

The Yale Tradition in Macroeconomics

Robert Shiller

Economic Alumni Conference

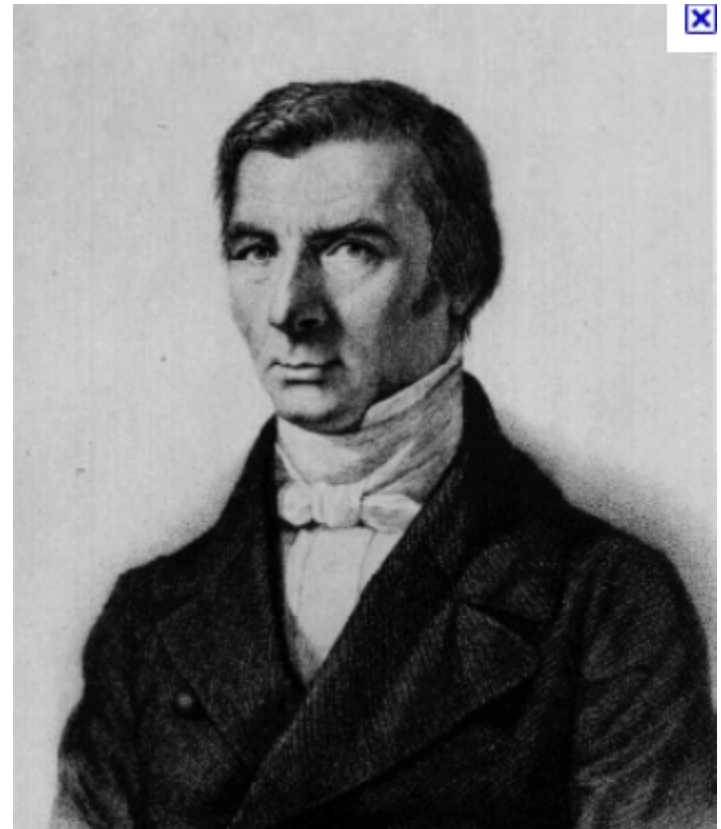
New Haven, April 8, 2011

Early History of Economics at Yale

- 1813 Yale under President Timothy Dwight had only three professors: Jeremiah Day, Prof. of Mathematics and Natural Philosophy, Benjamin Silliman, Prof. of Chemistry and Mineralogy, James L. Kingsley, Prof. of Language and Eccl. History, and six tutors, no economics at all
- “Political Economy” first appears in Yale Catalog 1824-5
- Still no economics professors

Economics Text Used 1828-37: Jean Baptiste Say (1767-1832)

- Probably not *Traité d'économie politique* 1803
- More likely: *Cours complet d'economie politique pratique* 1828



Say's Cours

PREMIÈRE DIVISION.

De la nature des richesses.

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Say's Cours

Des opérations productives.

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Second Yale Economics Text: Francis Wayland Used Starting 1837

- Wayland was president of Brown University 1827-55
- Published *Elements of Political Economy* 1837



From Wayland's Elements of Political Economy" 1837

- 1. That a man should enjoy the reward of his labor. No man will labor long without a reward, and the greater the reward the more industriously will he labor.
- 2. That a man shall suffer the penalty of idleness. God, has, in our present constitution, affixed severe punishments to idleness, and these are, generally, sufficient to make a man work enough, at least to support himself.

Wayland on the Tragedy of the Commons

- “The case is reversed among the Indians of our western forests. A tribe among them, of a few hundred persons, may occupy a tract of land as large as one of our states, but it is not divided, it is all owned in common. . . Hence everything goes to waste, and the whole community is no richer at the end of a year.”

The Beginnings of Development Economics at Yale, 1837

Among Wayland's Exercises (for Students):

“Suppose you were cast upon an island inhabited by savages, who were poor and indolent, though their soil and climate were very good, what would be the first means which you would take to render them industrious? (p. 97)

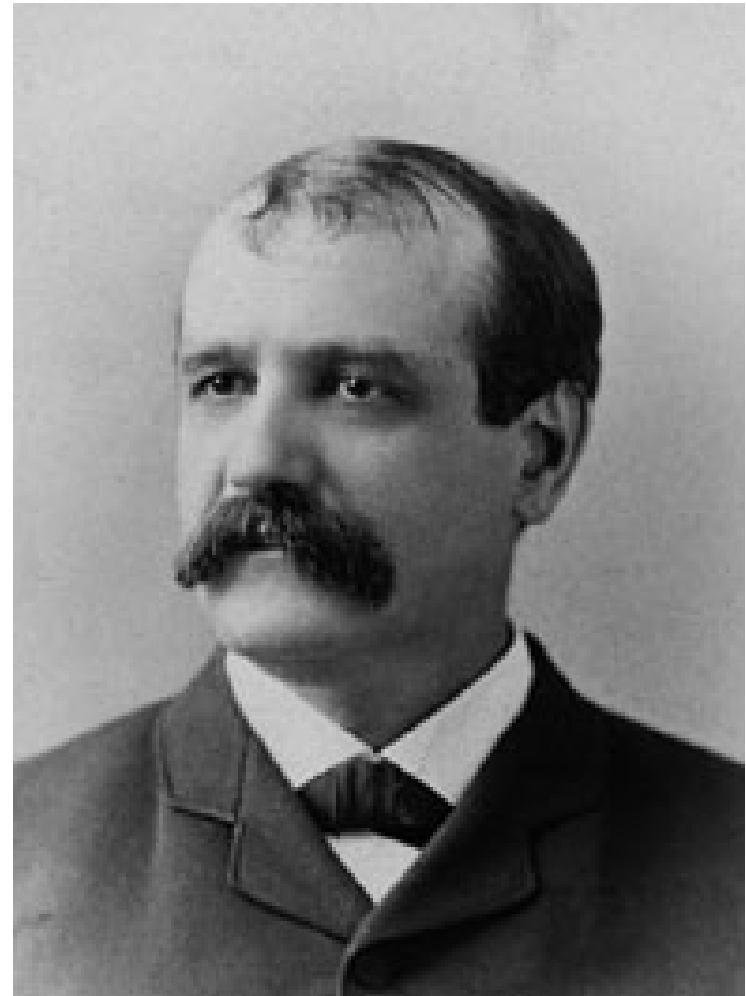
William Graham Sumner 1840-1910, First Yale Economist

- Graduated Yale College 1863
- Yale hired him as tutor in mathematics 1866-7
- Later, became Yale Professor of Political and Social Science
- His “sociology” course was the first so named in America
- *What the Social Classes Owe Each Other* (answer: nothing)



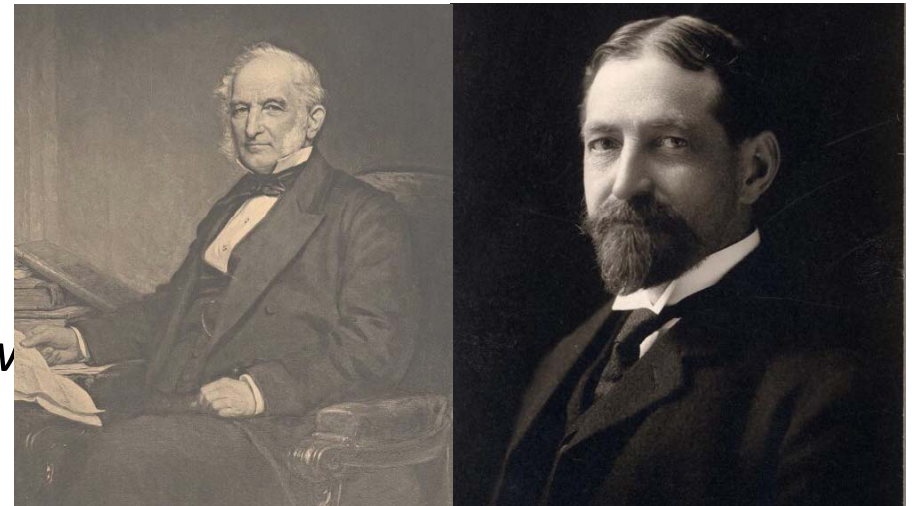
Francis Amasa Walker 1840-97

- Yale's first Professor of Political Economy, 1873, but became M.I.T. president 1881
- First president of AEA, 1886-92
- Robert Dimand:
"Others, like Francis A. Walker, loomed large during their careers, only to fade in the discipline's memory." J. Hist. Econ Thought 1998



Henry Walcott Farnam 1854-1933

- Son of New Haven canal builder and railroad magnate, B.A. Yale 1874, Yale Prof. of Political Economy 1880 in Sheffield Scientific School
 - Provided personal funds to hire Arthur Hadley and construct Irving Fisher's engine
 - Converted the *New England Review* into the *Yale Review*, devoted largely to economics until he founded and funded the *AER* 1911
 - 13th President AEA, 1911
 - Fisher's obituary of him emphasizes his social activism and
- Father Henry Farnam, Son Henry W. Farnam:

