

Two UCSD Professors Awarded Nobel Prize in Economics

October 8, 2003

For their pioneering work in statistical modeling of economic data, known as econometrics, Clive W. J. Granger, 69, and Robert F. Engle, 60, long-time collaborators in the Department of Economics at the University of California, San Diego, have been awarded the Nobel Prize in Economics.

Both scholars are internationally renowned for their groundbreaking work in the field of econometrics, which focuses on "time-series econometrics" which is the analysis of data that accrues over a period of time. Both have also spent the bulk of their academic careers at UCSD, where they helped build the economics department into one of the top departments in the world for econometrics. Both Granger and Engle retired from UCSD in June 2003 although they both remain active in the field. This fall Granger is a visiting scholar at Canterbury University in New Zealand and Engle is at New York University.

"The seminal contributions of these two renowned economists reflect the ground-breaking work being done at UCSD in the social sciences," said Marsha A. Chandler, Acting Chancellor of UCSD. "This prize adds to the eminent international reputations of these extraordinary faculty and that of our Department of Economics."

Granger and Engle become the 14th and 15th UCSD scholars to be awarded the Nobel Prize.

An enormously influential thinker in modern economics, Granger joined the faculty of UCSD in 1974. He has published widely in the areas of statistics and econometrics, forecasting finance and demographics. For more than three decades, he has been developing methods that help the understanding of the properties of time series data. In the 1960s, he pioneered spectral analysis, a technique for decomposing series into their component parts. In the 1970s, building upon work in physics, he developed the "Granger Test" for causality, a method for identifying what causes what when two series move together. The test is now routinely used by applied economists. In the 1980s, Granger pioneered cointegration, a methodology that can help us understand the long run relationship between pairs of economic variables, such as change in the money supply and inflation.

Over his long and productive career, Granger has received numerous awards and honors for his work, including being named distinguished fellow by the American Economic Association in 2002 and corresponding fellow by the British Academy for his "high international standing" in the social sciences. Granger has authored ten books on economics and has had over 200 papers selected, published or submitted. He has published interviews in the *International Journal of Forecasting and Econometric Theory*, and has been a featured speaker at academic conferences throughout the world. Granger studied at the University of Nottingham, graduating in 1955, and received his Ph.D. in 1959.

Engle, who joined the UCSD faculty in 1977, was chair of the Department of Economics from 1990 to 1994 and actively engaged at UCSD for more than 28 years. An expert in time series analysis with a long interest in the analysis of financial markets, his research has produced such innovative statistical methods as ARCH, cointegration, band spectrum regression and most recently, common features. He has published over 100 academic papers, and three books, on areas including financial econometrics covers equities, interest rates, exchange rates and options.

Engle lectures widely to both academic and practitioner audiences. He is a fellow of both the American Academy of Arts and Sciences and the Econometric Society. Engle graduated from Williams College in 1964

and received a Ph.D. in economics from Cornell University in 1969 after completing a Masters degree in low temperature physics.

Reaction From Nobel Prize-Winning Economists Reached In New Zealand and France

Professors Emeriti Clive Granger and Robert Engle were reached by University colleagues at distant locations for reaction to their naming, by the Royal Swedish Academy of Sciences, as recipients of the Nobel Prize in Economics.

From Christchurch, New Zealand, Granger said, "I was awakened here in the middle of the night so I didn't get a great night's sleep. I was mildly surprised because we knew that this was under consideration for the last several years. Of course, one is always surprised when it actually happens, and, in any event, I am delighted and honored." Reached in France, Engle said, "I'm totally overwhelmed by the honor and very pleased to share it with Professor Clive Granger, my long-time UCSD colleague. There are many students over the years who have contributed to this research."

Engle told of his learning of the award: "I'd just gotten back from lunch and I got a call from the secretary of the Nobel Committee. She said, 'Your life will not be the same because of what we are about to announce.' My wife and I thought this was pretty amazing."

Regarding his research work, Engle said, "The main thrust has always been modeling volatility with quantitative tools to measure and predict portfolio risk."

Asked to provide an explanation of his research, Granger said, "Concerning my work, I can say that economic data has special properties and it requires special techniques. I have developed techniques that can be used by central banks and federal reserves forecasting and policy development. I'm always hoping to make my research practical and useful. It starts out as theory but then one aims to move toward the practical end of things."

Granger added, "I was very pleased that the Nobel Committee recognized the work also of my long-time colleague Rob Engle. He came to the University of California in San Diego to work with me in 1975 and we have collaborated ever since. Along with another econometrician, Hal White, we helped build up our Department to among the very top on the globe."

Offering some history on collaboration in the Department of Economics, Granger explained, "Rob Engle was at MIT and came to join me at UCSD. We both worked on each other's projects but we also had our separate ideas. He published papers jointly with me on my ideas and I published with him, but most of the work was individual with our own students. Rob works mostly in the finance area and I more in macroeconomics. We were not competitors, but were helpful colleagues."

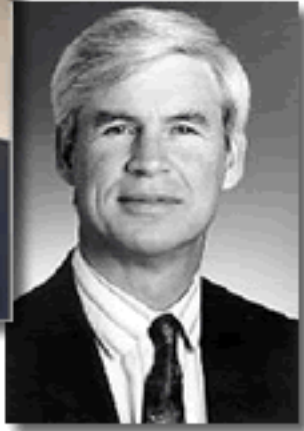
Granger said he would be New Zealand for another two months, then would attend the Nobel ceremonies in December and then return to his office at UCSD.

Engle maintains an office in the Department of Economics as well, even though he is now retired and occupies a faculty position at New York University's Stern School of Business. Both professors continue to advise graduate students at UCSD and to maintain homes in the area.

*### Since its founding in 1959, UCSD has rapidly risen to its status as one of the nation's premier institutions for higher education and attracts scholars seeking a fresh, next-generation approach to education, research and service. The campus supports close to 23,000 students and 21,000 employees, receives the sixth highest amount of federal R&D funding in the nation -- \$627 million last year. UCSD faculty and graduate programs are ranked by the National Research Council as tenth best in the nation; the campus also has one of the nation's highest percentages of faculty elected to the prestigious national academies. **Media contacts:** Barry Jagoda, (858) 534-8567 Dolores Davies, (858) 534-4594 Patti Quill, (858) 822-0661*



Granger



Engle



