

**The
Economist**

Free exchange It's complicated

Jean Tirole has won the Nobel prize in economics for his work on competition

Oct 18th 2014 | From the print edition

MAKING sure companies compete fairly is a tricky business. The firms being regulated know far more about their business than those doing the regulating; bureaucrats can easily end up being too heavy-handed or too lax. On October 13th Jean Tirole, a French economist at the Toulouse School of Economics, was awarded the Nobel prize in economics for his work on this conundrum—"industrial organisation", in the jargon.



Mr Tirole began publishing in the 1980s, when many governments were busy privatising big parts of their economies, from telecommunications to transport. It quickly became clear that the new, liberalised industries might not form perfectly competitive markets. Along with Jean-Jacques Laffont, a frequent partner who might have shared the prize had he not died in 2004, Mr Tirole developed a novel way of thinking about the difficulties regulators face managing such markets.

Consider a telecoms firm which has already spent heavily to build a network. Other firms will be unlikely to invest in a second network, as a price war between the two would make it hard to recoup the investment. Such a "natural monopoly" presents regulators with a problem. They do not want monopolists to gouge consumers and stifle innovation, yet they often struggle to determine the extent to which such things are happening.

The officials trying to tame the monopolists lack important information about their business: a phenomenon economists call "asymmetric information". From the outside it is hard to see how much a service should cost or how much a firm should be investing in new products and equipment.

One option for governments is to cap prices at some markup to a firm's costs. But that takes

away the incentive for firms to become more efficient. Another option is to impose a hard price cap. But then firms will tend to pocket gains in efficiency, instead of passing them on to consumers in the form of lower prices.

Messrs Tirole and Laffont realised this dilemma resembles a more familiar economic problem, that of agency, in which owners of assets struggle to set the right incentives for those who manage them. That prompted them to borrow ideas from other fields, such as auction design and game theory. The pair argued that rather than try to force firms into a single form of contract, regulators should give them a choice. Those without much room to cut costs would opt for cost-plus contracts, while more innovative firms would gravitate toward a set price. In either case, the choice would tell regulators what sort of firm they are dealing with, and thus allow them to negotiate the best deal for consumers.

Mr Tirole, along with Mr Laffont and Xavier Freixas, also showed that the best possible solution is not always the one that leads to the lowest prices. A public-spirited regulator dealing with a firm that has been good at cutting costs may be tempted to keep reducing the price the firm can charge, in the hope of wringing even bigger cost-reductions out of the business. But under those circumstances a rational firm will stop investing in cost-cutting measures at all, since the benefits will go not to it but to consumers, thanks to the steady ratcheting down of the price cap. A regulator's best bet may actually be to signal its intent to be somewhat lenient over time, lest it choke off cost-saving innovation altogether. Mr Tirole's work often illustrates how what looks like regulatory failure can in fact be a sensible response to markets that are hard to manage.

Mr Tirole's work stretches well beyond the regulation of monopolies. He analysed how investment in new technology can be used to limit competition. "Overinvestment" may convince potential rivals that trying to compete is not worth the trouble, for instance. More recently he has written extensively on financial-market regulation. In a prescient paper published in 1996 with Jean-Charles Rochet, he noted that the interconnectedness of modern financial systems would make it impossible for governments to allow big banks to fail, and that banks, anticipating bail-outs, would behave recklessly. Regulation should be designed to counter this moral hazard, by, for instance, limiting leverage.

Competitive hedge

Yet his most relevant work may be his analysis of "platform" markets which serve several kinds of consumers. A newspaper, for instance, markets itself to both readers and advertisers. In such markets, behaviour that looks anticompetitive may not be: cut-price subscriptions may be necessary to attract the large audiences advertisers demand. A regulation that demanded higher prices for readers to make life easier for potential competitors might wreck the two-sided market, and thereby leave everyone worse off. Big technology firms like Amazon and Google,

which provide platforms to users of various kinds, increasingly find themselves fending off criticism in just these sorts of cases.

Arguments over “net neutrality” touch upon related issues. In markets in which the owner of a network sells access to that network to others, while also competing with them to provide services over the network to consumers, it can be difficult to identify unfair behaviour. Mr Tirole’s work suggests that network owners should be allowed to charge higher access prices to heavy users (such as film-streaming services) to cover the costs they impose on the infrastructure. Yet his research also suggests that the network owner can easily abuse such charges to boost its position in the consumer market. Although Mr Tirole provides no simple template for regulating such platforms, he clearly identifies the many trade-offs regulators face.

Managing competition is hard, in other words, and regulators in politicised industries will often struggle to get it right. In a field predisposed to oversimplification, Mr Tirole’s work has been a refreshing departure, as well as an indispensable policy guide.

From the print edition: Finance and economics