

Brilliant minds: the Nobel Prize in Economics

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This paper answers some frequently asked questions about the Nobel Prize in Economics. The Prize is won predominantly by United States citizens or other academics working at United States institutions who tend to be around 66 years of age. Although during the 1980s the Prize was awarded to single recipients, more recently the Prize has always been shared. The awards do not appear to be skewed toward any particular field of economics.

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Thought can never be compared with action
except when it awakens in us the image of truth.

Germaine de Staël

Introduction

The Prize in Economic Sciences in Memory of Alfred Nobel (colloquially known as the Nobel Prize in Economics) is not an 'original' Nobel in that it was not created by Alfred Nobel's famous will.² It was created by the Central Bank of Sweden to commemorate its tercentenary in 1968. Apart from that difference in origin, the Economics Prize is awarded by the same rules and administered in much the same way as the other prizes.³

The Nobel prizes are awarded for specific achievements: discoveries, inventions and improvements. They are not awarded to outstanding individuals. Therefore, someone who makes a path-breaking discovery is favoured over someone who is an all-round scholar. No more than three can share in the prize nor can it be awarded to the deceased.

Assar Lindbeck, chairman of the Economics Prize Committee for around 15 years until the mid-1990s, has penned illuminating articles on the origins and administration of the Economics Prize (Lindbeck (1985) and (2004)⁴). What is not found in the later Lindbeck article is the controversy that attended the 1994 Prize awarded to John Nash

2 The will was drawn up in 1895, and the first Nobel prizes were awarded in 1901 for physics, chemistry, medicine, literature and peace.

3 The Economics Prize is awarded by the Royal Swedish Academy of Sciences, which also awards the Prizes in Physics and Chemistry. The Prize in Medicine is awarded by Sweden's Karolinska Institute; the Prize in Literature is awarded by the Swedish Academy; and the Peace Prize is awarded by the Norwegian Nobel Committee whose five members are appointed by the Norwegian Parliament. All six awards are administered by the Nobel Foundation and have the same value – 10 million kronor or over \$US 1.3 million.

4 Although the title of Lindbeck's 2004 paper claims to cover the period 1969-2004, it contains unfortunate errors and inconsistencies. Early in the paper the title of the section 'A Classification of Prizes for the First 32 years' begins the confusion as it indicates the period being spanned is 1969-2000! In the section 'Sharing of Prizes', Lindbeck notes that 'so far, eleven prizes out of thirty have been shared'. That statement is correct only if he stopped counting after the 1998 Prize. In the section 'Do the Prizes Reflect New Trends in Economic Analysis?', Lindbeck states 'out of 52 Laureates, 35 (about 65 per cent) have been US citizens'. Those figures agree with the awards made up to 2003. But while he seems to have counted Robert Engle (a US citizen) in the US tally, he unaccountably leaves out Clive Granger (a UK citizen) in the UK tally (reporting the UK tally as seven rather than eight laureates). This error is somewhat glaring because Engle and Granger shared the 2003 prize! In other respects, however, the paper is an excellent stocktake.

(jointly with John Harsanyi and Reinhard Selten). That controversy re-ignited lingering concerns within segments of the Swedish Academy of Sciences as to the appropriateness of a prize in economics.⁵ Those issues, along with Lindbeck's dominant role and personal style in selecting the Prize winners, are covered in Sylvia Nasar's book on John Nash's life (Nasar 1998, chapter 48). Nasar also brilliantly describes the volatile internal political dynamics of the Nobel Prize Committee.

There are also the lectures delivered by 18 laureates at Trinity University, Texas over the years since 1984 (Briet and Hirsch (2004)). The lectures provide intimate insights into how those laureates evolved as economists as well as a vista of economics from some of its leading practitioners. Advanced information sheets on each prize, prepared by the Nobel Prize Committee, and articles by laureates and their acceptance speeches can be found on the official website: www.nobelprize.org.

Considering these excellent resources, this short article confines itself to a few frequently asked questions about the Economics Prize.

