The Effects of Algorithms on Competition and Competition Law

Michal Gal

Algorithms, especially those based on artificial intelligence (AI), play an increasingly important role in many markets. They bring cost savings, speed, precision, and sophistication to decision-making and planning processes, improving both day-to-day decisions and long-term innovation, strategy, and vision. As a result, a growing number of market players employ algorithms for a variety of tasks, from setting price, output, and inventory levels, to predicting market dynamics and regulatory moves. This game-changing switch to (semi-)automated decision-making by robo-economicus is reshaping modern-day competitive dynamics.

While the use of algorithms can undoubtedly generate significant procompetitive benefits, this is not always the case. This article seeks to provide a short analysis of the effects of algorithms on competition and competition law, focusing on their use by market players. To do so, we first explore the potential effects of algorithms—especially those powered by AI—on both unilateral and multilateral market power. The analysis includes both the standalone and cumulative effects of the different types of welfare-reducing conduct, which has become easier to engage in due to the use of algorithms. We then translate these effects into effects on competition law enforcement.