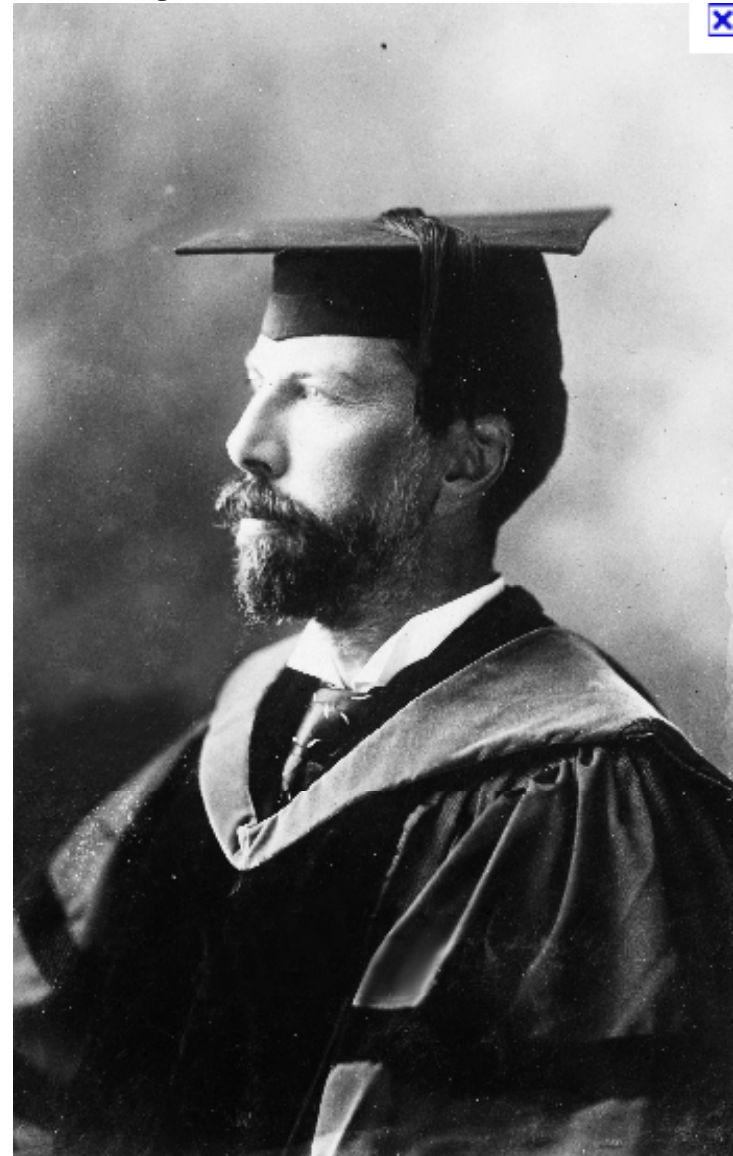


Farnam Memorial Gardens (Edwards & Prospect) Named after William Whitman Farnam BA 1866 Yale Treasurer 1888-99



Arthur Twining Hadley 1856-1930

- Son of Yale Greek professor, graduated Yale 1873
- First Yale president who was not a minister, 1899
- Fifth president of AEA, 1898-9
- Specialized in two of the same areas as Yale's second economist-president: railroads and antitrust



*Hadley Economics: An Account of the
Relations between Private Property and
Public Welfare 1896*

- On Say's Law (which he calls reciprocal demand): "Desire alone cannot increase demand. A man must have means of payment. . . . if an interval of time elapses between the time a man makes prices for the goods which he sells and spends the money thus obtained in the purchase of other goods, the theory of reciprocal demand ceases to work smoothly. P. 79.

Hadley on Unemployment, 1896

- “The proportion of unemployed is not likely to be diminished by a forced reduction in the hours of labor. Among the many causes of “unemployment,” the two most important are the shiftlessness of individual laborers and the fluctuations of commercial credit.” p. 405

Was Clay's *Economics* Assigned at Yale?

- From F. Scott Fitzgerald *The Great Gatsby* 1925: while Jay Gatsby [a Yale man] nervously awaited Daisy in Nick Carraway's house he "looked with vacant eyes through Clay's *Economics*." Why this book?
- But Ray Fair has found no evidence that Yale ever used *Economics* by Henry Clay. Irving Fisher's own text *Elementary Principles of Economics* 1910, 1912, and Taussig's *Principles of Economics* were used in the 1910s, FF&B started 1925.

Clive Day

- Yale graduate 1892
- Yale Professor of Economic History
- *A History of Commerce* 1907, is an economic history of the entire world since ancient Egypt, fun reading on Google Books

- Day is 3rd from left (Skull & Bones)



Yale Profs Argue WWI Should Be Financed by Taxes, 1917

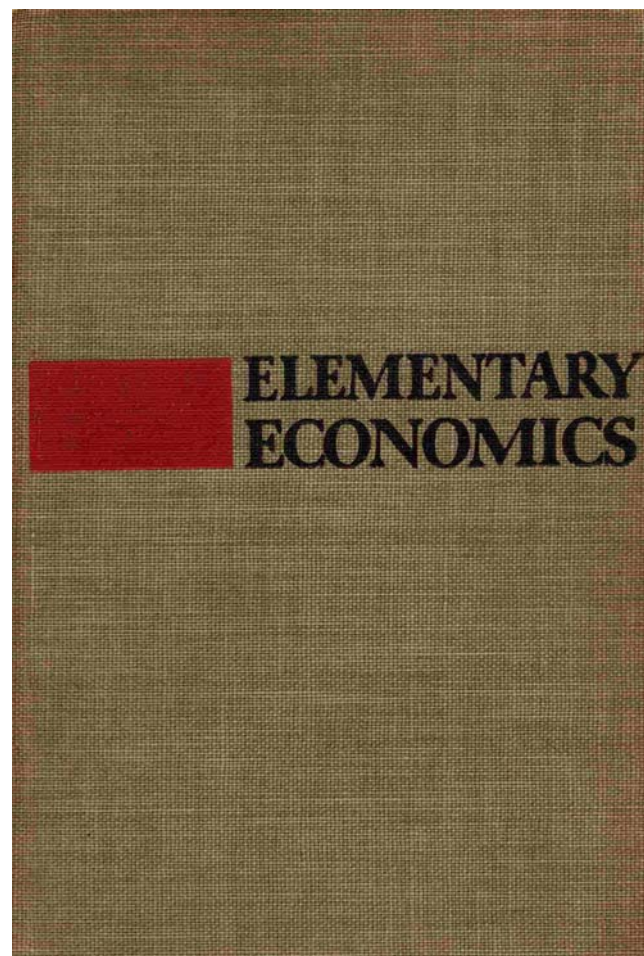
WASHINGTON, D. C.—Several Yale University economists and financiers, headed by Profs. Henry W. Farnum, Irving Fisher, Fred Rogers Fairchild and Clive Day, have presented to Congress an argument in favor of a policy of taxation, rather than of bond issues, as the chief means of financing the war. Taxation, they contend, will prevent price inflation consequent to bond issues. Their argument follows, in part:

"The policy of borrowing within the country itself does not shift any part of the Nation's burden of war expenditures from the present to the future. All it does is to make possible a different distribution of the burden among individuals and social classes, to permit repayment to certain persons who have contributed income during the war by other persons after the war. If the people can support the war at all, they can do it on a cash basis. Borrowing creates nothing. Except by borrowing abroad, which we can not do, we get nothing which we do not ourselves produce.

Elementary Economics

Fairchild Furniss & Buck

- All Yale economics students
- Fred Rogers Fairchild (1877-1966), Edgar Stevenson Furniss and Norman Sydney Buck. MacMillan Company. First edition 1927
- Last edition was apparently 1948, same year as first edition of Samuelson's *Economics*
- *Principles of Economics* 1954 added 4th author Reuben Emmanuel Slesinger



Fred Rogers Fairchild

- Yale Ph.D. 1904, Yale Professor, 1913, Knox Chair 1936
- Opposed government expenditure stimulus during New Deal. Said New Deal had “distinctly amateurish flavor”
- Advocate of balanced budget rule, “sound finance”
- 1936 Testified to US Senate committee in favor of “reduced expenditures and a moderate increase in taxation” Roosevelt’s theory that the road to prosperity is spending, not saving, is “fallacious and pernicious.”

Fred Rogers Fairchild

- Opposed Evsey Domar's 1948 suggestion that the government could still borrow to stimulate economy since national income growth would eventually bring debt/NI ratio down
- Fairchild: "the new philosophy of public debt" amounts to "romancing" and "wishful thinking."
- Opposed Marshall Plan: "Unless we abandon the current grandiose notions of America policing the world, feeding it, taking the load of reconstruction and generally playing Santa Clause we just can't afford it."

