Merger Motives, Firm Rationality and the Law of Potential Competition

Shilpi Bhattacharya*

This paper studies the implications of relaxing one of the central assumptions of antitrust law - that firms take profit maximizing decisions - for the review of mergers. The limitations of a firm's decision-making capabilities in the context of mergers are apparent from the many sordid tales of failed mergers that appear in the news. Inspired by the 'Carnegie School' and the scholarship in management studies that draws from it, this paper explores how the view of the firm as boundedly rational can enrich merger analysis in antitrust law. In order to focus the analysis on firm decision-making in an antitrust context, this paper conducts two detailed case studies of acquisitions that were reviewed by antitrust agencies. This paper finds that decisions to merge are complex results of various motivations and are taken by individuals who may suffer from biases. Moreover, the insights of managerial and firm behaviour obtained from the material examined suggests that antitrust agencies should not dismiss certain decisions as not likely to be taken by a firm simply because they are not 'rational'. This is particularly important as merger analysis requires antitrust agencies to predict the behaviour of firms and the assumptions of firm behaviour can have important implications in predicting firm conduct. The study also finds that behavioural insights could be helpful in the agencies analysis of whether a firm is a potential competitor and to what extent an acquired firm poses an effective competitive constraint on the acquiring firm. This may have applications in digital markets where potential competition is playing an increasingly important role in merger analysis.

1. Introduction

Mergers represent one of the most fertile areas for behavioural antitrust. The various nouns used in connection with mergers are illustrative of the behavioural aspects of mergers: marriage, divorce, coupling, winner, loser, (bidding) war, compromise, hostile (takeover) etc. Mergers are very public, high stake events that can bring out the best and the worst in the parties involved - a love story gone wrong or a marriage made in heaven! Mergers evoke emotions rather than cold rationality.

Competition agencies conduct merger review on the basis that merging firms are rational, profit-maximizers. Agencies generally agree that horizontal mergers in oligopolistic markets are efficiency enhancing and do not cause harm to consumer welfare. 1 According to economists, firms engage in mergers and acquisitions

^{*} Professor, Jindal Global Law School. The author would like to thank Prof. Roger Van den Bergh for insightful comments.

¹ See Orley Ashenfelter, Daniel Hosken & Matthew Weinberg, Did Robert Bork Understate the Competitive Impact of Mergers? Evidence from Consummated Mergers, 57 J. L & ECON. S67, S75 (Aug. 2014).

("M&A")2 in order to exploit growth opportunities and efficiencies, expand into new markets, diversify, access a different customer base, as a reaction to changes in the environment or as defensive moves to competitors.3 Mergers result in transfer of assets to more capable management who better utilise these assets.4 Further, the DoJ and FTC's Horizontal Merger Guidelines, 2010 (the "US Merger Guidelines")5 state that there focus is "primarily on how the merger affects conduct that would be most profitable for the firm".6 In other words, competition agencies review mergers within the framework of the rationality assumption – i.e. that the decision is taken with a view to maximizing a firm's profits.

Yet, in approximately two-thirds of all acquisitions, the acquiring firm's stock price falls immediately after the acquisition is announced.7 This indicates that markets are sceptical about the likelihood that the acquirer will be able to achieve the required efficiencies to justify the acquisition.8 There is substantial evidence that mergers often fail to achieve their objectives.9 Various studies have reported a high rate of M&A failure with one study placing the failure rate at 50% or more of all M&A transactions.10 It is not difficult to find examples of unsuccessful mergers in the history of business.11 Popular examples include AOL and Time Warner, Daimler-Benz and Chrysler, Kmart and Sears, eBay and Skype.12 Literature suggests that US merger review is not achieving its objectives of increasing consumer welfare.13

² In this paper the terms: mergers, acquisitions, mergers and acquisitions and M&A are used interchangeably.

³ See Gunther Tichy, What do we Know about the Success and Failure of Mergers, 1(4) J. INDUSTRY, COMPETITION & TRADE 347, 368 (Dec., 2001).

4 See Ashenfelter et al., supra note 1, at S72, S95.

⁵ "The Guidelines describe the principal analytical techniques and the main types of evidence on which the agencies usually rely to predict whether a horizontal merger will substantially lessen competition" *see* U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines (2010) [hereinafter US Merger Guidelines], *available at* http://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf.

6§1, US Merger Guidelines, id.

⁷ See Michael A. HITT, R. DUANE IRELAND & ROBERT E. HOSKISSON, STRATEGIC MANAGEMENT CONCEPTS: COMPETITIVENESS AND GLOBALIZATION 183 (8th ed., South Western Cengage Learning, 2009).

8See HITT et al., id. at 183.

9See Yaako Weber, Shloma Tarba & Christina Öberg, The M&A Paradox: Factors of Success and Failure in Mergers and Acquisitions, in A COMPREHENSIVE GUIDE TO MERGERS & ACQUISITIONS: MANAGING THE CRITICAL SUCCESS FACTORS ACROSS EVERY STAGE OF THE M&A PROCESS (Yaako Weber, Shloma Tarba & Christina Öberg eds., Financial Times Press, 2013), http://www.ftpress.com/articles/article.aspx?p=2164982; see also Clayton M. Christensen et al., The Big Idea: The New M&A Playbook, HARV. BUS. REV. (Mar. 2011), https://hbr.org/2011/03/the-big-idea-the-new-ma-playbook/ar/1 (stating that "Yet study after study puts the failure rate of mergers and acquisitions somewhere between 70% and 90%").

10 See Weber et al., id.; Tichy, supra note 3, at 385.

11"Mergers are more likely to fail than marriages." *See Nine Mergers that Epically Failed*, THE HUFFINGTON POST (Feb. 23, 2013), http://www.huffingtonpost.com/2013/02/23/worst-mergers-of-all-time n 2720121.html

12See id

13See Ashenfelter et al., supra note 1, at S67; Robert W. Crandall & Clifford Winston, Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence, 17(4) J. ECON. PERSPECTIVES 3 (2003); see also Dennis C. Mueller & B. Burcin Yartoglu, Efficiency vs. Market Power through Mergers, in The International Handbook of Competition 57, 81 (Manfred Neumann & Jürgen Weigand eds., 2d ed., Edward Elgar Publishing Limited, 2013)

14See Weber et al., supra note 9.

Nevertheless, it is interesting that M&As are increasing with time both in terms of volume and size of transactions. 14 This raises the interesting question of what motivates firms to merge despite the significant chances of failure? One study finds that gaining market dominance is a prominent factor motivating mergers that should be of concern to competition law.15 Another factor behind merger decisions is the personal interest of managers such as career progression, professional stability and higher salaries. 16 Managerial hubris and overconfidence can also cause biases in merger decisions and in estimating the potential efficiencies of mergers. As the CEO of Daimler stated about its failed acquisition of Chrysler, "Obviously we overestimated the potential for synergies." 17 Even one of the analysts who had initially praised the merger later noted that, "what once seemed like a perfect fit now just seems like a mistaken vision."18

M&A is said to be motivated as much by Opportunity as by fear.19 For instance, analysts believe that Vodafone acquired Mannesmann because it was competitively threatened by Mannesmann's acquisition of Orange.20 Orange was one of Vodafone's significant competitors in the UK with its superior technical knowhow and innovation capabilities. It also had a fast-growing customer base.21 Vodafone's CEO, Gent said that by acquiring Orange, Mannesmann had broken a "gentleman's agreement" not to compete with Vodafone in the UK.22 Vodafone felt cornered because Mannesmann and Orange's combined technical capabilities and superior geographic presence in many European markets would create a company that Vodafone would not be able to compete with. 23 Vodafone believed that to survive the only way forward was to acquire Mannesmann.24

