Identify an area of economics that you think should be given more attention in the A-Level or IB syllabus and say why this is so.

The Cambridge International AS and A level syllabus in Economics only briefly touches upon the concept of game theory. The syllabus includes only two types of games: zero sum game and the prisoner's dilemma. Game theory is the study of strategic interactions and is crucial in the study of economics. In "real world," people are subjected to situations where the behaviors of a third party can affect one's payoffs. Game theory is a framework that describes optimal actions in such settings by allowing one to look at problems from the "eyes of the opponent" and to understand the opponent's incentives. Instead of focusing primarily on perfect competition and monopolies, which rarely exist, more attention should be given to oligopolies and other imperfect forms of markets. This would make the course more practical.

The syllabus only superficially explains terminology like "Nash equilibrium" and "payoff matrix" without going into the depth of the subject. While writing essay-type answers for the Paper 4, the idea of rational choice and Nash equilibrium can be used to make predictions about behaviour of economic agents in a variety of situations including auctions, oligopolies, mergers and more. Subjective matters such as trust, vengeance and commitment can also be studied with the help of game theory.

The Cambridge Economics curriculum must include more mathematical and probabilistic aspects of game theory and a larger variety of games. For instance, concepts of extensive form games, backward induction, tragedy of the commons, discrete and continuous games etc. must be involved in the syllabus since they not only encourage children to think about their behaviour when they are put in business situations, but would also encourage more logical and mathematical approach to economic concepts.

Since rationality is closely related to game theory, the topic would help in students understanding the topic with a more practical approach. Apart from this, game theory is extremely interesting and demands active thinking. There are many simulation and games available to learn this topic in a fun way. Games like "The Evolution of Trust" by Nicky Case (Case 2017) can be an engaging medium to get students excited about the topic.

Furthermore, enumerative techniques can be introduced as a more "computational" approach to not only game theory but all of economics. Since data analysis has become the bedrock under which economic models are created, it would be useful to have a non-intimidating introduction to computational techniques in economics.

Bibliography

Case, Nicky. 2017. *The Evolution of Trust.* Accessed July 2020. https://ncase.me/trust/.