University of Melbourne

Department of Economics

Not the Final Exam

Questions and answers, elaborations and chat

Not the Final Exam[1]

1. Who am I? I was born in Sydney in 1918. In 1939 I obtained a first class honours degree from the University of Sydney where I had been a part-time student. From then until 1950 I worked as an economist in various government departments culminating in the position of Chief Economist in the Prime Minister's Department under Robert Menzies. Between 1943 and 1945, while working at the Department of War Organisation of Industry, I built a 10 equation quarterly model of the Australian economy, one of the first macroeconometric models ever constructed. In 1950 I was appointed the foundation Professor of Economics at the Australian National University. In 1955 I developed my model of internal and external balance. This paper was not published until 1963. In 1956 I published a paper in the <u>Economic Record</u> in which I presented a neoclassical economic growth which I had developed independently of Solow (who was later to get a Nobel Prize for his contribution to the theory of economic growth). In 1960 I developed 'the golden-rule' in an unpublished paper, independently of Phelps and others. I retired from the ANU in 1983. In 1987 I was made a Distinguished Fellow by the Economic Society of Australia and in 1988 I was made an Officer of the Order of Australia. I would universally be regarded as the greatest ever Australian economist. An obituary article about me in the <u>Economic Record</u> described me as the most distinguished of all Australian economists.

5. Who am I? I was born in Kirkcaldy, a small town near Edinburgh, in Scotland. Historians have never been able to establish the exact date of my birth but it is known from church records that I was baptised in 1723. My father - who was a controller of customs - died before I was born. At the age of 4 I was kidnapped by gipsies. Pursuit was mounted, and my captors abandoned me by the side of a road. At the age of 17 I went to Oxford University. After I left Oxford I moved back to Scotland to pursue an academic career in philosophy. I was appointed Professor of Logic at Glasgow in 1752 and just one year later I was appointed Professor of Moral Philosophy. My first book, <u>The Theory of Moral Sentiments</u>, was published in 1759. On a visit to Paris in 1764 I met François Quesnay but unlike him I felt that it was labour and not nature which was the source of value. My main work in Economics, and the book with which my name is most commonly associated, was published in 1776, the year the American colonies declared their independence. This was also the year in which my best friend, David Hume, died. My book is regarded by economists of all schools and nationalities as one of the most important works ever published in Economics. Late in my life I was a Commissioner of Customs (although I am seen as a champion of free trade).

6. Who wrote, "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."?

- Karl Marx
- J K Galbraith
- Adam Smith

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7. A famous Nineteenth Century economist studied the relative rates of expansion of the population and agricultural production and was led to the conclusion that food supply would grow at an arithmetic rate whilst population would grow at a geometric rate. Because of this there would be periods where there would be (considerable) shortages of food and as a result there would be times when many (perhaps very many) people would die from famine or disease. He summed up their (the ones who would die) 'lot' as follows: "It appears that from the inevitable laws of our nature [he means "as a result of the passions between the sexes"] some human beings must suffer from want . These are the unhappy persons who, in the great lottery of life, have drawn a blank." Who was it?

- William Godwin

- Karl Marx

- T R Malthus

8. We often come across the disparaging remark that Economics is "the dismal science". (a) Who <u>first</u> called economics "the dismal science"? (b) And why?

- Charles Dickens

- Thomas Carlyle

- Karl Marx

- David Susuki

9. Who am I? I was born in England in 1772. At the age of 14 I entered my father's business, for which I showed great aptitude. I did so well that in a few years I had acquired a fortune and was then in a position to indulge my wide-ranging tastes in literature and science. My first published work in Economics was <u>The High Price of Bullion, a Proof of the Depreciation of Bank Notes</u> (1810). In my <u>Principles of Political Economy and Taxation</u> (1817), I sought to analyse the laws determining the distribution of the social product among the "three classes of the community," namely, the landlords, the workers, and the owners of capital. I found the relative domestic values of commodities to be dominated by the quantities of labour required in their production. I also concluded that rent tends to increase as population grows. This is because, with diminishing returns to land, the marginal costs of cultivation rise and with it rents. I also proposed the theory that trade between countries reflected the comparative (not absolute) advantages of the trading countries. I was one of the first to examine the relationship between mechanisation and technical change on the one hand, and the demand for labour on the other, and was gradually led to the view that "technological change is "often very injurious to the interest of the class of labourers". In 1820 I published an article in a Supplement to the <u>Encyclopeadia Britannica</u> in which I discussed the view (re-discovered by Robert Barro in 1974) that, if agents are aware that the sale of government bonds entails a future tax liability to pay interest and eventually to redeem the bonds, tax and bond finance will, in theory at least, have the same effects on the private sector. In 1819 I purchased a seat in the House of Commons, this was common - excuse the pun - in those times, but illness forced me to retire from Parliament in 1823. I died that year at the age of 51.

10. Who wrote the following 'dismissive' remark about economists: "A part of the bourgeoisie is desirous of redressing social grievances in order to secure the continued existence of bourgeois society. To this section belong economists, philanthropists, humanitarians, improvers of the condition of the working class, organisers of charity, members of societies for the prevention of cruelty to animals, temperance fanatics, hole-and-corner reformers of every imaginable kind"? The same person also said "When the train of history goes round a bend, all the intellectuals fall off" AND "Labour is NOT the source of all wealth". All three quotes come from the same person. Who is that person?

11. In a review of one of the all-time classics in Economic theory the reviewer (F Y Edgeworth, himself a very important figure in the History of Economics) wrote: "... the argument is rendered obscure, or at least unattractive, by the use of symbols in excess of the modest requirements of elementary mathematical reasoning. The exuberance of algebraic foliage, rather than the fruit of economic truth, is the outcome of science thus cultivated." Who was the author of the book under review and what was its title?

12. We often (but perhaps not often enough) reflect on the role of mathematics in teaching and research. Which famous economist wrote: "I had a growing feeling in the later years of my work at the subject [Economics] that a good mathematical theorem dealing with economic hypotheses was very unlikely to be good economics; and I went more and more on the rules - (a) Use mathematics as a shorthand language, rather than as an engine of inquiry. (b) Keep to them till you have done. (c) Translate into English. (d) Then illustrate by examples that are important in real life. (e) Burn the mathematics. (f) If you can't succeed in (d), burn (c). This last I did often." Was it:

- W S Jevons

- Alfred Marshall

- F Y Edgeworth

13. Who am I? A native of Minnesota, I was born in 1895 and died in 1973. I graduated from the University of Washington with a B.A. in journalism in 1919 and earned a master's in mathematics from the same university in 1921. I received a Ph.D. in mathematics from Princeton University in 1924 and began teaching at the Food Research Institute at Stanford University that year. In 1946, I went to the University of North Carolina at Chapel Hill where I held a number of joint appointments as professor of mathematical statistics, associate director of the Institute of Statistics and professor of economics. I made numerous important contributions to economic analysis. To take just a few examples: My 1929 paper on the stability of competition introduced the notion of spatial competition in a duopoly situation and contained an early statement of a very well-known game-theoretic solution concept: the subgame-perfect equilibrium (as later defined by Selten). In 1931 I published a paper on the economics of exhaustible resources. My presidential address to the Econometric Society in 1938 introduced the "marginal cost pricing" equilibrium as a general welfare proposition: roughly, that economic efficiency is achieved if every good is produced and priced at marginal cost. This would be the foundation of the Fundamental Welfare Theorems of Paretian general equilibrium theory. It was also here that I introduced my "two-part" tariff as an alternative solution in situations of natural monopoly.

14. Who am I? Born in England in 1903 I studied maths at the University of Cambridge. After graduation I became a Fellow of King's College Cambridge and a university lecturer in Mathematics. I died in London at the age of 26, having made three important and lasting contributions to economics. First, in "Truth and Probability" (1931), I laid out for the first time the theory of subjective probability and the theory of choice under (subjective) uncertainty - this task was completed decades later by Bruno de Finetti and Leonard Savage. The second dealt with the theory of taxation (1927) in which I set out a special pricing rule. My third contribution was an exercise in determining optimal savings (1928) and involved one of the earliest applications of the calculus of variations to economics. I was a friend of Ludwig Wittgenstein and helped translate his notoriously difficult <u>Tractatus Logico-Philosophicus</u> (1922). My middle name was "Plumpton" and my brother (who was born in 1904) was Archbishop of Canterbury over the period 1961-1974.

15. Of whom was the English Prime Minister W S Churchill speaking when he said "If you put two economists in a room, you will get two different opinions; unless one of them is X, in which case you would invariably get three quite different opinions". It is said that this same person (X) when he was once accused by Churchill of being inconsistent on a rather important policy issue, replied: "When I am wrong I change my mind, what do you do?"   Question: Who was X?

16. In 1937 (just one year after Keynes' <u>General Theory</u> appeared) the Oxford economist John Hicks published an article which began with the words: "In order to elucidate the relation between Mr Keynes and the "Classics", we have invented a little apparatus"? What was the "little apparatus" which the writer had invented?

17. *This question is worth 2 marks.* (a) Who wrote these words: "The Quantity Theory of Money is fundamental. Its correspondence with fact is not open to question" and "The theory flows from the fact that money as such has no utility except what is derived from its exchange value, that is to say from the utility of the things which it can buy" and "A doubling of the value of currency or other forms of cash in circulation with the public ... must have the effect of raising the price index to double what it would have been otherwise, at least in the long run". (b) What famous quotation follows these words in the work in question?

