Ronald Harry Coase

(1910–2013)

Nobel-prizewinning economist whose work inspired cap-and-trade.

have had greatness thrust upon me,"
Ronald Coase wrote to the committee that awarded him the Nobel
Memorial Prize in Economic Sciences in
1991 at the ripe young age of 80 (he lived to be 102). This greatness was thrust upon

Coase for his uncanny ability to think through important questions at the core of economics. At a University of Chicago conference in 2011 to celebrate his 100th birthday, the breadth of topics inspired by his work was remarkable: climate-change policy, the field of law and economics, economic development and telecommunications regulation.

The Nobel committee rightly cited two extraordinary papers. To research the first, the British-born Coase left the London School of Economics in 1931 and spent a year in the United States. He visited factories and businesses to figure out why different industries were organized differently — such as barber shops with only a few employees and automobile companies with casts of thousands.

Aged 21, he returned to the United Kingdom and delivered a lecture in Dundee, arguing that companies exist because it is often cheaper to organize production that way. Having people on staff can save on transaction costs, such as having to repeatedly renegotiate labour contracts. Coase also relied on transaction costs to help explain why businesses do not grow forever — at some point they become too expensive to manage. Coase published his seminal paper on this subject, 'The Nature of the Firm' (R. H. Coase Economica 4, 386-405; 1937) six years later. He said he did not want to "rush into print" and had other teaching and research responsibilities - one of many examples of his humility.

In 1960 Coase published his masterpiece, one of the most cited, and arguably most misinterpreted, papers in economics: 'The Problem of Social Cost' (R. H. Coase *J. Law Econ.* 3, 1–44; 1960). It was based on arguments he had outlined the previous year in a paper on the US Federal Communications Commission (FCC), contending that the rights to use the electromagnetic spectrum should be bought and sold freely. This unfettered exchange would allow the spectrum to go to its most highly valued uses, which would be good for consumers.

Thus, mobile-phone networks could eventually displace television broadcasting as the demand for mobile-phone service increases. Today, Coase's idea is conventional wisdom; at the time it was revolutionary.

Coase, then teaching at the University



of Virginia in Charlottesville, was invited to defend his FCC argument in front of a University of Chicago economics brain trust, including Milton Friedman and George Stigler. Coase won over his sceptical audience. In 1964, he accepted a professorship at the University of Chicago in Illinois, where he spent the rest of his career.

'The Problem of Social Cost' changed the way that economists think about externalities, such as pollution. Up to that point, it was generally believed that having government put a price on pollution, an idea advanced by the British economist A. C. Pigou 40 years earlier, was the best way to solve the problem. For example, a power plant might be asked to pay a US\$1 tax on each kilogram of sulphur dioxide it emits.

Coase argued for other possible solutions. He suggested that the overall level of harm from a factory is related to how close people choose to live to it, as well as to the smoke it emits. In this view, it is for both parties to minimize the overall damages from the pollution and the costs of avoiding those damages.

Coase suggested that polluters and their victims could achieve the socially efficient level of pollution through negotiations over who should pay for mitigation and what actions they should take — when two key

conditions hold. First, ownership of the property rights (in this case, to the environment) must be clearly defined; second, negotiations among parties must be costless. Under these conditions, and a few other technical assumptions, one gets the famous 'Coase theorem'

(named as such by Stigler). This says that the initial distribution of property rights may not matter for achieving the socially efficient outcome. In 1990, policy-makers built on Coase's insight in designing the cap-and-trade programme that cut US sulphur dioxide emissions by millions of tonnes.

Some analysts have taken the Coase theorem to suggest that government regulation is necessarily less efficient than private negotiations between parties, over the level of pollution, say. This is a misinterpretation. In some cases, negotiations will be better, typically when there are few affected parties so that negotiation costs are lower. In other cases, some kind of government intervention is likely to be more efficient, such

as in the regulation of greenhouse-gas emissions. Coase urged researchers to compare how different policy approaches might work in practice.

Coase believed strongly in understanding how institutions are built and sustained. He understood that markets — be they for derivatives, pork bellies or rights to emit carbon dioxide — do not come out of thin air. He encouraged his students, and their students, to learn about how markets form and why they work (or do not). As editor of the esteemed *Journal of Law and Economics* between 1964 and 1982, he encouraged careful empirical analyses of institutions and regulations. In 2000, he helped to launch the Coase Institute, based in St Louis, Missouri, which assists outstanding young scholars studying economic and political institutions.

Coase was a vocal critic of 'blackboard economics', in which equations are used to model economies that bear little resemblance to real-world organizations. Today his view is heretical in many mainstream economics departments. We ignore it at our peril. ■

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