HET 2019-2020

Seminar 2.1 November 2019

Economics after WWII: Econometrics and synthesis

J.M. Keynes (1883-1946)

- Father: J.Neville Keynes
- Cambridge
- Bloomsbury group, antiVictorian and bohemian (Virginia Woolf, E.M.
 Forster, Duncan Grant, Vanessa Bell)



J.M. Keynes (1883-1946)



Theory of effective demand

Investiment: expectations ("animal spirits")

Non-optimal equilibria

Criticism against neoclassical economics:

the notion of equilibrium

rejects Say's law

investment schedule

institutions and regulation

1. Keynes, the Great Depression and the first economic models

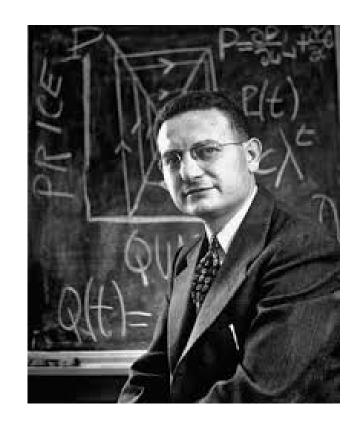
(1933) "The decadent international but individualistic capitalism, in the hands of which we found ourselves after the (1st) War, is not a success. It is not intelligent, it is not beautiful, it is not just, it is not virtuous – and it doesn't deliver the goods. In short, we dislike it, and we are beginning to despise it_"

1936, General Theory of Employment, Interest and Money

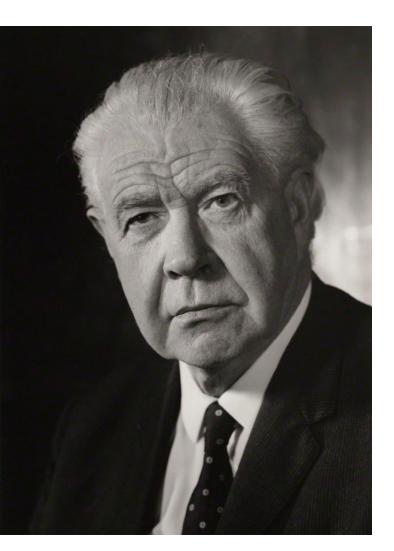
- Concept of Marginal efficiency of capital
- Consumption function and the multiplier
- Equilibrium S and I, but still expectations
- Based on Marshallian short term comparative statics in economics
- The topic being not any more price adjustments (as in TM) but fluctuations of output

The impact of *GT*

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" (Paul Samuelson)



Lionel Robbins (1898-1984)



"I long realized that my earlier diagnosis of the **Great Depression had** missed the mark in not realizing sufficiently the paramount role played by the catastrophic contraction of incomes brought about by deflation"

The disciples: Roy Harrod (1900-1978) and J.R. Hicks (1904-1989)





The puzzle of the IS-LM

Hicks's interpretation

1937: Keynes's answer

Harrod's strategy: to unify the efforts of the economists

Oxford Conference, 1936

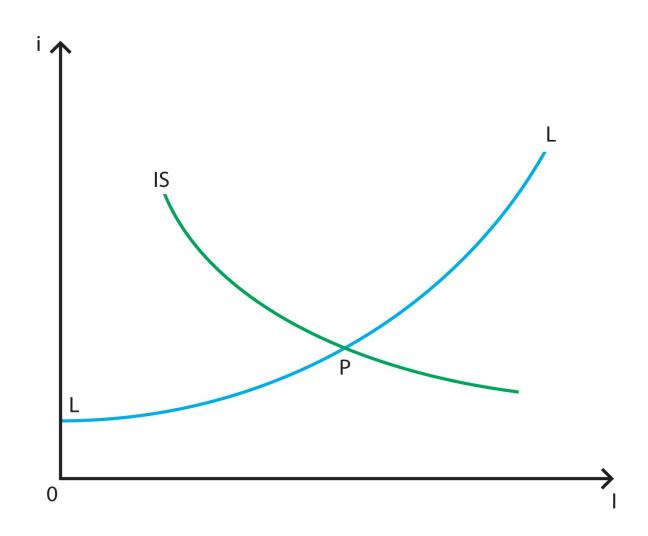
"It would be a good thing to ask one of Keynes's adherents to explain to us **in a clear** (i.e., **mathematical**) way the substance of his new book (*Frisch: 'excellent!'*) which now creates a sensation among English economists".