18. Who am I? I was born in New Zealand in 1914. I left school at the age of 15 and travelled around Australia working as a crocodile hunter, amongst other things. I qualified to be an engineer by correspondence. Travelling in S E Asia when the Japanese entered the Second World War, I joined the RAF and was shot down near Java in 1942. I started making a raft so that I could sail back to Australia but before I could complete it I was betrayed to the Japanese by Javanese villagers. As a result I spent three terrible years as a Prisoner of War of the Japanese. My activities whilst a POW, and especially my construction and successful use over a long period of time of a secret radio, is mentioned in the war diaries of Laurens van der Post and Edward (Weary) Dunlop. After the war I moved to England where I became interested in Sociology and Economics. Shortly after completing my PhD at LSE I was appointed to the staff there and made a Professor of Economics in 1958. Prior to this I had built a hydraulic model of the Keynesian system called the MONIAC which I was aiming to sell to educational institutions

(one was purchased by the University of Melbourne). My best known work in economics was a paper on "The Relationship between Unemployment and the Rate of Change of Money Wage Rates ..." published in the English journal Economica in 1958. That is my best known paper. Less well known is the fact that I developed the doctrine which has since become known as "The Lucas critique" long before Lucas published his ideas, but in a profession increasingly dominated by insular North American writers I was never given credit for this. In 1967 I moved to the Australian National University in Canberra as a Professor of Economics but in 1969 a crippling stroke forced me to resign my post at the ANU. I returned to New Zealand and died there in 1975.

19. Professor X (a well known North American economist) and his wife (Rita) were divorced in 1988. Rita insisted on inserting a clause in their divorce settlement (remember this is in 1988) , which said, "Ex-Wife shall receive 50% of the value of any Nobel Prize awarded to Professor X provided it is awarded before 30 October 1995".[2] The Nobel committee awarded the prize (worth $US 1.4 mill approx) to Professor X on 10 October 1995. Who was Professor X?

20. Of the following, who was employed in a Mint or was a Governor of a Central Bank?

- Milton Friedman
- W S Jevons
- J M Keynes
- Isaac Newton
- Ernesto "Che" Guevara

21.   Which Economist became Secretary General of the United Nations and was killed in mysterious circumstances in a plane crash while on a peace mission to Katanga in the Congo in 1961. Later that year he was posthumously awarded the Nobel Peace Prize. His writings include Markings (1964), a spiritual work of poetry and personal reflections. It continues to be a best seller.

22. Who am I? I was born in 1903. My first name is John. My primary field was Mathematics but that did not prevent me from making a fundamental contribution to Economics through my invention of Game Theory. In 1944 I published a book on that topic with my friend Oscar Morgenstern. It was titled The Theory of Games and Economic Behavior. At one stage in my life I experienced what my biographer (S Heims) called "a complete psychological breakdown".

23. Who was the (very modest!) economist (and historian of economic thought) who said he always wanted to be "the world's greatest horseman, world's greatest lover, and world's greatest economist", and said later he'd only achieved two of those goals, but then reflected "two out of three is not bad since horses and I just don't seem to get along"?

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[2] The source for this information is the Boston Globe, Saturday, October 21, 1995.

- John Stuart Mill

- John Maynard Keynes

- Joseph Schumpeter

24. In his preface to the sixth edition of the all-time best selling work on the history of economic thought the author tells us that: "The most important word in the title of my book has been incorrectly written as 'wordy' on a thousand students' essays". What is the title of the book and who is the author?

25. Which of the following economists/econometricians were born in Australia?

- A W Phillips (of Phillips curve fame)

- D Cochrane (of Cochrane-Orcutt method fame)

- G Watson (as in Durbin-Watson statistic)

- Kelvin Lancaster (Theory of the second best and the Characteristics approach to the consumer)

- Max Corden (of effective rate of protection fame)

26. (a) Who wrote of another economist's work: "The whole thing is charlatanism", it is "black magic" and "statistical alchemy"? and (b), Of whom was it said? (The person whose work was being put down went on to win for its author a Nobel prize in economic Science.)

- John Maynard Keynes

- Milton Friedman

- Robert Solow

- John Hicks

- Jan Tinbergen

- Paul Samuelson

- James Tobin

- Robert Lucas

27. In Econometrics we talk about Logits, Probits and Tobits. Who <u>first</u> used the word 'Tobit', and in what context?

28. Who was it who so loved his formula for the marginal product of labour that he had it put on his tombstone?

- Paul Douglas

- J B Clark

- J H von Thunen

29. Who am I? I was born in 1915. In 1970 I was the first American economist awarded the Nobel Prize in Economic Science in recognition of my fundamental contributions to nearly all branches of economic theory through the employment of mathematical techniques. My book Foundations of Economic Analysis (1947) was based on my Harvard PhD thesis. It is said that after my oral examination (for my PhD) had been completed and I had left the room, the examiners turned to each other and asked each other "do you think we passed?" My work covered such diverse fields as the dynamics and stability of economic systems, the incorporation of the theory of international trade into that of general economic equilibrium, the analysis of public goods, capital theory, welfare economics, and public expenditure. Of particular influence has been my mathematical formulation of the interaction of multiplier and accelerator effects and, in demand analysis, my development of the theory of revealed preference. My introductory textbook, Economics (1948) went into several editions and is considered a classic. Since 1940 I have been a Professor of Economics at the Massachusetts Institute of Technology (MIT). Once I wrote reference for a colleague who was seeking to move from MIT to another university. My reference was very brief. I simply pointed out that if they were to hire him then the average I.Q. of both their university and mine would rise. (He got the job!)

30. *This question is worth 8 marks.* Set out below are the first lines of a number of famous economics books. Most, if not all, of of them are by people who have been mentioned earlier in this quiz. Can you name the author of each work (*a bonus mark if you can also give the correct title in full*). All of the books are path-breaking works, initiating the founding of a new school of economists.

A. "The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity and judgment with which it is anywhere directed or applied, seem to have been the effects of the division of labour."

B. "The existence of analogies between the central features of various theories implies the existence of a general theory which underlies the particular theories and unifies them with respect to those central features."

C. "This book is about the stock of money in the United States."

D. "The wealth of those societies in which the capitalist mode of production prevails, presents itself as an immense accumulation of commodities, its unit being a single commodity. Our investigation must therefore begin with the analysis of a commodity".

E. "This book is chiefly addressed to my fellow economists. I hope that it will be intelligible to others. But its main purpose is to deal with difficult questions of theory, and only in the second place with the applications of this theory to practice. For if orthodox economics is at fault, the error is to be found not in the superstructure, which has been erected with great care and logical consistency, but in a lack of clearness and generality of the premises."

F. "The value of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of labour which is necessary for its production."

G. "The statistical study presented in the following pages may be best defined as an attempt to construct, on the basis of available statistical materials, a 'Tableau Economique' of the United

States for 1919 and 1929."

H. "Political Economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of wellbeing. Thus it is on the one side a study of wealth; and on the other, and more important side, a part of the study of man."

31. In 1759, the Marquis de Mirabeau (a French aristocrat and member of the Physiocratic school of economics) wrote in reference to a colleague's work that: "There have been, since the world began, three great inventions. The first, is the invention of writing. The second is the invention of money. The third is the Table of the Economy. This last is the great discovery of our age." Who made the "great discovery"?

- Richard Stone

- Francois Quesnay

- Wassily Leontief

32. Who won the <u>first</u> 'Prize for Economic Sciences in Memory of Alfred Nobel'?

- John Maynard Keynes

- Milton Friedman

- Ragnar Frisch

- Jan Tinbergen

- Paul Samuelson

- Robert Solow

- Paul Krugman

- Robert Barro

33. Who wrote the following: "Europe was so organised socially and economically as to secure the maximum accumulation of capital. This remarkable system depended for its growth on deception. On the one hand the labouring classes accepted from ignorance or powerlessness, or were compelled, persuaded, or cajoled into accepting, a situation in which they could call their own very little of the cake that they and the capitalists were cooperating to produce. And on the other hand the capitalist classes were allowed to call the best part of the cake theirs on the tacit underlying condition that they consumed very little of it in practice. The duty of 'saving' became nine-tenths of virtue and the growth of the cake the object of true religion. And so the cake increased; but to what end was not clearly contemplated."

- Karl Marx

- Adam Smith

- T R Malthus

- J M Keynes

34. (a) In which country was Karl Marx born? (b) Where did he spend most of his life?

- England
- Germany
- Russia
- Belgium

35. Who wrote a novel that had two minor characters named Adam Smith and Thomas Malthus?

- Douglas Adams; *The Hitchhiker's Guide to the Galaxy*
- Charles Dickens; *Hard Times*
- Daniel Defoe; *Robinson Crusoe*
- Lewis Carroll *Alice in Wonderland*

36. Which famous economist was murdered? (The exact perpetrator is unknown but it was probably his cook!)

- R Cantillon
- F Y Edgeworth
- F Quesnay
- J K Galbraith

37. Who am I? My entry in an early edition of the The Macquarie Dictionary (Second edition) reads as follows "[First name followed by Second name] 1908-1976, US economist and diplomat [he was a Professor of Economics at Harvard and US ambassador to India], his economic works include The Affluent Society."

38. Which British monetary economist and trade theorist gave his name to a river, which flows through an Australian capital city?

39. Who wrote the following crime/mystery/suspense novels (they can all be found in the American Literature section of the Baillieu): Murder at the Margin, A Deadly Indifference and The Fatal Equilibrium? (They were all written by the same author. In each novel the crime is solved by the application of microeconomic analysis.)

- Marshall Jevons
- Hal Varian
- Bill Griffiths
- John Freebairn

- Binger Hoffman
- Jeff Borland
- Edwin Mansfield
- Ian McDonald

40. Who was the Swedish economist, jailed for blasphemy in 1908?

41. Which of these people attended the London School of Economics?
- John F. Kennedy
- Mick Jagger
- J M Keynes
- John Cleese
- Ross Williams
- (Sir) Bruce Williams

43. Which of the following Classic articles were rejected by at least one 'leading' economics journal?
- "The Market for Lemons" by George Akerlof
- "A Theory of the Allocation of Time" by Gary Becker (a Nobel prize winner)
- "The Pricing of Options" by F Black and M Scholes
- "The Economics of Exhaustible Resources" by Harold Hotelling
- "Simple Mathematical Models with Very Complicated Dynamics" by Robert May
- "Capital Asset Prices" by William Sharpe (a Nobel prize winner)
- "Fluctuations in the Savings-Income Ratio" by Franco Modigliani (a Nobel prize winner)
- "Expectations and the Neutrality of Money" by Robert Lucas (a Nobel prize winner)
- "Protection and Real Wages" by P Samuelson (a Nobel Prize winner) and W Stolper.
- "Increasing Returns, Monopolistic Compettiton and International Trade" by Paul Krugman

44. Who said "If all economists were laid end to end, they would not reach a conclusion" and which economist prompted the remark?
- John Maynard Keynes
- George Bernard Shaw
- Karl Marx

- J K Galbraith

45. Who said "Anyone who clings to a frail theory must have a lot of confidence in its particular assumptions, and owes the rest of us some good reasons why we ought to accept them too? Robustness on the other hand, has its own reward." AND " This paper [by the Japanese Economist Hiro Uzawa] is very easy, it requires only a little arithmetic and the bare elements of the calculus.   Any economist who cannot read it ought at least to insist that his [sic] students do so".