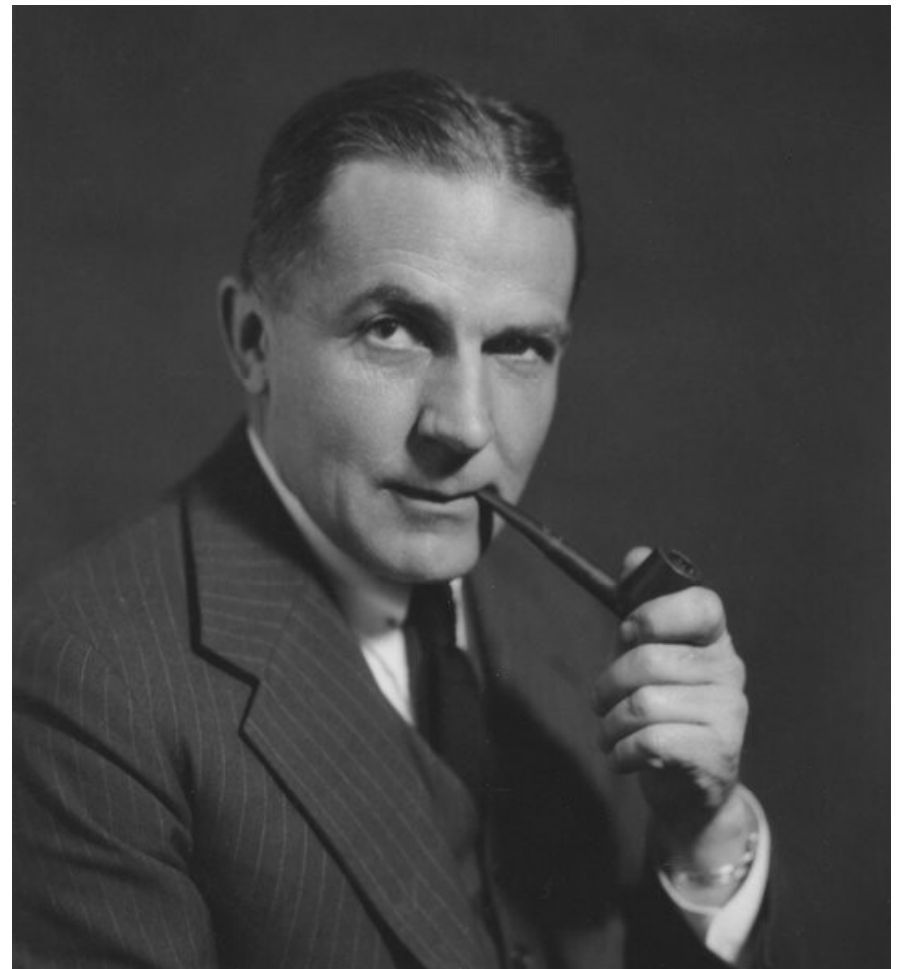
Edgar Stevenson Furniss

- Chairman of the Yale Department of Economics, Sociology and Government, 1929
- Associate dean, Sheffield Scientific School, starting 1929
- Dean of the Graduate School, 1934
- Yale Provost, 1956



Norman Sydney Buck

- Yale College 1913
- Ph.D. Yale
- Yale Professor of Political Economy 1930
- Yale Provost
- Winner of Yale Medal, 1962



4th Edition (1939) of FF&B Elementary Economics Had No Macroeconomics

- Part I The Economic Organization (production, business, division of labor)
- Part II The Forces Determining Price (price theory, imperfect competition)
- Part III Distribution of Wealth & Income
- Part IV Money & Banking

FF&B 1939 References to Depression

- “By the summer of 1929 most lines of business activity in the United States were showing some recession, and this was fatal to a domestic structure of speculative credit which was based on expectation of everlasting expansion, of accelerated profit taking and of security values which could move up only.” p. 605
- Factual description of New Deal policies (especially regarding credit and banking) follows, reporting brief newspaper-like criticisms others have made of them
- No mention of Keynes, hardly any of Fisher
- No real theory of depressions!

Olin Glenn Saxon 1892-1962

- Strong free market advocate
- Author of *Keynes at Harvard: Economic Deception as a Political Credo*
- Retired 1961
- Died 1962
- William F. Buckley at Saxon's retirement party:

PROFESSOR SAXON WAS the nearest thing to an omnipresence I ever knew. He made Yale unsafe for economic presumption. You could never tell just when one of the current economic myths, traveling about the campus drawing applause from all the little apprentice social magicians, would turn a corner, bump into Glenn Saxon, and die a miserable death. Occasionally, our beleaguered conservative forces needed a massive display of strength, and we would summon forth our Big Bertha, and put Mr. Saxon publicly on display before, say, the Political Union. There he would pronounce the veri-

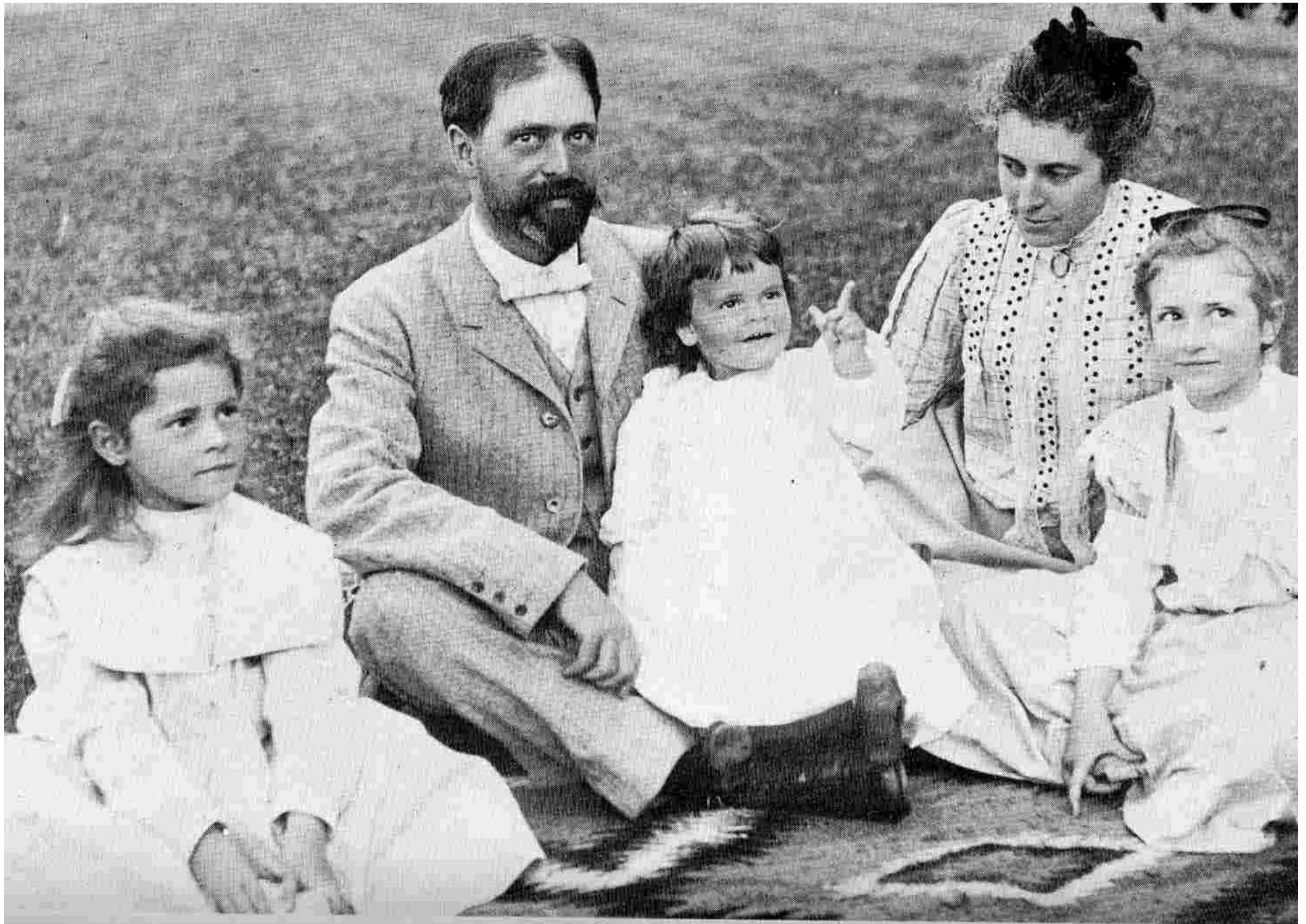
FF&B and their Conflict with Irving Fisher

- Fisher was in his later years “alienated” from some in his department
- FF&B seem to see themselves as expositors of received doctrine. No hint of controversy in the book. Economists’ names are hardly ever given (except in lists of suggested readings at ends of major sections of book). Frequent references instead to government agencies and their statistics.

Irving Fisher 1867-1947

- B.A. Yale 1888, Yale's first econ PhD 1891
- 20th President AEA, 1918
- Robert Dimand: "Once the most cited monetary economist, the subject of major review articles and the center of controversies over theory and policy, Fisher lost the profession's attention, vanished from citation lists in macroeconomics, and was regarded as an embarrassment by colleagues in his university and his discipline. Then, after his death, his contributions to macroeconomics became increasingly cited and influential, as macroeconomics developed in ways that brought it closer to Fisher's approach."





With family on Four-sixty lawn, 1902

My Father Irving Fisher by Irving Norton Fisher 1956

- During hurricane of 1938: “His concentration on his work was so complete that he was entirely unaware that anything unusual was in progress until he went outside to mail some letters and found trees down everywhere.”

Fisher Co-Founder of Life Extension Institute, which Encouraged Exercise

The Life Extension Institute, as you know, is a semi-philanthropic, self-supporting organization. It was founded in 1913, with the co-operation of Harold A. Ley, Professor Irving Fisher, former President Taft, Robert W. de Forest, and other forward-looking men of affairs. (Mr. Taft was Chairman of the Board of Directors until his appointment as Chief Justice of U. S. Supreme Court, when he resigned.)

Fisher Was behind Yale's Switch From Gymnastics to Athletics, 1914

"In the future the Yale classes in gymnastics will mean play, competitive athletics, preceded by careful physical examination, and prescriptions for defective or weak muscles or organs, lectures by Dean Blumer of the Yale Medical School, Prof. Irving Fisher of the National Health Movement, Dean Frederick Jones, and Dr. Rettger."