(Marschak to Frisch, February 1936)

Oxford, 1936

- Some of the disciples were absent (Joan Robinson, Shackle, Kahn), but Harrod was there
- "Hicks, Harrod, Meade and Hansen in America, the leading constructors of 'IS-LM' Keynesianism, had a clear motive: to reconcile Keynesians and non-Keynesians, so that the ground for policy could be quickly cleared. These early econometric models incorporated features which were not at all evident in the magnum opus, but which conformed more closely to orthodox theory." (Skidelsky, 1992: 538)

Original version by Hicks (1937)



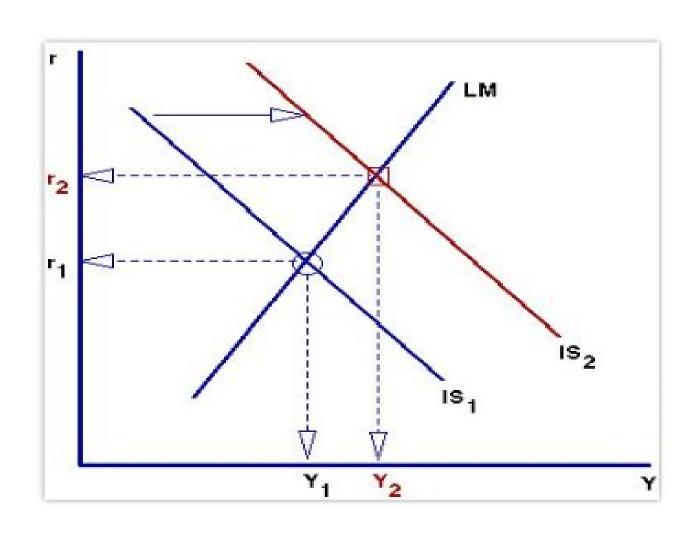
The puzzle of the IS-LM

Hicks's interpretation

1937: Keynes's answer

Harrod's strategy: to unify the efforts of the economists

IS-LM model



Roy Harrod vs Keynes

- Harrod: "My main endeavour was to mitigate his attack on the 'classical school'. (...) It seemed to me that this was pushing his criticism too far, would make too much dust and would give rise to irrelevant controversies."
- Keynes: "You don't mention effective demand (...). To me the most extraordinary thing, regarded historically, is the complete disappearance of the theory of demand and supply for output as a whole, i.e. the theory of employment, after it had been the most discussed thing in economics."

Harrod on Keynes

 It is possible to return to the "great truths which Adam Smith preached" and to accept the "gospel, without sacrificing any of Keynes' cherished principles relating to employment and trade depression" (Harrod, 1951)

 Keynes: "(Your) Freightful tendency to compromise"

Late reply by Keynes

 1) 1937, QJE: trajectories in time, uncertainty and choices of political economy

• 2) debate with Tinbergen on simultaneous equations, 1938 and 1939, then with keynesian econometricians and others (Marschak, Lange, Frisch, Divisia, etc.)