46. Of the following, who (inter alia) was an economist?

- Samuel Taylor Coleridge, author of *The Rime of the Ancient Mariner*
- Thomas De Quincey, author of *Confessions of an English Opium Eater*
- Arthur Conan Doyle *English medical practitioner, author (of Sherlock Holmes books amongst others) and spiritualist*
- Virginia Woolf, author of *A Room of One's Own*

47. A chemist, a physicist and an economist are stranded on an island, with nothing to eat. They are dying of starvation. A can of baked beans washes ashore. The chemist says, "I will build a fire and heat the can until it bursts open." The physicist says "I will calculate the trajectory of the contents and to put leaves on the ground where the beans will land so we can collect them all". The economist says, "Let's assume that we have a can-opener." Whose joke?

- Alfred Marshall
- John Maynard Keynes
- Milton Friedman
- Winston Churchill
- J K Galbraith

48. In all, around fifty people have won the Nobel Prize in Economics. Name as many winners as you can.

Robert Dixon

1. **Answer: *Trevor Swan*.** *(b. 1918, d. 1989) See N Butlin and R Gregory, "Trevor Winchester Swan", <u>Economic Record</u>, December 1989. His econometric model of the Australian economy is also published in that issue of the <u>Economic Record</u>.*

5. ***Answer: Adam Smith*** *(b. 1723? d. 1790) After two centuries, Adam Smith remains a towering figure in the history of economic thought. Known primarily for a single work, <u>An Inquiry into the Nature and Causes of the Wealth of Nations</u> (1776), the first comprehensive system of political economy. Despite its renown as the first great work in political economy, The <u>Wealth of Nations</u> is in fact a continuation of the philosophical theme begun in The <u>Theory of Moral Sentiments</u>. Smith is more properly regarded as a social philosopher whose economic writings constitute only the capstone to an overarching view of political and social evolution. He wrote in his <u>Theory of Moral Sentiments</u> the famous observation that he was to repeat later in <u>The Wealth of Nations</u>: that self-seeking men are often "led by an invisible hand . . . without knowing it, without intending it, [to] advance the interest of the society." Smith argued that it is in the unintended outcome of this competitive struggle for self-betterment that the invisible hand regulating the economy shows itself, for Smith explains how competition forces the prices of commodities down to their "natural" levels, which correspond to their costs of production. Moreover, by inducing labour and capital to move from less to more profitable occupations or areas, the competitive mechanism constantly restores prices to these "natural" levels despite short-run aberrations. Smith's analysis of the market as a self-correcting mechanism was impressive. But his purpose was more ambitious than to demonstrate the self-adjusting properties of the system. Rather, it was to show that, under the impetus of the acquisitive drive, the annual flow of national wealth could be seen steadily to grow.*

   David Hume *(b. 1711, d. 1776) an 18th-century Scottish empiricist philosopher, historian, economist, and essayist. How far he influenced his friend Adam Smith, 12 years his junior, remains uncertain: they had broadly similar principles, and both had the excellent habit of illustrating and supporting these from history. Hume was one of the originators of the Quantity Theory of Money.*

6. **Answer:** *Not Marx. It was **Adam Smith** in <u>The Wealth of Nations</u>, Book I, Ch 10, part 2. Although Smith preached laissez-faire (with important exceptions), his argument was directed as much against monopoly as government; and although he extolled the (often beneficial) social results of the acquisitive process, he almost invariably treated the manners and manoeuvres of businessmen with contempt.*

7. **Answer: *Thomas Robert Malthus*** *(b. 1766 d. 1834) English economist and demographer, best known for his theory that population growth will always tend to outrun the food supply and that betterment of the lot of mankind is impossible without*

stern limits on reproduction. Following studies at Jesus College, Cambridge, he was elected a fellow of the College in 1793, and took holy orders in 1797. In 1798 he published anonymously the first edition of <u>An Essay on the Principle of Population as it affects the Future Improvement of Society, with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and other Writers</u>. (Godwin and Condorcet were widely read at the time. They took for granted that material and 'spiritual' progress would occur resulting in the perfectibility of mankind and foresaw a millennium in which the human race would live prosperously and harmoniously.) Malthus' work received wide notice. Briefly, crudely, yet strikingly, Malthus argued that infinite human hopes for social happiness must be vain, for population will always tend to outrun the growth of production. The increase of population will take place, if unchecked, in a geometrical progression, while the means of subsistence will increase in only an arithmetical progression. Population will always expand to the limit of subsistence and will be held there by famine, war, and ill health. "Vice" (which included, for Malthus, contraception), "misery," and "self-restraint" alone could check this excessive growth. Malthus didn't think 'vice' was a good way out of the problem. Why not? Well, in his own words: "A promiscuous intercourse to such a degree as to prevent the birth of children [one wonders what on earth he has in mind!] seems to lower, in the most marked manner, the dignity of human nature. It cannot be without its effect on men, and nothing can be more obvious than its tendency to degrade the female character, and to destroy all its most amiable and distinguishing characteristics." (Malthus, cited in E Hunt, History of Economic Thought, Harper Collins, 1992, p. 93.) Malthus was an economic pessimist, viewing poverty as man's inescapable lot. The Malthusian theory of population acted as a brake on economic optimism, helped to justify a theory of wages that made the minimum cost of subsistence of the wage earner a standard of judgment, and discouraged traditional forms of charity.

In 1805 Malthus became professor of history and political economy at the East India Company's college at Haileybury. It was the first time in Great Britain that the words political economy had been used to designate an academic office. In 1811 he met and became close friends with the economist David Ricardo. One of many areas in which their views differed was over the question of the balance between aggregate demand and aggregate supply. Ricardo adhered to the notion that "supply creates its own demand". Malthus believed that there might be insufficient "effective demand," a phrase that he invented. In 1820 in his summary <u>Principles of Political Economy Considered with a View to Their Practical Application</u>, he went so far as to propose public works and private luxury investment, as palliatives for economic distress, that would increase effective demand and prosperity. In this respect, Malthus can be said to have anticipated the economic discoveries of John Maynard Keynes in the 1930s.

The quote about drawing a blank in the great lottery of life is from Malthus, T. R. 1798. An Essay on the Principle of Population. First edition. Volume 1 of The Works of Thomas Robert Malthus. Edited by E.A. Wrigley and D. Souden. London: W. Pickering, 1986, p 64.

William Godwin (b. 1756, d. 1836) Social philosopher, political journalist, and religious dissenter who anticipated the English Romantic literary movement with his writings advancing atheism, anarchism, and personal freedom. Was married in 1797 to Mary Wollstonecraft (herself an English writer noted as a passionate advocate of educational and social equality for women) who was the mother of his daughter **Mary Wollstonecraft**

Shelley *(the author of* Frankenstein *(1818) and the magnificent book* The Last Man *(1826)).*

8. **Answer:** *Thomas Carlyle attacking the 'political economists'.* **Thomas Carlyle** *(b. 1795, d. 1881) Scottish/British historian and essayist, whose major works include* The French Revolution, *(1837) and* Oliver Cromwell's Letters and Speeches. With Elucidations *(1845). Carlyle introduced the term dismal science in* The Nigger Question *published in 1849. It dealt with the labour situation in the West Indies. Carlyle puts the view that 'work' is morally good and that if a "Black man" will not voluntarily work for the wages they were being paid then they should be forced to work because that was their destiny. (A thoroughly racist document - one is pleased to belong to a discipline which is the target of the author's scorn). He writes of the opposition (those who wanted to abolish slavery, which included those who argued that the forces of supply and demand rather than physical coercion should regulate the labour market) that: "the Social Science - which finds the secret of this Universe in supply and demand and reduces the duty of human governors to that of letting men alone, is a dreary, desolate, and indeed quite abject and distressing one; what we might call, the dismal science." Thomas Carlyle,* Collected Works, Volume IV, *Chapman and Hall, N.D, p 353f. Carlyle was of the view that compulsion, rather than market forces should regulate the supply of labour on plantations in the West Indies because the laws of supply and demand are not appropriately applied to a "Black man". Instead, the "Black man should be compelled to work by the those who are born wiser than them", because this relationship (white = master and black = servant) has been ordained by God. A good reference on Carlyle's pro-slavery stance via a vis the views of the laissez faire economists can be found in C Vanden Bossche,* Carlyle and the Search for Authority, *Ohio State University Press, 1991, p 133f. Carlyle also invented the phrase "Captain of Industry". He used it as a chapter title in his book* Past and Present, *published in 1843. An excellent presentation of Caryle's attacks on economics may be found in J Persky, "A Dismal Romantic",* Journal of Economic Perspectives, *4, 1990, 165-72.*

    James Meade *(b. 1907, d. 1995), an English Nobel Prize winner from Cambridge, once quipped that Carlyle was wrong to call Economics the dismal science. Meade says that, in the light of recent biographies of Keynes and his circle, Economics should no longer be known as the dismal science but instead be known as 'the gay science'.*

9. **Answer: David Ricardo** *(b. 1772, d. 1823) English economist who gave systematised and classical form to the rising science of economics in the 19th century. Ricardo defined the scope of economics more narrowly than had Adam Smith and included little explicit social philosophy. Although his ideas have long since been superseded or modified by other work and by new theoretical approaches, Ricardo retains his eminence as the thinker who first systematised economics. Writers of various persuasions drew heavily upon his ideas, including those who favoured laissez-faire capitalism and those, such as Karl Marx, who opposed it. Even an undergraduate student today would learn comparative advantage and Barro's argument for 'Ricardian equivalence'. The paper published in the Supplement to the Encyclopeadia Britannica is 'Funding System' reprinted in P Sraffa (ed),* The Works and Correspondence of David Ricardo, *Vol 4, Cambridge University Press, 1951, pp 143-200.*

