History of Economic Thought I

9：V. Crises and Opportunities (1)

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Dec.18, 2024

Key Messages for Today's Lecture

- Toward the Birth of "Macroeconomics"
- Very turbulent period with economic issues
  - Price fluctuations
  - Late 19th century deflation
  - From Poverty to unemployment, crisis in free trade
  - WWI and the reconstruction of the gold standard

Development of Monetary History

- Marshall's contribution Cf.Marshall 1871
  - Classicals：Co-existence of cost of production theory and the Quantity Theory of Money
  - Marshall：Integration to the Quantity Theory of Money
    - Demand for money stock
    - Role of demand for money in determining the price level
    - Use of paper currency
  - Cambridge cash balance equation
    - $M = kPQ$。
  - "Other things being equal", change in M⇒change in P
- N.B.：Economists of this period, including Marshall, understood QTM as a strict proportionality thesis, therefore they were critical about "QTM"

Johan Gustav Knut Wicksell(1851-1926)

- Swede
- Social radical and heretic
- *Value, Capital and Rent*（1893）
- *Interest and Prices*（1898）
- *Lectures on Political Economy* (Vol.1, 1901, Vol.2, 1906; all in Swedish)

What Wicksell Achieved

- 1 attempt at integrating neo-classical economic theory (Austrian capital theory) and monetary theory
- 2 Monetary theory: recovering Thornton’s insights
  - Mechanism of price fluctuations due to the divergence between the market rate of interest and the natural rate of interest
  - What is natural rate of interest? Ambiguous
    - ①marginal productivity of capital
    - ②rate of interest with no price level change
    - ③interest rate which equals saving and investment
  - Market rate of interest: set by central bank
  - Four agent mode：workers, capitalists, entrepreneurs, and <u>bankers</u>
  - Market rate of interest⋛Natural rate of interest⇒Bank loans decreases, remain constant, increases⇒Price level decreases, remain constant, increases

Irving Fisher(1867-1947)

- American
- Yale University
- *Mathematical Investigations in the Theory of Value and Prices*（1892）
- *The Nature of Capital and Income* （1906）
- *The Rate of Interest*（1907）
- *The Purchasing Power of Money*（1911）
- *Theory of Interest*（1930）

What Fisher Achieved

- 1. Integrating capital theory to general equilibrium theory
  - Capital theory before Fisher：Austrians
  - Introduction of rate of time preference; intertemporal choice
- 2. Developing QTM：
  - Exchange equation: MV＝PT
  - Mechanical? But change in V, interdependence between variables
  - V depends on habit of individuals, payment method of society, other general causes
- 3. Distinguishing nominal and real interest rates
  - Real interest rate = nominal interest rate – expected price fluctuations <Fisher equation>
    - Deflation, deflationary expectations⇒Even low nominal interest rate means high real interest rate
  - Discussion of the “transition period”

Late 19th Century Deflation

- From 1873 to 1896, prices tended to fall in Europe and US
  - Called “The Great Depression”
  - What causes?
  - What to to?
- The Myth of the Gold Standard：historically, it was a brief period when all countries adopted the gold standard（1879-1914）
- Before 1870s, almost all countries on Bimetallism, or Silver standard

Bimetallism

- ① A commodity currency system
- ②Linked with multiple precious metals (gold and silver)
- ③Potentially instable
  - Potential discrepancy between the relative price of two precious metals legal set, and that set in market
  - Gresham’s Law: a bad (overvalued) currency drives out a good (undervalued) currency
  - E.g. Discovery of gold mine⇒gold production increases⇒market price of gold decreases⇒gold overvalued, silver undervalued relative to the legal ratio⇒silver would be hoarded
  - What happens if the demand for currency increases?