... and Hicks himself

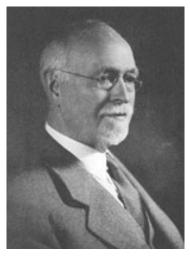
- Exclusion of time and uncertainty
- Sequential and non-deterministic causality for Keynes whereas simultaneous and deterministic for IS-LM

 "(The IS-LM scheme) is now much less popular with me than I think it still is with many other people. It reduces the GT to equilibrium economics; it is not really in time. That, of course, is why it has done so well." (Hicks, 1979: 289-90)

2. The econometric generation

 December 1930, foundation of the Econometric Society

I. Fisher R. Frisch J. Schumpeter







The Aconometric Society

An International Society for the Advancement of Economic Theory in its Relation to Statistics and Mathematics



A l'occasion du centenaire de la naissance de

Léon Walras

les membres soussignés de la Société Internationale d'Econométrie tiennent à exprimer leur reconnaissance à l'Université de Lausanne pour le service qu'elle a rendu à la Science, en dotant d'une chaire l'enseignement de la théorie de l'équilibre économique, et en lui imprimant un éclat qui a largement contribué à son rayonnement dans le monde.

Irving Fisher PRESIDENT

16 DECEMBRE 1934

OTHER OFFICERS FRANÇOIS DIVISIA · VICE-PRESIDENT

CHARLES F. ROOS · SECRETARY COLORADO COLLEGE COLORADO SPRINGS COLORADO U.S.A.

ALFRED COWLES 3RD . TREASURER

OTHER FELLOWS

LUIGI AMOROSO ROMA
OSKAR N. ANDERSON SOTA
OSKAR N. ANDERSON SOTA
PASCAL BONINSESON LAUSANNE
ARTHUR L. BOWLEY LONDON
CLEMENT COLSON PARIS
GUSTAVO DEL VECCHIO BOLGONA
GRIFFITH C. EVANS HOUSTON, TEXAS

RAGNAR FRISCH OSLO CORRADO GINI ROMA GOTTFRIED HABERLER GENÈVE HAROLD HOTELLING NEW YORK JOHN MAYNARD KEYNES CAMBRIDGE, ENGLAND
WESLEY C. MITCHELL NEW YORK
HENRY L. MOORE CORNWALL, NEW YORK
UMBERTO RICCI GIZA, ECYPT
JACQUES RUEFF PARIS ERICH SCHNEIDER DORTMUND, GERMANY
HENRY SCHULTZ CHICAGO

JOSEPH A. SCHUMPETER CAMBUIGE, MASSACHUSETTS
J. TINBERGEN SCHEVENINGEN
FELICE VINCE BOLOGNOM
BW ZAWADSKI WARSAWA
F. ZHUTHEN KOBENHANN F. ZEUTHEN KOBENHAVN

OTHER MEMBERS OTHER MEMBER.

ALPONSO DE PIETRI-TONELLI
VALENTINO DOMINEDO
ULIGI EINAUDI
GIOVANNI FERRARI
PAOLO FORTUNATI
AUGUSTO GRAZIANI
FILADELLO INSOLERA
PASCILLE LORIA
CUGLIENO MASCI
PUBLIO MENGARINI
ALESANDRO MOLINARI
JALESANDRO MOLINARI
GARTANO PIETRI
FILADELO
FI

KONGERIGET

DANMARK

WERNER FENCHEL
CARL IVERSEN
IVAN JANTZEN
HANS C. NYBOILE
J. STEFFENSEN
HENRY STJERNOVIST
HARALD WESTERGAARD

KRALJEVINA

YUGOSLAVIA AL BILIMOVIČ MAGYARORSZÁG MAGYARORSZAG
JENO ANDREICH
CHARLES GOLDZIHER
CHARLES JORDAN
DEZSO KEMENY
BELA KENEZ
JULIUS NEUBAJER
SALEXANDER SIPOS
EDWARD THEISS
STEPHEN VARGA

