BLAUG Great Economists since Keynes

GREAT Economists since Keynes

AN INTRODUCTION TO THE LIVES & WORKS OF ONE HUNDRED MODERN ECONOMISTS

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Preface

This book is addressed to those who are studying economics for the first time, who hear their teachers dropping names like Friedman, Galbraith, and Samuelson, and want to know something about these modern economists and why they are considered important. This book describes the careers and contributions of 100 famous economists, each one of whom has left a mark on twentieth-century economics.

Why 100 and not 200 or 300? The number 100 is arbitrary: we have to draw the line somewhere and 100 is a round number. Similarly, I have interpreted 'modern' to mean living or recently deceased and I have interpreted 'recently deceased' to mean 'since 1970'; obviously, this cut-off date is as arbitrary as the number 100. In short, words like 'famous' and 'modern' cannot be defined so as to satisfy everyone. Needless to say, this is my own personal list of the 100 great names in modern economics and another author might have drawn up a slightly different list. Nevertheless, I feel sure that a referendum among living economists would endorse 90 and perhaps even 95 per cent of my list.

This book can be consulted like a reference book; every entry is self-contained and, hopefully, self-explanatory. However, it can also be read continuously from beginning to end, in which case it will provide a virtual survey of schools of and approaches to modern economics.

Mark Blaug

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List of Entries

1. Adelman, I.
2. Alchian, A. A.
3. Arrow, K.J.
4. Bain, J. S.
5. Baumol, W. J.
6. Becker, G.S.
7. Bergson, A.
8. Boulding, K.E.
9. Bowles, S.
10. Buchanan, J.M.
11. Burns, A.F.
12. Chenery, H.B.
13. Clower, R.W.
14. Coase, R.H.
15. Debreu, G.
16. Demsetz, H.
17. Denison, E.F.
18. Dobb, M.H.*
19. Domar, E.D.
20. Dorfman, R.
21. Douglas, P.H.*
22. Downs, A.
23. Feldstein, M.
24. Fogel, R.W.
25. Friedman, M.
26. Frisch, R.A.K.*
27. Galbraith, J.K.
28. Georgescu-Roegen, N.
29. Gerschenkron, A.*
30. Haberler, G.
31. Hahn, F.
32. Hansen, A.H.*
33. Harrod, R.F.*
34. Hawtrey, R.G.*
35. Hayek, F.A. von
36. Hicks, J.R.
37. Hirschman, A.O.
38. Hotelling, H.*
39. Isard, W.
40. Johnson, H.G.*
41. Jorgenson, D.W.
42. Kaldor, N.
43. Kalecki, M.*
44. Kindleberger, C.P.
45. Klein, L.R.
46. Knight, F.H.*
47. Koopmans, T.C.
48. Kornai, J.
49. Kuznets, S.
50. Lancaster, K.J.
51. Leibenstein, H.
52. Leijonhufvud, A.
53. Leontief, W.W.
54. Lerner, A.P.*
55. Lewis, W.A.
56. Lipsey, R.G.
57. Little, I.M.D.
58. Lucas, Jr., R.E.
59. Machlup, F.*
60. Malinvaud, E.
61. Marschak, J.
62. McCloskey, D.N.
63. Meade, J.E.
64. Mincer, J.
65. Mises, L.E. von*
66. Modigliani, F.
67. Morgenstern, O.*
68. Morishima, M.
69. Musgrave, R.A.
70. Myrdal, G.
71. North, D.C.
72. Ohlin, B.G.*
73. Okun, A.M.*
74. Pasinetti, L.L.
75. Patinkin, D.
76. Phelps, E.S.
77. Phillips, A.W.*
78. Posner, R.A.
79. Robbins, L.
80. Robinson, J.*
81. Rostow, W.W.
82. Samuelson, P.A.
83. Sargent, T.J.
84. Schultz, T.W.
85. Scitovsky, T.
86. Sen, A.K.
87. Shackle, G.L.S.
88. Simon, H.A.
89. Solow, R.M.
90. Spence, M.A.
91. Sraffa, P.*
92. Stigler, G.J.
93. Stiglitz, J.E.
94. Tinbergen, J.
95. Tobin, J.
96. Triffin, R.
97. Tullock, G.
98. Vanek, J.
99. Viner, J.*
100. Weintraub, S.*

* Recently deceased.