According to Roll, acquisitions are individual decisions of managers and are affected by managerial biases. 25 Unlike other decisions of firms, these are not profit

```
15 See Tichy, supra note 3, at 384
16 See Tichy, id. at 368
17Divorce Puts Paid to Car-making Dream, FINANCIAL TIMES (May 14, 2007),
http://www.ft.com/intl/cms/s/0/86510ab2-0254-11dc-ac32-000b5df10621.html#axzz3bYwA90zp.
18Id.
19 Bidding for the Future, The Economist (Feb. 10, 2000) at
http://www.economist.com/node/281682?zid=316&ah=2f6fb672faf113fdd3b11cd1b1bf8a77.
20 See Marcus Walker, Vodafone and Mannesmann: The Bid that Couldn't Fail, EUROMONEY (Mar.,
2000) at http://www.euromoney.com/Article/1007961/Vodafone-andMannesmann-The-bid-that-
couldnt-fail.html (quoting Dan Dickinson, advisor to Mannesmann and head of European Mergers &
Acquisitions at Merrill Lynch, "Mannesmann buying Orange really put Vodafone in a corner because it
exposed Vodafone as having only a series of minority stakes. Their window of opportunity was to act
right away.")
21 See Vodafone and Mannesmann: Endgame, THE ECONOMIST (Jan. 13, 2000) at
http://www.economist.com/node/328276.
22 Roland Gribben & Christopher Williams, How Vodafone's Rise to a £59bn Giant Started with a New
Year's Eve Phone Call, THE TELEGRAPH (Jan. 1, 2015) at
```

http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/telecoms/11319237/H ow-Vodafones-rise-to-a-59bn-giant-started-with-a-New-Years-Eve-phone-call.html

23 See Bidding for the Future, The Economist (Feb. 10, 2000) at

http://www.economist.com/node/281682?zid=316&ah=2f6fb672faf113fdd3b11cd1b1bf8a77.

24 See Marcus Walker, Vodafone and Mannesmann: The Bid that Couldn't Fail, EUROMONEY (Mar., 2000) at http://www.euromoney.com/Article/1007961/Vodafone-andMannesmann-The-bid-thatcouldnt-fail.html.

25 See Richard Roll, The Hubris Hypothesis of Corporate Takeovers, 59(2) J. BUSINESS 197, 199 (1986).

maximizing.26 Roll's findings supports a rich literature within management studies that also draws from the behavioural theory of the firm that merger decisions are not profit maximizing for a firm. This paper assesses this literature and examines its implications for antitrust law.

In order to understand how the insights from management studies can be useful to antitrust law, the paper conducts two case studies of mergers that were reviewed by antitrust agencies and by courts. These cases examine the firm's acquisition decision in-depth along with the view taken by agencies of those decisions. The first case study is an old one and in an industry that has faced a high degree of concentration through numerous acquisitions – the beer industry. The second one is a more recent and much-discussed case – Facebook's acquisition of WhatsApp. The case studies are a unique tool for understanding firm behaviour and are inspired by the Carnegie School's insights that firms behave heterogeneously. The findings from these case studies throw light on to what extent firms consider themselves to be potential competitors as well as the extent to which firms might be competitively constraining each other.

Existing work within behavioural antitrust notes that merger review is particularly conducive to behavioural insights.27 For instance, behavioural antitrust has probed the predictions of entry in neoclassical economic models and the role of efficiencies in merger analysis.28 With respect to entry it is argued that neoclassical economic models can underestimate the likelihood of entry, or in some cases magnify the procompetitive effects of entry in overcoming the exercise of market power.29 With respect to mergers, the existence of merger efficiencies has been questioned.30 This paper extends previous studies by focusing on a firm's decision to merge and the motivation behind it. This paper also uniquely relies on literature from the field of management studies to understand to what extent firms exert a competitive influence on each other; and how the merger may affect market dynamics.

The rest of this paper is divided as follows: section 2 describes the problems with the existing effects-based approach to merger review. Section 3 reviews the literature on merger motives from the perspective of firm bounded rationality. Section 4 studies Falstaff's acquisition of Narragansett. Section 5 examines Facebook's acquisition of WhatsApp. Section 6 concludes.

2. The effects-based approach to merger review

Merger review in antitrust law is a prospective determination of market structure and anticompetitive effects. The emphasis on industry-specific rather than firm-specific factors in merger review is a legacy of the influence of industrial organisation on competition law.31 Behavioural insights take a different view - that not only the

²⁶ See id. at 199.
27 See See Amanda P. Reeves & Maurice E. Stucke, Behavioral Antitrust, 86 Indiana L. J. 1527, 1581 (2011).
28 See Avishalom Tor, Understanding Behavioral Antitrust, 92 Texas L. Rev. 573, 602-05 (2013) [hereinafter Tor I].
29 See Tor I, id. at 603-05.
30 See Tor I, id. at 602.

³¹See HITT et al., supra note 7, at 13.

external environment but also internal firm characteristics play a role in a firm's decisions and performance.32

Antitrust agencies reviewing mergers consider empirical evidence of the effect of mergers on prices, consumers, merging parties or rivals. This is called the effects-based approach as it relies on data-based simulations that predict how a proposed merger will affect competition in the market. Merger simulations now play a vital role in determining the harm from a merger. 33 Simulation models have come under criticism because they require strong assumptions on the nature of competition, shape of demand and marginal cost functions, and statistical assumptions for consistently estimating demand, which can make these models unrealistic. 34 The methodology used in these simulations is restrictive and in some cases inaccurate due to data limitations. 35 It is very difficult to make predictions of future effects on markets due to the inherent uncertainty and complexity of markets. 36 The evidence collected during merger review can also be inconclusive as to the effect of a merger on competition. 37 Some studies have found that simulations do not accurately predict post-merger prices. 38

The bounded rationality of consumers suggests caution in relying on the predictions of merger simulations.³⁹ Simulation models are limited by the use of simplifying assumptions that are not in accordance with the actual behaviour of firms or consumers.⁴⁰ Boundedly rational consumers can over or under react to post-merger price changes.⁴¹ In addition, merger simulations do not incorporate factors such as consumer's preferences for fairness, which can impact estimation of price elasticity of demand.⁴² Simulation models also fall short by not taking into account objectives

```
32See HITT et al., id. at 15.
```

33 See Gregory J. Werden, Luke M. Froeb & Mikhael Shor, *Behavioral Antitrust and Merger Control*, 167(1) J. INSTITUTIONAL & THEORETICAL ECON. 126 (Mar., 2011).

34 See Mathew C. Weinberg, More Evidence on the Performance of Merger Simulations, 101(3) Am. ECON. REV.: PAPERS & PROCEEDINGS 51, 51 (2011) available at

https://www.aeaweb.org/articles.php?doi=10.1257/aer.101.3.51.

35 See Avishalom Tor, Boundedly Rational Consumers: Three Challenges for Competition Law, 17 (The 55th Annual Meeting of the Italian Economic Association, Trento, Italy, 2014),

http://www.siecon.org/online/wp-content/uploads/2014/10/Tor-140.pdf (last visited: Aug. 28, 2015) (hereinafter Tor II).

³⁶See Jonathan B. Baker & Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement*, in How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust 235, 257 (Robert Pitofsky ed., Oxford University Press, 2009).

³⁷See Louis Kaplow & Carl Shapiro, *Antitrust, in* HANDBOOK OF LAW AND ECONOMICS 1073, 1153 (Mitchell A. Polinsky & Steven Shavell eds., vol. 2, Elsevier, 2007) (this is because in many cases requisite data is not available and even if it is available, it is difficult to show that price changes were caused by the merger rather than for other reasons such as changes in industry conditions).

38See Weinberg, supra note 34, at 51; Craig Peters, Evaluating the Performance of Merger Simulation: Evidence from the US Airline Industry, 49(2) J. L. & ECON. 627 (Oct. 2006).

³⁹See Tor II, *id.* at 17 (citing various sources including Alison Oldale, *Behavioral Economics and Merger Analysis*, 6 COMPETITION POL'Y INT'L 139 (Spring 2010); Oliver Budzinski & Isabel Ruhmer, *Merger Simulation in Competition Policy: A Survey*, 6 J. COMPETITION L. & ECON. 277 (2009); Elizabeth M. Bailey, *Behavioral Economics: Implications for Antitrust Practitioners*, ANTITRUST SOURCE (June 2010) [hereinafter Bailey I]).

40 See Tor II, supra note 35 at 17; Kaplow & Shapiro, supra note 37, at 1139; Tor I, supra note 25, at 658

41See Tor II, id. at 17.