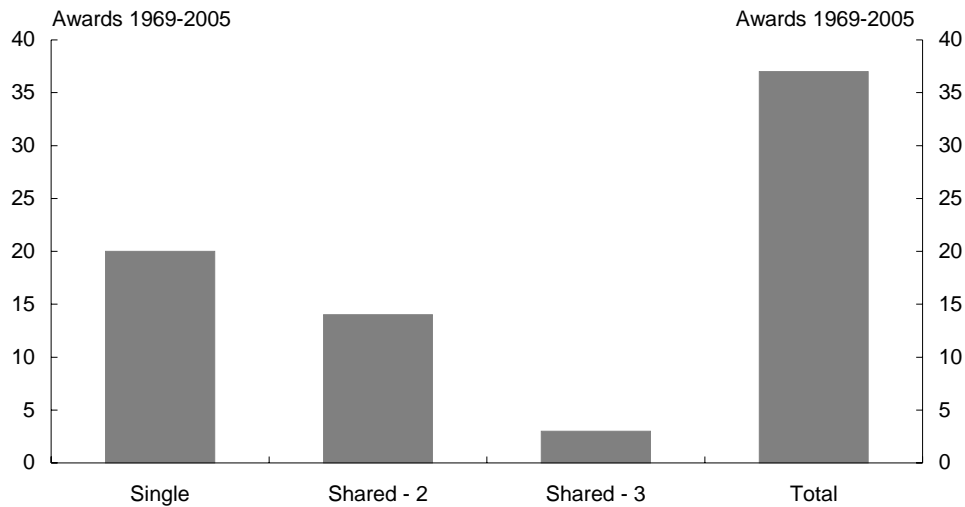
How often is the Prize shared?

With the 2005 award, the Economics Prize has been given 37 times to 57 laureates. The Prize has been shared 17 times. Although single and multiple recipients were equally common in the 1970s and the 1990s, in the 1980s the Prize went to single recipients only. By contrast, every prize awarded in the new millennium has been shared.

Shared prizes in general do not always represent recognition for complementary or contemporaneous work. Each shared prize has involved different considerations. For example, the prize given to Sir John Hicks and Kenneth Arrow reflected intergenerational work in the same field. Hicks initiated a profound transformation in general equilibrium theory and Arrow provided it with fresh nourishment. The Prize given jointly to Markovitz, Miller and Sharpe in 1990 was for complementary contributions in financial economics and the Prize given to Merton and Scholes in 1997 may be considered as a follow-up (Lindbeck 2004). Whereas, the joint awards in 2000 (for economic psychology and experimental economics) and 2002 (for econometrics) recognise distinct contributions. A chronological list of the awards is in Table 1 at the end of this article.

5 Lindbeck (1985) records a 'certain scepticism towards the new prize idea among some natural scientists in the Academy ...' but that it was accepted after some discussion within the Academy.

Chart 1: Distribution of awards between recipients

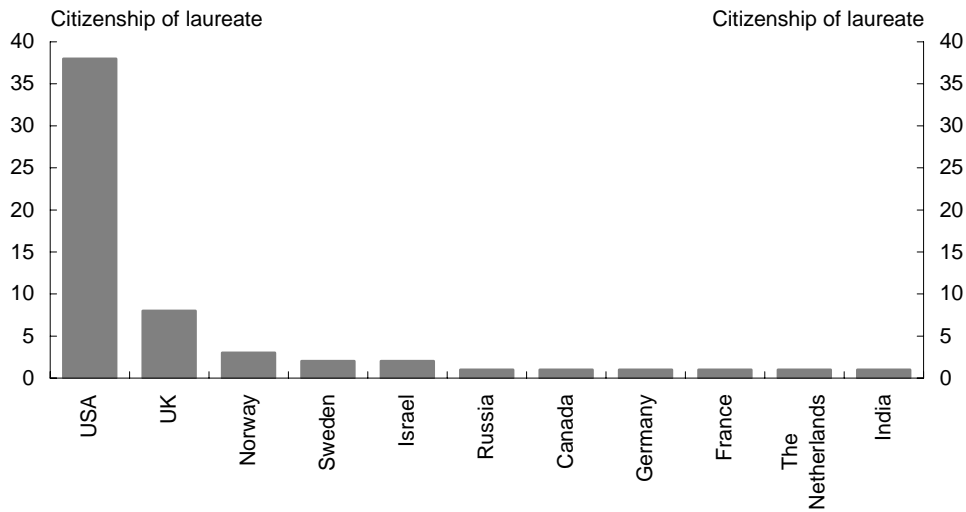


What is the citizenship of the laureates?

US citizens dominate the list of laureates — 40 in total. Two laureates (Kahnermann 2002 and Aumann 2005) hold dual US/Israeli citizenship. It has been observed that this reflects the dominant role of the US in modern economic analysis as well as the brain gain to the US from those laureates who became naturalised US citizens after being largely trained in other countries (Lindbeck 2004). Therefore, I have recomputed the tally by re-assigning those naturalised US citizens to their country of birth. That re-assignment reduces the US tally to 34 (58 per cent).