Contents

Adelman, Irma.

(1930 –)

Irma Adelman has made distinguished contributions to the development of computable general equilibrium models for development planning and has collaborated with Cynthia T. Morris in a pioneering attempt to employ new techniques of multivariate analysis to study the interactions among economic, social, and political forces in the process of economic development. Latterly, she has also attempted to quantify the trade-off between economic growth and inequality in income distribution in particular countries.

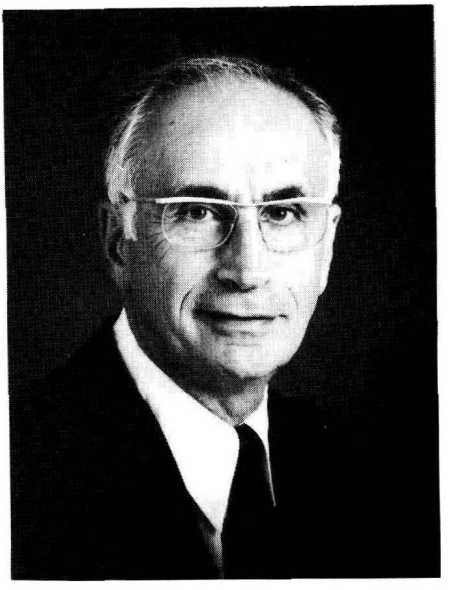
Her first book was a purely theoretical survey of *Theories of Economic Growth and Development* (Stanford University Press, 1961; 2nd ed., 1974) in which she attempted to express the ideas of some of the major economists of the past (Adam Smith, David Ricardo, Karl Marx, and Joseph Schumpeter) by means of a single but comprehensive mathematical model of the growth process. Next came *The Theory and Design of Economic Development* (Johns Hopkins University Press, 1966), edited with E. Thorbecke, which contained one of her many efforts to construct a computable planning model for a Thirld World country, in this case, Korea. But her present reputation was only firmly established with the publication of *Society, Politics, and Economic Development: A Quantitative Approach* (Johns Hopkins University Press, 1967), co-authored by C. T. Morris, which announced a new interdisciplinary framework for the quantitative analysis of the causal factors in the development process. *Society, Politics*

and Economic Development analysed the statistical association between various indicators of economic development and a large variety of economic, social and political factors responsible for economic development, using cross-section data for forty-three developing countries. Adelman and Morris employed a statistical tool rarely used by economists, 'factor analysis', which has the virtue of grouping a large body of data into a smaller number of 'factors' that are capable of providing the explanations. Their findings drew attention to a number of elements that had not hitherto been regarded by development economists as critical to the development process, such as the degree of political stability and the degree of 'sophistication' of financial markets in a country. *Society, Politics and Economic Development* was followed by *Economic Growth and Social Equity in Developing Countries* (Stanford University Press, 1973), which applied a similar technique to the same data base in an effort to explain the shares of income accruing to the poorest households in developing countries; it demonstrated that economic growth as such does not automatically raise the income shares of the poor, even when the countries in question are semi-developed rather than underdeveloped, thus contradicting the famous Kuznets inverse-U relationship [see Kuznets, S.]. The lessons of that book are amply displayed in one of Adelman's most readable and controversial articles, 'Development Economics: A Reassessment of Goals', *American Economic Review,* May 1975. A more recent book on *Income Distribution Policy in Developing Countries: A Case Study of Korea* (Stanford University Press, 1977), with S. Robinson, provides a specific case study of the possible conflict between equity and growth in the Third World.

Adelman was born in 1930 in Rumania but took all her degrees from the University of California, Berkeley: a BS in 1949 (at the age of nineteen!), an MA in 1950, and a PhD in 1955. She began teaching at Berkeley in 1952, joined the staff at Stanford University in 1961, moved to Johns Hopkins University and, finally, to Northwestern University in 1966, where she became a professor. In 1971 she spent a year at the World Bank in Washington as Senior Economist in the Bank's Development Research Center. The following year she became a Professor of Economics at the University of Maryland. In 1977-8 she was a Fellow at the Netherlands Institute for Advanced Study in the Humanities and Social Sciences. Finally, in 1979, she returned to the University of California, Berkeley, to become Professor of Agricultural Resource Economics, a post she holds to this day. She was elected as Vice-President of the American Economic Association in 1979.