Fisher is Vice President of Non-Smokers League 1923

WAR IS DECLARED ON 'DEMON' TOBACCO

NATIONAL CRUSADE PLANNED

**Non-Smokers' League
Will Work for State**

bacco smoking in all public and semi-public places.

"2. To secure enactment of additional laws, &c., necessary for such purpose, or to so restrict that only those who may indulge the habit will be required to inhale tobacco fumes.

"3. Creation of wholesome opinion. Encouraging individuals, whose rights and comforts may be disregarded by tobacco users, to insist upon proper re-

Dr. Pease applauds the opposition to the use of tobacco shown at the recent Anti-Alcoholic Congress at Copenhagen. The stand there taken by internationally known authorities on health has given considerable impetus, he says, to the movement to send the ash tray to join the cocktail shaker in exile from those shores.

Tobacco in the War.

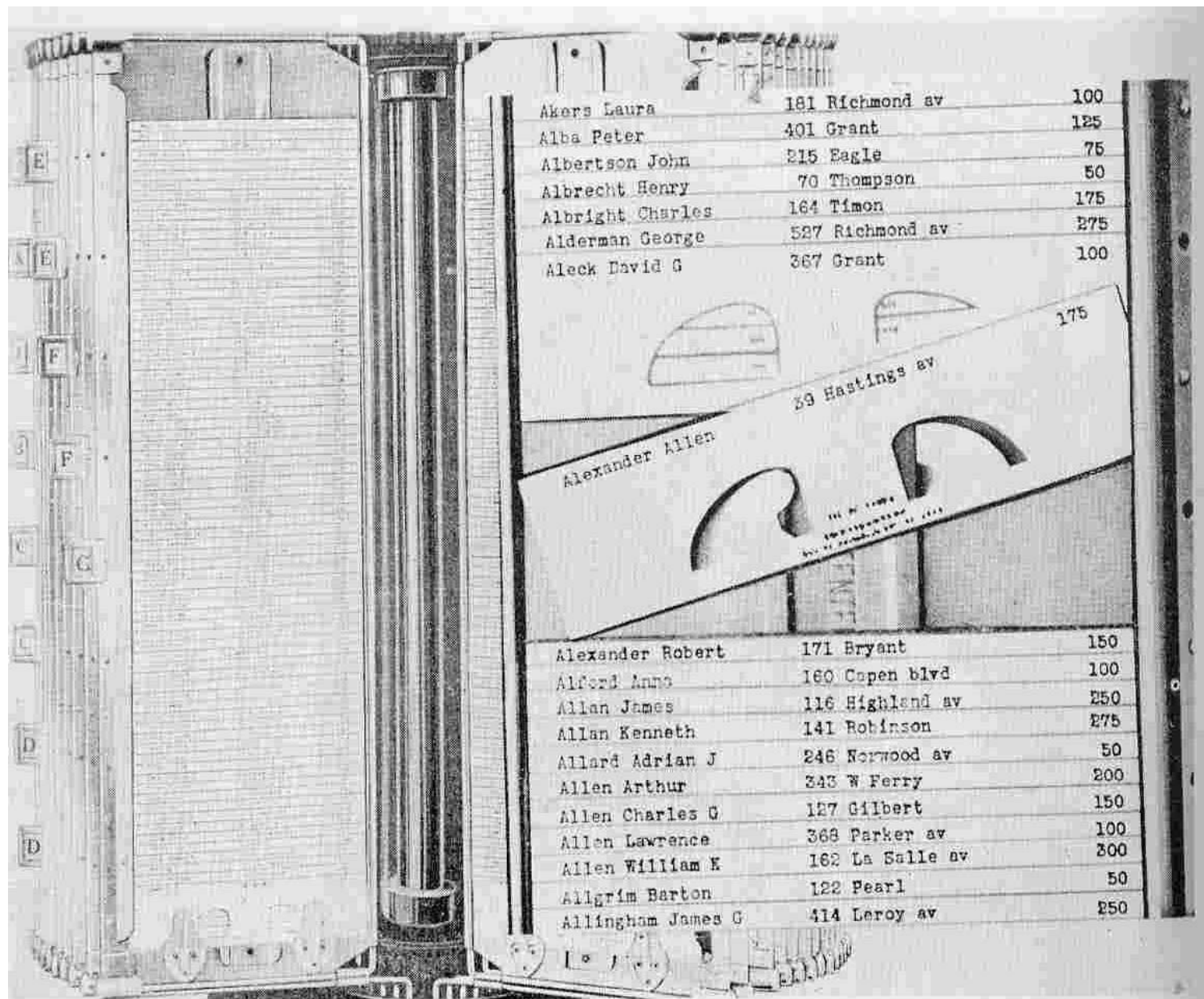
A long and bitter struggle is expected by the non-smokers. Not only must new ground be gained, but lost ground must be made up as well, they say. The war dealt a staggering blow to the cause of tobacco prohibition. Tobacco was included in the army rations. It

Fisher Criticism of the Medical Establishment

- “He deplored the ultraconservative attitude of the run-of-the-mill medical man and often remarked that the majority of them were ‘fifty years behind the times’ because of the time lag between making new discoveries and their general application.” (Irving N. Fisher p. 116)
- Irving Fisher rode a bicycle to work at Yale, jogged, hiked the East Rock for exercise, in an era when few adults did such things.
- All the profits from his *How to Live* book went to the Life Extension Institute

