes and unemployment Cf. Phillips 1958
 - From there to the policy menu Cf. Samuelson and Solow 1960
- 3. Okun's Law
 - Linking unemployment rate to GNP (GDP) growth
- 4. Discretionary discretions, fine tuning
- 5. Emphasis on fiscal policy
- 6. Inflation theory: demand pull, cost push

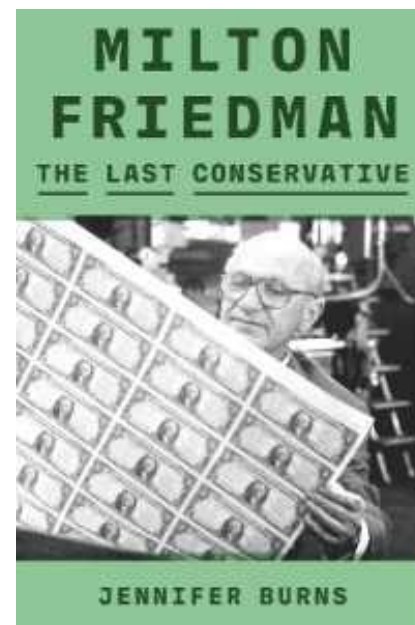
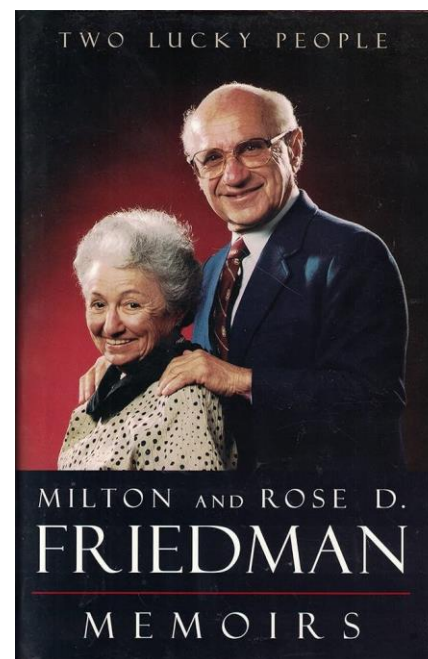
Phillips Curve and Okun's Law



Source: Samuelson and Solow (1960)

Enter Milton Friedman (1912-2006)

- Born in the United States, the son of Jewish immigrants.
- The economist who grew up in the Great Depression
- Studied at the University of Chicago Graduate School Economics.
 - He found a lifelong friend George Stigler and his companion Rose.
- Ph.D. from Columbia University. Empirical tradition of the NBER.
- Cf. Burns (2023)

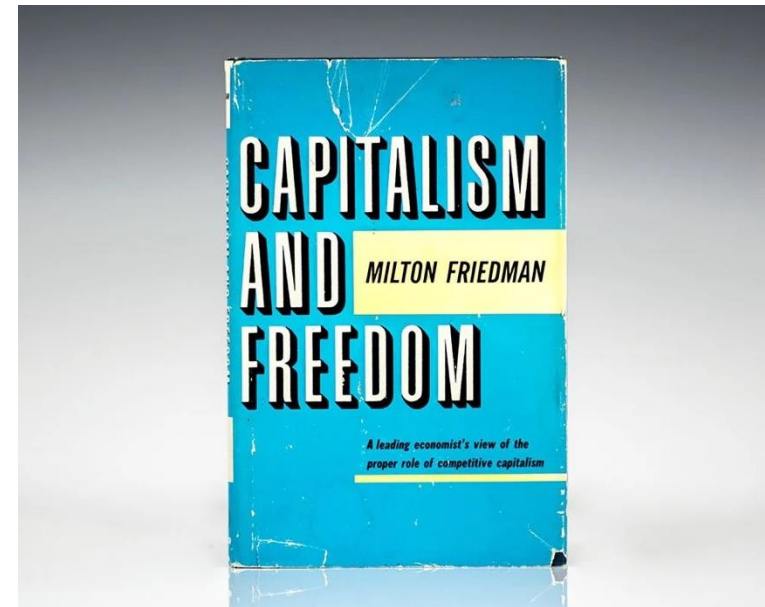


Friedman's Fight

- Methodology: Thorough positivism. Explanation of facts rather than refinement of theory.
 - “Methodology of Positive Economics” (1953). In economics, it is important to be able to explain past, present, and future facts. In particular, it is important to be able to predict the future. A desirable theory is one that can explain facts.
 - An avowed Marshallian.
 - In fact, it belongs to the NBER tradition.
- Theory of consumption function: rebuilding a rational basis for consumption activity.
- A Study on the Great Depression