Alchian, Armen A.

(1914 –)



Armen Alchian is best known to students for his introductory textbook, *University Economics* (Wadsworth, 1964; 3rd ed., 1972), written jointly with W. R. Allen, which stands out among all of its rivals by a consistent emphasis on the actual or potential role of markets as a device for organising economic life, making due allowance for the transaction and information costs involved in creating markets and the divisible or indivisible benefits to individual economic agents of operating markets.

To his fellow economists, however, Alchian is the author of a small but influential series of articles: as modern economists go, Alchian writes little but makes every publication count. His *Economic Forces at Work* (Liberty Press, 1977) reprints eighteen of his masterful papers, including such gems as 'Uncertainty, Evolution and Economic Theory' (1950) which suggested a new Darwinian justification for some of the standard assumptions of economic theory; 'The Meaning and Validity of the Inflation-Induced Lag of Wages' (1960), with R.A. Kessel, which exploded the myth that past inflations had accelerated economic growth by redistributing income in favour of profits; and 'Information Costs, Pricing and Resource Unemployment' (1969), which provides an explanation for Keynesian 'unemployment equilibrium' without invoking Keynes's assumption of rigid wages. 'Production, Information Costs, and Economic Organization' (1972), co-authored by H. Demsetz, is another one of Alchian's immensely influential papers: it is almost the first to take up the suggestion of

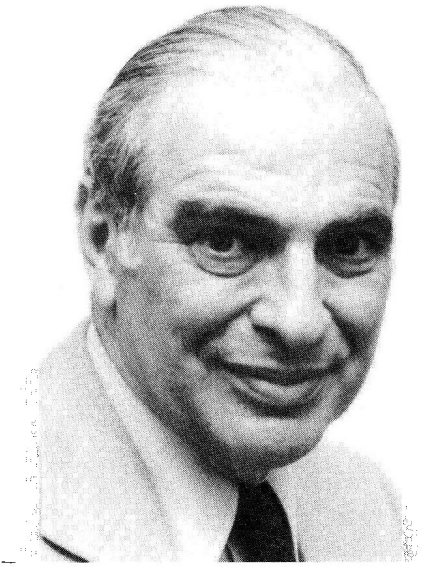
Coase [see Coase, R.H.] that transaction costs are the key to the creation of business firms and to think through the implications of that idea for the employment relationship between labour and management [see Demsetz, H.].

'Uncertainty, Evolution and Economic Theory', the first of these papers, must number among the five or ten most cited articles of post-war economics. Do businessmen really strive to maximise profits? If they do, certain things follow about pricing policies and the effects of particular taxes on output and price. So we can check on whether they do by investigating the impact of taxes. But such research is difficult and so, alternatively, we may try asking businessmen just what does motivate their activities. But direct inquiries of motives are as difficult and ambiguous in their results as studies of the impact of taxes. What Alchian suggested instead was the study of the 'survival process': the price system itself is a Darwinian mechanism that selects the 'fit' and rejects the 'unfit', where 'fitness' is judged in terms of the ability to make greater profits than your competitors. Not all businessmen maximise profits but those that fail to do so go bankrupt and hence, in time, we observe only profit-maximisers. This argument serves to justify the general assumption of profit maximisation without having to argue each and every counter-example. No wonder then that Alchian's article achieved immediate fame and was repeatedly invoked by Milton Friedman in an even more famous article, 'Essay on the Methodology of Positive Economics', *Essays in Positive Economics* (University of Chicago Press, 1953), which argued that the validity of economic theories did not depend on making 'realistic' assumptions about the motivations of economic agents.