NEDERLAND
O BAKKER
W J. DE LANGEN
I. P. DE VOOYS
J. GOUDRIAAN, JR.
L HAMBURGER

L HAMBURGER
J G, KOOPMANS
F, W. 'HOOFT
WILLEM L VALK
E. C. VAN DORP
W. J. G. VERMEULEN
G. M VERRIJN-STUART

* NIPPON MIYOJI HAYAKAWA SENJIRO TAKAGI YASUMA TAKATA S. TOBATA

ALGERS GEORGES HENRI BOUSQUET ARGENTINA

ALEJANDRO E. BUNGE CARLOS E. DIEULEFAIT ALEJANDRO E. SHAW

JUSTRALIA MAURICE H. BELZ TORLIEV HYTTEN

BELGIQUE

BLGARIYA IVAN BAINOFF

CANADA R. H. COATS ALEXANDER J. COOK

ČESKOSLOVENSKÁ REPUBLIKA KAREL ENGLIS
JAROSLAV JANKO
IMRICH A. KARVAS
DOBROSLAV KREJCI
PETR RASTOKIN FRANTISÉK SCHWARZ

CHILE JULIO GIROZ ROBERTO VERGARA

CHINA C. C. CHANG WARREN CHEN FRANKLIN L: HO K. P. KING D. K. LIEU T. SHENG C. SUN

DEUTSCHES REICH

DEUTSCHES REICH
ARNO ARON
ABOOR HANAU
MEDORE HANAU
MIHERIM KROMPHARDT
OTHO KUHNIN
OTHO KUHNIN
HAS RICHTER-ALTSCHAFFER
ROBERT SCHMIDT
RULDET STUCKEF
WILHELM VEUCCES
WILHELM VEUCCES
OTHOROWOOD
WILHELM VEUCCES
OTHOROWOOD
WILHELM VEUCCES
OTHOROWOOD
WILHELM VON STACKEE
WILH VON WILH VON STACKEE
WILH VON WILHEL

EGYPT COSTANTINO BRESCIANI-TURRONI
JAMES IRELAND CRAIG

> ENGLAND ENGLAND
>
> R. G. D. ALLEN
>
> C. F. BICKERDIKE
>
> D. OLLAND
>
> C. DOLLAND
>
> MORITA
>
> R. G. HANTREY
>
> R. G. HANTREY
>
> R. HICKS
>
> JAKOB MARSCHAK
>
> REDVERS OPIE
>
> LIONEL C. ROBBINS
>
> G. J. D. SCHUMACH
>
> HAD D. C. STAMP
>
> JOSIAN C. STAMP
>
> JOSIAN C. STAMP

ESPAÑA OLEGARIO FERNÁNDEZ BAÑOS

FRANCE

FIENNE ANTONELLI

GERARD BARRIOL

ALFRED BARRIOL

EMILE BORE

MENTOR BOUNIATIAN

G. DARMOIS

DE RUFFI DE PONYES

MAI LIBORIOL

A. GALLIOT

E. GUMBEL

MAI HADAMARDACHS

MAI HEBMANT

M. HUBER

LOGICE ANDER

LOGICE ANDER

GARLIES MOURE

GARL FRANCE

INDIA PRAPHULIACHANDRA BASU
B. B. DAS GUPTA
L. C. JAIN
W. M. MCLEAN

ITALIA RICCARDO BACHI RODOLFO BENINI GINO BORGATTA GIUSEPPE BUFANO ATTILLIO CABIATI FRANCESCO C D'ANNA THILIPPINE ISLANDS EMETERIO ROA EXEQUIEL S. SEVILLA

OSTERREICH OSTERREICH
HANS MAYER
KARL MENOER
KARL MENOER
LUDWIG V. MISES
OSKAR MORGENSTERN
EWALD SCHAMS
ERICH SCHIEF
KARL SCHLESINGER
RICHARD STRIGE
EMANUEL BUGO VOGEL
OTTO WEINBERGER

RZECZPOSPOLITA

POLSKA

ZYGMUNT LIMANOWSKI
J. PIEKALKIEWICZ
STANISLAW SWIANIEWICZ
ALEKSY WAKAR
FERDYNAND ZWEIG

SOUTH AFRICA S. HERBERT FRANKEL F E., GELDENHUYS

SUISSE MICHEL ANGELO BESSO ARRIGO BORDIN LOUIS V. FURLAN WALTER KULL GEORGES ROYOT HANS STAEHLE

SUOMEN TASAVALTA K. T. JUTILA

> SVERIGE GUSTAF AKERMAN
> JOHAN AKERMAN
> JOHAN AKERMAN
> GOSTA BAGGE
> K. G. HAGSTROEM
> ERIK LINDAHL
> F. J. LINDERS
> GUNNAR MYRDAL
> SVEN DAG WICKSELL

