Behavioral Economics as Applied to Firms

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Overview

- Recent policy focus on *consumer* decision problems:
  - infrequent, low-stakes decisions
  - less powerful Darwinian forces
- But *firms* may also have bounded rationality and biases:
  - operate in highly complex, uncertain environment leading to use of "rules of thumb"
  - strategic situations, where rational play involves highly intricate strategies (tacit collusion, reputation building, etc.)
  - Darwinian selection may operate only with a long lag
  - people at top of career ladder may have particular personalities
  - strategic benefits in employing CEOs with particular personalities
  - some CEOs care particularly about their product
  - illegal cartels need to operate without backing of legal contracts, so trust and social cohesion may be important
  - profit-maximizing firms may wish to mimic irrational behavior

Rules of Thumb I

- In complex environments, firms may resort to decision-making short-cuts
- These can make markets more—or less—competitive

1. If firms in an oligopoly imitate the most profitable strategy from previous round, market might evolve to highly competitive outcome
   - e.g., when firms choose quantities, most profitable firm has biggest output
2. Firms might be "satisficers", and only change strategy when profit falls below some "aspiration level"
   - if aspiration level is average profitability in the economy, firms may unwittingly converge to collusive behavior

Rules of Thumb II

3. In conflict with profit-maximizing precepts, many managers claim to base pricing decisions on “full costs” rather than marginal costs
   - if a firm behaves as though its marginal cost is higher than it really is, could induces rivals to raise their own prices
   - *all* firms in the market benefit
   - akin to “strategic delegation”, placing an incentive scheme on a CEO which rewards departures from profit maximization
   - could mean that mergers which have only fixed cost synergies may benefit consumers

Social Preferences I

- Abundant evidence that many people are motivated by relative, not absolute, performance
  - CEOs may be more likely to be "competitive" personality types than the average
  - many CEO incentive schemes include rewards for relative performance
  - in Cournot markets, if one CEO cares about relative profit and rival CEOs care about absolute profit, former makes more (absolute) profit than if she cared about absolute profit
- If firms care partly about their profits relative to rivals, this makes the market more competitive
- If, for whatever reason, managers care in part about relative profits, should be incorporated into competition policy analysis

Social Preferences II

- Illegal cartels may attempt to instill *esprit de corps* among conspirators
  - in laboratory experiments, tacit collusion rarely observed with more than two firms, unless there is prior face-to-face interaction
  - Gary Dinners: "We have something better to guide and control us than a contract ... We as men, as gentleman, as friends, have reached a point where we entertain for one another affectionate regard ... We have reached a position so high that we are bound to protect one another, where we cannot act except with a distinct understanding that honor is involved..."
- In historic UK shipping cartels, predation was more likely to be seen if entrant had lower social status or was foreign

Managerial Overconfidence I

- Overconfidence is likely to be prevalent among entrepreneurs
  - "winner's curse": others may have considered launching new product, but only those most confident of success will actually do so
  - helps explain high failure rate for new businesses and reluctance to lend to new businesses
- Managers may also be overconfident
  - overconfident managers more likely to undertake a merger
  - may explain why many mergers are not profitable

Managerial Overconfidence II

- Managers may be overconfident about their price fixing remaining undetected
    - if so, proposals to increase sanctions on cartels may not work as well as profit-maximizing model suggests
- Overconfident investors on stock market often survive in market
    - if overconfident investor underestimates risk of security, he will over-invest in that asset
    - his expected utility will be lower than anticipated, but his wealth will grow relative to unbiased investors

Satisficing Behaviour (again)

- While firms may pursue (absolute) profits, they may be unable or unwilling to *maximize* profits
  - instead they may be content to obtain merely a high proportion of the maximum
- Pursuit of exactly optimal profits may lead to low equilibrium profits
  - e.g., Bertrand price competition has profit-maximizing equilibrium with zero profit
  - no one in experiments would ever set price equal to cost, even in one-shot interaction

Which Biases Survive in Markets?

[Friedman 1953] "Let the apparent determinant of business behavior be anything at all—habitual reaction, random chance or what not. Whenever this determinant happens to lead to behavior consistent with rational and informed maximization of returns, the business will prosper and acquire resources with which to expand"

- May be roughly true in competitive markets
- Many behavioral biases prevalent in consumer markets—self-control, procrastination, myopia, etc.,—are of limited strategic benefit to firms, and so will likely be "selected out"
- But other biases—aggression, care for relative performance, care for social cohesion, over-optimism, "sunk-cost fallacy"—can lead to strategic advantages for firms operating in oligopolistic markets

Behavioral Policymakers?

- Undue reliance on profit-maximizing paradigm may sometimes lead to erroneous policy
  - e.g., structural empirical studies normally assume profit maximization to estimate costs, etc.
  - merger simulation is problematic
- Competition Authorities also operate in complex, strategic environments
  - necessitates rules of thumb (e.g., market concentration thresholds, *per se* rules)
- Weaker Darwinian pressure than on firms
- May be strategic benefits to having institutional focus which differs from social welfare (Armstrong-Vickers)
- Imitative strategies may be employed
  - enjoy "safety in numbers"
  - recent focus on behavioural economics may be example of this?