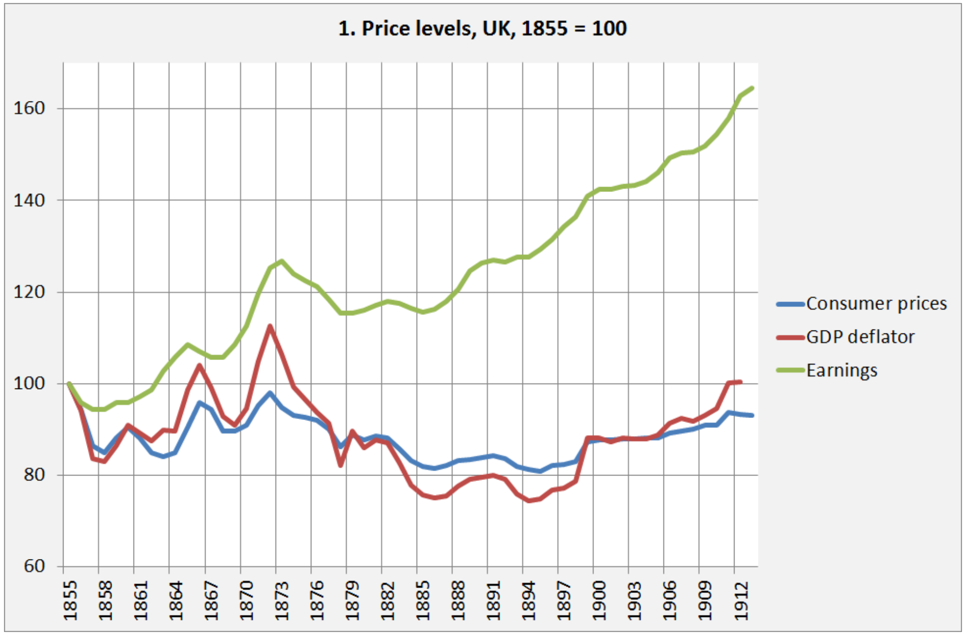
Bimetallism: Crisis to Demise

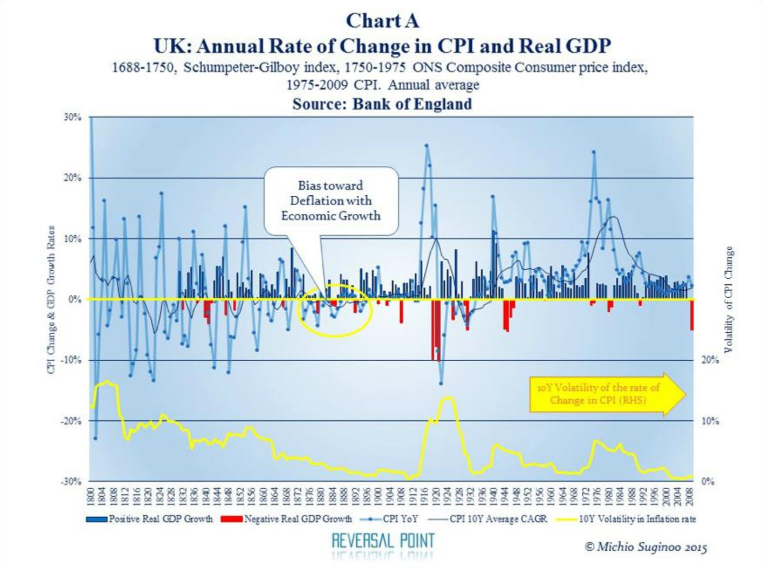
- 1850s：Discovery of gold mines in California, USA（1849）and Australia（1851）⇒Gold overvalued⇒France and USA went to de facto Gold Standard
- 1861-5：The US Civil War: Greenback (inconvertible paper money)：Rise in inflation
- 1871：Franco-Prussia War：German unification, the Second Empire. Germany went to the GS; France followed suit⇒Demand for gold increased⇒Gold price increased⇒Deflation
- 1873: The US coinage act: the gold standard
    - "Crime of '73"

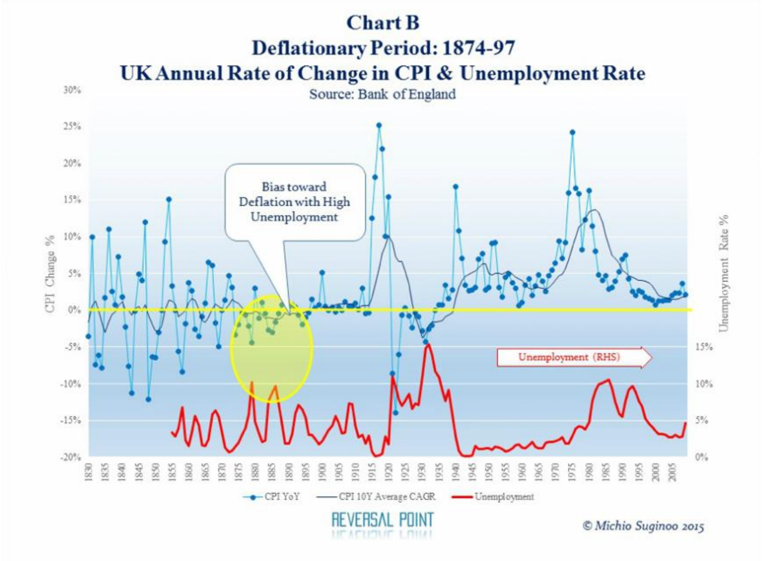
Late 19th century deflation: UK

https://rwer.wordpress.com/2014/05/14/ugly-deflation-in-the-nineteenth-century-and-now/