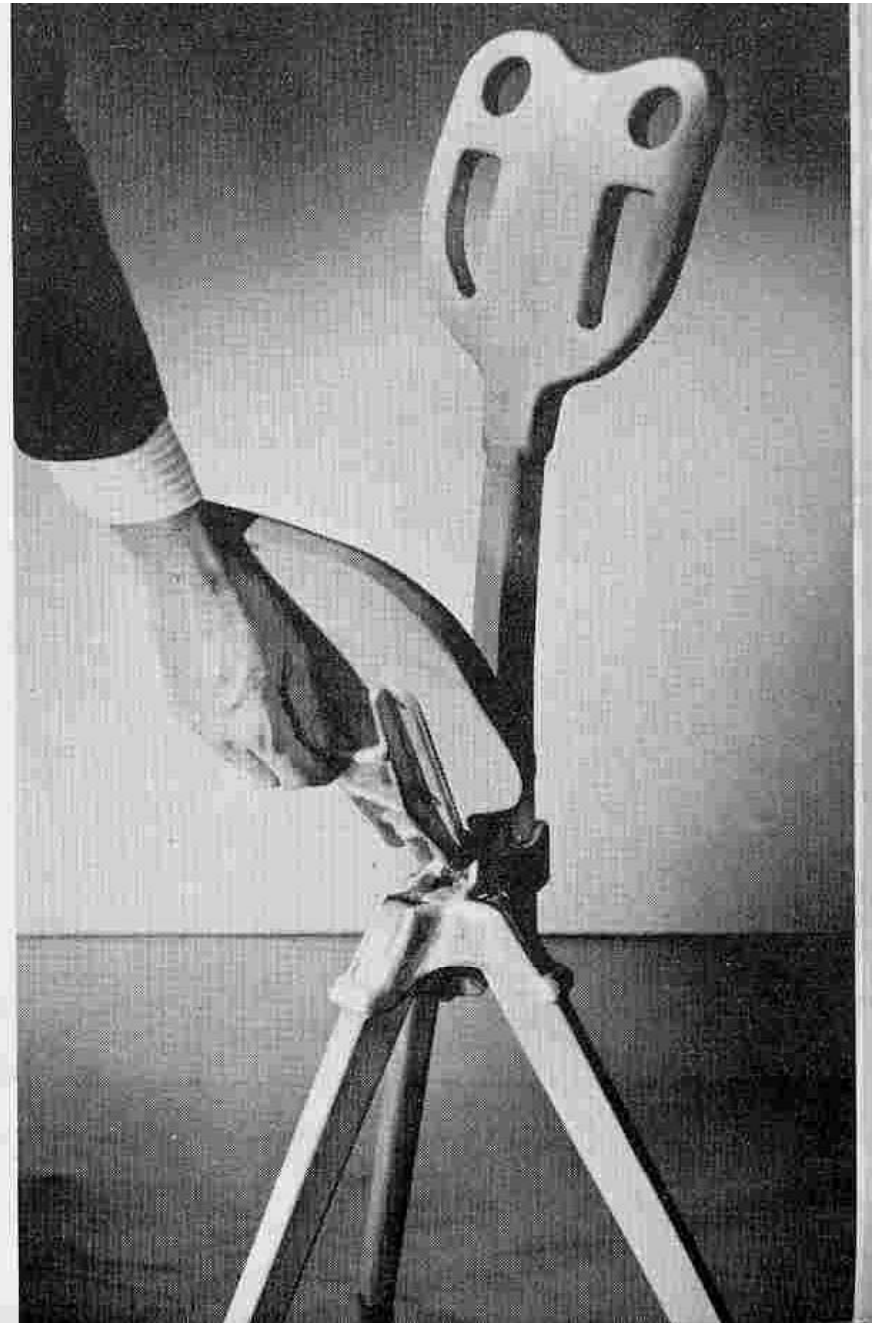
Irving Fisher Productions

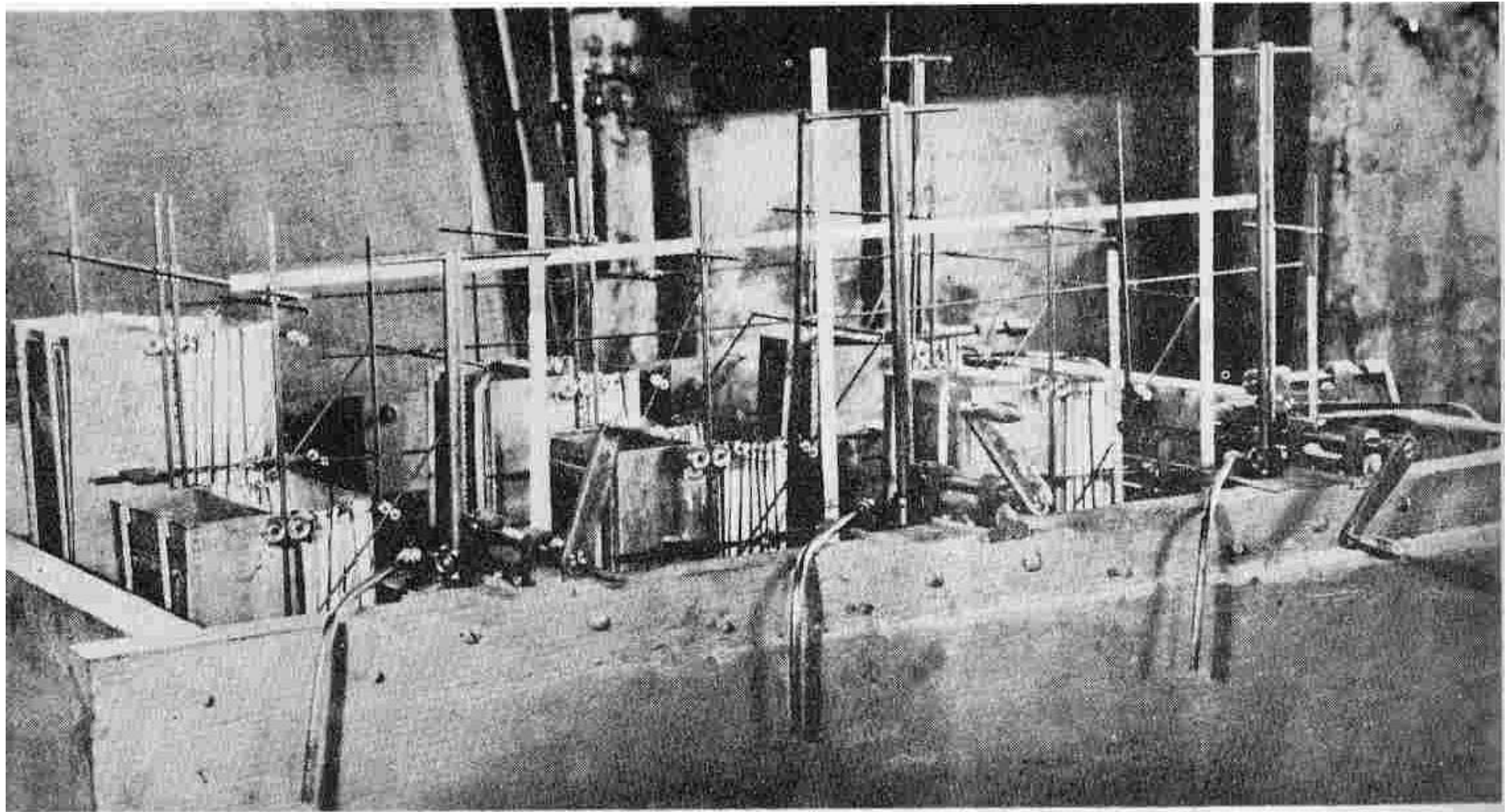
- *Elements of Geometry* 1896
- *A Brief Introduction to the Infinitesimal Calculus* 1897
- *Effect of Diet on Endurance* 1907
- *Purchasing Power of Money* 1910
- *How to Live* 1915 (21 editions, 400k copies by '37, 6 million given away by Metropolitan Life)
- *The Money Illusion* 1928
- *Theory of Interest* 1930
- *The Stock Market Crash—and After* 1930
- *World Maps and Globes* 1944
- Inventions: (as member of Yale crew team) stroke indicator for Yale crew, Visible Index (Rand Kardex 1925, precursor to Rolodex 1956), folding chair, electric bed suspended by pulleys from the ceiling, an accurate sundial, a clock made entirely from wood, price level mechanism, Fisher Ideal Index Number, compensated dollar, icosahedral equal-area map projection