Robert Barro (b. 1944). *Born in New York, Robert Barro is a Professor of Economics at Harvard University and is widely recognised as one of the worlds leading Macroeconomists (and a future Nobel Prize winner in my opinion). He has written on many aspects of economics and economic policy including money, employment and inflation, modern business cycle theory and fiscal policy. He has authored a best selling textbook simply titled* <u>Macroeconomics</u> *and has*

been responsible for the rise of 'new classical economics'. (An interview with Barro is published in B Snowdon et al, <u>A Modern Guide to Macroeconomics</u>*, Edward Elgar, 1994.) Recently the New York Times reported that he has moved form Harvard to Columbia (one of the N.Y. universities) and that Columbia is paying him a salary of $300,000.*

Ricardo's writings on what has become known as 'Ricardian equivalence' are discussed in G O'Driscoll, "The Ricardian Nonequivalence Theorem", <u>Journal of Political Economy</u>*, 1977, pp 207-10. He says that Ricardo did demonstrate that in theory, taxation and bond sales are equivalent, but that he also went on to say that the public does not see it that way because they suffer from 'fiscal illusion'.*

10. **Answer: *Karl Marx*** *(b. 1818, d. 1883) Revolutionary, social and political theorist, historian, and political economist, was the author (with Friedrich Engels) of* <u>Manifest der Kommunistischen Partei</u> *(1848), commonly known as* <u>The Communist Manifesto</u>*, the most celebrated pamphlet in the history of the socialist movement, as well as of its most important book,* <u>Das Kapital</u>*. This work (Capital), published in three volumes in 1867, 1885, 1894 is one of his most important works. In it he expounded his theory of the capitalist system, its dynamism, and its tendencies toward self-destruction. He described his purpose as to lay bare "the economic law of motion of modern society." The second and third volumes were published posthumously, edited by his collaborator Friedrich Engels. Much of* <u>Das Kapital</u> *deals with Marx's concept of the " surplus value" of labour and its consequences for capitalism. Marx held that under the capitalistic system, labour was merely a commodity and could get only its subsistence. The capitalist, however, could force the worker to spend more time on his job than was necessary to earn his subsistence, and the excess product, or surplus value, thus created, was taken by the capitalist.*

The first quote is from Marx <u>and Engels</u> *(so I have cheated a little here) in the* <u>Manifesto of the Communist Party</u> *Section 3. The second is mentioned in Todd Buchholz's book* <u>New Ideas from Dead Economists</u>*, p.55. The third is from Marx's* <u>Critique of the Gotha Program</u> *(1875 p 1)*

11. **Answer:** *Edgeworth was reviewing Leon Walras'* <u>Éléments d'Economie Politique Pure</u> *in the journal* <u>Nature</u>*, Sept 5, 1889, p435*

***Francis Ysidro Edgeworth** (b. 1845, d. 1926) Irish economist and statistician who applied mathematics to those fields, developing new concepts. Edgeworth was educated at Trinity College in Dublin and Balliol College, Oxford, graduating in 1869. In 1877 he qualified as a barrister. He lectured at King's College, London, from 1880, becoming professor of political economy in 1888. From 1891 to 1922 he was Drummond Professor of economics at Oxford. He played an important role as editor of the Economic Journal (1891-1926). Edgeworth originally hoped to use mathematics to illuminate ethical*

questions; and his first work, <u>New and Old Methods of Ethics</u> (1877), drew on mathematical techniques, especially the calculus of variations, which possibly deterred otherwise interested readers. His most famous work is <u>Mathematical Psychics</u> (1881), which presented his ideas on the generalised utility function, the indifference curve, and the contract curve, all of which have become standard devices of economic theory. Edgeworth contributed to the pure theory of international trade and to taxation and monopoly theory. He also made important contributions to the theory of index numbers and to statistical theory, in particular to probability, advocating the use of data of past experience as the basis for estimating future probabilities. (A good reference on Edgeworth is John Creedy's <u>Edgeworth and the Development of Neoclassical Economics,</u> Blackwell, 1986.)

Marie-Esprit-Leon Walras *(b.1834, d. 1910) was a French-born economist whose outstanding work Éléments d'économie politique pure (Elements of Pure Economics) published in 1874 was one of the first comprehensive mathematical analyses of general economic equilibrium. Interestingly, Edgeworth said of Walras' notion of 'tatonnement': "He diffuses over some thirty-five pages an idea which might have been adequately presented in a few paragraphs. For it is, after all, not a very good idea."*

12. ***Answer:*** *It was Marshall but all three were good mathematicians and thought a lot about the role of mathematics in Economics.*

Alfred Marshall *(b. 1842, d. 1924) one of the chief founders (along with Edgeworth and Jevons) of the school of English neoclassical economists. Marshall was a fellow and lecturer in political economy at Balliol College, Oxford, from 1883 to 1885 and professor of political economy at the University of Cambridge from 1885 to 1908. He thereafter devoted himself to his writings. Marshall's magnum opus, <u>Principles of Economics</u> (1890), was his most important contribution to economic literature. It was distinguished by the introduction of a number of new concepts, such as elasticity of demand, consumer's surplus, quasi-rent, the distinction between short and long run as we know them today and the representative firm, all of which played a major role in the subsequent development of economics.*

(The passage is an extract from a letter to a friend (A Bowley) dated 1906 - Marshall would by then have been 64. Source is A Pigou (ed) <u>Memorials of Alfred Marshall</u>, Kelley & Millman, 1956, p 427.) Recent discussion of the role of mathematics may be found in C Beed and O Kane, "What is the Critique of the Mathematisation of Economics?" <u>Kyklos</u>, 1991, pp 581-612.)

William Stanley Jevons *(b. 1835, d. 1882) Jevons' work, along with similar discoveries made by Karl Menger in Vienna (1871) and by Léon Walras in Switzerland (1874), marked the opening of a new period in the history of economic thought. Jevons broke off his studies of the natural sciences at University College, London, in 1854 to take a post as assayer in Sydney, Australia. There he acquired an interest in political economy and social studies. When he returned to England in 1859, he soon completed two of his most original and seminal papers, "General Mathematical Theory of Political Economy" (1862) and "A Serious Fall in the Value of Gold" (1863). In the first he outlined what subsequently came to be known as the marginal utility theory of value. This theory suggests that the utility or value to a consumer of an additional unit of a product is (at least beyond some critical quantity) inversely related to the number of units of that product he already owns. In the second he set out to measure the rise in prices in the*

period following the Californian and Australian gold discoveries and made one of the greatest contributions to the theory of index numbers ever published. In 1866 Jevons was appointed to a chair of political economy at Owens College, Manchester. He moved to University College, London, in 1876. A polymath, he contributed to the development of Logic, as well as Economics, he invented a system for cataloguing books in a library, a system of musical notation, he published a paper on cloud formation and many other topics in the area of scientific meteorology.

13. **Answer:** *Harold Hotelling 1895-1973. The works referred to are: "Stability in Competition", Economic Journal, 1929; "The Economics of Exhaustible Resources", Journal of Political Economy, 1931 and "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates", Econometrica, 1938.*

14. **Answer:** *Frank (Plumpton) Ramsey, 1903-1930. The works referred to are: The Foundations of Mathematics: and other logical essays, 1931; "A Contribution to the Theory of Taxation", Economic Journal, 1927, and "A Mathematical Theory of Saving", Economic Journal, 1928.*

15. **Answer: John Maynard Keynes** *(b. 1883, d. 1946) English economist, journalist, and financier, best known for his revolutionary economic theories (Keynesian economics) on the causes of prolonged unemployment. His most important work, The General Theory of Employment, Interest and Money (1936) advocated a remedy for economic recession based on a government-sponsored policy of full employment.*

After graduating from Cambridge, Keynes became a civil servant and moved to the India Office in Whitehall. He then returned to Cambridge, where he taught economics until 1915. The onset of World War I brought him back to government employment, this time in the Treasury. There he was concerned with the economic management of the war. His special responsibility covered relations with allies and the conservation of England's scant supply of foreign currencies. After the war he accompanied his prime minister, Lloyd George, to France as an economic adviser to the British delegation to the Peace Conference being held at Versailles, Keynes soon became so distressed at the political chicaneries of the proceedings and the unrealistic character of the reparations policies to be imposed upon a defeated Germany that his health deteriorated, and he resigned his post. Always an activist, Keynes translated personal distress into public protest. In two summer months he composed the indictment of the Versailles settlement that by Christmas 1919 reached the bookstores as The Economic Consequences of the Peace. The permanent importance of this polemical essay lies in its economic analysis of the excessive weight of reparations upon the German economy and the corresponding lack of probability that they ever would be paid.

His enduring triumph was his composition in the early 1930s of The General Theory of Employment, Interest and Money, which appeared in 1936; an exposition of new ideas that had been partly foreshadowed in his Treatise on Money (1930) a work which was largely in the Quantity theory tradition and which unfortunately (in my opinion) has been overshadowed by the attention given to the General Theory. The central message of the GT is readily translated into two powerful propositions. The first declared the existing

theory of unemployment nonsense. In a depression, according to Keynes, there was no wage so low that it could eliminate unemployment and no effective automatic corrective mechanism. The second proposition proposed an alternative explanation about the origins of unemployment and depression. This centred upon the possibility that there could be deficient aggregate demand. The continuing influence of Keynes was exemplified by publication of the <u>Collected Writings of John Maynard Keynes</u>, 29 vol. (1971-79), by the Royal Economic Society, which includes materials not previously published. Keynes, it would seem did not have much time for Prime Ministers: he once described Lloyd-George, the Welsh born British Prime Minister, as "this goat-footed bard, this half-human visitor to our age from the hag-ridden magic and enchanted woods of Celtic antiquity". He also remarked about Lloyd George that "when he is alone in his room there is no one there" (JMK, <u>Essays in Biography</u>).