http://www.reversalpoint.com/anecdote-1874-97.html

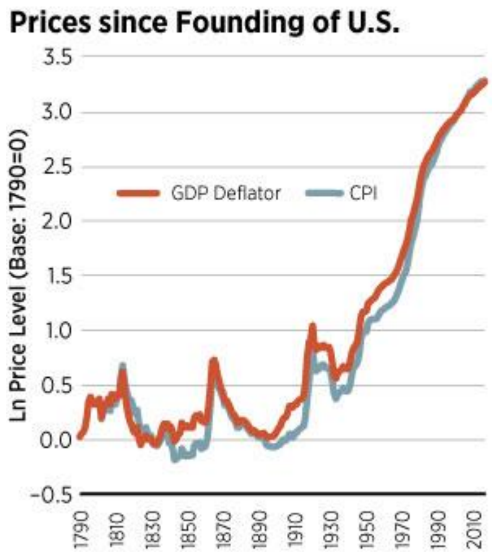






Late 19th century deflation: USA

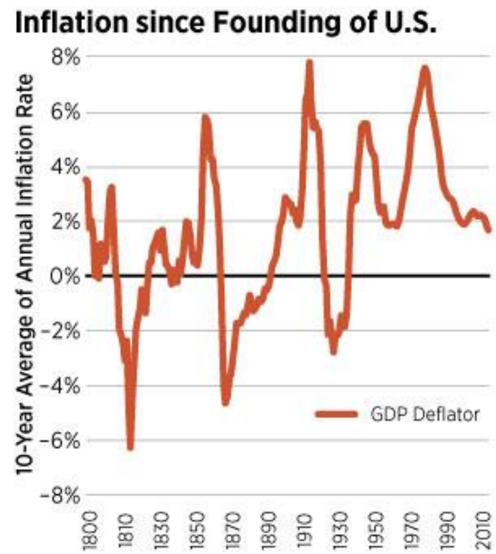
https://www.stlouisfed.org/publications/regional-economist/second-quarter-2017/a-short-history-of-prices-inflation-since-founding-of-us



SOURCES: Johnston and Williamson (2017); Lindert and Sutch (2006); Bureau of Labor Statistics; Bureau of Economic Analysis; and FRED.

NOTE: Macroeconomic variables that exhibit exponential growth, such as output and prices, are frequently expressed in natural logarithms to transform them into series with a linear trend. The difference between the logged series and its linear trend is approximately equal to the percent deviation of the original series from its trend. The GDP deflator and the consumer price index (CPI) are different measures of the price level. The CPI focuses on consumer expenditures, while the GDP deflator is a broader measure of prices in the economy. Although the two series occasionally diverge, over the long run, they both paint a similar picture.