NORGE POUL HEEGAARD GUNNAR JAHN HENRIK PALMSTROM

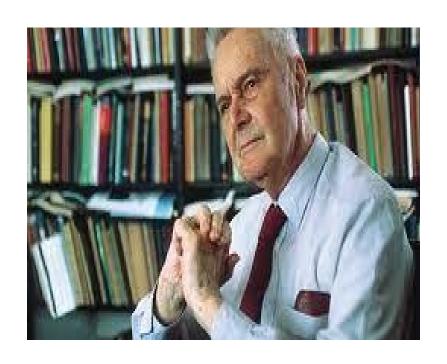
UNITED STATES UNITED STATES
CARL-1 AISBERG
EUGEN AITSCHUI
MONTGOBER D. ANDERSON
SEIGHT AL ANDERSON
SEIGHT ANDERSON
HENRY E. BAILEY
ARTHUR L. BAILEY
ERNEST L. BOGART
WALTER G. BOWERMAN
THEODORE H. BROWN
JOHN B. CANNING
HELEN CANOUER
THOMAS N. CARVER
C. L. CHRISTENSON
J. M. CLARK VICTOR S. CLARK
GERHARD COLM
MORRIS A. COPILARD
MORRIS A. COPILARD
A. R. CRATHORNE
A. R. CRATHORNE
A. R. CHATHORNE
A. R. CHATHORNE
BEDING A. DAVIES
HENRY S. DENNISON
EDWARD T DEVINE
MORDICAL EZEKIEL
DAVID FOR DEVINE
MORDICAL EZEKIEL
DAVID FEIDAY
THORNTON C. RVICE
EDWARD F. RAVIT
ELEMENT S. W. GLAFFE
EDWARD F. KAUTTEKY
HENRY S. CHALLER
EDWARD F. KAUTTEKY
HENRY S. CHALLER
ENTILLIAM JAFFE
ENTRY
ENTRY
ENTRY
HENRY S. CHALLER
THORNTON C. KELLER
THORNTON C. MEXAMORE RACAIS
MAX ASSULY
WORACE SECRIST
WORACE SE

Econometric Society (created1930)

1st conference of the Econometric Society (1931, Lausanne)



The econometric debate





The debate with Tinbergen:



Model of cycles: USA (1877-1913 e 1919-1932), UK (1871-1910), France (1871-1908), Germany (1871-1912)

Model USA: 22 equations, 31 variables, multiple regression and estimation by OLS

Critique by Keynes:

- a) Complexity is irreducible to a model
- b) Non linearity
- c) Dificulty of specification and homogeneity through time
- d) Incomensurability
- e) Dificulty of analysing the qualitative results

The Cambridge Conference, 1938

Debate on Tinbergen (1939)

- Lange e Marschak try to publish a rebuttal of Keynes in the *Economic Journal*
- Memorandum by Frisch: it is not possible to estimate the causality relations

The debate with Tinbergen: Keynes on probability



Keynes on probabilities: the degree of rational belief

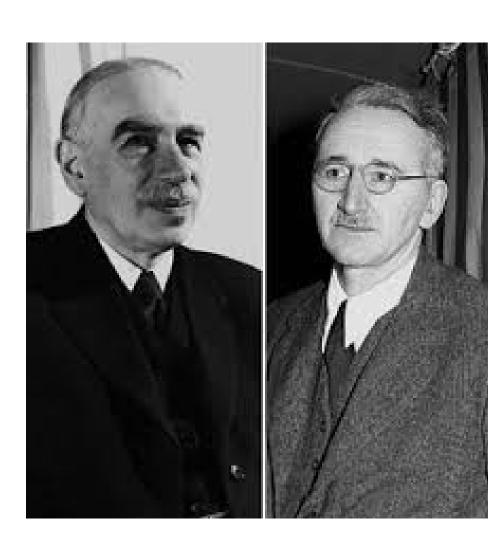
Keynes on frequencism and induction:

"this view of basing probability upon series is certainly false. (...) My point is that the evidence need not always be of this nature and that in any case to base a statement of probability on a past frequency is not the same thing as to make a certainly true statement with regard to future frequency"

Keynes against atomism

"The atomic hypothesis which has worked so splendidly in physics breaks down in psychics. We are faced at every turn with the problem of organic unity, of discretness, of discontinuity – the whole is not equal to the sum of the parts, comparisons of quantity fail us, small changes produce large effects"

The debate with Fridriech Hayek



1931, the debate is ignited by a critique by Hayek against Keynes's *Treatise* on *Money*

On the notion of credit cycle, equilibrium, and the schedule of Savings and Investment

The themes of the Hayek-Keynes debate

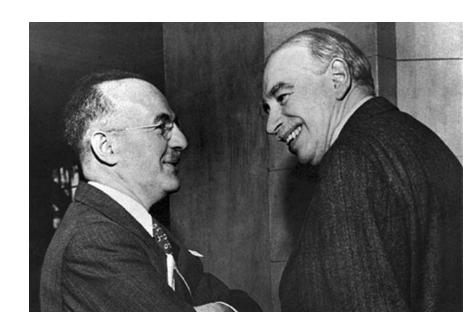
- Hayek: against explaining the cycle from the point of view of aggregate demand; for a self correcting mechanism of equilibration
- Hayek: the rise of S does not imply a reduction of total demand
- Hayek: intertemporal equilibrium, the cycle being a process of transition between equilibria

Friedrich Hayek (1899-1992)

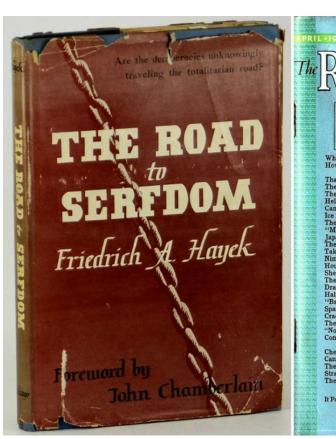
Debate with Keynes (1931) on the *Treatise on Money,* on the possibility of reducing unemployment by public spending and action (Hayek for private investment in public markets)

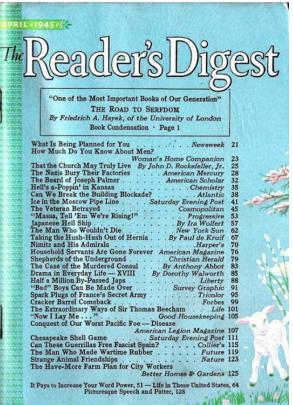
Keynes on "Prices and Production":

"one of the most frightful
muddles I have ever read",
adding, "It is an extraordinary
example of how, starting with a
mistake, a remorseless logician can
end in Bedlam" (a psychiatric
hospital)



Hayek's *Reader's Digest* version of *Road to Serfdom*





Road to Serfdom (1943), on the danger of **Labour Party** politics leading to totalitarian regime

The creation of the Mont Pélérin Society

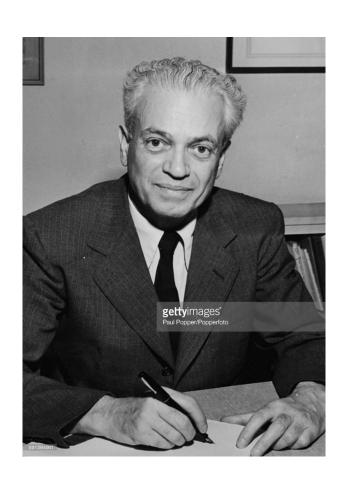


Walter Lippmann (1938, Paris)





Louis Rougier (Lippmann Colloque, 1938, Paris)