Evidently, there cannot be any doubt that economics is very much a US-centred intellectual endeavour. The real US influence is magnified further still when one recognises that the type of graduate training economists receive in other places increasingly mirrors the US model. For a small country, Norway's contribution of three laureates (Frisch 1969, Haavelmo 1989 and Kydland 2004) is particularly noteworthy.

Chart 2: Countries with at least one laureate



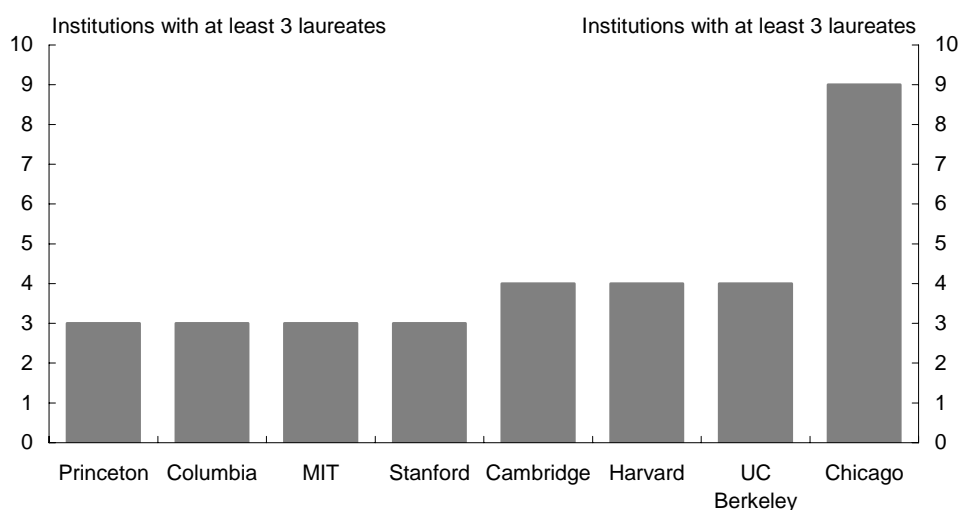
Note: The two US dual citizens are counted in their other country of citizenship, Israel.

Where do the laureates tend to work?

Not surprisingly, when they received their prizes, 45 laureates (76 per cent) were working at a US institution. This is perhaps a better indication of the brain gain to the US than counting the number of naturalised US citizens. The drift to the US is striking on this measure: nearly one-fifth of the pool of laureates are non-US born but were working and making their reputations in the US.

Another striking feature is how strongly the University of Chicago features in the institutional pecking order, with its tally of nine laureates (15 per cent of the total). Together, the eight institutions shown in Chart 3 account for a little over half of the awards.

Chart 3: Institutional distribution of laureates



How young are the laureates?

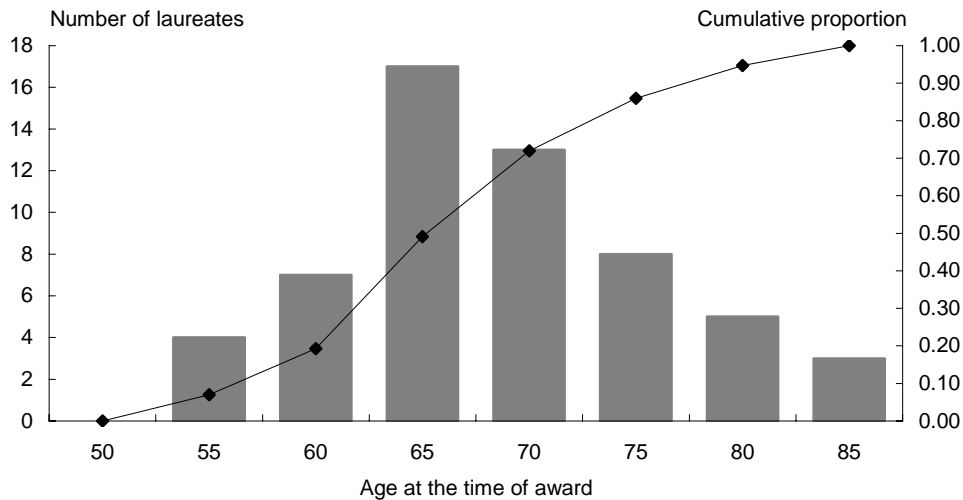
The laureates ranged in age from 51 (Arrow 1972) to 84 (Schelling 2005)⁶, with an average age of 66 years. Apart from Kenneth Arrow, the other laureates who were 55 years or younger were Robert Merton (53 years), James Heckman (54 years) and Paul Samuelson (55 years).