■ FEDERAL RESERVE BANK OF ST. LOUIS

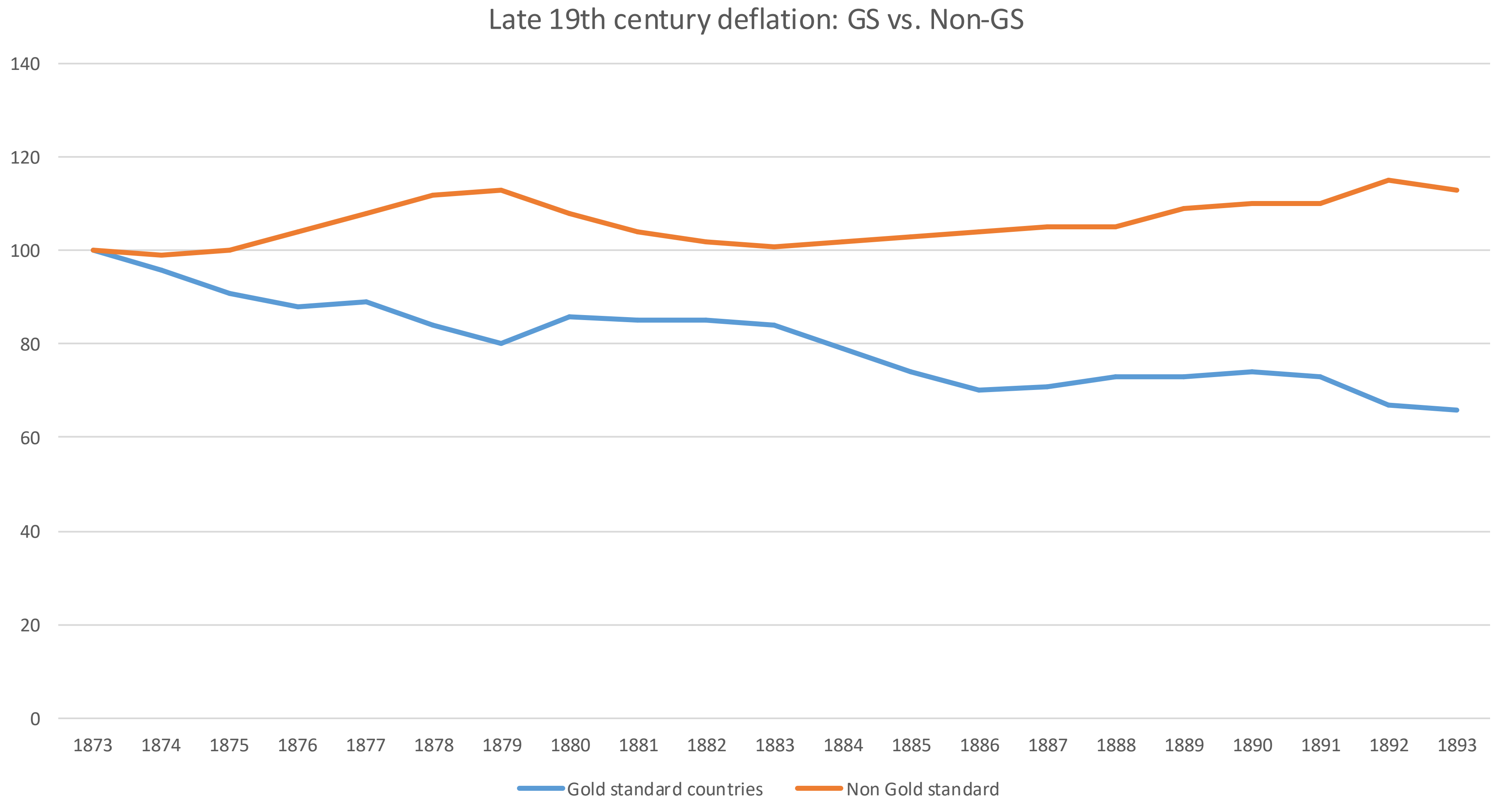


SOURCES: Johnston and Williamson (2017); Bureau of Economic Analysis; and FRED.

NOTE: Episodes of high inflation are recurrent in U.S. history. Prior to the founding of the Fed, high-inflation episodes were followed by prolonged periods of deflation, bringing prices back to their original levels. In the postwar period, inflation instead returned to positive levels, making increases in the price level permanent rather than transitory. Inflation volatility was dramatically higher in the pre-Fed period than during the postwar.

■ FEDERAL RESERVE BANK OF ST. LOUIS

Late 19th Century Deflation: The Gold Standard Phenomenon



Economic Issues

- Needed: theory to determine relative price of precious metals
  - What is the long-run equilibrium price of precious metals?
- Cost of production theory vs QTM
- Cost of production theory lacks:
  - Distinction between stock and flow
  - Shape of marginal cost curve
  - The role of demand in price determination
- A. Marshall and others got involved with policy debate
  - The Gold and Silver Commission (1888-89)

The Case for Classical Gold Standard Monometalism

- Bonamy Price：Cost of production： Long-run “natural” price

- R.Giffen：Against Bimetallism: it is“the management of a coinage with a view of artificially keeping a standard stable from period to period”;“a departure from the Free Trade principle which Governments ought to follow in all commercial matters”(Giffen 1886, 49)

- But isn’t Gold Standard “artificial” as an institution?
  - “Gold standard mentality”