Similarly, Alchian's 'Information Costs, Pricing and Resource Unemployment' was the beginning of all later 'job search' theories of unemployment. Alchian's original insight was to note that it takes time to gather information about job opportunities at various wage rates and that time is costly; hence, much, and perhaps all, observed unemployment is simply the lengthening of search-time as job offerings become scarcer, being a rational response to rising information costs. One implication of this argument is that the existence of unemployment benefits causes still more unemployment, but this is only one of many of the controversial implications of job search theories [see Phelps E.S.]. Here, as elsewhere, Alchian has opened up vistas that others have spent years exploring more fully. There can be no greater compliment than this.

Alchian was born in Fresno, California, in 1914 and his entire life has been spent in the State of California; a BA in 1936 and PhD in 1944

from Stanford University, a post as economist with the Rand Corporation in Santa Monica (1947-64), and, finally, a professorship at the University of California, Los Angeles, since 1964.



Arrow, Kenneth J.

(1921 –)

Economists are not unaccustomed to brilliant doctoral dissertations by relatively unkown youngsters - witness Samuelson's *Foundations* and Becker's *Economics of Discrimination* - but Kenneth Arrow's doctoral thesis, *Social Choice and Individual Values* (Wiley, 1951; 2nd ed. Yale University Press, 1963), is in a class by itself. Employing the notational system of symbolic logic, at the time unfamiliar to economists, Arrow proposed to solve a question in politics which no economist and few political scientists had ever posed: suppose all individuals can rank all states of the world in order of preference, is it possible to find a voting rule that will always select one of those states as 'most preferred'?

The most popular voting rule, majority choice, may easily fail to express a unique social preference. Consider, for example, the simple case where three individuals A, B and C are asked to vote for three alternative states of the world, x, y, and z. Now suppose A prefers x to y and y to z, B also prefers y to z but instead prefers z to x, whereas C like B prefers z to x but like A prefers x to y. It is easily checked that x wins over y by the two votes of A and C, y wins over z by the two votes of A and B, but, unfortunately, x does not therefore win over z because z in turn wins over x by the two votes of B and C. In other words, in this simple case of three voters and three alternative options, the democratic method of majority choice leads to a stalemate.

What Arrow now demonstrated was that this stalemate can occur, not just under a constitution based on the principal of majority rule, but under

every conceivable constitution except that of dictatorship: it is logically impossible to add up or otherwise combine the choices of individuals into an unambiguous social choice except by rigging the 'constitution', for example, by confining all choices to two and only two options, either directly or indirectly through political parties and parliamentary representatives.

Arrow's 'impossibility theorem' appeared to have such startling consequences for both political philosophy and welfare economics that literally hundreds of papers have been written to refute it. But Arrow's theorem has withstood all technical criticisms and has never been decisively challenged on its own grounds. Its significance for welfare economics, however, is frequently misunderstood as implying the impossibility of a 'social welfare function' [see Bergson, A.]. But Arrow's 'constitutional function' is not identical with Bergson's 'social welfare function'. Bergson's 'social welfare function' says that a competitive equilibrium can achieve any Pareto-optimal solution [see Lerner, A.P.], provided the original endowments of income in the economy are altered by lump-sum transfers of income: the social welfare function expresses the community's agreement on the size and direction of these transfers. Obviously, there is no sense in which it is impossible to form such a function. However, if we ask: how are we to get the community's agreement on lump-sum income transfers?, then indeed Arrow's 'constitutional function' becomes directly relevant. In short, the 'impossibility theorem' is a theorem about politics, not economics.

After making his name with *Social Choice and Individual Values,* Arrow joined forces with Gerard Debreu to rework the standard 'existence proofs' for general equilibrium, principally in a classic paper, 'Existence of Equilibrium for a Competitive Economy', *Econometrica,* July 1954. Leon Walras, the nineteenth-century inventor of general equilibrium theory, believed that one can prove the existence of simultaneous equilibrium in all the markets of an economy simply by counting equations and unknowns to make sure that one has as many known demand-and-supply equations as unknown prices to be determined. It had long been known that an adequate proof must go beyond counting equations and unknowns but a rigorous proof of the existence of a general equilibrium solution had nevertheless defeated everyone before Arrow and Debreu. By using new mathematical techniques, Arrow and Debreu discovered that the existence of multi-market equilibrium under conditions of perfect competition requires forward markets in all goods and services, that is, markets in which we can pay today to obtain delivery tomorrow or accept delivery today for the

promise of payment tomorrow. This finding threw doubt on the practical significance of general equilibrium theory and much of Arrow's work was concerned to demonstrate that general equilibrium theory was nevertheless 'robust', that is, of relevance even to economies with missing forward markets. This is the burden of a later book, *General Competitive Analysis* (Holden-Day, 1971; Oliver & Boyd, 1971), co-authored with Frank Hahn.