Capitalism and Freedom (1962) (1)

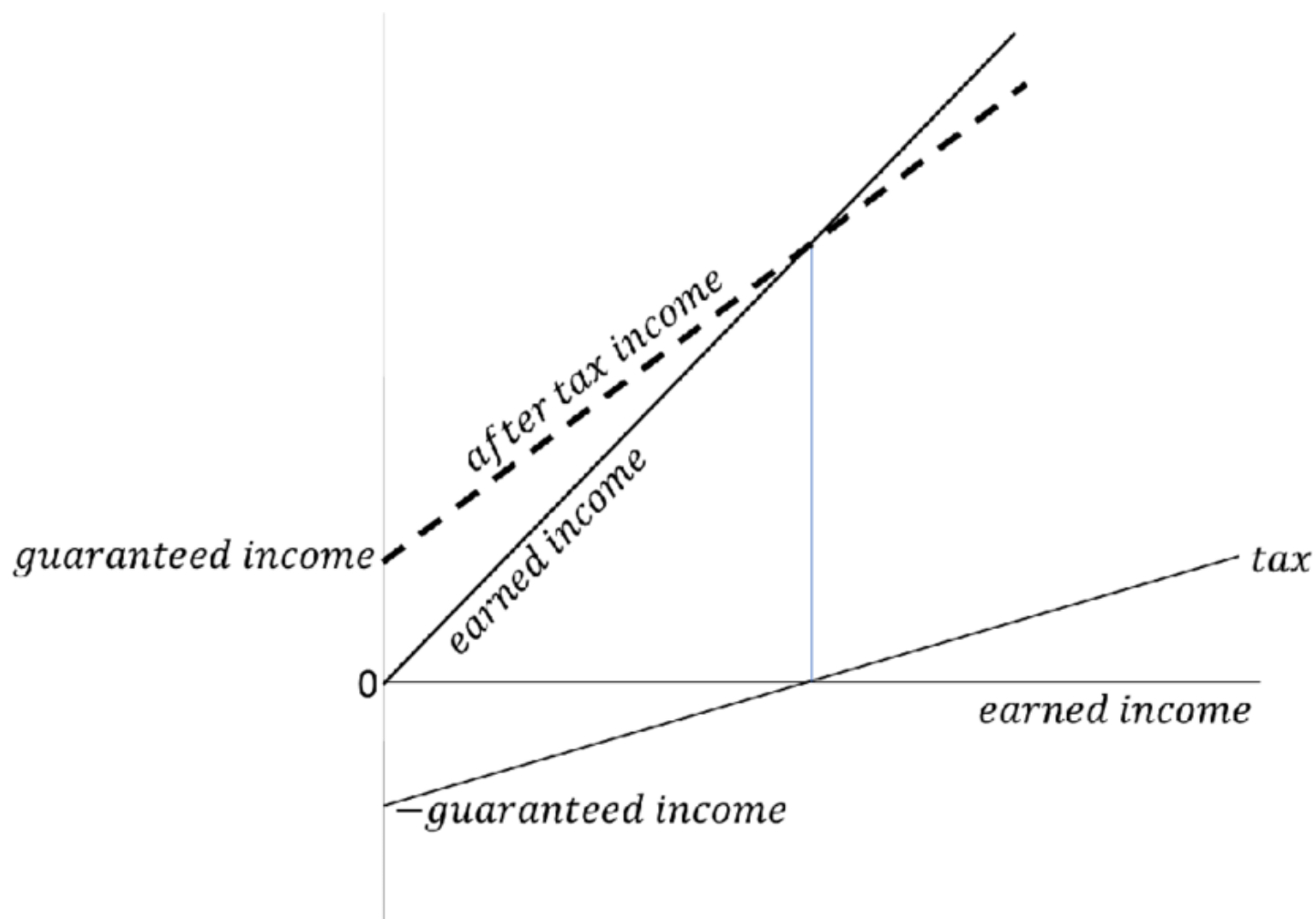
- Economic freedom as the basis of liberty
- A free and competitive market economy is a prerequisite to guarantee this.
- Government failure is more problematic than market failure.
 - Natural monopoly?
- Defense of corporations? No, a defense of free market competition. Saving Capitalism from the Capitalists!



