

Nobel Prize in Economics Awarded for Contract Theory

By Don Sutherland

On October 10, 2016, the Royal Swedish Academy of Sciences awarded the Nobel Prize in Economics to Oliver Hart of Harvard University and Bengt Holmström of the Massachusetts Institute of Technology for their contributions to [contract theory](#). This is an important contribution, as contract theory allows people to rationally structure solutions to complex and often uncertain problems. Contract theory has a large impact on a broad range of voluntary decision making ranging from economic transactions to political choices.

When it comes to education, Hart's and Holmström's work suggests that incentives for easy-to-measure tasks e.g., test scores, should be weakened. A lot of important work e.g., teaching creative thinking, is difficult to measure. Focusing incentives on test scores would create a classic externalities-type situation. In such cases, the prices from private transactions don't fully cover the costs that extend beyond that relationship e.g., pollution, and the benefits that extend beyond that relationship e.g., public goods such as those related to an educated population. The result is that one winds up with a higher amount of negative externalities and a lower amount of positive externalities than would be the case were the full costs/benefits were incorporated in prices. Similarly, a compensation structure that is disproportionately linked to test scores would skew teaching toward test-related content and away from the more difficult to measure and potentially more valuable domain of creative thinking.

The following are excerpts from the [press release](#) associated with this award:

Modern economies are held together by innumerable contracts. The new theoretical tools created by Hart and Holmström are valuable to the understanding of real-life contracts and institutions, as well as potential pitfalls in contract design.

Society's many contractual relationships include those between shareholders and top executive management, an insurance company and car owners, or a public authority and its suppliers. As such relationships typically entail conflicts of interest, contracts must be properly designed to ensure that the parties take mutually beneficial decisions. This year's laureates have developed contract theory, a comprehensive framework for analysing many diverse issues in contractual design, like performance-based pay for top executives, deductibles and co-pays in insurance, and the privatisation of public-sector activities...

Through their initial contributions, Hart and Holmström launched contract theory as a fertile field of basic research. Over the last few decades, they have also explored many of its applications. Their analysis of optimal contractual arrangements lays an intellectual foundation for designing policies and institutions in many areas, from bankruptcy legislation to political constitutions.