Winston Churchill *(b. 1874, d. 1965) Author and politician. After a rise to prominence in national politics before World War I, he acquired a reputation for erratic judgment in the war itself (it was Churchill who gave us the Gallipoli tragedy) and in the decade that followed. Politically suspect in consequence, he was a lonely figure until his response to Adolf Hitler's challenge brought him to leadership of a national coalition in 1940. With Franklin D. Roosevelt and Joseph Stalin he (unfortunately) shaped Allied strategy in World War II, and after the breakdown of the alliance he alerted the West to the expansionist threat of the Soviet Union.*

16. **Answer:** *J R Hicks, in his article "Mr Keynes and the Classics", <u>Econometrica</u>, 1937, pp 147-159. Hicks had invented IS-LM analysis.*

John R. Hicks, *(b. 1904, d. 1989) English academic economist who made pioneering contributions to general economic equilibrium theory and, in 1972, shared (with Kenneth J. Arrow) the Nobel Prize for Economics. Then, for two decades, he was a fellow of All Souls College, Oxford, and was thereafter a professor emeritus. Hicks's classic work, <u>Value and Capital</u> (1939; 2nd ed. 1946), marked a major advance in the formal modelling in the area of Microeconomics. As well as value and Capital he wrote a number of other books (including the path-breaking book <u>The Trade Cycle</u> (1950) and a large number of influential journal articles including the one referred to in the question in which IS-LM analysis appears for the first time.*

17. **Answer:** *Many people have held these views at one time or another (including David Hume, Alfred Marshall and more 'modern' writers such as Friedman). However the person who wrote these lines was no other than **John Maynard Keynes** in his book <u>A Tract on Monetary Reform</u> which was published in 1923 (ie before he became a 'keynesian' - if he ever was one - but that's a different story). The quotes I have given you come from pages 61 and 65 of that work. One reason why I have asked this question is that after writing the words "A doubling of the value of currency or other forms of cash in circulation with the public ... must have the effect of raising the price index to double what it would have been otherwise" he goes on to say: Now 'in the long run' this is probably true. ... But this long run is a misleading guide to current affairs. **In the long run we are all dead.** Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is*

flat again" (ibid, p 65, my emphasis). This notion that in the long run we are all dead has become one of the most famous Keynes' phrases.

18. **Answer: A W (Bill) Phillips** *After he left the ANU in 1969 he returned to New Zealand and died there in 1975. Biographies may be found in C Blyth, "A W Phillips" <u>Economic Record</u>, 1975, 303-7; and R Leeson, "A W Phillips MBE", <u>Economic Journal</u>, 1994, 605-18 and in the entry for Phillips in the <u>New Palgrave</u>. There is a MONIAC on display on the first floor of our building and a caricature of a MONIAC machine by Bruce Petty may be found on the cover of this document. The 1958 <u>Economica</u> article was titled in full: "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957". He plotted the unemployment rates and the rates of change of money wages for the U.K. from 1861 to 1957. He found that, except for the years of unusually large and rapid increases in import prices, the level of unemployment could explain the rate of change in money wages. This was the birth of 'the Phillips curve'.*

19. **Answer: Robert Lucas** *(b. 1937). American economist who won the 1995 Nobel Prize for Economics for developing and applying the theory of rational expectations. His work, which gained prominence in the mid-1970s, questioned the influence of John Maynard Keynes in Macroeconomics and the efficacy of government intervention in economic affairs. Lucas graduated from the University of Chicago with degrees in history and economics. He accepted a professorship of economics at the University of Chicago in 1975. Lucas' <u>Studies in Business-Cycle Theory</u> (1981) reprints his research from the 1970s, and <u>Models of Business Cycles</u> (1987) provides an overview of his economic theory.*

20. **Answer:** *Newton and Jevons in a Mint and Guevara in a Central Bank*

Isaac Newton *(b. 1643, d. 1727) English physicist and mathematician who invented the infinitesimal calculus, laid the foundations of modern physical optics, and formulated three laws of motion that became basic principles of modern physics and led to his theory of universal gravitation. He is regarded as one of the greatest scientists of all time. He was appointed Lucasian professor of mathematics in 1669. (A position now occupied by Stephen Hawking the author of the best seller <u>A Brief History of Time</u>.) In 1696 Newton was appointed warden of the Royal Mint in London. He energetically went after coin clippers and counterfeiters and, amongst other things, set the rate of exchange between the English pound and gold bullion (the "gold standard") which remained unchanged for over 200 years until it was suspended during the First World War.*

William Stanley Jevons *(b. 1835, d. 1882) English logician and economist who expounded in his book <u>The Theory of Political Economy</u> (1871) the "final" (marginal) utility theory of value was for 5 years an assayer in the Royal Mint in Sydney.*

Ernesto "Che" Guevara *(b. 1928, d. 1967) Born in Argentina he was a medical student, fought with Fidel and Raul Castro during the Cuban Revolution (1956-59), appointed by Castro to be Minister of Industry and Governor of the Central Bank of Cuba. He was a theoretician and tactician of guerrilla warfare and later guerrilla leader in Africa and South America. Killed by Bolivian Army forces in 1966.*

21. Answer: Dag Hammarskjold, *(b. 19053, d. 1961) A Swedish statesman, he served as the second secretary-general of the United Nations from 1953-61. The son of a former prime minister of Sweden, Hammarskjold studied law and economics and taught for three years before entering the Swedish civil service. He soon acquired an international reputation as a monetary expert. In the years of economic readjustment following World War II, he represented Sweden at many international conferences. In 1951 he joined the Swedish delegation to the United Nations, becoming its chairman in 1952. When Trygve Lie resigned as secretary-general in 1953, Hammarskjold was elected to the position. An active international peacemaker of great moral authority and sensitivity, he worked to resolve the Suez crisis of 1956and the 1958 crisis in Lebanon and Jordan. In 1960, with the onset of the Congo crisis, he sent a UN-peacemaking force into that country (now Zaire), a move that was strongly attacked by the USSR. Hammarskjold was killed in a plane crash while on a peace mission to Katanga in the Congo. He was posthumously awarded the Nobel Peace Prize for 1961. His writings include Markings (1964), a book of personal reflections. (Markings, translated by Leif Sjöberg and W.H. Auden is published by Faber and Faber, London, 1964.)*

22. Answer: **John von Neuman,** <u>not</u> John Nash *(although Nash did make a fundamental contribution to the theory of non-cooperative games).*

John von Neuman *(1903--1957) Born in Budapest, Hungary in 1903. After simultaneously earning a doctorate in mathematics from the University of Budapest and a doctorate in chemistry from the University of Zurich, he joined the faculty of the University of Berlin in 1927. He moved to Princeton in 1932. During this time, he made important contributions not only to pure and applied mathematics, but also to physics and, in some ways, philosophy (esp. in relation to the quantum paradox). He was also active in the Manhattan Project (the development of the atomic bomb) and was one of President Truman's advisors on the Atomic Energy Commission. His later work on parallel processes and networks has earned him the label of the "father of the modern computer". John von Neumann's 1944 book with Oskar Morgenstern, Theory of Games and Economic Behavior was a landmark of twentieth century social science. Besides single-handedly inventing the entire field of Game Theory (which he began doing with a famous 1928 article), this book introduced several other important elements used in other fields of economics, such as the axiomatization of utility theory per se (as later pursued by Arrow, Debreu, etc.) and the axiomatization of choice under uncertainty, i.e. the formalization of the expected utility hypothesis. An excellent biography is to be found in Heims, Steve J. <u>John Von Neumann and Norbert Wiener : from mathematics to the technologies of life and death</u>: MIT Press, 1980.*

John Nash *(1928 -) In 1994 Nash shared a Nobel Prize for my pioneering analysis of equilibria in the theory of non-cooperative games. In his rather intriguing autobiographical essay (http://www.nobel.se/economics/laureates/1994/nash-autobio.html) Nash explains that his working game theory" had been stimulated by the work of von Neumann and Morgenstern". Sylvia Nasar's biography, <u>A beautiful mind</u> (Simon & Schuster, 1998) has been made into a movie of the same title.*

23. Answer: Joseph Schumpeter, *(b. 1883, d. 1950), Czech born American economist and sociologist known for his theories of capitalist development and business cycles. Schumpeter was educated in Vienna and taught at various universities on the continent*

before joining the faculty of Harvard University (1932-50). In 1919 he served briefly as minister of finance in the Austrian government. His influence in the field of economic theory was powerful. In his (once) widely read <u>Capitalism, Socialism, and Democracy</u> (1942), he argued that capitalism would eventually perish of its own success, giving way to some form of public control or socialism. His magnificent <u>History of Economic Analysis</u> (1954; reprinted 1966) is an extensive (and exhaustive!) study of the development of analytic methods in economics. His other books include; <u>The Theory of Economic Development</u> (1912) and <u>Business Cycles</u> (1939).