The overwhelmingly non-experimental basis of testing economic theories means that recognition tends to come later in life than in other scientific fields.⁷ Vernon Smith's award in 2002 marks the Nobel Prize Committee's acknowledgment of the growing contribution experimental methods are making in certain areas.⁸

6 Ronald Coase, 1991 and William Vickrey, 1996 are the other octogenarians. Vickrey died suddenly a few days after his award was announced.

7 The youngest winners of the Physics, Medicine and Chemistry Prizes were respectively 25 years (awarded in 1915), 32 years (awarded in 1923) and 35 years (awarded in 1935). But these disciplines also boast the oldest winners: Physics, 87 years (awarded in 2002 and in 2003), Medicine, 87 years (awarded in 1966 and in 1973), and Chemistry, 85 years (awarded in 2002). Interestingly, the last time the Prize was given to someone in their early thirties was in 1973 for Physics. As an aside, Rudyard Kipling is the youngest winner (at 42 years) of the Literature Prize which was awarded to him in 1907.

8 Those interested in the methodological aspects of experimental economics might consult Guala (2005).

Chart 4: Age distribution of laureates

For what work is the Nobel Prize awarded?

Following Lindbeck (2004), Table 2 at the end of this article groups the awards into six broad categories: Macroeconomics, Economic Growth Theory, Microeconomics, Partial and General Equilibrium Theory, Interdisciplinary Research and New Methods. For analytic and methodological reasons, it is appropriate to consider growth theory to be part of macroeconomics. Although this (five- or six-) classification scheme does not remove overlaps, it does provide a rough guide as to where the awards have been going. Table 2 also shows that 17 years after the prize was awarded to Solow, growth theory was once again recognised, albeit partially, through the 2004 Prize to Kydland and Prescott.⁹ By contrast, general equilibrium theory was last recognised in 1988.

⁹ This reflects the growth cycles of growth theory. The first modern wave began in the mid-1950s with the contributions of Solow and Swan and lasted until the early 1970s. The second (endogenous growth) wave began in the mid-1980s and shows no sign of weakening vigour.

Chart 5: Awards by broad category

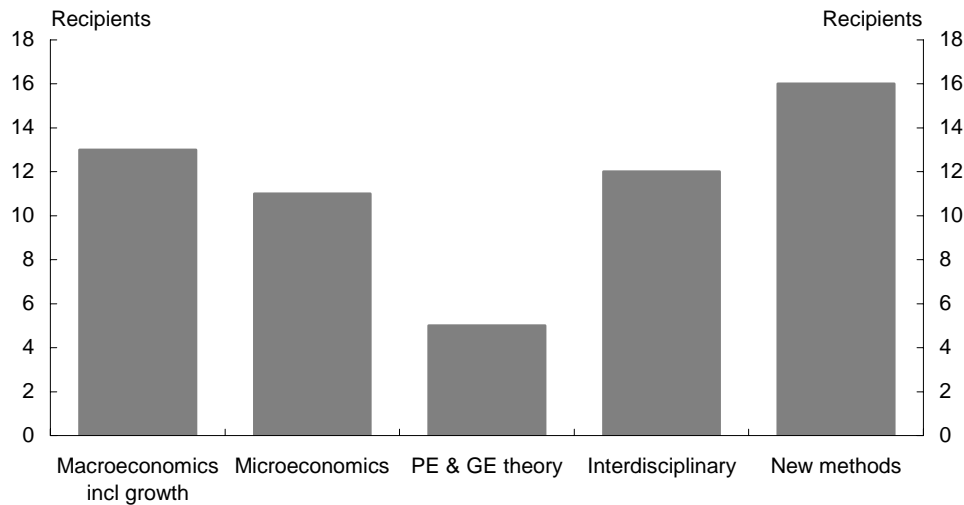


Chart 5 suggests that the awards do not appear to be markedly skewed toward any particular field. Considering that the purpose of the Nobel prizes is to acknowledge ‘discoveries, innovations and improvements’, it is to be expected that ‘new methods’ accounts for the largest number of awards.

New methods naturally encompasses a diverse range of work from econometrics (with the inaugural prize going to Frisch and Tinbergen) to national income accounting (Stone 1985) and input-output analysis (Leontief 1973) to the five awards given for game theory more recently. In Table 2, I have listed Schelling’s award in both the ‘new methods’ and ‘interdisciplinary research’ categories but I have counted it only in the new methods category.

