

A behavioural approach to antitrust law and economics

Dr Avishalom Tor explains how a new approach to antitrust law can better ensuring competitive markets that benefit consumers

ABSTRACT
80 words to come

Behavioural law and economics offer a powerful new tool that challenges the assumptions, the methodology, and many of the outcomes of neo-classical economics, which has until recently dominated antitrust law and economics. Grounded in empirical observations of human behaviour, behavioural law and economics can provide a deeper, richer and more accurate picture of when antitrust law should step in to protect competition.

Antitrust law and economics now

Over the last few decades, Chicago School law and economics scholarship has reshaped the theory and doctrine of antitrust law. By applying neo-classical microeconomics to antitrust, scholars were able to rationalise and systematise this legal area, which previously has been viewed as confused and paradoxical.

Today, much of antitrust law and economics – like neo-classical microeconomics more generally – relies on a rational actor model to predict the behaviour of individuals and firms in the market. In theory, rational actors always maximise the utility of their decisions. In the context of antitrust law, rational actors are assumed to hold to an even narrower, better defined, precept: they always maximise the economic value of their actions. In other words, antitrust law and economics assumes that business decision-makers in the market make optimal decisions to further their narrow self-interest. Such hypothetical rational actors make no systematic errors when judging the likely risks, costs and benefits of different business practices. Nor do these actors ever engage in business practices with a negative expected value, or make inconsistent choices.

Joining the rational actor framework with the policy goal of promoting allocative efficiency, antitrust law and economics purports to predict market behaviour and then determine whether such behaviour will have anticompetitive efficiency consequences. The Chicago School has used neoclassical insights to argue that only a limited number of cases concern the antitrust laws. They have asserted that the antitrust law should mainly address horizontal

arrangements and practices. In most other cases, the Chicago School argued that business practices have been wrongly deemed to violate the antitrust laws.

Sometimes the argument has been that the occurrence of allegedly anticompetitive practices spells no efficiency loss and may in fact even be procompetitive. For example, Chicago School scholars have argued that resale price maintenance is likely to be procompetitive unless it serves to facilitate a horizontal cartel. Otherwise, a rational manufacturer would only engage in this practice to induce retailers to provide consumers' valuable but costly services that they would not otherwise provide. As a result of the impact of the Chicago School, the courts rarely consider non-price restraints illegal, and the enforcement agencies almost never challenge vertical restraints, even when they are price-related.

At other times, the Chicago School has raised the related, though distinct, argument that some allegedly anticompetitive practices were unlikely ever to take place because rational actors would not find them beneficial. This has been the case, for instance, with allegations of predatory pricing by dominant firms. According to this view, which has been adopted by the Supreme Court, a rational seller would be extremely unlikely to sell its products below cost in order to drive its rivals from the market. Such a seller would engage in predation only if he anticipates recouping the costs invested in below-cost sales by charging consumers supracompetitive prices for a sufficiently long period. A seller could only recoup, however, if barriers to entry are sufficiently high. Otherwise, once the predator began charging higher prices, new entrants would flock into the market and undercut these inflated prices, making recoupment impossible and predation futile.

Despite the tremendous impact Chicago School scholarship has had on the courts and the enforcement agencies alike, many scholars and practitioners of antitrust harbour reservations about specific Chicago School applications. They often find these applications unrealistic, divorced from observations in actual markets, and tending to obscure the importance of dynamic considerations, asymmetric infor-

mation, and strategic behaviour. Others have balked at the normative commitment of the Chicago School to efficiency considerations alone.

In response to this critique, Post-Chicago scholars have been applying recent economic insights to challenge the more simplistic microeconomic learning of the Chicago School, even while retaining its fundamental economic commitment to efficiency concerns. The present project similarly seeks to make antitrust law and economics more realistic by incorporating the insights of behavioural law and economics regarding the likely decision-making process of market participants.

A behavioural approach: the basics

In contrast to the theoretical assumptions of rational actor models, a behavioural approach to antitrust law is based on scientific findings regarding actual human behaviour, which can often provide better descriptions of market dynamics and thus more effective prescriptions for competition policy. The hallmark of the behavioural approach is the replacement of *homo economicus*, the perfectly rational actor with a real-life boundedly rational decision-maker who, apart from being affected by emotion and motivation, has only limited cognitive resources. To function effectively in a complex world, boundedly rational actors must rely on cognitive heuristics, simplifying mental shortcuts that inevitably lead people to make some systematic decision errors; as a result, their behaviour necessarily deviates from that predicted by rational actor models.