42See Elizabeth M. Bailey, *Behavioral Economics and U.S. Antitrust Policy*, 47(3) REV. INDUSTRIAL ORGANIZATION 355, 360 (Nov., 2015).

other than profit maximization in firms' pursuit of M&A.43 Firm conduct needs to be better understood to make merger simulations more effective.44

In certain cases competition agencies have acknowledged that the profit incentives of firms may be overridden by other interests. One such case was Genzyme's acquisition of Novazyme, a merger to monopoly in the market for the research and development (R&D) of therapies for a rare and fatal medical condition called Pompe disease.45 The two companies were the only ones developing enzyme replacement therapies for Pompe disease and the merger could have reduced the pace of R&D efforts to develop these therapies as well as potentially stopped the development of a second therapy for Pompe disease.46 Nevertheless, the US Federal Trade Commission (FTC) felt that despite incentives to act anti-competitively, the combined company would continue to engage in R&D for Pompe disease because of the personal interests of the executive managing the combined company's Pompe disease programme. This executive had two children suffering from Pompe disease who would have died if a therapy was not developed in time, so he had compelling personal reasons to expedite the finding of a therapy. In this case the FTC recognised that in certain cases it is appropriate to depart from the assumption of rationality in favour of fact-specific, behavioural considerations.47

The European Commission (the Commission) is increasingly applying some of the insights from business studies to merger analysis, for instance in using the similarity of the business models of the merging firms to determining the closeness of competition between the merging parties.48 Yet merger review is largely an exercise where firm rationality plays a central role. One particular aspect of merger law that has potential behavioural applications and that is relevant to the discussion in this paper is the theory of potential competition. A potential competitor is one who intends to enter the market in the future or is on the 'fringes' of the market and exerting a competitive influence on firms in the relevant market merely by its presence on the fringes of the market. In such cases, the EC Merger Guidelines require that the potential competitor should exert a "significant constraining influence" or there should be a "significant likelihood" of the entities succeeding in exerting a competitive influence. The EC Merger Guidelines state that, "evidence that a potential competitor has plans to enter a market in a significant way could help the

```
43See Bailey I, supra note 41, at 8.
```

⁴⁴See Peters, supra note 38, at 647.

⁴⁵See Federal Trade Commission Press Release, FTC Closes its Acquisition of Genzyme Corporation's 2001 Acquisition of Novazyme Pharmaceuticals, Inc. (Jan. 13, 2004), https://www.ftc.gov/news-events/press-releases/2004/01/ftc-closes-its-investigation-genzyme-corporations-2001.

⁴⁶ See Genzyme Corporation's Acquisition of Novazyme Pharmaceuticals, Inc., File No. 021-0026, 4 (Jan. 13, 2004) (Commissioner Mozelle W. Thompson, dissenting),

https://www.ftc.gov/system/files/attachments/press-releases/ftc-closes-its-investigation-genzyme-corporations-2001-acquisition-novazyme-pharmaceuticals-inc./thompsongenzymestmt.pdf [hereinafter Thompson Dissent].

⁴⁷ See Bailey, supra note 42, at 364. Nonetheless, the FTC's decision to allow the acquisition was questioned by the dissent who felt that there were no demonstrable benefits from the merger such as any efficiency gains that could not be achieved by the parties in the absence of the acquisition and that the large amount paid by Genzyme for Novazyme suggested that the true motives of the merger were anticompetitive. See Thompson Dissent, id. at 6.

⁴⁸ See Paul McGeown & Aude Barthélemy, *Recent Developments in EU Merger Control 2014*, 6(6) J. EUROPEAN COMPETITION L. & PRACTICE 440, 448 (June, 2015) (the Commission feels that parties with different business models are less likely to constrain each other even if they sell the same product).

Commission to reach such a conclusion." ⁴⁹ Competition agencies accordingly consider a firm's actual behaviour and internal documentation to determine if it is a potential competitor. In addition, the US Supreme Court has recognised that potential entrants can exert a pro-competitive influence on competitors and acquisitions that eliminate them can have a negative effect on the market. ⁵⁰ Behavioural insights could be used to determine whether a firm is positioned as a potential competitor. This will be discussed in greater detail in later sections. Another interesting feature of the Commission's recent jurisprudence has been its use of the idea of a firm as an "aggressive competitor" to assess the degree of competition that is likely to prevail or be removed by a merger. ⁵¹ This idea could be expanded to include 'strategic competitors' as a certain kind of potential competitor.

3. A Behavioural View of Mergers

The Carnegie School questioned the assumption in neoclassical economics that firms engage in maximization by conducting empirical studies that described how decision-making in firms was compromised by internal conflicts and constraints. Bounded rationality refers to cognitive constraints caused by biases and limitations.52 Firms employ a range of tools including heuristics (rules of thumb) in their decision-making that could cause bounded rationality. 53 Selten further clarified that motivation, adaptation and cognition are three aspects of human behaviour that produce limits to rationality. 54 Motivation represents the objectives of human behaviour. 55 Many different factors may motivate people to act in particular ways and this also applies to managers in firms. The second factor, adaptation, refers to routine learning behaviour without the use of reasoning. 56 This builds a connection between the actions of individuals and what they learn from their everyday experiences. Thus, people may behave in certain ways because of previous learning. Finally, cognition describes all conscious and unconscious reasoning processes of the human mind. 57 Cognitive limitations are often cited as the primary reason for bounded rationality.

A substantial amount of literature describes how M&A decisions are boundedly rational. Acquisition decisions are complex and involve numerous considerations. Firms taking these decisions need to decide firstly, about whether or not to undertake a merger or acquisition at all, next which of all possible companies is the most appropriate to acquire, how to structure and value the transaction and how much to

⁴⁹ § 60, Guidelines on the Assessment of Horizontal Mergers under the Council Regulation on the Control of Concentrations between Undertakings, Council Regulation (EC) No. 139/2004, 2004/C 31/03 (Feb., 2004), *available at* http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/ [hereinafter EC Merger Guidelines]

⁵⁰See FTC v. Proctor & Gamble Co., 386 U.S. 568 (1967); United States v. Falstaff Brewing Corp., 410 U.S. 526 (1973) [hereinafter Falstaff].

⁵¹ See McGeown & Barthélemy, supra note 48, at 449.

⁵²Reinhard Selten, *Bounded Rationality*, 146(4) J. INSTITUTIONAL & THEORETICAL ECON. 649, 649 (1990).

⁵³ For instance, Cisco's acquisition strategy followed a simple rule that they would only acquire companies with fewer than 75 employees, 75% of whom were engineers.

⁵⁴ Reinhard Selten, *Features of Experimentally Observed Bounded Rationality*, 42 EUROPEAN ECON. REV. 413, 414 (1998).

⁵⁵Selten, id. at 414.

⁵⁶Selten, id. at 414.

⁵⁷Selten, id. at 414.

pay for targets.58 Managers consider many possibilities and process vast amounts of information to make these decisions. To simplify the processing of all the variables and data involved in an acquisition decision, managers may use perceptual processes or heuristics. This can make acquisition decisions subject to managerial biases.59

Jemison and Sitkin describe M&A decisions as negotiated results of decision-making processes rather than as outcomes of rational choices. 60 Formal and informal processes, organisational routines, political interests and managers' former experiences can all affect decision-making within firms.61 Sub-units within a firm can have different and conflicting goals, resources and time horizons. In many cases decisions can only be taken by resolving these differences through coalition building, bargaining and conflict resolution.62 Deeper issues with an acquisition may also be overlooked due to differences between and within firms.63 All of these factors hamper rational decision-making by a firm.

Drawing on the literature from organisational routines and managerial cognition, Amburgey and Miner argue that mergers are affected by a firm's strategic inertia, which can also be called strategic momentum.64 This is a firm's tendency to repeat its previous strategic decisions, regardless of whether they are successful. This is because every time a firm undertakes an M&A they develop improved competencies in M&A, which further encourages this activity. 65 Amburgey and Miner find repetitive momentum does impact certain M&A decisions. A firm is likely to take repeated M&A decisions particularly for product extension and horizontal mergers.66

Managerial objectives play an important role in decisions to merge. 67 Managers might have different considerations than firm profitability in mind when making merger decision such as, maximising power, prestige, income, publicity or career opportunities. 68 Budzinski and Kretschmer take the view that while mergers are unprofitable for the firm, unprofitable mergers are a result of individually rational managerial decisions. 69 Consultants might advise companies to enter into unprofitable mergers so that they can earn more income. 70 This is facilitated by the ambiguity in

```
<sup>58</sup> Irene M. Duhaime & Charles R. Schwenk, Conjectures on Cognitive Simplification in Acquisition and Divestment Decision-Making, 10(2) ACADEMY MGMT. REV. 287 (Apr., 1985).
```

59See Duhaime & Schwenk, id. at 288.