Eclectic and insightful, Schelling’s work is often hard to categorise as it has typically focused on problems somewhat outside the traditional domain of his home discipline of economics.¹⁰ Richard Zeckhauser (1989) quotes Paul Samuelson as saying ‘In Japan Thomas Schelling would be named a national treasure. Age cannot slow down his

10 Thomas Schelling’s early landmark work was in national defence and the strategic issues associated with nuclear war and the strategic value of brinkmanship. He was elected to the Institute of Medicine and the National Academy of Sciences and was a fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science and the Association for Public Policy and Management before his election as a Distinguished Fellow of the American Economic Association (Zeckhauser 1989).

creativity, nor custom stale his infinite variety'.¹¹ Nasar (1998, page 363) records that he was on the list of potential Nobel candidates in the mid-1990s.

The repeated and multiple awards for the economics of information and financial economics almost entirely characterise the microeconomics category. As the recipients of these prizes are with one exception (Mirrlees 1996) US citizens, it would seem that microeconomics is without parallel the domain of US economists.

The Nobel Prize Committee also recognised early and often the immense value of interdisciplinary work – with the awards in this category rivalling those given for discoveries in macroeconomics and microeconomics.

Summary

Like winners of the five 'original' prizes, winners of the Economics Prize enjoy a little public fame, a small fortune and inestimable kudos from their peers and students.¹² Whichever way one views the statistics, the dominance of the US in economics is absolute.¹³ But in the eyes of some, perhaps even a great majority of physical scientists, the value of the Economics Prize remains questionable.

University administrators, however, do not seem to harbour such prejudices. Welcoming Schelling's Prize William W Destler, senior vice president for academic affairs and provost of the University of Maryland, said 'Maryland's flagship public university is now known for more than the physics department that put it on the national academic map'. He said having two Nobel laureates on the faculty could help the university raise more money and attract top students and researchers (Anderson 2005).

And what of Australia's connection to the laureates? The only direct association is with the game theorist John Harsanyi, joint winner of the 1994 Prize, who came to Australia in the great post-War migration wave. After obtaining a Master of Arts degree from the University of Sydney, Harsanyi lectured at the University of Queensland. Then he

11 Upon retiring in 2003, Schelling was planning to learn how to program a computer to finish research on racial segregation that he had started decades ago. But after the Nobel Prize, the University of Maryland has un-retired him to raise funds (Harford 2005).

12 Gary Becker says 'There's no question you get better treatment. You get all kinds of discounts, mostly when you're overseas in Europe and Asia. In response to the question what does the actual Nobel Prize look like?, Becker says 'It's a small gold medal, not worth a lot of money. There's a picture of Alfred Nobel on one side and your name on the other. Plus you get a check, the largest check I've gotten. They give you that on Nobel's birthday.' (Van Fossen 2006). The award ceremonies and banquets are actually held each year on 10 December – the anniversary of Alfred Nobel's death.

13 I do not know of any work that describes the country affiliation of the other prizes.

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spent the years 1959-1961 as senior research fellow at the Australian National University before moving to the United States.

It may be apt to end with Harsanyi's words:

'I was not an immediate success in Australia. My English was not very good and my Hungarian university degrees in pharmacy and philosophy were not recognized in Australia. It was clear that I would have to do factory work, which I did on and off for three years. Often I was unemployed because my manual skills were very deficient. I typically could not keep any factory job for more than a few days. Sometimes I would keep a job for a couple of weeks, but this was the exception ... I enrolled at the University of Sydney as an evening student. I did so as a student in economics ... I loved the logical elegance of economic theory' (Breit and Hirsch 2004, page 226).

References

- Anderson, N 2005, 'U-MD Is Basking In Professor's Glory: Campus Gets Another Boost in Prestige', *Washington Post*, 11 October, p AO7.
- Breit, William and Barry T Hirsch (eds) 2004, *Lives of the Laureates* 4th edition, The MIT Press.
- Guala, F 2005, *The Methodology of Experimental Economics*, Cambridge University Press.
- Harford, T 2005, 'Lunch with the FT, Thomas Schelling: Man with a strategy for games of life', *Financial Times*, 17/18 December, p W3.
- Lindbeck, A 1985, 'The Prize in Economic Science in Memory of Alfred Nobel', *Journal of Economic Literature*, Vol XXIII, March, pp 37-56.
- Lindbeck, A 2004, 'The Sveriges Riksbank (Bank of Sweden) Prize in Economic Sciences in Memory of Alfred Nobel 1969-2004', <http://nobelprize.org/economics/articles/lindbeck/index.html>
Accessed 4 January 2006.
- Nasar, Sylvia 1998, *A Beautiful Mind*, Faber and Faber Ltd.
- Van Fossen, A 2006, 'Faculty Smackdown – Prof. Gary Becker', *The University of Chicago Graduate School of Business newsletter, GSB Life*, 2 February.
- Zeckhauser, R 1989, 'Distinguished Fellow: Reflections on Thomas Schelling', *Journal of Economic Perspectives*, Vol 3, No. 2, pp 153-164.