Capitalism and Freedom (1962) (2)

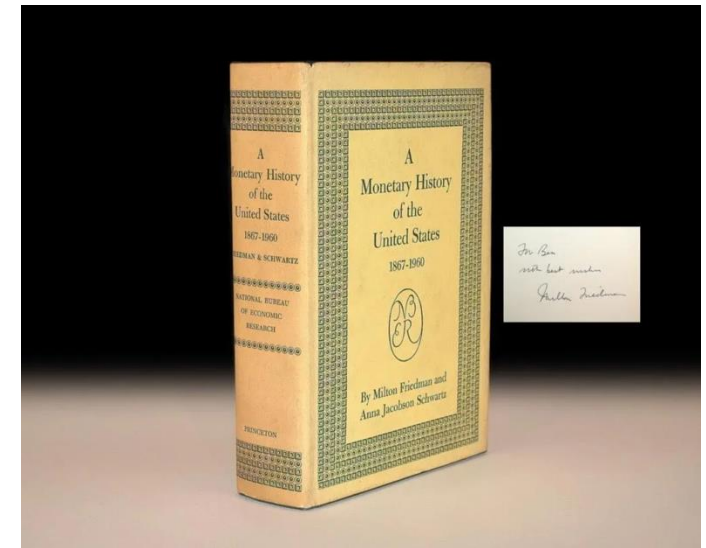
- Can we leave everything to the market? The answer, of course, is no. “The consistent liberal is not an anarchist.”
- What the state needs: "market failure" => the minimal role.
- (1) Setting up rules: Property rights
- (2) Monetary policy: free markets do not work with respect to the monetary domain. What is the best policy given state intervention?
 - Opposition to discretionary policies
 - Lessons from the Great Depression
 - Emphasis on rules: k% rule
- (3) Alleviation of Poverty, Provision for Basic education
 - Existence of positive "neighborhood effects" (externalities)
 - But the right incentives need to be put in place.
 - Negative Income Tax
 - Toward Basic Income
 - Vouchers for Education

Negative Income Tax



A Monetary History of the United States, 1867-1960 (1963).

- Co-authored with Anna Jacobson Schwartz
- Why is this publication important?
- “Lessons” of the Great Depression at that time: instability as an essential flaw of the market economy = economic fluctuations and cycles; the Great Depression as a decisive case of "market failure"
- Friedman et al. argue: market economies are inherently stable. Economic fluctuations and cycles are "policy failures" of governments and central banks. Economic fluctuations in the United States were brought about by changes in the money supply.
- Methodology: "Analytical Narrative".
- Great Depression: caused by the Fed's Great Contraction of the money supply (The Great Contraction).



Monetarist

- A group of economists who emphasize the role of money.
- Modern version of the quantity theory of money: a revival of the quantity theory of money, but not a simple revival. Conjunction with the principle of effective demand. We are all Keynesians.
- Stabilizer
- Critical of stabilization through fiscal policy
 - Existence of rugs
 - Against discretion
- Importance of monetary policy. However, the rule.
 - What is needed for this is a stable money demand function
- Fierce dispute with Keynesians
 - Differences in style: theoretical or empirical
 - What is the mechanism by which money influences?

Think Further:

Topics for a paper

- How has the development of computers affected economics?
- Read Edwards (2023) and discuss Milton Friedman's relationship with the Chilean military regime.
- How would you assess the Keynesian vs. monetarist controversy today?

Next Week

- Text:
 - Shleifer, Andrei (2009), “The Age of Milton Friedman,” *Journal of Economic Literature*, Vol.47, No.1, pp.123-135.
 - Eichengreen, Barry (2009), “The Last Temptation of Risk,” *The National Interest*, No. 101 (May / June 2009), pp. 8-14.
 - <https://www.aeaweb.org/research/charts/an-empirical-turn-in-economics-research>
 - <https://businessreview.berkeley.edu/the-empirical-revolution-in-economics/>
 - Angner, Erik (2023), How Economics Can Save the World, August25. <https://www.oecd-forum.org/posts/how-economics-can-save-the-world-by-erik-angner>

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