60See David B. Jemison & Sim B. Sitkin, *Corporate Acquisitions: A Process Perspective*, 11(1) ACADEMY MGMT. REV.145 (Jan., 1986).

61 See Thomas Straub, Reasons for Frequent Failure in Mergers and Acquisitions: A Comprehensive Analysis 50-51 (Ph.D. Dissertation, Deutscher Universitätsverlag, Gabler Edition Wissenschaft, Jul. 2007).

62See Thomas C. Powell, Dan Lovallo & Craig R. Fox, *Behavioral Strategy*, 32 STRATEGIC MGMT. J. 1369, 1375 (2011).

63See Philippe C. Haspeslagh & David B. Jemison, Managing Acquisitions: Creating Value through Corporate Renewal (The Free Press, 1991).

64 See Terrey L. Amburgey & Anne S. Miner, Strategic Momentum: The Effects of Repetitive, Positional and Contextual Momentum on Merger Activity, 13(5) STRATEGIC MGMT. J. 335 (1992). 65 See id. at 336.

66 See id. at 345.

67 Randall Morck, Andrei Shleifer & Robert Vishny, *Do Managerial Objectives Drive Bad Acquisitions?* 45(1) J. FINANCE 31 (1990).

⁶⁸ See Oliver Budzinski & Jürgen-Peter Kretschmer, *Implications of Unprofitable Horizontal Mergers*, 10(1) CONTEMPORARY ECONOMICS 13, 14-15 (2016).

69 See Budzinski & Kretschmer, supra note 66, at 14-15.

70 See id. at 14-15.

identifying the reasons for a merger's failure. Budzinski and Kretschmer also argue that pre-emptive and defensive mergers or mergers that are taken to pre-empt competitive threats are rational even when unprofitable because they are less unprofitable for a firm than the consequences that would arise from the merger not occurring.71

Roll was the first to propose managerial hubris as a factor behind acquisition decisions but a significant literature now supports this view. Hubris can be described as a situation where managers are convinced that their valuations of a firm are correct and that a decision to merge will lead to gains for the acquiring firm even when there is little evidence to support these beliefs.72 Hubris causes managers to overestimate their own abilities, performance and probability of success.73 It is higher for managers that have previously executed acquisitions successfully.74 Hubris can lead managers to believe that market value does not represent the full value of the firm and should be disregarded in favour of managers' own valuations.75 Hubris can also affect the performance of the firm post-acquisition as attempts to achieve efficiencies may not be realised.76 It may also result in managers paying too much for an acquisition because they are likely to overestimate their ability to positively integrate and extract value from it.77 An empirical examination of mergers measuring the distribution of gains and losses across the acquiring and acquired firms found that there was little empirical evidence to support the hypothesis that mergers are carried out to achieve efficiencies and more empirical evidence to show that mergers are carried out because of managerial discretion and hubris.78 Even though managers with hubris are aware that mergers are risky and on average cause losses to the acquiring firm, they still go ahead with mergers because hubris leads them to believe that they are better than other managers at identifying and operationalising mergers.

Managers may also be overconfident and overestimate efficiencies and underestimate problems associated with mergers. 79 Overconfident CEOs are more likely to undertake value-reducing mergers.80 In addition to overconfidence, CEO dominance also contributes to excessive merger activity as dominance increases the likelihood that a CEO can impose her overconfident views on the company.81

Further, managers are documented to over-estimate the extent to which they can control the outcome of an acquisition. 82 This results in managers not thoroughly evaluating acquisition candidates before deciding to acquire them. Another bias

⁷¹ See id. at 14-15.

⁷² Richard Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59(2) J. BUSINESS 197, 213 (1986).

⁷³ Pasquale M Picone, Giovanni B Dagnino & Anna Minà, *A Multidisciplinary Appraisel of the Hubris Hypothesis and Proposed Research Agenda*, 28(4) ACADEMY MGMT. PERSP.447, 454 (2014).

⁷⁴ See id. at 458.

⁷⁵ See Roll, supra note 71, at 199.

⁷⁶ See Picone, supra note 72, at 458.

⁷⁷ See STRAUB, supra note 49, at 48.

⁷⁸See Dennis C. Mueller & Mark L. Sirower, *The Causes of Mergers: Tests Based on the Gains to Acquiring Firms' Shareholders and the Size of Premia*, 24 MANAGERIAL DECISION ECON. 373 (2003). 79See Baker & Shapiro, *supra* note 36, at 256.

⁸⁰See Ulrike Malmendier & Geoffrey Tate, Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction, 60(6) J. FINANCIAL ECON. 20 (2008).

⁸¹See Rayna Brown & Neal Sarma, CEO Overconfidence, CEO Dominance and Corporate Acquisitions, 59 J. ECON. & BUS. 358 (2007).

⁸²See Duhaime & Schwenk, supra note 57, at 289.

associated with M&A is 'escalation of commitment' – managers may continue an M&A transaction even if it is not in the firm's best interest to continue with it because they feel they have already invested significant time and resources on the transaction.83

Another set of factors causing defects in M&A decisions are agency considerations or managerial self-interest such as higher salaries. Acquisitions and the legacy attached to them, whether a success or failure, can have a weighty impact on a manager's career. Managers' decisions to acquire may be motivated by empire building, which can also explain why managers acquire companies despite past failures and predicted difficulties in undertaking M&A transactions.84 According to Marris, "managements are likely to see the growth of their own organization as one of the best methods for satisfying personal needs and ambitions, an attitude which is reinforced by psychological tendencies to identify the ego with the organization."85 For instance, the former CEO of Daimler-Benz used M&A as a tool for his ambition to make the company into a global car manufacturer.86 Another example of managerial egos being responsible for mergers is in the merger of Holcim and Lafarge, the two largest cement manufacturers in the world, as the chairman of Holcim was about to retire and "wanted to end [his career] on a high" with a successful merger.87 Yet, though the merger of Holcim and Lafarge was to be a merger of equals, personality and ego clashes between the top management of both companies ruffled feathers to such an extent that the success of the merger itself was threatened.88

Managerial biases are also reflected in the premiums paid for acquisitions. Acquisition premiums can represent the acquiring firm's view of the potential for efficiencies from the transaction. Higher premiums should signal greater efficiencies from the acquisition. 89 However, one study found that managers' expectations of efficiencies from a merger did not correlate with the amount of premium paid by an acquiring firm, suggesting that efficiencies may be a means to get shareholder consent, while managers have other reasons for taking the decision. 90 There is also empirical evidence that managers consistently overpay for acquisitions for reasons described above: managerial hubris, escalation of commitment, cognitive biases, or for agency considerations such as empire building. 91 It is also argues that mergers that are financed by payments in stock rather than cash are more likely to be caused by

```
83See Mario Schijven & Michael A. Hitt, The Vicarious Wisdom of Crowds: Towards a Behavioral Perspective on Investor Reactions to Acquisition Announcements, 33 STRATEGIC MGMT. J. 1247, 1251 (2012).
```

⁸⁴ STRAUB, supra note 49, at 48.

⁸⁵Robin Marris, A Model of the "Managerial" Enterprise, 77(2) QUART'LY J. ECON.185, 187 (May, 1963).

⁸⁶ See Divorce Puts Paid to Car-making Dream, FINANCIAL TIMES (May 14, 2007),

http://www.ft.com/intl/cms/s/0/86510ab2-0254-11dc-ac32-000b5df10621.html # axzz3bYwA90zp.