24. Answer: Robert Heilbroner, *<u>The Worldly Philosophers</u>, Penguin Books, 1991. Multiple copies in the Giblin at 330.10922 HEIL. (It is easily, in my opinion, the most readable history of economic thought.) Two other very readable histories are:* **Todd Buchholz** *<u>New Ideas from Dead Economists</u> New American Library, 1989 (now available in Penguin). Shelved at 330.0922 BUCH; and* **Daniel Fusfeld** *<u>The Age of the Economists</u> Scott, Foresman/Little, Brown Higher Education, 1990. Shelved at 330.09 FUSF. Other good books include* **Mark Blaug's** *<u>Economic Theory in Retrospect</u>, 5th ed. Cambridge University Press, 1996. Copies shelved at 330.109 BLAU. Copies of earlier editions are shelved at 330.109 B645 and* **W Breit & R Ransom**, *The Academic Scribblers, 3rd ed. Princeton University Press, 1998. Copies shelved at 330.0922 BREI. A good book on the nature of economic discourse is* **D. McCloskey**, *<u>The Rhetoric of Economics</u> University of Wisconsin Press, 1985. Shelved at 330 MCCL.*

25. Answer: *Cochrane, Watson and Lancaster.*

A W (Bill) Phillips *(b. 1914, d. 1975) was born in New Zealand.*

Donald Cochrane *(b. 1917, d. 1983) was born in Melbourne. He did his first degree at the University of Melbourne, followed by a PhD at Cambridge under Richard Stone. Jointly with Guy Orcutt he published a paper in the <u>Journal of the American Statistical Association</u> on estimation where auto-correlation is present. He also wrote an excellent survey of econometrics which was published in the <u>Economic Record</u> in 1949. War service as a navigator in the RAAF. Appointed a professor at the University of Melbourne in 1955. In 1961 he moved to Monash University as their the first Professor of Economics and Dean of the Faculty of Economics and Commerce at Monash University. (One of many outstanding Australian academics to have moved from Melbourne University to Monash, for one reason or another. Recently the reverse brain drain was in action when the University of Melbourne was fortunate in attracting Professor* **John Freebairn**, *who had been Head of the Department of Economics at Monash, to move to Melbourne where he is now Head of our Department.)*

Geoffrey Watson *was born in 1921 in Bendigo, Victoria. He was a lecturer in the Department of Statistics at the University of Melbourne in the 1950's. Is now Professor of Statistics at Princeton.*

Kelvin Lancaster *was born in Sydney in 1925. Amongst his many accomplishments he was a fellow of the Econometrics Society, a Distinguished Fellow of the American Economic Association and a Professor of Economics at Columbia University. Together*

with Richard Lipsey he wrote the famous article in welfare economics titled 'The General Theory of the Second Best' published in the <u>REStuds</u> in 1956. He wrote important papers in many areas of economic analysis including consumer behaviour and the structure of markets. A major conceptual innovation that he introduced was not to view the consumer as choosing between different goods but instead to see them as choosing between different characteristics which the goods themselves provided. The fullest statement of these ideas was in his 1979 book titled <u>Variety, Equity and Efficiency</u>.

Max Corden *was born in Breslau, in Germany. He did his first degree at Melbourne (in fact he was in the first cohort of BCom honours students) followed by a PhD at London. He was a lecturer in the Economics Department at the University of Melbourne between 1958 and 1962.*

26. Answer: *Keynes on Tinbergen. Poor Tinbergen! The first quote is in a letter from Keynes to Harrod dated 21 sept 1938, p 305 of Collected Writings of JMK XIV, the second quote is from Keynes' review of Tinbergen's book <u>Statistical testing of business cycle theories</u>, in the <u>Economic Journal</u> Sept 1939; the third quote is taken from Keynes' reply to Tinbergen in the <u>Economic Journal</u> March 1940. Tinbergen's 'crime' was to have built a little econometric model of the US economy. Tinbergen must have wondered what was going on, after all, Keynes was a fellow of the Econometric Society when he was writing all this. To us it is quite obvious that Keynes had no idea what he was talking about in his review. He shows no understanding of the least squares method, of multiple regression techniques or of difference equations (he actually claims that it is impossible to get a cycle out of a linear difference equation!*

Jan Tinbergen *(b. 1903, d. 1994) Dutch economist noted for his development of econometric models. He was co-winner (with Ragnar Frisch) of the first Nobel Prize for Economics, in 1969. From 1929 to 1945 he was a business-cycle statistician with the Dutch government's Central Bureau of Statistics and from 1945 to 1955 was director of the Central Planning Bureau. He held the post of professor of economics at The Netherlands School of Economics (now part of Erasmus University), Rotterdam, for 40 years (1933-73) and then taught for two years at the University of Leiden before his retirement in 1975. Tinbergen was an economic adviser to the League of Nations at Geneva, 1936-38, and it was there that he completed his analysis of the economic development of the United States from 1919 to 1932. This pioneering econometric study provided much of the raw material for his later development of business-cycle theory and for the application of methods of economic stabilisation. Later he also constructed an econometric model of The Netherlands, which was applied to both short-term and broader political-economic planning. (There is a fascinating account of the development of Tinbergen's pioneering model of the Dutch economy in G Dhaene and A Barten, "Where it all began: The 1936 Tinbergen model revisited", <u>Economic Modelling</u>, 1989, pp 203-19.)*

27. Answer: The American writer Herman Wouk, author of 'The Cain Mutiny'. It refers to the Yale economist and Nobel Prize winner, J Tobin.

James (Jim) Tobin (b. 1918) American economist whose contributions to the theoretical formulation of investment behaviour were also of great practical value in understanding

financial markets. His work brought him the Nobel Prize for Economics in 1981. (Tobin has a very funny story about the King of Sweden trying to contact him to tell him he had won the prize. The King was instead put through by the university telephone switchboard operator to one of the colleges where the phone was answered by an undergraduate named J Tobin. A modest lad, he suggested they might have the wrong person. Tobin says that if the student had been a Yale PhD student maybe he would not have been so bashful!) After taking degrees from Harvard University (1939, 1940), Tobin spent 1941-42 as an economist with the Office of Price Administration in Washington, D.C. After the US entered WW II he served in the Naval Reserve, rising to second in command of the destroyer USS Kearney. In 1947 Tobin received his Ph.D. from Harvard, and in 1950 he joined the faculty of Yale University, where in 1957 he became Sterling professor of economics. In addition to teaching, he served as director of the Cowles Foundation for Research in Economics. Tobin's work significantly extended the usefulness of Keynesian economic analysis by greatly clarifying such issues as risk, portfolio management, and the role of financial markets in conveying information about underlying conditions.

I have mentioned that Tobin was an officer in the US Navy. A shipmate of his was named Herman Wouk. Wouk later used his experience in the US Navy as background for a novel of his (later turned into a film which starred Humphrey Bogart) called The Cain Mutiny. Tobin appears in the book thinly disguised as one of the characters who is named Tobit. Later, Arthur Goldberger applied the name Tobit to Tobin's method of extending Probits to multiple regression. (Tobin's paper introducing this estimator/method was rejected by the Journal of the American Statistical Association and was published in one of the volumes of his collected papers.)

28. ***Answer: Johann Heinrich von Thünen**, (b. 1783, d. 1850) German location theorist and economist. His formula was $\sqrt{a.p}$. Where a is the value of subsistence needs and p is the average product of a working family, so the formula is the geometric mean of the two. A silly formula really (for a good discussion of how silly see M Blaug, Economic Theory in Retrospect, Heinemann, London, Second edition, pp. 319-21) but to arrive at it he did some very neat maths, in fact he was "The first to use calculus as a form of economic reasoning" J Schumpeter, History of Economic Analysis, Allen and Unwin, 1954, p 466. See also Peter Lloyd, "Elementary Geometric/Arithmetic Series and Early Production Theory", Journal of Political Economy 1969, pp 21-34.*

29. ***Answer:** Paul Samuelson*

30. ***Answer (A):** Adam Smith The Wealth of Nations, At the same time as he was writing about how specialisation allowed opulence, he wrote about the intellectual degradation of the worker in a society in which the division of labour has proceeded very far; for the specialised worker "generally becomes as stupid and ignorant as it is possible for a human being to become." (Marx also developed this idea and linked it to 'alienation'. Marx's ideas were 'investigated' by Harry Braverman)*

*   ***Answer (B):** Paul Samuelson, Foundations of Economic Analysis,*

*   ***Answer (C):** Milton Friedman and Anna Schwartz A Monetary History of the United States 1867-1960. More than any other, this book marked the rise of monetarist anti-*

keynesianism.

Answer (D): *Karl Marx, Capital Volume 1.*

Answer (E): *Keynes' Preface to the <u>General Theory</u> (I have cheated here. The first line of the text proper is " I have called this book the General Theory of Employment Interest and Money .....")*

Answer (F): *David Ricardo, <u>Principles of Political Economy and Taxation</u>*

Answer (G): *W Leontief, <u>The Structure of the American Economy, 1919-1939</u>. (Notice the reference to Quesnay's work.)*

Answer (H): *Alfred Marshall, <u>Principles of Economics.</u>*

31. **Answer:** *The statement was made by the Marquis de Mirabeau, lauding (his friend) Quesnay's Tablaeu Economique which was first published in 1758.*

Victor Riqueti, Marquis de Mirabeau *(b. 1715, d. 1789) French political economist, the forerunner and later patron of the Physiocratic School of economic thought. In his popular work titled "The Friend of Man, or Treatise on Population" (1756-58) Mirabeau borrowed heavily from the ideas of Richard Cantillon in stressing the primacy of agriculture over commerce as a source of wealth. Mirabeau's approach to economics had anticipated the doctrines that were being formulated by the Physiocratic school of François Quesnay, and the Marquis soon associated himself with the Physiocrats' attempts to reform France's antiquated, inefficient system of taxation.*

François Quesnay *(b. 1694, d. 1774) French economist and intellectual leader of the physiocrats, the first systematic school of political economy. Quesnay was consulting physician to King Louis XV at Versailles, where he developed an interest in economics. However, he did not publish his first book on the subject until he was in his 60s. Quesnay's system of political economy was summed up in his <u>Tableau Economique</u> (1758), which displayed diagrammatically the relationship between the different economic classes and sectors of society and the flow of payments among them. In his <u>Tableau</u> Quesnay developed the assumption of economic equilibrium, a concept used as a point of departure for much subsequent economic analysis. Of especial importance was his analysis of capital as advances, or a stock of wealth that had to be accumulated in advance of production. His classification of these advances distinguished between fixed and circulating capital. He was one of the originators of the 19th-century doctrine of the harmony of class interests and of the related doctrine that the maximum social satisfaction occurs under free competition.*

Wassily Leontief *(b. 1906) Russian-born U.S. economist who has been called the father of input-output analysis in applied economics and who won the Nobel Prize for Economics in 1973. Leontief was a student at the University of Leningrad (1921-25) and the University of Berlin (1925-28) and went to the United States in 1931, teaching at Harvard University from 1931 to 1975. The core of his complex input-output system is a flow table in the form of a matrix showing what individual industries buy from and sell to one another. With the addition of government, consumers, foreign countries, and other elements, there emerges a general outline of the goods and services circulating in a national economy. The input-output method of economic analysis is used in various forms in more than 50 industrialised countries for planning and forecasting. Leontief is also known for the "Leontief Paradox," his finding that, in the United States, exports are*

labour intensive and imports are capital intensive. Among his major publications are <u>The Structure of the American Economy</u> 1919-1929 (1941) and <u>Input-Output Economics</u> (1966).