Related attack on QTM

- Syllogism of Giffen：the foundation of bimetallism is QTM, QTM is false, therefore bimetallism is false

- James L. Laughlin：Cost-push explanation fo price fluctuations

- Irving Fisher emerges arguing against Laughlin

Proposals (1) Symmetallism

- Marshall：a stable bimetallism：a basket of gold and silver currencies
  - Adjusting the amounts of precious metals within a basket, so that stabilize the purchasing power of a pound paper money
    - A basket with a certain ratio（gold：silver＝1：20）
      - Gresham's Law does not work

Proposals（2） Indexation

- W. S. Jevons：Gold rushes in California and Australia→Inflation
  - Expert on index theory
  - In the end, supported the Gold standard. But on empirical grounds; value of silver could fluctuate

- “Tabular Standard of Value”：money should function as a standard of value; should introduce indexed contracts
  - H. S. Foxwell, Marshall supported
  - In accordance with Neo-classical monetary business cycle theory

- But Giffen(1892) criticized and Marshall became silent.

From Improvement to Substitution

- Marshall : with fiat inconvertible money, central bank does open market operations to stabilize the value of “basket”
- Fisher (1913): “Compensated Dollar Plan” Cf. Dimand (2003)
  - dollar price of basket of goods and services = gold price of basket times dollar price of gold
  - Independent of Marshall
  - Keynes, Pigou, Hawtrey appreciated
- Wicksell (1915) : “an international paper standard”;

If the objective is price stabilization, why don’t central bank of each country cooperate to stabilize the price level with paper money?

The Last Phase

- In the end, what happened? Cf. Friedman (1992)
  - Discovery of a large gold mine in Transvaal, South Africa + technological innovation（cyanization method）→Gold production increased
  - Introduction of the Gold Exchange Standard
  - End of deflation

- UK：Denied the return to bimetallism

- USA：William Jennings Bryan defeated in 1896 and 1900 presidential elections

Bryan, “Cross of Gold” Speech, July 9, 1896
https://historymatters.gmu.edu/d/5354/

- Having behind us the producing masses of this nation and the world, supported by the commercial interests, the laboring interests, and the toilers everywhere, we will answer their demand for a gold standard by saying to them: "You shall not press down upon the brow of labor this crown of thorns; you shall not crucify mankind upon a cross of gold."

The Wizard of Oz: An Allegory of Bimetallism?

https://www.youtube.com/watch?v=7Lg4vjRY4Ts

https://www.youtube.com/watch?v=xCY8Sqv-rQw&t=334s

Evaluation: Was It a “good” deflation?

- Became important because of Japan’s deflation from the 1990s
- What caused deflation?
  - Bordo and Redish 2004：Deflation was caused by monetary factor. But recessions were caused by real factors; but no role of expectations
- Did the economies grow even under deflation? More controversial issue
  - Yes：Positive productivity shock, low economic rigidities
  - No：Considering measurement errors in the price index, the economies were stagnating（Kaufman 2020）
    - Nominal GDP = real GDP + rate of inflation

The Road to Monetary Business Cycle Theory

- ①Distinction between nominal and real interest rates
  - Marshall 1887
    - Fluctuations in prices⇒fluctuations in the purchasing power of money⇒Changes in the real value of debt
    - Inflation Expectation⇒Purchase commodities to borrow money⇒Inflation
  - Fisher（1911）: the role of expectation. Lagged adjustment of nominal interest rate to price changes
  - Business cycles＝price fluctuations; associated changes in production and employment
- ②Rigidities of money (nominal) wage
  - Insights of Hume, Thornton
  - Marshall and Marshall 1879
    - Introducing changes in production and employment

World War I and the Great Transformation

- The Great War, 1914-1918

- The rise of “communist” “socialist” Soviet Russia（1917）

- Collapse of the stable Western institutions of the 19th century Cf.Polanyi 1944
  - 1) Balance of power in international politics
  - 2) Liberal state in domestic politics
  - 3) Autonomous adjustment market in economy
  - 4) International gold standard

- Trinity of the “Orthodoxy”: Free trade, gold standard and balanced budget
  - But pre-WWI gold standard was “contingent rule”

