Optimisation in Economics: Motivational Quotes

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Quote from Leonhard Euler

"For since the fabric of the universe is most perfect and the work of a most wise Creator, nothing at all takes place in the universe in which some rule of maximum or minimum does not appear."

Leonhard Euler in the introduction to *De Curvis Elasticis*, Additamentum 1 to *Methodus inveniendi lineas curvas maximi minimive proprietate gaudentes, sive Solutio problematis isoperimetrici latissimo sensu accepti* (1744).

Quote from Richard Caves

"Constrained-maximization problems are mother's milk to the well-trained economist."

From page 88 of Caves, Richard E (1980), "Industrial organisation, corporate strategy and structure", *The Journal of Economic Literature* 18(1), March, pp. 64–92.

Quote from Larry Ausubel and Raymond Deneckere

"Almost every economic problem involves the study of an agent's optimal choice as a function of certain parameters or state variables. For example, demand theory is concerned with an agent's optimal consumption as a function of prices and income, while capital theory studies the optimal investment rule as a function of the existing capital stock."

From page 99 of Ausubel, LM, and RJ Deneckere (1993), "A generalized theorem of the maximum", *Economic Theory 3(1)*, January, pp. 99–107.

Quote from Paul Samuelson

"The very name of my subject, economics, suggests economizing or maximising. · · · So at the very foundations of our subject maximization is involved."

From page 249 of Samuelson, (1972), "Maximum principles in analytical economics", *The American Economic Review 62(3)*, June, pp. 249–262.

This journal article is the text of Paul Samuelson's Nobel Memorial Prize Lecture from 11 November 1970.