Louis Rougier: Lippmann Colloque 1938 (with 26 participants)

Secret conversations Pétain-Churchill

(not admitted in the MPS until the late 1950s)

Mont Pélérin, 1947



1947 Mont Pélérin, Switzerland

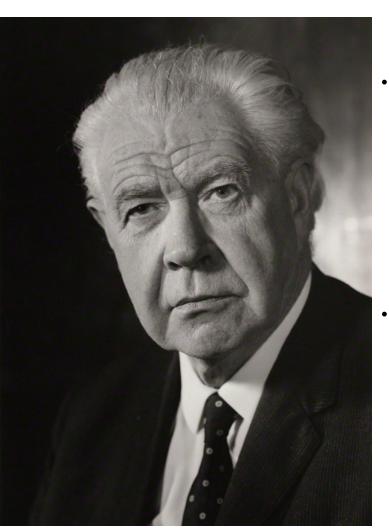
Friedrich Hayek Karl Popper Von Mises Lionel Robbins

Milton Friedman (35 yrs)

Debates at the 1947 conference

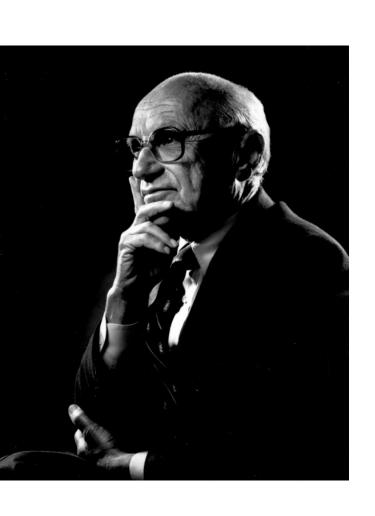
- Rejected "conservatism," associated with the status quo, but no alternative was clearly dressed; it gloried capitalism but not its cultural traits; it praised individualism but suspected democracy.
- Debate on the role of the Society: Indoctrination (Hayek) or pluralism (Popper)?
- For many years, the Society had scarce influence, except for Ludwig Erhard, chancellor of Germany (1963-1966)

Lionel Robbins (1898-1984)



- Lionel Robbins, to treat the Russians as "though they are not human beings"
 - The Cold War as a constitutive part of the Mont Pélérin endeavor

Milton Friedman (1912-2006): monetarism against Keynesianism



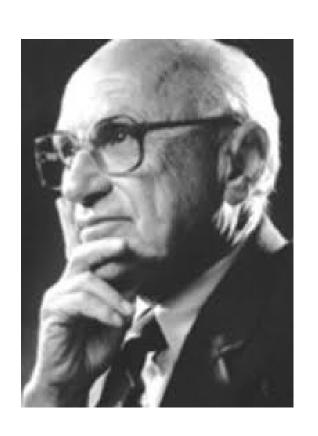
Demand led policy creates inflation

The reason for the 1929 crash was the wrong procedure of the monetary ayuthorities

Monetary policy is the key

Markets must be free to decide: laissez faire, laissez passer

Milton Friedman as a public man



1962, "Capitalism and Freedom"

abandoned programs of aid to the poor, argued for elimination of agricultural price supports, minimum wage, military draft, national parks, public housing, social security

borders open to all immigrants, although no social welfare

The 1964 presidential debate

Friedman (and his candidate, Goldwater) strongly opposed to the civil rights legislation



But Friedman became a "public intellectual"

The public intellectual

Beginning in 1966 he published a successful column in the Wall Street Journal and in 1980 aired a ten-part TV series, "Free to Choose" on the public television network.

• Milton Friedman choir:

https://www.youtube.com/watch?v=W3Seg0JE1PM

Conclusion

- Keynes: the dominant economist for the first half of the 20th century
 - Aggregate demand
 - Disequilibria
 - Psychological traits and institutions

The Keynesian-neoclassical synthesis: **Solow and Samuelson**

Friedrich Hayek and Milton Friedman: the new orthodoxy of the 1990s