Richard Stone *(b. 1913, d. 1991) British economist who in 1984 received the Nobel Prize in Economic Science for developing an accounting model that could be used to track economic activities on a national and, later, an international scale. Stone studied law and economics at the University of Cambridge. In 1940, at the invitation of Keynes, he entered the British government's Central Statistical Office. After World War II he was appointed director of the new department of applied economics at Cambridge. He retained that position until 1955, when he became Professor of finance and accounting at Cambridge, a post he held until 1980. The first official estimates of British national income and expenditures were made according to Stone's method in 1941. The greater part of Stone's work, however, was done in the 1950s, when he offered the first concrete statistical means by which to measure investment, government spending, and consumption; these models resulted in what was, in essence, a national bookkeeping system. He went on to adapt his models for such international organisations as the United Nations.*

32. *Answer:* *Frisch and Tinbergen were joint winners of the first Nobel prize for Economics*

There are five Nobel Prizes that are awarded annually by four institutions from a fund established under the will of Alfred Bernhard Nobel and there is one set up by the Bank of Sweden. The five prizes established by Nobel's will are: the Nobel Prize for Physics; the Nobel Prize for Chemistry; the Nobel Prize for Physiology or Medicine; the Nobel Prize for Literature; and the Nobel Prize for Peace. The Bank of Sweden set up an additional award, the Prize for Economic Sciences in Memory of Alfred Nobel, in 1968, and the first award was given in 1969. (The Peace prize is awarded by the Norwegian Storting (parliament); all the others are awarded by Swedish organisations.)

Ragnar Frisch, *(b. 1895 d. 1973) pioneer Norwegian econometrician and economist who was a joint winner (with Jan Tinbergen) of the 1969 Nobel Prize for Economics. Frisch was educated at the University of Oslo, obtaining his Ph.D. in 1926. He was appointed to a specially created professorship at Oslo in 1931, a post he held until his retirement in 1965. Frisch was a pioneer of econometrics and is credited with inventing the term. He was one of the founders of the Econometric Society and, for 21 years, editor of <u>Econometrica</u>. Frisch is particularly famous for the development of large-scale econometric modelling linked to economic planning and national income accounting. Frisch was involved with a range of macroeconomic topics, including the trade cycle, production theory, consumer behaviour, and statistical theory.*

33. *Answer: J M Keynes*, *in <u>The Economic Consequences of the Peace</u>, Section III of Chapter 2, titled "The Psychology of Society". Keynes had a way with words and he could be scathing in his criticism (we have already seen this in the case of Tinbergen).*

(The 'cake' allusion at the end is a reference to Adam Smith, I think.)

34. *Answer:* *Born in Germany (Prussia), Marx lived most of his life in London, having been hounded out of Germany, France and Belgium by the police and government*

agents.   He NEVER set foot in Russia.   Indeed, if he were to be told that the first 'socialist/communist revolution was to occur there at all, let alone 'as soon as' 1917, he would have been very very surprised.

35.   Answer: Charles Dickens *(b. 1812, d. 1870) generally regarded as the greatest English novelist. He has the two figure in his book <u>Hard Times</u>.*

Daniel Defoe *(b. 1660, d. 1731) English novelist, pamphleteer, and journalist, author of <u>Robinson Crusoe</u> (1719-22) and <u>Moll Flanders</u> (1722) amongst other things. (note how old he was when he wrote these books - especially Moll Flanders - is this the origin of the phrase 'dirty OLD man'?) Now speaking of Robinson Crusoe: In the novel Robinson sets out on a voyage from Brazil and is shipwrecked. For 25 years he is alone on an island until he 'obtains' a Caribbean companion, who he names 'Friday'. My question is, what was the original purpose of his voyage from Brazil?[3]*

A good paper on the economics (and Marxian economics) to be found in the story, is S Hymer, "Robinson Crusoe and the secret of primitive accumulation", <u>Monthly Review</u>, 1971.   Reprinted in E Nell, (ed), <u>Growth, Profits & Property</u>, Cambridge University Press, 1980, pp 29-40. Defoe (his father's name was Foe, Daniel added the 'de') wrote a great many pieces on trade and commerce generally and the benefits of free trade in particular.

Douglas Adams *does have a reference to economists in his book <u>The Hitchhiker's Guide to the Galaxy</u> in the first paragraph of Chapter 16. "Arthur awoke to the sound of argument and went to the bridge. Ford was waving his arms about. "You're crazy Zaphod," he was saying, "Magrathea is a myth a fairy story, it's what parents tell their kids about at night if they want to frighten them so they won't grow up to be economists."*

*I put **Lewis Carroll** in so I could tell my favourite joke from the book <u>Annotated Alice</u> which has notes by Martin Gardner. He poses the riddle "Why is a raven like a writing desk"? Answer "Because there is a b in both".*

36.   Answer: Richard Cantillon *(b. late 17th century, d. 1734) Irish economist and financier who wrote one of the earliest treatises on modern economics. Cantillon was an Irishman of Norman origins and Jacobite connections (a Jacobite was a partisan of James II of England or of the Stuarts after the revolution of 1688) who spent much of his life in France. He operated as a financier in a number of centres, including Amsterdam, where his transactions were on a large scale. Cantillon was murdered (it has long been suspected but never proven) by a dismissed cook who returned one night and set fire to his house (with him in it). Cantillon's fame rests entirely on his <u>Essai sur la nature du commerce en général</u>, written about 1730-34 and published by the Marquis de Mirabeau in 1755. Its treatment of population influenced Adam Smith and, through the latter, Malthus. It contained a theory of relative wages, which was used by Smith; the <u>Essai</u> probably inspired the famous <u>Tableau Economique</u> of the Physiocrat F Quesnay. The <u>Essai</u> also contains his theories of wages, prices, and interest, the workings of currency*

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[3] Answer: He was sailing from Brazil to Africa to buy slaves to work on his own and his friend's plantations.

circulation, the role of precious metals in the international economy, and other subjects.

*The editors of the Macquarie dictionary have attempted to get rid of **Galbraith** a few times, so far without success. See Question 37.*

*37. **Answer: John Kenneth Galbraith** He was born (in Canada) in 1908 but he did not die in 1976. Or 1986 or 1996. Or indeed in any other year. In fact the entry in the Macquarie dictionary is just plain wrong on this point. He is still alive (a post Keynesian perhaps, but physically alive.) A Professor of Economics at Harvard (1949-75), he established himself as a politically active, liberal academician with a talent for communicating with the reading public. A key adviser to President John F. Kennedy, he served as ambassador to India (1961-63), returning to Harvard in 1963 but continuing his involvement in public affairs. In 1972 he was president of the American Economic Association. Galbraith's major works include <u>American Capitalism: The Concept of Countervailing Power</u> (1951), in which he questioned the devotion to the competitive ideal in industrial organisation. In <u>The Affluent Society</u> (1958) he faulted the "conventional wisdom" of U.S. economic policies and called for less emphasis on production and more attention to public services. In The <u>New Industrial State</u> (1967) he called for intellectual and political innovations to deal with the decline of competition in the U.S. economy and envisaged a growing similarity between "managerial" capitalism and socialism.*

*38. **Answer: Robert Torrens** (b. 1780, d. 1864), British economist, soldier, politician, and promoter of schemes for the colonisation of Australia. At one time an officer in the Royal Marines, Torrens was wounded whilst in command of the defence of the island of Anholt and he began to study economics during the course of the siege. He was for many years a member of the British House of Commons (1826-35) he served as chairman of the South Australian Colonisation Commissioners. Torrens was best known as an economics writer. He became a major spokesman for the currency school led by David Ricardo. This strict monetary approach, advocated a gold standard and regulation of the banks' ability to issue currency, on the theory that prices are lowered when the supply of money is controlled. Torrens also made some original contributions to the theory of comparative cost and to the principle of reciprocal demand. Torrens was highly regarded among the classical economists and influenced much legislation. His son emigrated to Australia and in fact was briefly (in 1857) Premier of South Australia.*

*39. **Answer: Marshall Jevons** (obviously a pseudonym - the 'true' authors are: William Breit and Kenneth Elzinga). All three books are shelved at 813.54 JEVONS in the Baillieu. The Baillieu's computer catalogue offers the following tantalising abstract for <u>Murder at the Margin</u>: "While the police force is bogged-down in an investigation that leads everywhere and nowhere, the diminutive, balding Professor Spearman, who likes nothing better than to train his curiosity on human behaviour, conducts an investigation of his own, one governed by rather different laws - those of economics. Theorising, hypothesising, Spearman sets himself on the trail of the killer............"*

40. *Answer: (Johan Gustaf) Knut Wicksell* *(b. 1851, d. 1926) Swedish economist, the foremost in his generation and internationally renowned for his pioneering work in monetary theory. In* Interest and Prices *(1898) he propounded an explanation of price-level movements by an aggregate demand-supply analysis focussed on the relations between prospective profit and interest rates. This made Wicksell a forerunner of modern monetary theory and anticipated the work of John Maynard Keynes in* A Treatise on Money *(1930). In* Value, Capital and Rent *(1893), Wicksell emerged as an originator of the marginal productivity theory. There and in other studies he also made striking advances in capital theory. Wicksell was professor at the University of Lund from 1900 to 1916. According to J Galbraith's* History of Economics, *Penguin, p 223f, Wicksell, who had previously been in trouble for advocating birth control was jailed for 2 months for questioning the Immaculate Conception. He got his own back - whilst in jail he wrote a book about population growth and methods by which it might be controlled! (There is a nice biography of Wicksell by C Uhr in* The New Palgrave.)*