His visible index, patented 1913

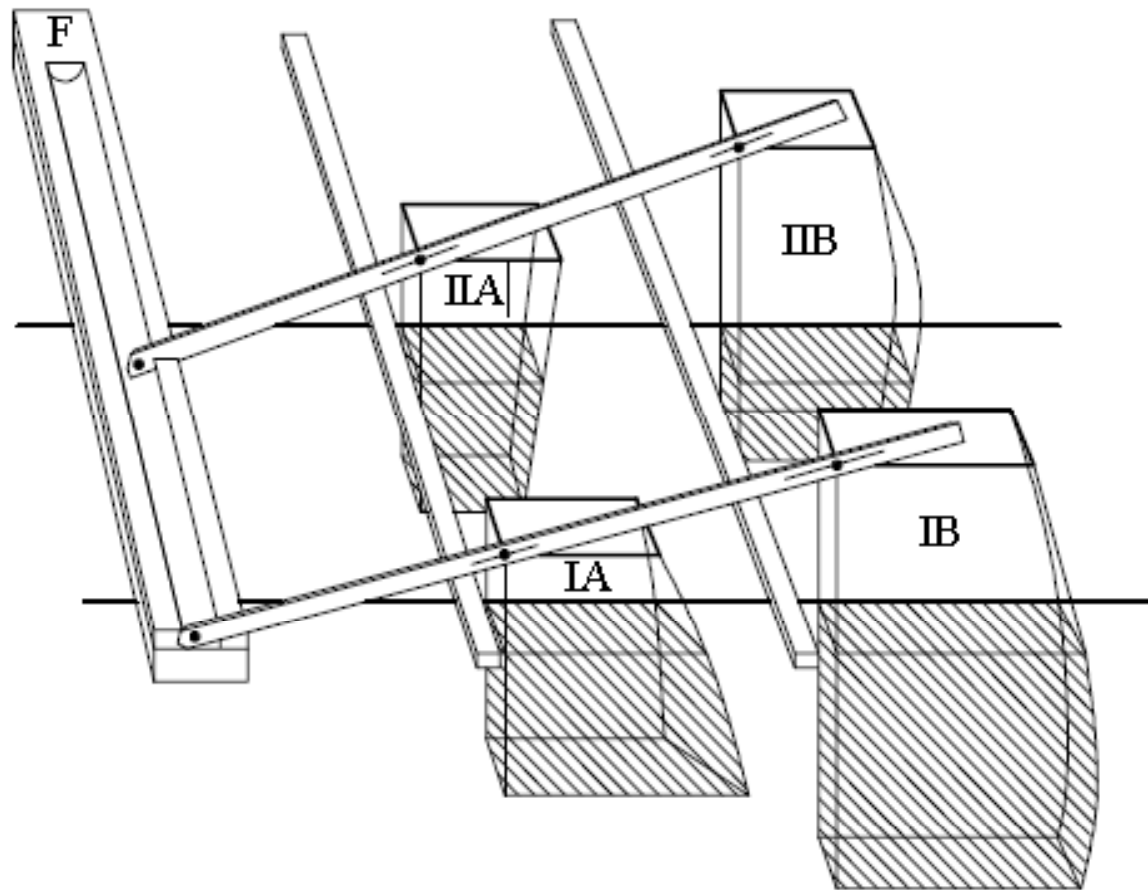
His folding stool,
invented 1945



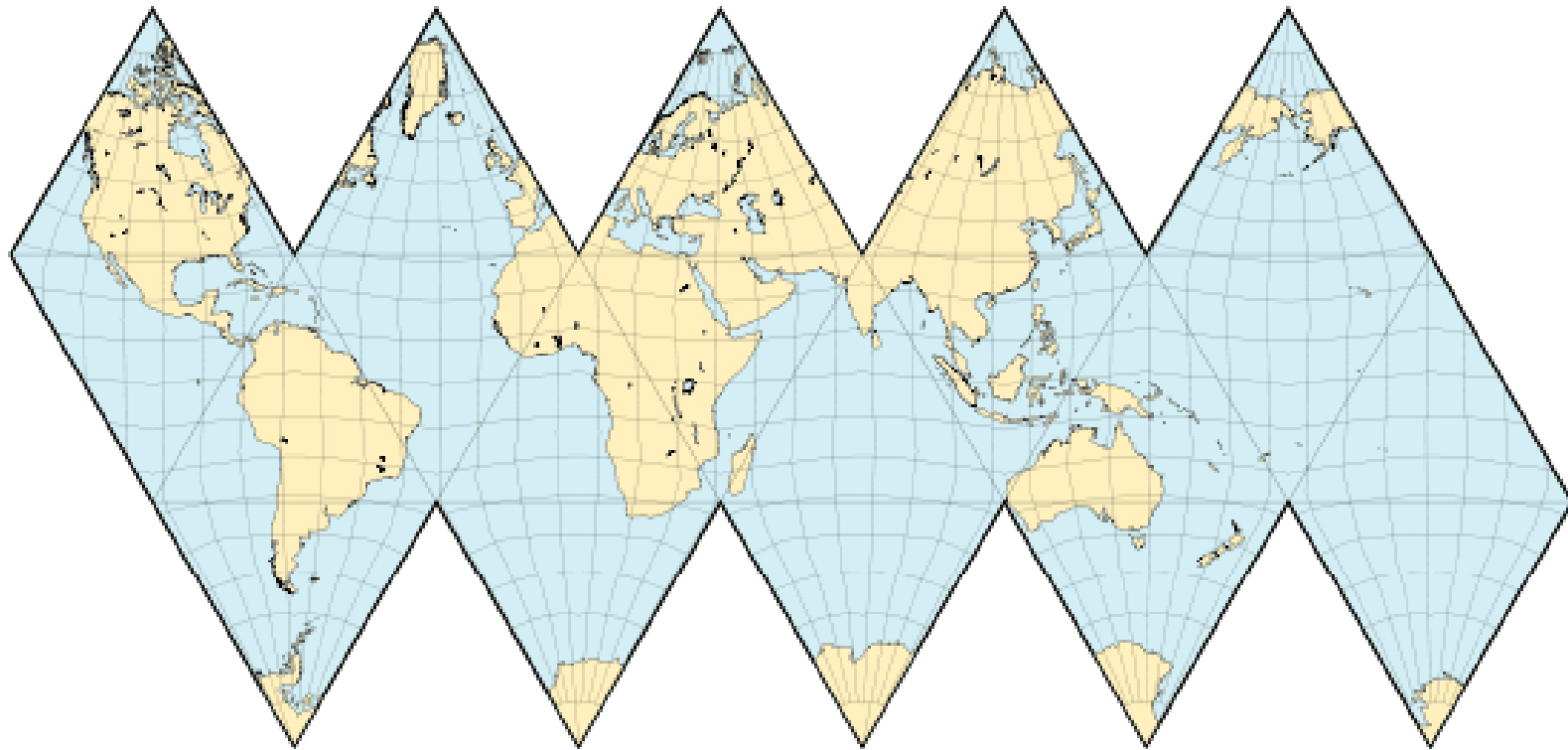


His price level mechanism, 1892

Brainard & Scarf's (2000) Simplification of Fisher's Machine (2-Good, 2-Consumer Case)



Fisher's 1945 Patented Equal-Area Icosahedral Map Projection (an Improvement of R. Buckminster Fuller's Dymaxion Projection)



At BIS in Switzerland There Is an Irving Fisher Committee on Central Bank Statistics

Irving Fisher Committee on Central Bank Statistics

The Irving Fisher Committee on Central Bank Statistics (IFC) is a forum of central bank economists and statisticians, as well as others who want to participate in discussing statistical issues of interest to central banks. The IFC is established and governed by the international central banking community and operates under the auspices of the Bank for International Settlements (BIS). It is associated with the [International Statistical Institute \(ISI\)](#).

The IFC has adopted the name of Irving Fisher, an internationally renowned economist and statistician, for his work on economic measurement and many other topics related to monetary and financial stability of interest to central banks. His wide-ranging contributions to economics and statistics and his multi-disciplinary approach serve as an example for the IFC's objectives and activities.

Formation of Dept of Economics, 1937

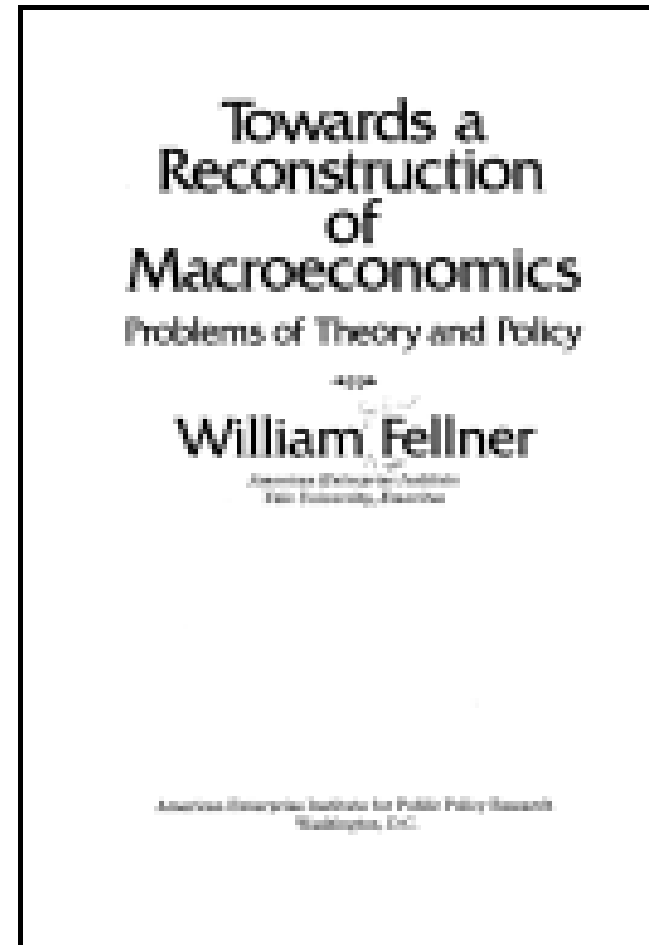
- Sheffield Scientific School merged with Yale College into a single Faculty of Arts and Sciences
- Department of Economics created then

Critical 1940s Econ Dept Meeting

- Widely, if vaguely, remembered meeting
- Irving Fisher no longer there
- New hires advised to be there to outvote “the icecap,” the conservative economists
- Department was transformed from a “conservative” to “modern” economics department

William J. Fellner 1905-1983

- Council of Economic Advisers 1973-5
- Author of many books
- “Stabilization Policy Ten Years After” with Duesenberry and Perry 1 1980



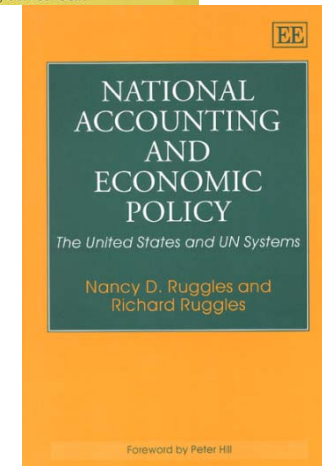
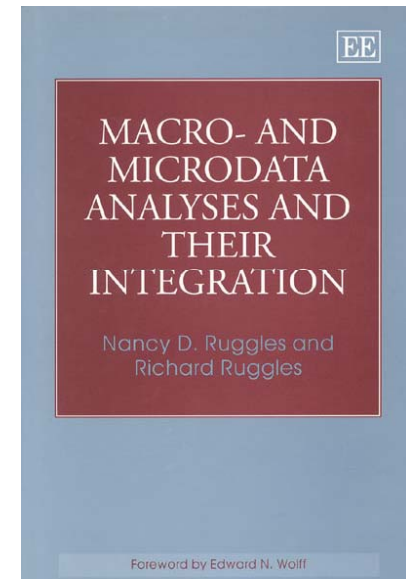
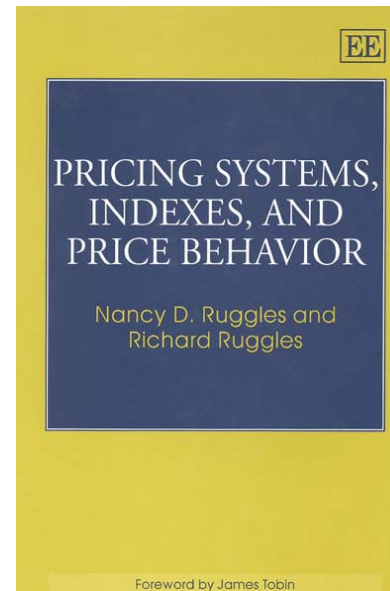
Richard Ruggles 1916-2001

- PhD Harvard 1942
- During WWII, devised system to figure out from serial numbers what were production numbers at munitions factories
- Statistician, developed national income accounting
- Joined Yale 1947
- Department chair 1959-62



Nancy Dunlap Ruggles

- PhD Harvard 1949
- Senior Research Economist with the Institute for Economic and Social Policy Studies at Yale University
- Jointly authored much of husband Richard Ruggles' work
- Married Richard 1946, Accidental death 1987



William F. Buckley, Jr. 1925-2008

- After WWII US Army, graduates Yale 1950
- Skull & Bones
- Author of 50 books, first of which was *God & Man at Yale* 1951
- Syndicated columnist
- TV show Firing Line 1966-99
- Best-known American conservative



*Buckley's God and Man at Yale: The
Superstitions of Academic Freedom 1951*

. . If the recent Yale graduate, who exposed himself to Yale economics during his undergraduate years, exhibits enterprise, self-reliance, and independence, it is only because he has turned his back upon his teachers and texts. It is because he has not hearkened to those who assiduously disparage the individual, glorify the government, enshrine security, and discourage self reliance.” p. 45