In the context of antitrust law, those systematic deviations of market participants' behaviour from neo-classical assumptions are especially important. They reveal that certain anticompetitive practices are more or less likely to occur than the traditional economic approach deems; they even indicate that some business practices are altogether more or less anticompetitive than previously thought. For instance, if the evidence were to specify conditions under which the managers of dominant firms tend to be risk seeking – that is, engaging in negative expected value business practices – predatory pricing could sometimes occur even absent a rationally sufficient likelihood of recoupment. Similarly, if manufacturers were prone to overestimate the risks of free riding and loss leading, and underestimate the costs of controlling retail prices, for example, inefficient resale price maintenance could very well occur.

For the purpose of antitrust analysis, the behavioural findings on judgement and decision-making can be divided into two main categories:

- those revealing systematic biases in judgements of probabilities, costs and benefits under uncertainty; and
- those showing systematic violations of rational choice prescriptions in decision making.

The first category includes both purely cognitive judgemental biases and biases with a motivational or emotional as well as a cognitive foundation.

To illustrate, using availability as a proxy for likelihood, decision makers judge events as more likely when these events are easier to imagine or recall from memory. In most circumstances, availability is a useful proxy – more common events are better remembered and imagined. Availability, however, also leads to predictable biases because more vivid or recent experiences, for example, are easier to recall, regardless of their frequency. For this reason, the dramatic success of a particular business venture will affect judgements of similar ventures more than justified, because it is better remembered than the less vivid fate of many other comparable ventures.

In addition to exhibiting biases due to reliance on cognitive heuristics such as availability, motivation and affect also bias the judgements of business decision-makers. Exhibiting optimistic bias, for example, they tend to overestimate their business ability, skill, and performance and their likelihood of experiencing positive events, and to underestimate their personal vulnerability to certain risks. For instance, optimistically-biased decision-makers have been shown consistently to overestimate the predicted performance of their investments relative to the market. They even have been shown to overestimate the past performance of their portfolios and to switch their investments too frequently, a behaviour correlated with poorer performance which can also impact the market at large.

Cognitive heuristics, motivational forces and affect can all bias decision-makers' judgements of probability and value under uncertainty. After making such judgements and predictions, however, market participants must also choose their course of action. Hypothetical, strictly rational, value-maximising actors consistently make their choices on the basis of their overall asset position at present, and the possible consequences of these choices. They never bear a risk that fails to promise a sufficient increase in expected value and never embark on a course of action with a negative expected value.

The behavioural evidence shows, however, that decision-makers exhibit systematic deviations from the rational actor model when making decisions – as well as judgements – under risk and uncertainty. They tend to make their choices as if the potential outcomes of these choices were gains and losses relative to a given reference point, commonly the status quo, instead of taking into account their overall position. Losses also loom larger than gains in their minds, although in both domains real decision-makers reveal a diminishing sensitivity as outcomes move further away from the reference point.

For this reason, market participants tend to be risk averse in choosing among possible gains but risk seeking – against rational action precepts – when

choosing among potential losses. They also make inconsistent choices in comparable problems as a result of a shift in reference points or a change of frame that make an alternative appear once a gain and another time a loss. To illustrate, in making a decision between reorganisation plans for a manufacturing firm in the face of financial crisis, managers will be risk averse if they think of the decision problem as saving plants and jobs, but risk seeking if they think of trying to avoid losses of plants and jobs instead. Often, business decision-makers also exhibit a bias in favour of retaining the status quo in the face of superior alternatives that require moving away from it, or they keep on escalating their commitments to a course of action into which they have already sunk significant costs.

Moreover, when incorporating probabilities and risks into their decisions, market participants show further systematic deviations from rational value maximisation. They:

- underweight medium to high probabilities, while overweighting small probabilities that seem to eliminate risk or make an outcome certain;
- show a preference for known risks over ambiguous ones with a comparable expected value; and
- dramatically overestimate their ability to control events with a chance component while avoiding risky alternatives whose outcomes they think cannot be controlled.

Applying this to antitrust law

The phenomena described above, together with many other robust empirical findings on human judgement and decision-making have important implications for antitrust law. The following section therefore summarises some of these implications, focusing on a re-evaluation of the interplay between new entry into industry, incumbents' market power, and antitrust doctrines. It then briefly discusses monopolisation and predatory pricing, vertical restraints and resale price maintenance, and the formation and stability of horizontal co-operation and cartels.

Actual and potential new entry plays an important role in antitrust law. Usually, the law proscribes behaviours as anticompetitive only when the alleged violators have market power. Without the power to raise prices to supracompetitive levels, the business practices of firms in the market cannot harm consumers and are therefore not of antitrust concern. Firms with small market shares clearly do not have market power. But traditional economic analysis argues that even dominant firms with a large share of the market may not have power over price. In fact, when barriers to entry are low and new entry into the market is easy even a monopolist has no market power, since any attempt to raise prices will draw into the market new entrants who would undercut the inflated monopoly price.