41. *Answer: JFK graduated from Harvard (having spent* a few weeks *at LSE, Princeton and Stanford!), Mick Jagger and our Dean (and Professor of Econometrics) Ross Williams, both went to LSE. Keynes was a student at Cambridge as was John Cleese. Bruce Williams, an economist and former Vice-Chancellor of the University of Sydney, did honours in Economics at the University of Melbourne.*

43. Answer: According to the paper by J Gans and G Shepherd, "How Are the Mighty Fallen: Rejected Classic Articles by Leading Economists", Journal of Economic Perspectives, *1994, pp 165-79;* **all of them were rejected** *and either never published in a journal, published by another journal or only published by the journal where they were originally submitted after intervention by others. Particularly noteworthy are the following: Robert May's paper was rejected by the* American Economic Review *and published in* Nature*. It dealt with chaos and is one of the most cited papers in all sciences (May is an Australian, from Sydney). The paper by Black and Scholes was rejected by the* Journal of Political Economy *and the* Review of Economics and Statistics*. The empirical section of the paper was published in the* Journal of Finance *and the full paper was eventually published in the* Journal of Political Economy but only *because Fama and Miller spoke with the editor. Hotelling's now famous paper was rejected by Keynes who was Editor of the* Economic Journal*. (Charles Darwin also had his problems with referees. One advised a publisher that Darwin would be best told to extract the chapter about the breeding of racing pigeons form his manuscript titled* Origin of Species *and to simply publish it rather than the whole book!)*

44. Answer: G B Shaw, referring in particular to Keynes. **George Bernard Shaw** *(b. 1856, d. 1950) an Irish comic dramatist, literary critic, and Socialist propagandist, winner of the Nobel Prize for Literature in 1925.*

45. *Answer: Robert (Bob) Solow, (b. 1924), American economist who was awarded the 1987 Nobel Prize for Economics for his important contributions to the theory of economic growth. Solow received his B.A. (1947), M.A. (1949), and Ph.D. (1951) degrees from Harvard University. He began teaching economics at the Massachusetts Institute of Technology in 1949 and became a full professor there in 1958. His "Contribution to the Theory of Economic Growth" was published in <u>The Quarterly Journal of Economics</u> in 1956. In the 1957 Solow's empirical work showed that, contrary to traditional economic thinking, the rate of technological progress is actually more important than capital accumulation and increases in labour in achieving such growth. From the 1960s on, Solow's studies were influential in persuading governments to channel their funds into technological research and development in order to spur economic growth. He has published jointly with Professor **Ian McDonald** from the Department of Economics at the University of Melbourne.*

The first quote is from a paper by Solow in a Festschrift for an Australian Economist, Geoff Harcourt p 424. The second is Solow's comment on a paper by Hiro Uzawa in the <u>Review of Economic Studies</u>, 1961.

46. Answer: Thomas De Quincey *(b. 1785, d. 1859) was not only an English essayist and critic but also an economist and follower of Ricardo. In 1803, he entered Worcester College, Oxford, where he conceived the ambition of becoming "the intellectual benefactor of mankind." He became widely read in many subjects and eventually would write essays on such subjects as history, biography, economics, psychology, and German metaphysics. While still at college in 1804, he took his first opium to relieve the pain of facial neuralgia. By 1813 he had become "a regular and confirmed opium-eater" and he remained an addict for the rest of his life. De Quincey's confessions were first published in <u>London Magazine</u> in 1821 and made him famous. It was reprinted as a book in 1822. In his (very funny) book titled <u>Eat the Rich</u>, P J O'Rourke points out that De Quincey once said explained that be became interested in economics whilst "In a [drug induced] state of imbecility".*

*I might mention a little about **Virginia Woolf** (b. 1882, d. 1941), British author who made an original contribution to the form of the novel and was one of the most distinguished critics of her time. She was a member of the Bloomsbury Group, a name given to a number of English writers, philosophers, and artists who frequently met between about 1907 and 1930 at the houses in the Bloomsbury district of London, the area around the British Museum. Keynes was a member of this group.*

47. Answer: Milton Friedman *(b. 1912) American laissez-faire economist, professor at the University of Chicago, and one of the leading conservative economists in the second half of the 20th-century. He was awarded the Nobel Prize for Economics in 1976. After studying at Rutgers University and the University of Chicago, Friedman received his PhD from Columbia University in 1946 and joined the faculty of the University of Chicago that same year. Friedman became one of the leading American advocates of the monetarist school of economics, which holds that the business cycle is determined primarily by money supply and interest rates rather than by a government's fiscal policy. In Capitalism and Freedom (1962; with his wife, Rose D. Friedman) Friedman argued for a negative income tax, or guaranteed income, to supersede centralised social welfare services, which in his view are inimical to the traditional values of individualism and useful work. Among his other works, many of which concern the theory of money, are <u>A Monetary History of the United States, 1867-1960</u> (1963) a work which, amongst other things, disputed and perhaps put to rest, the Keynesian interpretation of the cause of the Great*

Depression of the 1930's. Friedman is a formidable opponent in debate, it has been said of him that: "When he took to the floor to argue, it was time to send for the ambulances" (W Breit & R Ransom, The Academic Scribblers, Third edition, p 258.)

48. *Answer: **Nobel Laureates**, 1969 -*

1969 : Ragnar Frisch and Jan Tinbergen "For having developed and applied dynamic models for the analysis of economic processes."

1970 : Paul Samuelson "For the scientific work through which he has developed static and dynamic economic theory and actively contributed to raising the level of analysis in economic science."

1971 : Simon Kuznets "For his empirically founded interpretation of economic growth which has led to new and deepened insight into the economic and social structure and process of development."

1972 : John Hicks and Kenneth Arrow "For their pioneering contributions to general economic equilibrium theory and welfare theory."

1973 : Wassily Leontief "For the development of the input-output method and for its application to important economic problems."

1974: Gunnar Myrdal and Friederich von Hayek "For their pioneering work in the theory of money and economic fluctuations and for their penetrating analysis of the interdependence of economic, social, and institutional phenomena."

1975: Leonid Kantovarich and Tjalling Koopmans "For their contributions to the theory of the optimum allocation of resources."

1976: Milton Friedman "For his achievements in the field of consumption analysis, monetary history and theory and for his demonstration of the complexity of stabilisation policy."

1977: Bertil Ohlin and James Meade "For their path-breaking contribution to the theory of international trade and international capital movements."

1978: Herbert Simon "For his pioneering research into the decision making process within economic organisations."

1979: Theodore Schultz and Arthur Lewis "For their pioneering research into economic development, with particular consideration of the problems of developing countries."

1980: Lawrence Klein "For the creation of econometric models and their application to the analysis of economic fluctuations and economic policies."

1981: James Tobin "For his analysis of financial markets and their relations to expenditure decisions, employment, production and prices."

1982: George Stigler "For his seminal studies of industrial structure, functioning of markets and causes and effects of public regulation."

1983: Gerard Debreu "For having incorporated new analytic methods into economic theory and for his rigorous reformulation of the theory of general equilibrium."

1984: Richard Stone "For having made fundamental contributions to the development of systems of national accounts and hence greatly improved the basis for empirical economic analysis."

1985: Franco Modigliani "For his pioneering analysis of savings and financial markets."

1986: James Buchanan "For his development of the contractual and constitutional bases of the theory of economic and political decision making."

1987: Robert Solow "For his contributions to the theory of economic growth."

1988: Maurice Allais "For his pioneering contributions to the theory of markets and efficient utilisation of resources."

1989: Trygve Haavelmo "For his clarification of the probability theory foundation of econometrics and his analysis of simultaneous economic structures."

1990: Harry Markowitz, William Sharpe and Merton Miller. To Markowitz "For having developed the theory of portfolio choice"; to Sharpe "For his contributions to the theory of price formation for financial assets, the so-called Capital Asset Pricing Model (CAPM)" and to Miller "For his fundamental contributions to the theory of corporate finance."

1991: Ronald Coase "For his discovery and clarification of the significance of transaction costs and property rights for the traditional structure and functioning of the economy."

1992: Gary Becker "For having extended the domain of microeconomic analysis to a wide range of human behaviour and interaction, including non-market behaviour."

1993: Robert Fogel and Douglass North "For having renewed research in economic history by applying economic theory and quantitative methods to explain economic and institutional change."

1994: John Harsanyi, John Nash and Reinhard Selten "For their pioneering analysis of equilibria in the theory of non-cooperative games."

1995: Robert Lucas "For having developed and applied the hypothesis of rational expectations, and thereby having transformed macroeconomic analysis and deepened our understanding of economic policy."

1996: James Mirrlees and William Vickrey "For their fundamental contributions to the economic theory of incentives under asymmetric information."

1997: Robert C. Merton and Myron S. Scholes "For a new method to determine the value of derivatives."

1998: Amartya Sen "For his contributions to welfare economics."

1999: Robert A. Mundell "For his analysis of monetary and fiscal policy under different exchange rate regimes and his analysis of optimum currency areas."

2000: James Heckman and Daniel Mc Fadden. To Heckman "For his development of theory and methods for analysing selective samples" and to McFadden "For his development of theory and

2001: George A. Akerlof, A. Michael Spence and Joseph E. Stiglitz "For their analyses of markets with asymmetric information."

2002: Daniel Kahneman "For having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty" and Vernon L. Smith "For having established laboratory experiments as a tool in empirical economic analysis, especially in the study of alternative market mechanisms."

49. *Answer:* *There can be no given 'correct' answer to this one. We can each choose our own. And I am very keen to hear your views. For me Keynes is the best (see for example his marvellous <u>Essays in Biography</u>), as is George Shackle (not well known in Australia - an English follower of Keynes who felt we should take uncertainty (true uncertainty) seriously. See his <u>Years of High Theory</u>. Also, whilst many find Marx "turgid" I like him very much, especially when he is criticising someone, he is a mster of Invective (although Thomas More was pretty good!). Like Keynes, Marx in full flight is really magnificent. And Solow, I like him because he writes very well and expresses himself very clearly and he has a great sense of humour.*