Reconstruction of the Gold Standard

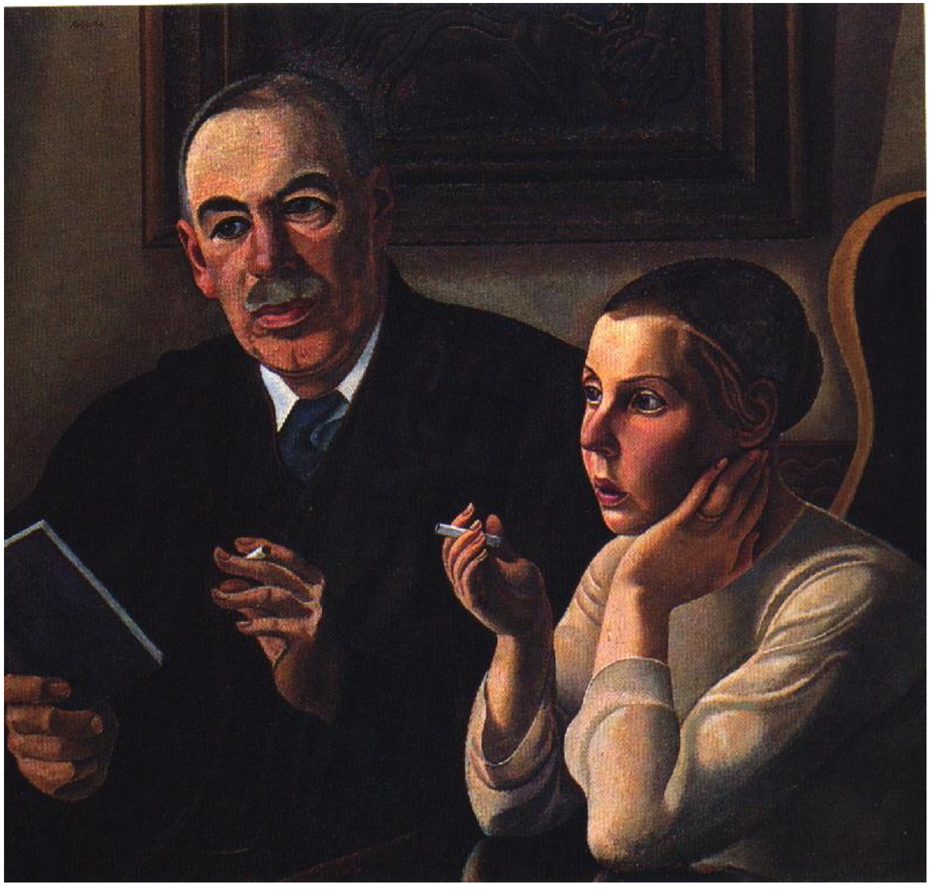
- 1914 : World War I broke out
  - belligerent countries suspended the GS
  - 1917: US, Japan
  - 1918: Armistice
- Reconstruction problem
  - Should return?
  - Which parity?
- 1919: US returned at the old parity
- 1920-21: severe deflation, but the “roaring twenties” afterward

Development of Monetary Business Cycle Theory

- Stabilisation: stabilizing production and employment by stabilizing the price level
  - ①Desirable?
  - ②What policy tool?
- ①Stabilizers：I. Fisher, R. G. Hawtrey, J. M. Keyens
  - Critics：D. H. Robertson, the Austrians (Mises, Schumpeter, Hayek, L. Robbins)
- ②mainly monetary policy. Stabilizers were skeptical about fiscal policy by public works, but Pigou

John Maynard Keynes (1883-1946)

- Cambridge University
- Attended the peace conference at Versaille as a representative of the UK Ministry of the Treasury
  - *The Economic Consequences of the Peace*（1919）
- Three major works
  - *A Tract on Monetary Reform*（1923）
  - *A Treatise on Money*（1930）
  - *The General Theory of Employment, Interest and Money*（1936年）
- UK representative at the Bretton Woods conference



A Tract on Monetary Reform（1923）

- Chapter I: The Consequences to Society of Changes in the Value of Money
  - Three classes: Investors, Business Men, Earners
  - Inflation (good for business men and earners) and deflation (good for investors) have redistributional effects
- Chapter II: Public Finance and Changes in the Value of Money
  - Inflation as tax
- Chapter III: The Theory of Money and the Exchanges
  - QTM, purchasing power parity, forward exchange market
- Chapter IV: Alternative Aims in Monetary Policy
  - Devaluation or deflation
  - Stability of Prices *versus* Stability of Exchange
  - The Restoration of a Gold Standard
- Chapter V: Positive Suggestions for the Future Regulation of Money