Buckley's List of Yale Econ 10 Texts

- 1946-47: *Economic Analysis and Public Policy* by Mary Jean Bowman and George Leland Bach, 1946
- 1947-8: *The Elements of Economics* Lorie Tarshis 1947
- 1948-50: *Economics, An Introductory Analysis* by Paul A. Samuelson 1948 (except for the section taught by Prof. Buck: “Apparently he refused to adopt the department-prescribed textbooks. Instead, he uses the text that for many years, and in a happier age, was used by the entire department of economics—a book which he coauthored with Professor Fairchild and, *mirabile dictu*, Prof. Furniss.” p. 99

Lloyd Reynolds 1911-2005

- Ph.D. Harvard 1936, joined Yale 1945
- Econ Chair 1950?-60
- Defended Yale against Buckley
- “Former Yale president Kingman Brewster Jr. once credited Dr. Reynolds with transforming Yale's economics faculty from one of the worst departments in the country into one of the best. Dr. Reynolds told Brewster that he did it by hiring people brighter than himself. During his chairmanship, the faculty grew from 31 to 65 members, two of whom later won Nobel Prizes.” (Wash Post 2005)



James Tobin 1918-2002

- Joined Yale as part of Reynolds expansion 1950
- Council of Economic Advisers under Kennedy
- Nobel Prize 1981



Robert Triffin 1911-1993

- Joined Yale econ department 1951 as part of Reynolds' expansion
- “Triffin dilemma” that reserve currency must run deficits
- “Keynes-Triffin plan” for a supranational central bank



Henry Wallich 1914-1988

- Joined Yale 1951 as part of Reynolds expansion
- Eisenhower CEA member 1959
- Newsweek columnist from 1965
- Advocated tax-based incomes policy TIP 1971
- Member of Fed Board of Governors 1974-86
- “Like burglary, inflation is an extralegal form of redistribution”



Cowles Foundation 1955

- Alfred Cowles (1891-1984) Yale 1913, who also founded *Econometrica*
- 1932 Colorado Springs Cowles Commission
- U. Chicago starting 1939
- Reynolds brings Cowles Commission from Chicago, 1955, along with Tjalling Koopmans and Jacob Marshak

- Alfred Cowles:



Kenneth Boulding on Cowles Foundation, quoted 1955

- "It is becoming more and more clear," he continued, "that the Cowles Commission and the leaders of the Econometric Society constitute such a group in the present day, in the sense that no economist anywhere in the world can afford to remain completely ignorant of the ferment of ideas, the new research techniques and new points of view which are constantly proceeding from the activities" of the Commission.

Cowles and Macroeconomics

- In the 1980s, there was a move at Cowles to make the Cowles Foundation non-exclusive
- From then on, Cowles became the wing of the economics department that specialized in macroeconomics, econometrics and theory
- When Bill Nordhaus returned from being Yale provost, he did not take an office at Cowles. This may have broken the tradition that all Cowles people have offices at 30 Hillhouse

Robert Solow “Cowles and the Tradition of Macroeconomics,” 1991

- Based on his remarks at Cowles Fiftieth Anniversary celebration 1983
- “It is striking that the list of Cowles Foundation Papers includes almost none belonging to the rational-expectations-with-market-clearing school that has captivated so many young macroeconomists who are away from the bracing air of the New England shoreline.”
- “money and growth tradition”

Solow 1983 (Continued)

- [Cowles researchers emphasized]“the eminently scientific view that in a world with a complex set of portfolio preferences, financial institutions, and paper assets (some with fixed and some with market-determined yields), monetary theory and monetary policy are not well represented by a model in which an undifferentiated " M " is exogenously varied by means of helicopter drops, and idealized helicopter drops at that.”

What Was Solow Getting At?

- To me, Yale Macroeconomics, as also exemplified by younger people today, is a informed commonsense economics (ICE, not to be confused with ice cap).
- Tobin's debate with Friedman exemplifies this.
- Friedman got great publicity by overemphasizing the connection between money supply and inflation, playing to the public, creating a false simplicity about policy
- Tobin was *moral*, not jumping on bandwagons

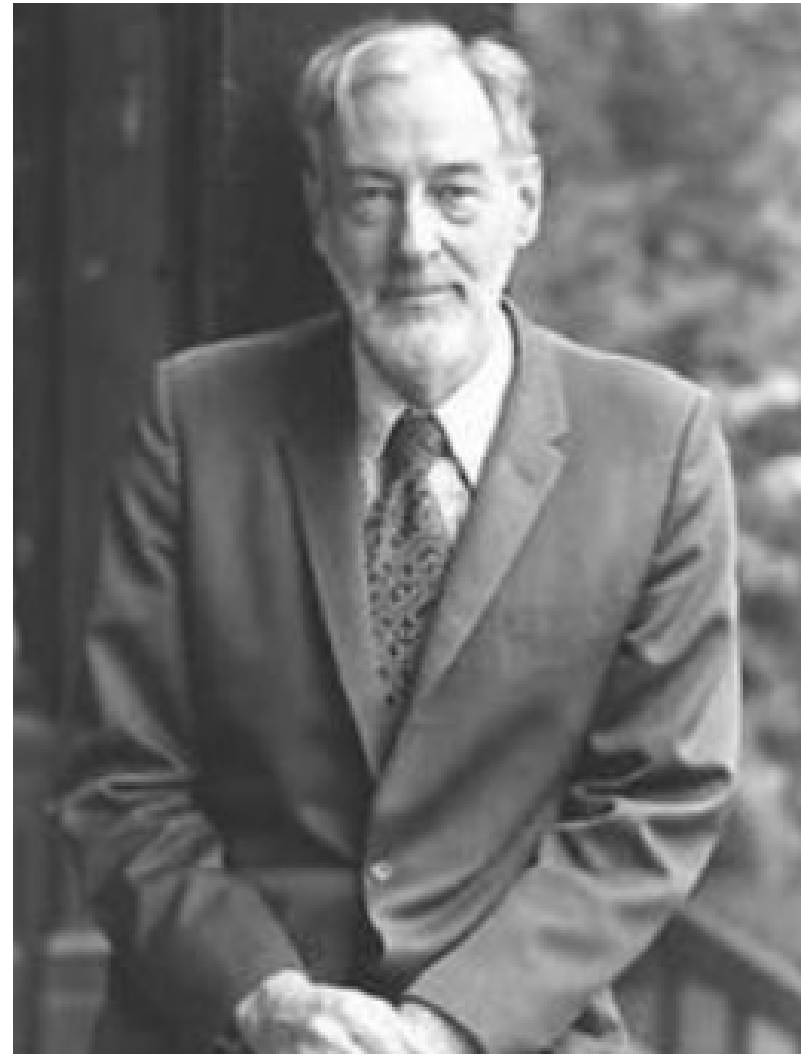
Jacob Marshak 1898-1977

- "Money and the Theory of Assets", 1938, *Econometrica*.
- "Rational Behavior, Uncertain Prospects and Measurable Utility", 1950, *Econometrica*.
- Elected president of AEA, but died of stroke before he took office



Tjalling Koopmans 1910-85

- Brought Cowles Foundation to Yale 1955
- Cowles coffee hour
- “Measurement without Theory”
- Nobel Prize 1975



Reynolds Starts Economic Growth Center 1961

- [Around 1960] he persuaded Ford [Foundation] to donate \$15 million to establish the Yale Economic Growth Center, which he served as founding director until 1967.”
- Now the world’s premier academic center for development