Table 1: Chronological list of the economics prize

Year	Laureate	Country	Institutional affiliation	Award citation
1969	Ragnar Frisch	Norway	University of Oslo, Norway	'for having developed and applied dynamic models for the analysis of economic processes'
	Jan Tinbergen	Netherlands	The Netherlands School of Economics, Rotterdam	'for having developed and applied dynamic models for the analysis of economic processes'
1970	Paul A Samuelson	USA	Massachusetts Institute of Technology	'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	USA	Harvard University	'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	Sir John R Hicks	UK	All Souls College, Oxford UK	'for their pioneering contributions to general economic equilibrium theory and welfare theory'
	Kenneth J Arrow	USA	Harvard University	'for their pioneering contributions to general economic equilibrium theory and welfare theory'
1973	Wassily Leontief	USA	Harvard University	'for the development of the input-output method and for its application to important economic problems'
1974	Gunnar Myrdal	Sweden	University of Stockholm, Sweden	'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'
	Friedrich August von Hayek	UK	University of Freiburg	'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 Vitaliyevich Kantorovich	USSR	Academy of Sciences, Moscow USSR	'for their contributions to the theory of optimum allocation of resources'
	Tjalling C Koopmans	USA	Yale University	'for their contributions to the theory of optimum allocation of resources'

Table 1: Chronological list of the economics prize (continued)

Year	Laureate	Country	Institutional affiliation	Award citation
1976	Milton Friedman	USA	University of Chicago	'for his achievements in the fields of consumption analysis, monetary history and theory and for his demonstration of the complexity of stabilization policy'
1977	Bertil Ohlin	Sweden	Stockholm School of Economics, Sweden	'for their pathbreaking contribution to the theory of international trade and international capital movements'
	James E Meade	UK	University of Cambridge, UK	'for their pathbreaking contribution to the theory of international trade and international capital movements'
1978	Herbert A Simon	USA	Carnegie-Mellon University, Pittsburg	'for his pioneering research into the decision-making process within economic organizations'
1979	Theodore W Schultz	USA	University of Chicago	'for their pioneering research into economic development, with particular consideration of the problems of developing countries'
	Sir Arthur Lewis	UK	Princeton University	'for their pioneering research into economic development, with particular consideration of the problems of developing countries'
1980	Lawrence R Klein	USA	University of Pennsylvania	'for the creation of econometric models and their application to the analysis of economic fluctuations and economic policies'
1981	James Tobin	USA	Yale University	'for his analysis of financial markets and their relations to expenditure decisions, employment, production and prices'
1982	George J Stigler	USA	University of Chicago	'for his seminal studies of industrial structure, functioning of markets and causes and effects of public regulation'
1983	Gerard Debreu	USA	University of California, Berkeley	'for having incorporated new analytical methods into economic theory and for his rigorous reformulation of the theory of general equilibrium'
1984	Sir Richard Stone	UK	University of Cambridge, UK	'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	USA	Massachusetts Institute of Technology	'for his pioneering analyses of saving and of financial markets'

Table 1: Chronological list of the economics prize (continued)

Year	Laureate	Country	Institutional affiliation	Award citation
1986	James M Buchanan Jr	USA	George Mason University, Fairfax Virginia	'for his development of the contractual and constitutional bases for the theory of economic and political decision-making'
1987	Robert M Solow	USA	Massachusetts Institute of Technology	'for his contributions to the theory of economic growth'
1988	Maurice Allais	France	Ecole Nationale Supérieure des Mines de Paris	'for his pioneering contributions to the theory of markets and efficient utilization of resources'
1989	Trygve Haavelmo	Norway	University of Oslo, Norway	'for his clarification of the probability theory foundations of econometrics and his analyses of simultaneous economic structures'
1990	Harry H Markowitz	USA	CUNY, NY	'for their pioneering work in the theory of financial economics'
	Merton M Miller	USA	University of Chicago	'for their pioneering work in the theory of financial economics'
	William F Sharpe	USA	Stanford University	'for their pioneering work in the theory of financial economics'
1991	Ronald H Coase	UK	University of Chicago	'for his discovery and clarification of the significance of transaction costs and property rights for the institutional structure and functioning of the economy'
1992	Gary S Becker	USA	University of Chicago	'for having extended the domain of microeconomic analysis to a wide range of human behaviour and interaction, including non-market behaviour'
1993	Robert W Fogel	USA	University of Chicago	'for having renewed research in economic history by applying economic theory and quantitative methods in order to explain economic and institutional change'
	Douglass C North	USA	University of Washington, St Louis, MO	'for having renewed research in economic history by applying economic theory and quantitative methods in order to explain economic and institutional change'
1994	John C Harsanyi	USA	University of California, Berkeley	'for their pioneering analysis of equilibria in the theory of non-cooperative games'
	John F Nash Jr	USA	Princeton University	'for their pioneering analysis of equilibria in the theory of non-cooperative games'
	Reinhard Selten	Germany	Rheinische Friedrich-Wilhelms Universität, Bonn Germany	'for their pioneering analysis of equilibria in the theory of non-cooperative games'