 $^{87\} See$ Sarah Gordon and Arash Massoudi, $Holcim\ \&\ Lafarge:\ A\ Merger\ of\ Egos$, Financial Times (Mar. 23, 2015), http://www.ft.com/intl/cms/s/0/41d317c8-d14e-11e4-98a4-

⁰⁰¹⁴⁴feab7de.html#axzz3h6OZj8AB

⁸⁸ See id.

⁸⁹See Schijven & Hitt, supra note 82, at 1251.

⁹⁰ Ahmed Ismail, *Does the Management's Forecast of Merger Synergies Explain the Premium Paid, the Method of Payment and Merger Motives?*, 40(4) FINANCIAL MANAGEMENT 879 (2011). 91See Schijven & Hitt, *supra* note 82, at 1252.

managerial hubris or agency-related motives.92 Mergers motivated by empire building are also said to reduce the long term value of firms more substantially.93 Managers could use overvalued firm stock to undertake acquisitions that further personal goals.94

Studies have found that decisions to merge are taken for a combination of reasons outlined above such as managerial self-interest, market timing, efficiency and hubris.95 Ngyuyen, Yung and Sun classify merger motives into value increasing and value decreasing motives.96 The former motivated by efficiencies and the latter by agency considerations, managerial hubris and timing.97 The variability of merger motives suggests that the presumption of a merger being profit maximizing for a firm is overly simplistic and may carry weak presumptive power in determining firm behaviour.

3.1 Strategic Reasons for M&A

M&A can also be a strategic decision of a firm or a competitive tactic. The so called 'killer acquisitions' in digital markets would fall within this category. Haspeslagh and Jemison highlight that acquisitions are made to further a firm's strategic objectives.98 Some reasons for executing M&As are to achieve size, growth and profitability. Another reason for M&A is to achieve greater market power.99 Acquisitions may be a response to an emerging competitive threat, a means to enter a new market and exploit market opportunities or to spread risks across industries.100 Firms may engage in acquisitions to shift their operations from their core business into different markets. Further, acquisitions are sometimes used as strategies when there is uncertainty in the competitive landscape.101 In industries with intense competitive rivalry, firms may engage in acquisitions to lessen their dependence on one or more products or markets.102 Some acquisitions are made to gain capabilities that the firm does not possess.103 Acquiring firms with different skills and capabilities helps the acquiring firm to access new knowledge and remain competitively relevant.

A company seeking to enter a new market and facing barriers to entry may find entry more effective by acquiring an established competitor than by entering the market on its own. High entry barriers thus make acquisitions attractive by offering immediate market access.104 Further, in dynamic markets, acquiring firms that have innovative

```
92 See Hien Thu Nguyen, Kenneth Yung & Qian Sun, Motives for Mergers and Acquisitions: Ex-Post Market Evidence from the US, 39 Journal of Business, Finance & Accounting 1357, 1369 (2012).
93 See id. at 1369.
94 See id. at 1372.
95 See Nguyen et al., supra note 88, at 1372.
96 See id. at 1359.
97 Id. at 1359.
98 See Haspeslagh & Jemison, supra note 62.
99 See Hitt et al., supra note 7, at 184.
100 See Hitt et al., id. at 183.
101 See Hitt et al., id. at 183.
102 See Hitt et al., id. at 190.
103 See Philip M. Rosenzweig, Managing Acquisitions: Creating Value through Corporate Renewal, 18(2) Academy Mgmt. Rev. 370, 371 (Apr. 1993) (book review).
104 See Hitt et al., supra note 7, at 187.
```

products may be less costly, faster and less risky for firms than developing these products internally.

A firm has a competitive advantage when it implements a strategy which competitors are unable to duplicate or find it too costly to imitate. 105 However, no competitive advantage is permanent, the question is of how long a competitive advantage will last. 106 Thus, firms constantly search for opportunities to obtain a sustainable competitive advantage and M&A is one such tool in the hands of managers to obtain an advantage over competitors. Strategic M&A may not be profit-maximizing or value enhancing but is a means of survival or competitive posturing. This perspective of M&A activity as a way of obtaining advantage over competitors can be useful to competition law by contributing to the understanding of the motivations and impact of M&A in the short-term and the long-term.

4. The Falstaff Case

The government challenged the acquisition by Falstaff, the fourth largest beer producer in the US, of Narragansett, the largest beer seller in the New England area of the US on the theory that Falstaff's acquisition violated section 7 of the Clayton Act because Falstaff was a potential entrant into the New England market and the acquisition eliminated competition that would have existed had Falstaff entered the market *de novo.*107 The district court rejected this argument and held that Falstaff was not a potential competitor since the evidence showed that Falstaff would never have entered the market other than through the present acquisition.108 This lead to the US Supreme Court's judgment in *US v. Falstaff Brewing Corp* discussed below.109 The Supreme Court disagreed with the district court and held that Falstaff was a potential competitor in the market.

The Falstaff decision was branded as an instance of "zealous" merger enforcement aimed at protecting smaller firms and halting the trend towards concentration. 110 Yet, as critics pointed out, the Supreme Court's decision did not actually help to stop the trend towards concentration in the beer industry. 111 This was because the high concentration in the market was due to the growth of national brewers and so smaller companies such as Falstaff and Narragansett could only effectively compete against the larger brewers by achieving the same size and scale, which the Supreme Court's decision made difficult.112

This case study focuses on whether the district court was right to find that Falstaff would never have entered the market in the New England area *de novo*. The other

```
105 See HITT et al., id. at 5.
106 See HITT et al., id. at 5.
107 See United States v. Falstaff Brewing Corp., 410 U.S. 526, 530 (1973) [hereinafter Falstaff];
Legality of Brewery Purchase Remains Undecided, 59 Am. BAR ASSOC'N J.529.
108 US v. Falstaff Brewing Corp. 332 F. Supp. 970 (D.R.I. 971) (1971).
109 See Falstaff, supra note 107, at 526.
110 See Kenneth G. Elzinga & Anthony W. Swisher, The Supreme Court & Beer Mergers: From Pabst/Blatz to the DOJ-FTC Merger Guidelines, 26(3) REV. INDUSTRIAL ORG. 245, 250, 261 (May, 2005).
111 See Falstaff is Crying in Narragansett's Beer, 59 Am. BAR ASSOC'N J. 1056-57 (1973).
112 See Falstaff is Crying in Narragansett's Beer, id.
```

issue this study examines is whether the Supreme Court was right to find that Falstaff was a potential competitor because of the competitive influence it exerted over firms in the New England market due to its position on the fringes of the market.113 These issues are examined in this study from the perspective of firm decision-making and particularly, whether these decisions can be called rational. The present case is especially suited to firm decision-making analysis because Falstaff could not be called an actual potential competitor in New England if it would never have entered the market *de novo*. Moreover, Falstaff's position as a perceived potential competitor would depend on whether its competitors considered that it would enter the market *de novo*. Thus, Falstaff's decision to enter was at the centre of this case.

4.1 The contradiction between objective and subjective evidence

Falstaff wanted to enter the New England market so that it could position itself as a national player in the brewing industry to compete more effectively against national companies.114 The position as a national player held certain competitive advantages for Falstaff in terms of greater prestige, improved ability to advertise and less exposure to local problems.115 Falstaff had publicly expressed its desire to become a national player, which the court felt made its incentives to enter the New England market known to its competitors and made it a potential entrant.

The Supreme Court focused on objective evidence i.e., Falstaff's incentives and ability to enter. In his concurring opinion to the Supreme Court's majority decision, Justice Marshall stated that courts should presume that objectively measurable market forces govern firm conduct. 116 The New England market was growing, Falstaff was one of the few companies with the ability to enter as a significant competitor and it had substantial economic incentives to expand. 117 In the words of Justice Marshall:

But where a powerful firm is engaging in a related line of commerce at the fringe of the relevant market, where it has a strong incentive to enter the market de novo, and where it has the financial capabilities to do so, we have not hesitated to ascribe to it the role of an actual potential entrant. In such cases, we have held that § 7[Clayton Act] prohibits an entry by acquisition...118

Given its incentives and ability to enter, the court felt that Falstaff could have rationally entered *de novo* or by means of 'toehold' acquisition (by acquiring a small brewery and expanding it). 119 As the following discussion shows, the Supreme

113Elzinga & Swisher note that the court ignored other more important issues in assessing the merger and if these issues had been examined the merger would have been allowed because the court would have found that it did not raise any concerns for competition. For instance, agencies would have used scanner data from retail sales to construct simulation models and measure the intensity of competition between Falstaff and Narragansett and would have found that the two companies were not selling products that were close substitutes of each other. *See* Elzinga & Swisher, *supra* note 68, at 263 n.92.