1925: Keynes Lost the Battle

- The success of the return to the GS in US
- More public support for the return at the pre-war, old parity
- Keynes dissented, but in a minority
- March 17, 1925: Meeting with Churchill, McKenna, Bradbury and Niemeyer
- April, 1925 : UK returned to the GS with the pre-war parity
- Deflation and rise in unemployment; social unrest.
- 1926: Coalminers strike
- Why did the policymakers of the day adhere to the return to the GS, at the pre-war parity?
  - Respect contracts at the pre-war parity, but why?
  - Gold Standard Mentality
  - Similar controversy in Japan Cf. Wakatabe 2014

March 17, 1925

- Churchill to McKenna: “But this isn’t entirely an economic matter; it is a political decision for it involves proclaiming we cannot, for the time being, complete the undertaking which we all acclaimed as necessary in 1918, and introducing legislation accordingly. You have been a politician; indeed you have been Chancellor of the Exchequer. Given the situation as it is, what decision would you take?”
- McKenna: “There is no escape; you have to go back; but it will be hell.”

US Boom and the Fed

- 1920-21: Deflationary recession, then Roaring Twenties
  - The rise of mass consumption society（Radio, Ford T-Model）
- The establishment of the FRB in 1913, the age of Benjamin Strong (1923-28), New York Fed President
- Stabilization policy by open market operations
  - Lessons learned from 1920-21 recession?

Irving Fisher's Battle

- Fed as a product of compromise
  - Ambiguity in decision making at central and in local level
  - Ambiguity in basic philosophy: "real bills doctrine" and price stabilization
- Fisher's proposal to mandate the Fed to pursue price stabilization through legislative action
  - 1919—24, 1926-27, 1928
- Benjamin Strong protested and Fisher's concern
  - "I will trust you as long as you live but you will not live forever and when you die I fear your policies will die with you".
- 1928: two setbacks

Critics：Friedrich August von Hayek (1899-1992)

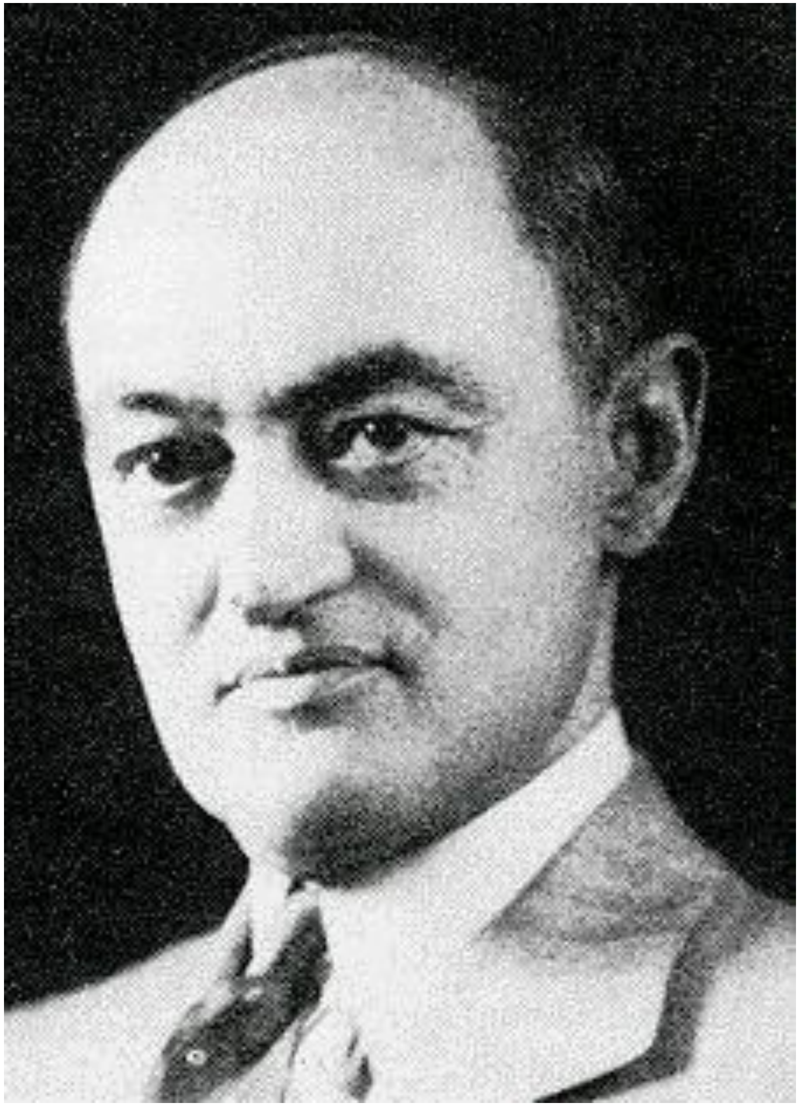
- Student of von Mises
- Graduate of the University of Vienna
- 1931, professor at LSE
- *Monetary Theory and Business Cycles*（1929）
- *Prices and Production*（1931）
- Involvement with Socialist Calculation Debate