Table 1: Chronological list of the economics prize (continued)

Year	Laureate	Country	Institutional affiliation	Award citation
1995	Robert E Lucas Jr	USA	University of Chicago	'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 A Mirrlees	UK	University of Cambridge, UK	'for their fundamental contributions to the economic theory of incentives under asymmetric information'
	William Vickrey	USA	Columbia University	'for their fundamental contributions to the economic theory of incentives under asymmetric information'
1997	Robert C Merton	USA	Harvard University	'for a new method to determine the value of derivatives'
	Myron S Scholes	USA	Stanford University	'for a new method to determine the value of derivatives'
1998	Amartya Sen	India	Trinity College, Cambridge University UK	'for his contributions to welfare economics'
1999	Robert A Mundell	Canada	Columbia University	'for his analysis of monetary and fiscal policy under different exchange rate regimes and his analysis of optimum currency areas'
2000	James J Heckman	USA	University of Chicago	'for his development of theory and methods for analysing selective samples'
	Daniel L McFadden	USA	University of California, Berkeley	'for his development of theory and methods for analyzing discrete choice'
2001	George A Akerlof	USA	University of California, Berkeley	'for their analyses of markets with asymmetric information'
	A Michael Spence	USA	Stanford University	'for their analyses of markets with asymmetric information'
	Joseph E Stiglitz	USA	Columbia University	'for their analyses of markets with asymmetric information'
2002	Daniel Kahneman	USA and Israel	Princeton University	'for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty'
	Vernon L Smith	USA	George Mason University	'for having established laboratory experiments as a tool in empirical economic analysis, especially in the study of alternative market mechanisms'

Table 1: Chronological list of the economics prize (continued)

Year	Laureate	Country	Institutional affiliation	Award citation
2003	Robert F Engle III	USA	New York University	'for methods of analyzing economic time series with time-varying volatility (ARCH)'
	Clive W J Granger	UK	University of California, San Deigo	'for methods of analyzing economic time series with common trends (cointegration)'
2004	Finn E Kydland	Norway	Carnegie-Mellon University; University of California, Santa Barbara	'for their contributions to dynamic macroeconomics: the time consistency of economic policy and the driving forces behind business cycles'
	Edward C Prescott	USA	Arizona State University; FRB Minneapolis	'for their contributions to dynamic macroeconomics: the time consistency of economic policy and the driving forces behind business cycles'
2005	Robert Aumann	Israel and USA	Center for Rationality, Hebrew University of Jerusalem	'for having enhanced our understanding of conflict and cooperation through game-theory analysis'
	Thomas C Schelling	USA	University of Maryland College Park, Maryland	'for having enhanced our understanding of conflict and cooperation through game-theory analysis'

Table 2: Economics prize by field

Macroeconomics

Year	Laureate	Country	Institutional affiliation	Award
1976	Milton Friedman	USA	University of Chicago	Macroeconomics
1977	Bertil Ohlin	Sweden	Stockholm School of Economics, Sweden	International Economics
	James E Meade	UK	University of Cambridge, UK	International Economics
1980	Lawrence R Klein	USA	University of Pennsylvania	Macroeconometrics
1981	James Tobin	USA	Yale University	Macroeconomics
1985	Franco Modigliani	USA	Massachusetts Institute of Technology	Macroeconomics
1995	Robert E Lucas Jr	USA	University of Chicago	Macroeconomics
1999	Robert A Mundell	Canada	Columbia University	International Macroeconomics
2004	Finn E Kydland	Norway	Carnegie-Mellon University; University of California, Santa Barbara	Macroeconomics
	Edward C Prescott	USA	Arizona State University; FRB Minneapolis	Macroeconomics