114 *See* Falstaff, *supra* note 107, at 529.

115See Falstaff, id. at 529.

116See Falstaff, id. at 548.

117 Brief of the United States before the Supreme Court of the United States in USA v. Falstaff Brewing Corp. 27 (1971) [hereinafter Government brief].

118 See Falstaff, supra note 107, at 548.

119 See Government brief, supra note 117, at 37-38.

Court's view that firm decision-making is only motivated by objective factors is rather simplistic.

4.1.1 The Recommendations of the Little Report

Prior to acquiring Narragansett, Falstaff commissioned Arthur D. Little to advice it about how it could maximize its profits. The Little Report recommended that Falstaff should enter a number of markets in which it was not operating including New England, Chicago and Detroit. Further, based on a review of cost estimates and the ratio of earnings to net worth, the Little Report advised that Falstaff should enter New England by building a new brewery rather than by buying one. 120 The recommendations of the Little Report that Falstaff should build a brewery in New England were also based on the finding that Falstaff more profitably sold beer through its own branches. 121 All these factors provided a rational basis for entry de novo. Yet, despite its greater profitability, in reality Falstaff sold very little of its beer through its own distribution channels. Falstaff's reluctance to use its distribution channels despite the larger profits it could make from them is a sign that profit maximization does not always govern firm decision making. Accordingly, despite the recommendations of the Little Report, Falstaff's management insisted that acquiring a brewery was essential for successful entry.122 Falstaff also reasoned that it could not estimate what sales it would achieve in New England so as to justify obtaining financing for building a brewery.123 This statement is illogical because Falstaff hired an expert for the very purpose of providing it with this kind of market information and it should have had this information about the likely sales it could expect to achieve before deciding to buy a brewery. All these factors point to limitations in the quality of decision making within Falstaff.

Additionally, the Little Report had previously recommended that Falstaff enter markets in Chicago and Detroit *de novo*. Falstaff followed these recommendations and attempted entry, which it said turned out to be "disastrous". 124 Falstaff's management felt that following the Little Report's recommendations did not work because it did not have strong distributorships to make *de novo* entry successful in those markets.125 Falstaff's management was thus strongly influenced by its recent bad experiences of entering *de novo* in markets where it did not have established distributorships. The recent failures were amplified in the minds of Falstaff's management - called the availability heuristic,126 making them unable to rationally assess the benefits of entering *de novo*.127 This is evident from Falstaff's statements highlighting these past bad experiences128 and its subsequent conduct in looking for a brewer to acquire in New England.

```
120 See Falstaff, supra note 111, at 529, 553.
```

¹²¹ See Government brief, supra note 121, at 38.

¹²² See Falstaff, supra note 111, at 571.

¹²³ Brief on behalf of Falstaff Brewing Corp. before the Supreme Court of United States in the matter of USA v. Falstaff Brewing Corp. 13, n.10 (1971) [hereinafter Falstaff brief].

¹²⁴ Falstaff brief, id. at 16 n. 13.

¹²⁵ See Falstaff brief, id. at 16

¹²⁶ The availability heuristic shows that when evaluating decisions people rely on the most immediate instance of that decision that comes to mind.

¹²⁷ For some evidence of this bias see Falstaff brief, supra note 126, at 13.

¹²⁸ See Falstaff brief, id. at 20.

Many brewers in New England approached Falstaff between 1960 and 1964 to be acquired but Falstaff rejected all these offers because it believed that each of these brewers lacked an effective distributorship and consequently, did not provide a meaningful prospect of entry into New England. 129 Falstaff's overt concern that the target must have a strong distributorship was also evident from the testimony of its president that the reason for the acquisition was, "the distributorship purely and simply." 130 As stated in its Annual Report:

"The long-range principle benefits of this [Narragansett] acquisition are many, principally the acquisition of a large, modern plant and a strong marketing and *distributor organization* which can provide a springboard for the introduction of Falstaff beer into New England as a companion brand to the Narragansett products in that area." [emphasis added]

On the other hand, the government argued that entering de novo or by acquiring a small brewery was a rational business proposition because Falstaff had significant past experience with buying smaller breweries and enlarging and modernizing them. 132 Falstaff and the government also differed in their views on the role of advertising in generating sales. The government argued based on Falstaff's past conduct that it could have generated enough sales to enter de novo if it invested in advertising. Here Falstaff again pointed to its failure to establish itself in Detroit and Chicago to show that advertising did not always generate enough sales. 133 The reverses in Detroit and Chicago had a deep impact on Falstaff, perhaps because this was its first big failure. In the 1950s Falstaff had engaged in an aggressive campaign of growth through numerous acquisitions. Falstaff's annual reports show that its managers were confident of the success of the various acquisitions as they expected these to follow the path of previously undertaken successful acquisitions. 134 However, in fact Falstaff's tremendous growth through acquisitions peaked prior to the acquisition of Narragansett, after which its market position and sales declined dramatically.135 The failures in Detroit and Chicago were not carefully examined by management and imputing those failures to a lack of strong distributorship points towards managerial hubris. This hubris may have built-up due to the tremendous past success of Falstaff's acquisitions. For instance, management could have examined whether changing consumer preferences for beer contributed to its poor performance in some markets.

The court should probably have investigated why the management was so committed against entry *de novo* that it was disregarding the advice of the expert it had hired to help it to make this decision. When Falstaff rejected the recommendations of the Little Report, the court should have considered it a demonstration that there were other considerations at play in its decision. As one commentator noted, potential

¹²⁹ Falstaff brief, *supra* note 126, at 5, 21-22.
130 Falstaff brief, *id.* at 13 n. 10.
131 FALSTAFF BREWING CORP., ANNUAL REPORT TO SHAREHOLDERS (1965) [hereinafter Falstaff Annual Report].
132 *See* Government brief, *supra* note 121, at 37-38.
133 *See* Falstaff brief, *supra* note 126, at 20 n. 19.
134*See* Falstaff Annual Report, *supra* note 134.
135*See id.*

profitability may not be the main cause for a firm's decision to enter a new market. Other factors could play a role such as increasing sales, prestige, advertising costs. 136 If, as Justice Marshall of the Supreme Court stated, the subjective statements of managers should not be given any credence when it contradicts objective economic evidence, 137 'objective' factors showed that the Little Report was right to recommend entry *de novo*. The Supreme Court said that subjective evidence should be considered only when there is a "compelling demonstration" that a firm will not follow its economic self-interest. 138

4.2 Different interpretations of market data

Falstaff questioned why it would have foregone *de novo* entry if it was indeed more profitable. 139 Falstaff introduced substantial evidence during the trial to show that entry by acquisition would be more profitable for it in New England than entry *de novo*. 140 An independent economist testifying for Falstaff called the expected return on *de novo* entry as "a very, very poor investment indeed." 141 Further, as Falstaff argued, the government provided no evidence that entering *de novo* would provide an acceptable level of profit. 142 As a rational firm why would Falstaff decide to enter by acquisition if it was more profitable to enter *de novo*? The majority opinion of the Supreme Court steered clear of this issue by simply not acknowledging it and sticking to its own view of the objective evidence - the financial condition of Falstaff and the characteristics of the New England market, which made it reasonable to consider Falstaff a potential entrant into that market. 143 Falstaff's own view of the market and the evidence it introduced was termed "subjective". 144 However, in his concurring opinion, Justice Marshall acknowledged this problem:

"Falstaff introduced a great deal of evidence tending to show that entry de novo would have been less profitable for it than entry by acquisition. I have no doubt that this is true. Indeed, if it can be assumed that Falstaff is a rational, profit-maximizing corporation, its own decision offers strong proof that entry by acquisition was the preferable alternative. But the test in §7 cases is not whether anticompetitive conduct is profit-maximizing."145