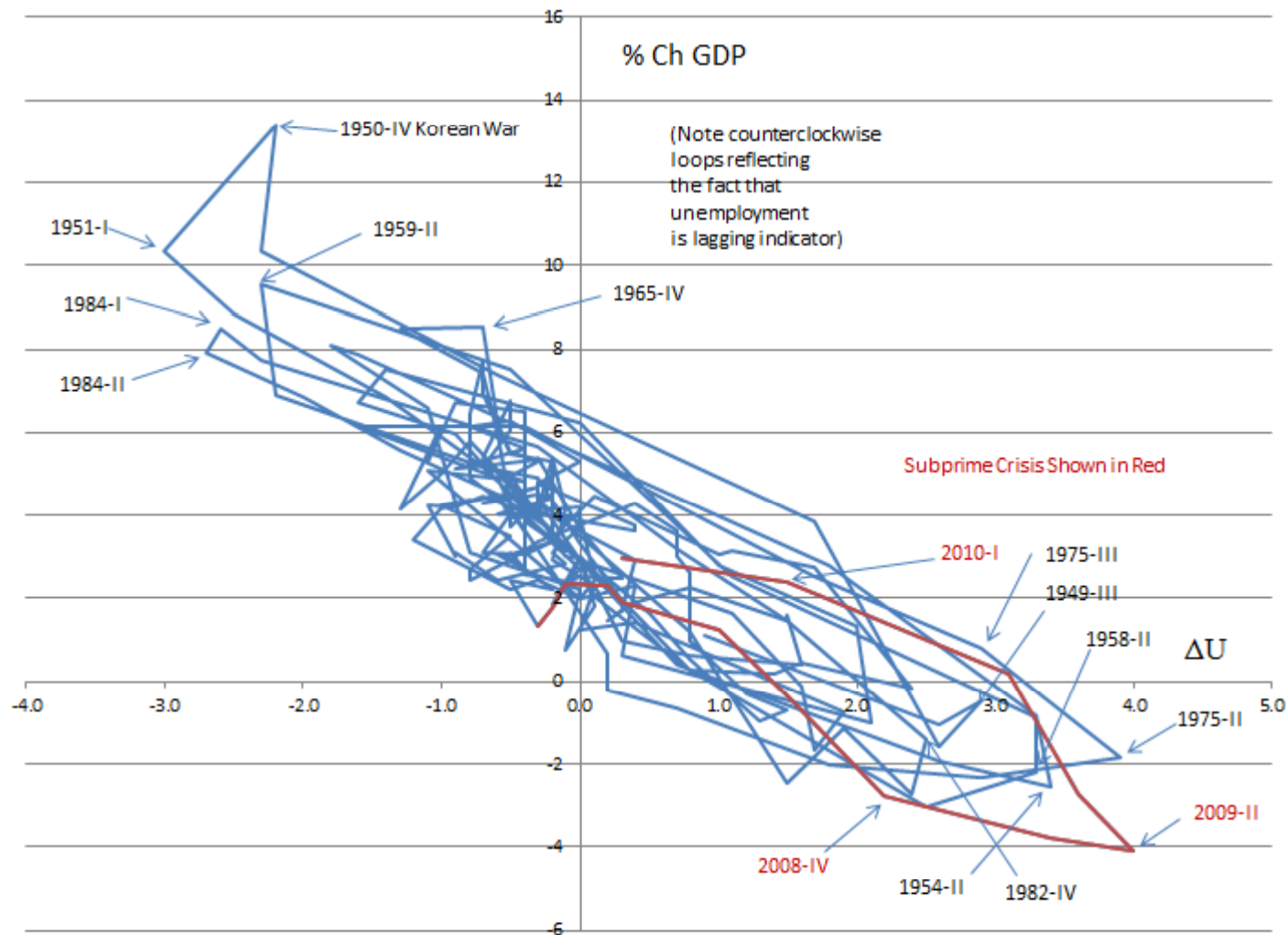


Arthur Okun 1928-1980

- Chairman of Council of Economic Advisers under President Johnson
- Founding editor, Brookings Papers on Economic Activity
- “Okun’s Law”
- “Misery Index”

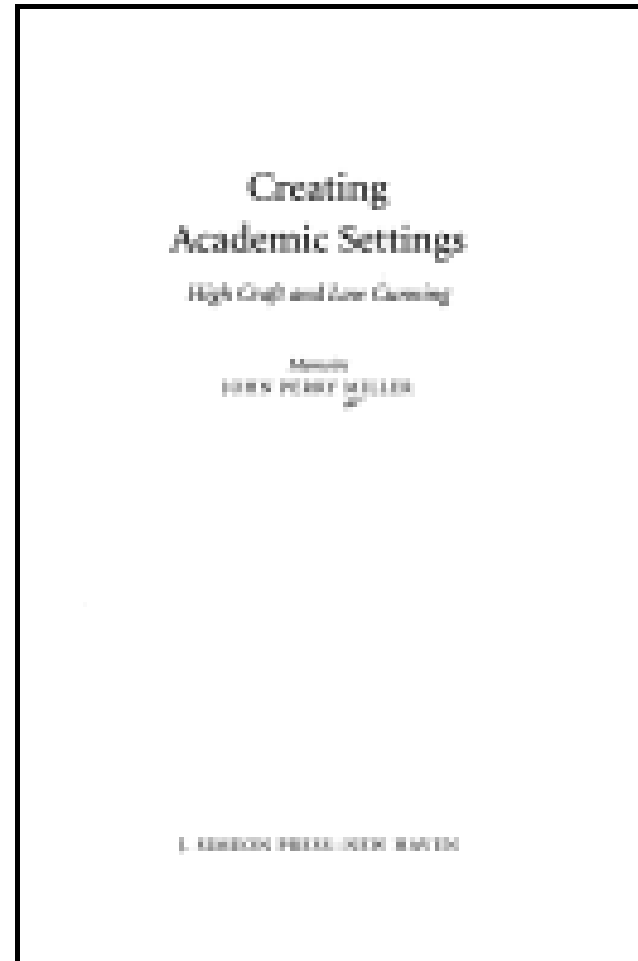


Okun's Law, Quarterly, 1949-2010



John Perry Miller 1912-87

- Son of Yale prof. Lowell Miller
- PhD Harvard 1937
- Competition, Cartels and their Regulation 1962
- Dean of Yale graduate school 1961-9
- Co-founder of Yale School of Management



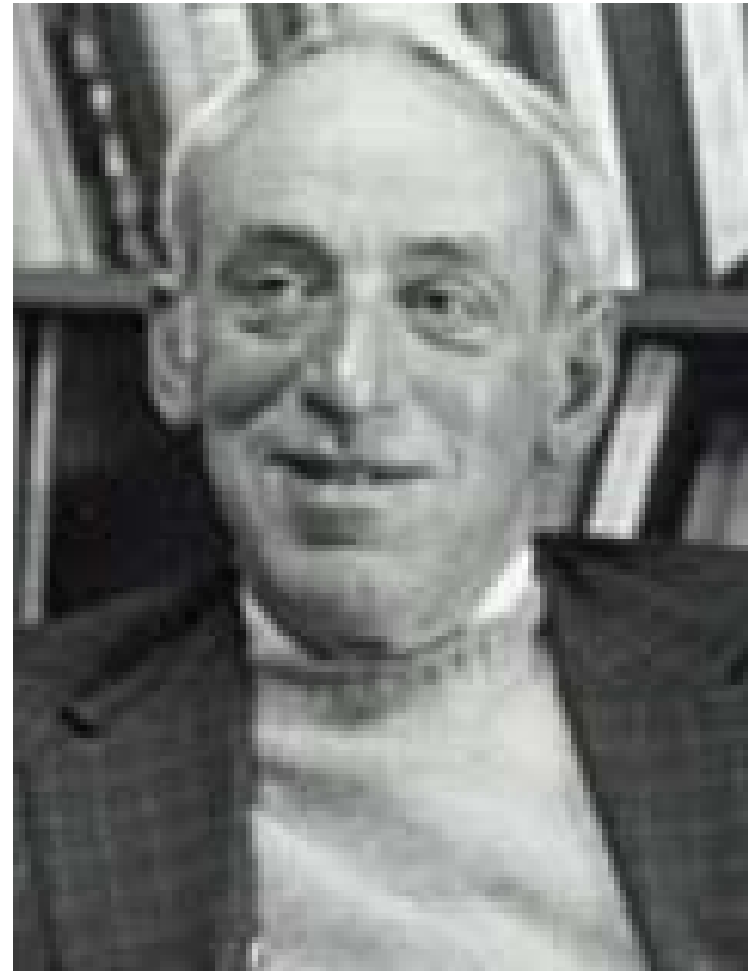
Yale School of Management 1976

- In his book, Miller describes alumni resistance to creating a “vocational” school at Yale
- School of Organization and Management emphasized social sciences, public as well as private management

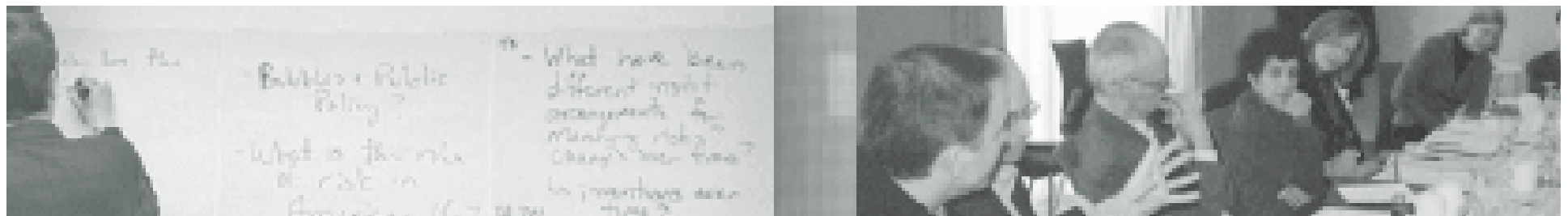


James Tobin

- Harvard BA 1939, Ph.D 1947
- Junior Fellow Harvard 1947-50
- John Bates Clark Medal 1955
- I came to Yale because Ruggles, Reynolds, and Miller convinced me that there would be a renaissance of the department; it would grow and improve. That was indeed what happened.



THE TOBIN PROJECT



The Tobin Project is an alliance of the nation's leading academics united by a belief in the power of ideas and a shared commitment to using ideas to improve the lives of their fellow citizens.

Modeled after earlier efforts to link academics and lawmakers, the Tobin Project seeks to influence public debate by reaching both outward to connect with the policy community and inward to shape debate within the academic community.

Adam Smith 1776

- “By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an **invisible hand** to promote an end which was no part of his intention. Nor is it always the worse for the society that it was not part of it. By pursuing his own interest he frequently promotes that of the society **more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.** It is an affectation, indeed, not very common among merchants, and very few words need be employed in dissuading them from it.”

Tobin's Moral Purpose

- Tobin exemplified a kind of economics that to me understands Smith and understands how a malfunctioning economic system can be improved to contribute to such moral purpose

Thanks to Robert Dimand, Ann Judd for their Historical Work

- Robert Dimand, “Irving Fisher and Modern Macroeconomics,” American Economic Review, 1997, editor of Irving Fisher papers, James Tobin papers.
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