Growth theory

Year	Laureate	Country	Institutional affiliation	Award
1979	Theodore W Schultz	USA	University of Chicago	Development Economics
	Sir Arthur Lewis	UK	Princeton University	Development Economics
1987	Robert M Solow	USA	Massachusetts Institute of Technology	Economic Growth Theory
2004	Finn E Kydland	Norway	Carnegie-Mellon University; University of California, Santa Barbara	Macroeconomics
	Edward C Prescott	USA	Arizona State University; FRB Minneapolis	Macroeconomics

Table 2: Economics prize by field (continued)

Microeconomics

Year	Laureate	Country	Institutional affiliation	Award
1982	George J Stigler	USA	University of Chicago	Industrial Organisation
1990	Harry H Markowitz	USA	CUNY, NY	Financial Economics
	Merton M Miller	USA	University of Chicago	Financial Economics
	William F Sharpe	USA	Stanford University	Financial Economics
1996	James A Mirrlees	UK	University of Cambridge, UK	Economics of Information
	William Vickrey	USA	Columbia University	Economics of Information
1997	Robert C Merton	USA	Harvard University	Financial Economics
	Myron S Scholes	USA	Stanford University	Financial Economics
2001	George A Akerlof	USA	UC Berkeley	Economics of Information
	A Michael Spence	USA	Stanford University	Economics of Information
	Joseph E Stiglitz	USA	Columbia University	Economics of Information

Partial and general equilibrium

Year	Laureate	Country	Institutional affiliation	Award
1970	Paul A Samuelson	USA	Massachusetts Institute of Technology	Partial and General Equilibrium Theory
1972	Sir John R Hicks	UK	All Souls College, Oxford UK	General Equilibrium Theory
	Kenneth J Arrow	USA	Harvard University	General Equilibrium Theory
1983	Gerard Debreu	USA	University of California, Berkeley	General Equilibrium Theory
1988	Maurice Allais	France	Ecole Nationale Supérieure des Mines de Paris	Partial and General Equilibrium Theory

Table 2: Economics prize by field (continued)

Interdisciplinary research

Year	Laureate	Country	Institutional affiliation	Award
1971	Simon Kuznets	USA	Harvard University	Economic Growth and Economic History
1974	Gunnar Myrdal	Sweden	University of Stockholm, Sweden	Economic, Social and Political Processes
	Friedrich August von Hayek	UK	University of Freiburg	Economic, Social and Political Processes
1978	Herbert A Simon	USA	Carnegie-Mellon University, Pittsburg	Administrative (Management) Science
1986	James M Buchanan Jr	USA	George Mason University Fairfax Virginia	Economics and Political Science
1991	Ronald H Coase	UK	University of Chicago	Economics, Law and Organisations
1992	Gary S Becker	USA	University of Chicago	Microeconomics and Economic Sociology
1993	Robert W Fogel	USA	University of Chicago	Economics and History
	Douglass C North	USA	University of Washington, St Louis	Economics and History
1998	Amartya Sen	India	Trinity College, Cambridge University UK	Economics and Philosophy
2002	Daniel Kahneman	USA and Israel	Princeton University	Economic Psychology
	Vernon L Smith	USA	George Mason University	Experimental Economics
2006	Thomas C Schelling	USA	University of Maryland College Park, Maryland	Game Theory

Table 2: Economics prize by field (continued)

New methods

Year	Laureate	Country	Institutional affiliation	Award
1969	Ragnar Frisch	Norway	University of Oslo, Norway	Econometrics
	Jan Tinbergen	Netherlands	The Netherlands School of Economics, Rotterdam	Econometrics
1973	Wassily Leontief	USA	Harvard University	Input-Output Analysis
1975	Leonid Vitaliyevich Kantorovich	USSR	Academy of Sciences, Moscow, USSR	Theory of Optimum Allocation of Resources
	Tjalling C Koopmans	USA	Yale University	Theory of Optimum Allocation of Resources
1984	Sir Richard Stone	UK	University of Cambridge, UK	National Income Accounting
1989	Trygve Haavelmo	Norway	University of Oslo, Norway	Econometrics
1994	John C Harsanyi	USA	University of California, Berkeley	Game Theory
	John F Nash Jr	USA	Princeton University	Game Theory
	Reinhard Selten	Germany	Rheinische Fredrich-Wilhelms Universitat, Bonn Germany	Game Theory
2000	James J Heckman	USA	University of Chicago	Econometrics
	Daniel L McFadden	USA	University of California, Berkeley	Econometrics
2003	Robert F Engle III	USA	New York University	Econometrics
	Clive W J Granger	UK	University of California, San Deigo	Econometrics
2005	Robert Aumann	Israel and USA	Center for Rationality, Hebrew University of Jerusalem	Game Theory
	Thomas C Schelling	USA	University of Maryland College Park, Maryland	Game Theory