This case presents an interesting conundrum. On the one hand there was 'objective evidence' suggesting that Falstaff had both the capability and the incentive to enter the New England market *de novo*. On the other hand, Falstaff's management firmly believed that entry by acquisition would be more profitable for it and that it would not enter *de novo*. 146 Should the court then take Falstaff's word for what its intended

```
136 See United States v. Falstaff Brewing Corporation: Potential Competition Re-examined, 72(4) MICH. L. REV. 837, 849 (March, 1974) [hereinafter Falstaff case review].

137 Falstaff, supra note 107, at 569 ("in most cases subjective statements contrary to objective evidence simply should not be believed.")

138 Falstaff, id. at 548, 525

139 Falstaff brief, supra note 120, at 17.

140See Falstaff, supra note 111, at 554, 571.

141 Falstaff case review, supra note 139, at 857,

142 Falstaff brief, supra note 120, at 13, 17.

143See Falstaff, supra note 111, at 533.

144See Falstaff, id. at 566.

145 Falstaff, id. at 572.

146See Falstaff, id. at 571.
```

actions would be, as the district court had done, or rely on its own objective evidence of Falstaff's motives and ability to enter? In the words of Justice Marshall,

"...in a case where the objective evidence strongly favors entry *de novo*, a firm which asks us to believe that it does not intend to enter *de novo* by implication asks us to believe that it does not intend to act in its own economic self-interest. But corporations are, after all, profit-making institutions, and, absent special circumstances, they can be expected to follow courses of action most likely to maximize profits." 147

Yet, firm's decisions are not as simple as the Supreme Court would like to believe. Even Justice Marshall concedes that managers can make mistakes in their assessment of objective market forces. As he notes, economic predictions are difficult to make and different people might reach different conclusions from the same objective data. 148 Moreover, another commentator notes that an entrant's behaviour cannot always be accurately predicted based on objective or subjective evidence. 149 This is evident from the fact that even given a figure of projected profits, the experts in this case could not agree about whether it was sufficient to induce *de novo* entry. 150 In the present case economic evidence was interpreted quite differently by the management of Falstaff, the agency commissioned by Falstaff to study the market and ultimately by the government and the courts with no consensus between them about whether entry by acquisition or entry *de novo* was more profitable.

In fact everyday observations of firm behaviour confirms that managers of different firms can take very different decisions when faced with similar kinds of evidence about market conditions. The dissenting opinion in this case dismissed the distinction between subjective and objective economic evidence and pointed out that economic decisions are all largely subjective. 151 In the words of Justice Rehnquist:

"In the instant case, Falstaff sought to prove why it was not in the 'economic self-interest' of that firm to enter a new geographic market without an established distribution system. Its explanation is as 'objective' as any of the evidence offered by the Government to show why a hypothetical Falstaff should enter the market." 152

Thus, according to the dissent, it is not possible to objectively determine what is in a firm's economic self-interest and the reasoning of Falstaff's management was as relevant in determining its actions as the economic evidence put forward by the government. 153 If we acknowledge that strategic decisions made by firms are subjective, it paves the way for understanding firm behaviour as heterogeneous and allowing the application of behavioural theories to understanding firm conduct. This is supported through this case study, which has highlighted the complexity of

147*See* Falstaff, *id.* at 568.

148*See* Falstaff, *id.* at 3 n. 19.

149 *See* Falstaff case review, *supra* note 139, at 859.

150 *See id.* at 859.

151*See* Falstaff, *supra* note 111, at 575.

152 Falstaff, *id.* at 575-76.

153*See* Falstaff, *id.* at 576.

decision-making within the reality of market contexts. It is almost impossible to be able to always correctly understand how a market might develop in the future.

One question considered by the court in determining Falstaff's status as a potential competitor was whether incumbent firms in the market in New England considered Falstaff a potential entrant and acted more competitively as a result. The government argued that, "ordinarily firms in the market will evaluate the competition of an established firm on the edge of the market on the basis of objective factors...financial capacity and economic incentives to enter." 154 Yet, it is perfectly plausible that Falstaff's competitors in New England had different perceptions about its status as a potential entrant.155 The court did not hear the testimony of any competitor other than Narragansett, who stated that they did not consider Falstaff a competitive threat and had other competitors to worry about.156 As one commentator notes, given the nature of cost and demand conditions prevailing at the time in the beer industry, incumbents would have expected Falstaff to enter in a way that would have allowed them to operate as closely as possible to optimal scale.157 This would make de novo entry unlikely. Economies of scale played an important role in the market at that time as profit margins were low and this was creating barriers to entry and increasing concentration in the market.158 The reason that many New England brewers including Narragansett approached Falstaff to be acquired was because they realised that they needed to operate at a bigger scale.159 Thus, it is likely that contrary to the view of the Supreme Court, New England firms did not consider Falstaff to be a potential competitor or did not have the same views about it.

It is clear that market conditions favoured national brewers at that time and smaller firms felt the need to consolidate to remain competitive. Yet, with the benefit of hindsight, entry by acquisition of Narragansett was not profitable for Falstaff and their market share in all markets fell substantially in the years following the acquisition - to the benefit of national brewers. 160 Entry *de novo* may have caused even greater losses to Falstaff in those market conditions. 161

5. Facebook's Acquisition of WhatsApp

"Gavin Belson [CEO of fictional Google-type company Hooli]: Let me acquire you.

Richard Hendricks [CEO of fictional start-up company Pied Piper]: What? No way.

Gavin Belson:...It's the perfect fit. You get my infrastructure, I get your speed, and I get it today rather than in a month or two. What's the downside?

```
154 Government brief, supra note 120, at 26.
155 See Falstaff case review, supra note 139, at 844.
156 Falstaff brief, supra note 126, at 24 n. 26.
157 See Falstaff case review, supra note 139, at 845.
158 See Government brief, supra note 120, at 32; Falstaff, supra note 111, at 550.
159 See Falstaff brief, supra note 111, at 5.
160 See Falstaff, supra note 111, at 530.
161 See Falstaff brief, supra note 126, at 18.
```

Richard Hendricks: The downside is that everything I'm building becomes the property of your giant, soulless corporation.

Gavin Belson: And what exactly do you think you're building? You're out there trying to get funding so you can hire people, scale up, roll out a product, IPO, and eventually become a publicly-traded what? Corporation.

Richard Hendricks: We would be different.

Gavin Belson: I see. I suppose once Pied Piper is a billion-dollar company, you'll seek out your competitors and help them. Please...you think you're building something different? No."162

This dialogue takes place in the TV sitcom 'Silicon Valley' which follows the path of a young entrepreneur, Hendricks as he tries to establish a disruptive technology startup company. This dialogue between Belson, the chief executive of a large conglomerate and Hendricks provides an interesting perspective on the acquisition of WhatsApp by Facebook. In this fictional setting the large company tries to imitate the disruptive product of the small start-up company but fails to do so. It then tries to acquire the smaller company. As the CEO of the large company tells the CEO of the small company, the small company can give the bigger one faster access to its innovative technology and the bigger company can give the smaller one access to better infrastructure. These were some of the reasons for the acquisition by Facebook of WhatsApp, a company with a better product in messaging that Facebook found difficult to replicate in the short-term. Interestingly, in the fictional setting in the TV show the offer of the acquisition is rejected because the young and idealistic chief executive believes he wants to build a company that would be "different" from a "giant soulless corporation". The older and more experienced chief executive effectively calls this the hubris of the younger man.

In October, 2014, Facebook, an online social networking service, completed its acquisition of WhatsApp, a mobile communications service, for a landmark amount of US \$19 billion in a transaction that was famously formed after WhatsApp's founder Jan Koum was invited to spend a few days at the home of Facebook's CEO Mark Zuckerburg and was sealed with a bottle of 'Jonnie Walker' scotch, highlighting the informal nature of the negotiations and the important role that the personalities heading these companies played in this acquisition decision. 163

This acquisition raised competitive concerns, at least in the EU because market data collected by the Commission suggested that the parties had a combined market share of 30% to 40% in messaging services in iOS and Android smart phones while competitors in this market had a much smaller share of the market. 164 In addition, the

162Silicon Valley: Runaway Devaluation (HBO Entertainment, Apr. 19, 2015).
163See Parmy Olson, Facebook Closes \$19 Billion WhatsApp Deal, FORBES (Oct. 6, 2014), http://www.forbes.com/sites/parmyolson/2014/10/06/facebook-closes-19-billion-WhatsApp-deal/.
164See Facebook / WhatsApp, Commission of the European Communities Decision No.M.7217 (Oct. 3, 2014),

Commission noted that the market shares of Facebook and WhatsApp were calculated based on the data given by the parties themselves, which may have underestimated actual market positions; but the Commission did not have sufficient data to independently measure market shares. 165 However, the Commission felt that large market shares may not be sustainable for a long period of time in the fast-growing and dynamic market for communication apps and may not cause lasting damage to competition. 166 With the benefit of hindsight we know that both Facebook and WhatsApp's market share has only increased with time despite the dynamic nature of the markets in which they operate.