The Chicago School emphasises the role of entry in limiting the need for antitrust law. According to this view, entry is usually easy because true barriers to entry, that is, economic factors that make the long-term cost of production higher for entrants than for incumbents are uncommon and rarely anticompetitive. Chicago School scholars have therefore asserted that, due to entry, predatory behaviours are unlikely, cartels less attractive, and horizontal mergers usually of little concern, to name a few examples. Thus, if the potential for effective entry is commonplace – as the neo-classical model assumes – market share rarely translates to market power and most allegations of antitrust violations should be dismissed summarily in the face of easy entry.

However, the empirical evidence that has accumulated over the last few decades paints a picture that is very puzzling for the traditional account of entry. First, there is now a consensus among industrial organisation scholars that there is excess entry. Across industries and over time, the rate of entry is much higher than models assuming rational entry predict, with many entrants attempting entry against the odds. Second, most of those economic variables that should make entry less attractive in some markets – such as capital requirements, economics of scale, or growth volatility – have only little impact on the observed rate of entry. And finally, startup entrants appear to embark on higher risk ventures with lower average performance compared with their less risky diversifying counterparts.

The behavioural analysis of entry decision-making, however, provides a coherent explanation for the three puzzles of entry. A large body of experimental and other empirical findings suggests that when making judgements and choices with high personal stakes under uncertainty, whose outcomes partly depend on skill and performance, decision-makers systematically tend to be overconfident, exhibiting optimistic and desirability biases. The behavioural literature also indicates that overconfident entrants will not only make excessive entry attempts but also tend to disregard many of those background economic variables whose impact on their prospects is statistical and indirect, instead overemphasising the idiosyncratic strengths and plans. Last, a close analysis reveals that a number of psychological factors make startup entrants more overconfident than diversifying ones, thus leading them to enter more frequently even in the face of inferior prospects.

The behavioural account, therefore, not only explains the three puzzles of entry, but also sheds new light on the dynamics of competition. It suggests that antitrust law cannot rely on observations of entry alone to conclude that incumbents' market share does not translate to market power. Because entrants tend to be overconfident and typically fail without penetrating the market, a reliance on entry rates can

be misleading. Instead, regulators and courts should focus on larger, often diversifying, entrants for short-term competitive pressure, and take into account industry-specific factors such as a history of successful penetration of expansion.

These findings also suggest some revision of antitrust doctrine. For example, dominant firms may be more likely to recoup investments in predation than Chicago School scholarship allows. Similarly, any analysis of the potential anticompetitive impact of horizontal mergers should be careful not to equate seemingly easy entry with effective market pressure without examining carefully those specific market characteristics discussed above.

Of course, a behavioural approach to antitrust law can offer insights well beyond the case of entry decision-making. In the case of monopolisation, for instance, the behavioural literature suggests that dominant firms with declining market shares will tend to gamble on negative expected value predation attempts in order to restore their dominant position. Under such circumstances, therefore, predatory pricing will be more likely to occur than the neo-classical account recognises.

The case of vertical restraints provides another example where behavioural findings suggest that resale price maintenance may often be more harmful than the Chicago School allows. A close examination of the judgements facing manufacturers shows they

are prone to overestimate the risks of loss leading and free riding downstream. They also prefer, at the margin, to control such risks by taking price related measures as opposed to using less pernicious, non-price, restraints.

Finally, behavioural findings also suggest that the current wisdom regarding the establishment and maintenance of horizontal co-operation and collusion needs some revision. When firms have a history of intense rivalry, both beneficial co-operation and harmful collusion will be harder to establish than traditional theory allows, and therefore less likely to develop unless their benefits outweigh their costs by a large margin. On the other hand, when competitor firms or a given market has a history of collusion, co-operation and cartels will be more likely. Similarly, an established, successful, cartel will be more robust to concerns of free riding and shirking than current theory allows, although it will not last indefinitely.

Conclusion

A behavioural approach to antitrust law and policy has much to offer. It substitutes empirical research into human decision-making for the unrealistic theoretical models which still dominate antitrust law and economics. It can lead the way to a richer, fact-based, analysis of the classic antitrust problem of ensuring competitive markets for the benefit of consumers.

NOTES

The research summarised here has benefited from the generous support of the Institute for Consumer Antitrust Studies at Loyola University Chicago School of Law. The full working paper on a behavioural approach to antitrust law and economics is available on the Institute's website at www.luc.edu/antitrust or upon request at antitrust@luc.edu.