In the interim between the original article with Debreu in the 1950s and the book with Hahn in the 1970s, Arrow's work concentrated on the implications of risk aversion for economic activity as it relates to medical and other kinds of insurance. *Essays in the Theory of Risk-Bearing* (North-Holland, 1971) sums up his work in this area. Optimal inventory and optimal social investment policies have been other interests, as reflected in *Studies in the Mathematical Theory of Inventory and Production* (Stanford University Press, 1958), authored jointly with S. Karlin and H. Scarf, and *Public Investment, the Rate of Return, and Optimal Fiscal Policy* (Johns Hopkins University Press, 1970), authored jointly with M. Kurz. A much-studied article, 'The Economic Implications of Learning by Doing', *Review of Economic Studies,* June 1962, marked Arrow's contribution to the modern theory of economic growth. Finally, he was one of the four authors of a famous paper on 'Capital-Labor Substitution and Economic Efficiency', *Review of Economics and Statistics,* August 1961, which introduced the economics profession to the CES (constant elasticity of substitution) production function, the first step beyond the Cobb-Douglas production function in over thirty years [see Douglas, P.H.].

Born in New York City in 1921, Arrow graduated from City College, New York in 1940 at the early age of nineteen. He went on to do postgraduate work in statistics at Columbia University under Harold Hotelling [see Hotelling, H.] but wartime service in the US Air Force interrupted his studies for almost five years. Returning to Columbia after the war, there were further delays before he hit on social choice as the topic of his thesis. He joined the Cowles Commission in Chicago in 1947 [see Marschak, J.] and then moved to Stanford University in 1949, becoming a professor at Stanford in 1953. In 1968 he took up a professorship at Harvard University, only to move back again to Stanford in 1979. He has been honoured throughout his career but increasingly so in the latter years: President of the Econometric Society in 1956, winner of the John Bates Clark medal of the American Economic Association for the most distinguished work by an economist under the age of forty in 1957, President in turn of the Institute of Management Sciences in 1963, the American Economic Association in 1973, and the Western Economic Association

in 1980, a recipient of honorary degrees from nine universities, and, to cap it all, the Nobel Prize in Economics, shared jointly with John Hicks in 1972.

Secondary Literature: C. C. von Weizsäcker, 'Kenneth Arrow's Contributions to Economics', in H. W. Spiegel and W. J. Samuels (eds.), *Contemporary Economists in Perspective* (JAI Press, 1984), 1.

Bain, Joe S. (1912 –)

Joe Bain's *Barriers to New Competition: Their Character and Consequences in Manufacturing Industries* (Harvard University Press, 1956) was one of the first studies clearly to identify and measure barriers to entry into industries and to treat them, not just as an important dimension of market structure, but as having a predictable effect on the conduct and performance of business firms. 'Barriers to entry' may take the form of large setting-up costs but they may also consist of the threat to cut prices and to impose large losses on newcomers. Monopoly power is desirable for the sake of the higher profits it brings but these high profits also attract new entrants, which tends to erode profits. It is open to question, therefore, whether entry barriers actually result in above-average profit rates. Bain was in fact one of the first to test the widely held belief that profit rates are higher in concentrated industries, a topic which has since attracted an enormous literature. Finally, Bain has also repeatedly attacked the even more widely held thesis that monopoly, oligopoly, or simply concentration of industry is always and everywhere the result of technical economies of scale either in production or in marketing; frequently, it is the result of a product innovation and the subsequent, cumulative advantages of being the first in the field; at other times, it is simply the result of public regulation, discouraging new entrants into the industry. Bain's many *Essays on Price Theory and Industrial Organization* (Little Brown, 1972) virtually constitute by themselves an entire course in industrial organisation.