

Robert C. Merton [Ideological Profiles of the Economics Laureates]

Daniel B. Klein, Ryan Daza, and Hannah Mead *Econ Journal Watch* 10(3), September 2013: 457-460

Abstract

Robert C. Merton is among the 71 individuals who were awarded the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel between 1969 and 2012. This ideological profile is part of the project called "The Ideological Migration of the Economics Laureates," which fills the September 2013 issue of *Econ Journal Watch*.

Keywords

Classical liberalism, economists, Nobel Prize in economics, ideology, ideological migration, intellectual biography.

JEL classification

A11, A13, B2, B3

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http://econjwatch.org/file_download/747/MertonIPEL.pdf

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Robert C. Merton

by Daniel B. Klein, Ryan Daza, and Hannah Mead

Robert C. Merton (1944–) grew up in Hastings-on-Hudson, New York, where baseball and cars, not school, were his primary interests (Merton 1998). His father, Robert K. Merton, was an eminent sociologist teaching at Columbia University; the younger Merton earned his B.S. there in engineering mathematics. He then moved to the California Institute of Technology for his M.S. in applied mathematics. After his master's, he was drawn to economics. He says he believed macroeconomics had been effective in controlling unemployment and inflation, and he "felt that working in economics could 'really matter' and that potentially one could affect millions of people" (Merton 1998). Merton is very reserved in policy discourse and holds a middle ground, recognizing the potential for both market and political failures.

Knowing his mathematical and engineering background would help him in economic analysis, Merton also felt he had strong economic intuition, particularly regarding the stock market (Merton 1998). Merton pursued his Ph.D. at MIT, where he began working with Paul Samuelson, whom he considers his mentor (Merton 2005). After earning his Ph.D. Merton stayed at MIT for nearly two decades before moving to the Harvard Business School.

While at Cal Tech, Merton had learned firsthand about the stock market. "[M]any mornings I would get to a local brokerage house at 6:30 am (9:30 am in New York) for the opening of the stock market, spend a couple of hours watching

the tape and trading, and then go to my classes" (Merton 1998). Merton's stock market experience led to his collaboration with Samuelson:

In the course of my work for Paul, we discovered shared interests and some common knowledge about the stock market, warrants and convertible securities. I found out that my "after/before-hours" interest in such things could also be a legitimate part of my day-hours devoted to research. (Merton 1998)

Samuelson and Merton (1969) wrote a paper on warrant pricing, which would lead to Merton's "massive contributions to 'the option-pricing formula' and to dynamic investment theory, which followed almost immediately" (Duffie 2008). Darrell Duffie writes, "Within a few years of his arrival at MIT in 1967, it is no exaggeration to say that Merton had transformed his newly chosen field of financial economics and, more broadly, dynamic modelling in economics" (Duffie 2008).

This work won him the Nobel Prize in 1997, shared with Myron Scholes:

Robert C. Merton and Myron S. Scholes have, in collaboration with the late Fischer Black, developed a pioneering formula for the valuation of stock options. ... Robert Merton devised another method to derive the [Black-Scholes] formula that turned out to have very wide applicability; he also generalized the formula in many directions. (Royal Swedish Academy of Sciences 1997)

Merton says that his early research focused "on developing dynamic models of optimal lifetime consumption and portfolio selection, equilibrium asset pricing, and contingent-claim pricing," then he worked on applying these models, and finally, he branched into studying institutions: "In particular, I am studying the role of financial technology and innovation in driving changes in financial institution and market design, the management of financial-service firms, and the regulatory and the accounting systems" (Merton 1998).

On regulation, Merton both sees a need for some government intervention and is cautious about certain uses of that power. An essay that Merton coauthored with Zvi Bodie contains the statement that "Successful public policy depends importantly on recognizing the limits of what government can do to improve efficiency and on recognizing when government *inaction* is the best choice" (Merton and Bodie 1995, 266). The essay continues:

Government regulatory actions can do much to either mitigate or aggravate the dysfunctional aspects of financial innovations. By analogy again, hurricanes are inevitable, but government policy can either reduce their devastation by encouraging early warning systems or it can aggravate the damage by encouraging the building of housing in locations that are especially vulnerable to such storms. Similarly, well-intentioned government policies aimed at reducing the systemic risks of a crisis in the global financial system may have the unintended and perverse consequence of actually increasing the risk of such a crisis. (Merton and Bodie 1995, 266)

Merton wrote in favor of regulation that "sometimes unanticipated and unintended consequences of government actions can indeed be positive" (Merton 1995, 479). He supports what he calls "functional regulation" over "institutional regulation," functional regulation being that in which regulators take the functions as given and seek to improve the institutions, rather than the other way around. "Functional regulation promises more consistent treatment for all providers of functionally equivalent products or services and thereby reduces the opportunities for rent-seeking the regulatory capture" (Merton and Bodie 1995, 269).

Following the 2008 financial crisis, Merton advocated a national financial oversight board:

And so one of the big things that will come out of the crisis on this is education, and training, and the need for people to understand these models and their applications who are in positions of oversight. One suggestion, which I think is an actual good one that can be done along these lines, is to create something that's akin to the National Transportation Safety Board. But instead of for—that's for airplanes and trains—this would be for the financial system. In which, whenever there's a failure in the financial system, failure of a single bank, failure of a hedge fund, failure of a brokerage house—a forensic team, highly trained, comes in and examines what happened and as with air crashes, reassembles or determines what were the causes of the failure. (Merton 2010, 3)

In the same interview, Merton acknowledged the potential flaws of regulation and called for better, not necessarily more, regulation:

And the difficulty is, is that regulators like the rest of the industry, are human beings. They have limited resources and limited knowledge. ... That said, we certainly need to have revisions and improvements to the regulatory practices. Certainly they did fail in a number of places. I'm not so clear that the answer is to have more regulations passed, or very wide sweeping ones, but rather to take existing ones to make rather

targeted improvements and make sure that the regulators have...the resources, including the right people to perform their functions. (Merton 2010, 5)

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Merton H. Miller

by Daniel B. Klein, Ryan Daza, and Hannah Mead⁴⁰

Born in Boston, Merton Miller (1923–2000) received his undergraduate degree in economics from Harvard in 1944. He worked at the U.S. Treasury's

40. We thank Sam Peltzman for his help on this profile.