The Austrian Business Cycle Theory

- Ambitious program to integrate the real and monetary economy
- 1. intertemporal resource allocation in a monetary economy: in a growing economy, money supply and nominal income must remain constant; deflation
- 2. Malfunction in the monetary system as the only necessary condition for the deviation from the intertemporal resource allocation equilibrium
  - A change in money supply changes relative price from equilibrium
  - Credit creation⇒divert resources from consumption to investment
  - Crisis: excess demand for consumer goods, excess supply of investment goods
  - But reallocation of resource from investment to consumption is difficult

Critics: Joseph Alois Schumpeter (1883-1950)

- Graduate of University of Vienna
- Brief foray into politics and banking, then Harvard Cf.McCraw 2007
- *Theory of Economic Development*（1911）
- *Business Cycles*（1939）
- *Capitalism, Socialism, and Democracy*（1942）



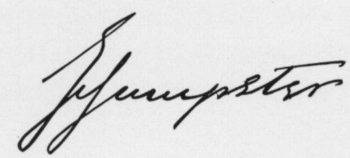
Schumpeterian Theory

- Entrepreneur = those who execute “new combinations” (= innovations in technology, organization, marketing..)
- Wave of innovations ⇒Business cycles: integrating growth and cycles
- First mover entrepreneur⇒excess profit⇒imitators enter⇒excess profit disappears
- Given full-employment; innovative activity⇒increase in factor prices⇒increase in the price level⇒increase in aggregate supply by entry of imitators⇒decrease in the price level (the price level is the shadow of the real side)
- In the background: credit creation and the role of banker
- “business cycle is like a heartbeat. If you stop a heartbeat, the heart would stop” ⇒stabilization is harmful

1931: Schumpeter visited Tokyo University of Commerce (now Hitotsubashi University)

http://www.lib.hit-u.ac.jp/service/tenji/amjas/

1931年（昭和6年）1月，本学訪問の際のシュムペーター教授（当時47才）



Think Further : They are topics for a short term-paper.

- Compare Marshall's monetary theory and Fisher's monetary theory.
- Was *The Wonderful World of Oz* an allegory for bimetallic debate in the US? Read the literature and write your opinion.
- Compare two controversies about the return to the gold standard, the period from 1797 to 1821 and the period from 1919 to 1925 in UK.
- Why did the policymakers of the day adhere to the return to the gold standard?

Next Week

- Texts :
  - Wakatabe, Masazumi (2018), "The Great Depression and Macroeconomics Reconsidered: The Impacts of Policy and Real-World Events on Economic Doctrines," *Research in the History of Economic Thought and Methodology*, Vol. 35B, 250-283.
  - Wakatabe, Masazumi (2014), "'The Lost Thirteen Years': The Return to the Gold Standard Controversy in Japan, 1919-1932," in Toichiro Asada ed, *The Development of Economics in Japan*, London and New York: Routledge, 2014, pp.13-38.
- Classics:
  - Keynes, *The General Theory*, Preface, Chapters 1-3, 12, 18, 24
    - https://www.marxists.org/reference/subject/economics/keynes/general-theory/
  - Hayek, *The Road to Serfdom*, Condensed version
    - https://cdn.mises.org/Road%20to%20serfdom.pdf
  - Hayek, *The Road to Serfdom*, Caricature version
    https://cdn.mises.org/Road%20to%20Serfdom%20in%20Cartoons.pdf
  - Schumpeter, *Capitalism, Socialism and Democracy*, Part II
    - https://periferiaactiva.files.wordpress.com/2015/08/joseph-schumpeter-capitalism-socialism-and-democracy-2006.pdf

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- Polanyi, Karl (1944), *The Great Transformation*, Boston:Beacon Press.