The critical issue in Facebook's acquisition of WhatsApp was whether Facebook and WhatsApp were 'close competitors' in the relevant market. In fact McGeown & Barthélemy describe the Commission's decision in this case as providing "interesting insights into its thinking on closeness of competition".167 In order to understand the degree and extent of the competition between the two it is relevant to understand why Facebook acquired WhatsApp and why it paid such a significant amount for the acquisition. Another related issue of concern to competition from this acquisition was the impact of the acquisition on innovation. Further, a matter of concern was that given the potential for reduced competition and innovation from the merger, the Commission did not examine the possible efficiencies from the transaction at any length.

It is also important to note that the Commission and US antitrust authorities both cleared the merger after an investigation and while agencies in both jurisdictions were concerned about the acquisition; they concluded that competition would not be affected and consumer welfare would not reduce from the merger.

5.1 A Strategic Decision

High-technology companies have a history of acquiring high growth, start-up companies. Examples include Google's acquisition of YouTube in 2006 and Facebook's acquisition of Instagram in 2012.168 Often these acquisitions are criticised for being extravagant as a lot of money is paid for a company with an unproven product. Some of these acquisitions have proven to be very successful and this has encouraged more acquisitions to be made. Ultimately, many of these acquisitions are made when the market is still nascent and reflect manager's intuition and beliefs about the future direction of growth in a market rather than facts and figures of performance on which 'rational' decisions would be taken.

Some companies engage in defensive or pre-emptive acquisitions to stop their competitors from acquiring the target. 169 For instance one of the reasons Google is

```
http://ec.europa.eu/competition/mergers/cases/decisions/m7217_20141003_20310_3962132_EN.pdf [hereinafter Facebook / WhatsApp].

165See Facebook / WhatsApp, id. at § 97.

166See Facebook / WhatsApp, id. at § 99.

167See McGeown & Barthélemy, supra note 48, at 448.
```

168See David Gelles, For Facebook, It's Users First and Profits Later, THE NEW YORK TIMES (Feb. 20, 2014), http://dealbook.nytimes.com/2014/02/20/for-facebook-its-users-first-and-profits-later/.

169 See Peter Curwen, WhatsUpp, 16(3) INFO (2014),

http://www.emeraldinsight.com/doi/abs/10.1108/info-02-2014-0011.

said to have acquired Waze, a community based traffic and navigation application, is because Facebook was interested in buying Waze, and it did not want Facebook to have a competitive advantage by acquiring Waze. Certain analysts feel that the acquisition of WhatsApp was motivated by Facebook's desire to keep WhatsApp away from Facebook's competitors. 170 Google was one such key competitor that had reportedly offered US \$10 billion for WhatsApp but the offer was rejected by WhatsApp's management. 171 One analyst argued in this context that keeping competitors at bay is necessary because it is impossible to know which new technological innovation will attract consumers in a large scale. 172 Acquisitions occur more frequently in innovation-driven markets because managers perceive acquisitions to be less uncertain compared to the risks involved in developing innovations internally within the firm, since the performance of the acquired firm's product or service can be assessed prior to the acquisition. 173

The Commission also acknowledged in its review of the acquisition that the market for consumer communications is a new and fast-growing market, characterised by short innovation cycles and frequent market entry.174 The pace of competitive change has increased so significantly in this market that it is difficult to predict what the structure of the market will be in a few months. As business scholars state, the only way to survive in such a competitive environment is to accept and adapt to disruptions.175 In such an environment, this acquisition effectively removed a firm from the market that could have changed the way the communications market evolved. Consequently, it may be possible to argue that Facebook acquired WhatsApp in order to extend its domination over the market for communication services by removing a potential competitor of significance from the market.176

An analyst has described Facebook's acquisition of Instagram and of WhatsApp as arising because they provided more popular products/services than Facebook's own competitive offering of the same product/service.177 Moreover, WhatsApp with its different organisation and understanding of trends will help Facebook to grow in markets where it would have likely lost out to WhatsApp because of WhatsApp's potential to disrupt the market in the future.178 One commentator went as far as to state that Facebook is effectively buying its way out of competing in a dynamic market. 179 This shows Facebook's intuition of changing market trends and the strategic nature of this acquisition.

Considered from a strategic perspective, achieving growth in mobile users was an important objective for Facebook and Facebook was attracted to WhatsApp's much

```
170See also Gelles, supra note 171.
171See Gelles, id.
172 Curwen, supra note 172.
173See HITT et al., supra note 9, at 188.
174See Facebook / WhatsApp, supra note 167, at § 99.
175See Adam Hartung, Disrupt to Thrive in 2011: Model Facebook, Groupon, Twitter (Jan. 10, 2011), http://adamhartung.com/disrupt-to-thrive-in-2011-model-facebook-groupon-twitter/.
176See Hartung, id.
177 See Hartung, id.
178See Gelles, supra note 171.
```

faster growth in mobile users.180 In fact WhatsApp stands out in the industry in terms of its number of users, growth of new users and intensity of use on mobile phones. 181 Further, there is speculation that Facebook was concerned that the changing market for communication services and growing consumer preferences for mobile technology such as for sharing photographs and for chatting on mobile phones may erode the value of Facebook's flagship platform in the future. Facebook's declining user numbers made it concerned about its continued growth in new users and the easiest way to get new users was via an acquisition. 182 Consequently, it may be argued that Facebook acquired WhatsApp in order to prevent its own product offering from becoming irrelevant through the growth of innovative services offered by WhatsApp and to defend its position in the market for consumer communications and social networks.183 From the perspective of improving consumer welfare, it may be possible to contend that Facebook would have taken more efforts to innovate in response to the increased competition provided by WhatsApp if it had not acquired WhatsApp. On the other hand, Hartung argues that those companies that try to defend their market positions against the challenges of new entry and market shifts by trying to improve their own product offering are often unsuccesful and new entrants with a disruptive and innovative product offering win these battles.184 Therefore, Facebook's decision to defend its market position by making an acquisition may be a smarter and more succesful strategy, even though it may not be profitable from a short-term perspective.185

Nevertheless, from the perspective of rationality it is worth questioning why Facebook paid such a significant amount i.e., US \$19 billion for WhatsApp when WhatsApp generated only US \$10.2 million in revenues and in fact it made a loss of US \$138.1 million in the period before the acquisition i.e., 2012-13.186 Moreover, the rationality of Facebook's decision to pay such a large amount should also be questioned given that the relevant market has low barriers to entry and fast-chaging consumer preferences.187 Rational firms would only pay such a high amount for an acquisition when they are certain of achieving fairly high potential efficiencies. However, other than access to WhatsApp's large user-base, Facebook has not made clear as to what are the potential efficiencies from this transaction. Further, as this transaction was financed substantially through stocks rather than through cash, it may also reflect Facebook's overconfidence in the value of its stock rather than any claimed efficiencies from the acquisition.

Another interesting facet of Facebook's acquisition of WhatsApp that business analysts are wondering about is how Facebook intends to make profits from this

```
180See Matt Swider, Why did Facebook Buy WhatsApp?, TECH RADAR (Feb. 20, 2014), http://www.techradar.com/news/internet/web/what-s-up-with-facebook-buying-WhatsApp-it-s-about-the-developing-world-1226429.
181See Swider, id.
182 Curwen, supra note 172.
183See Hartung, supra note 178.
184See Hartung, id.
185See Hartung, id.
186See Sarah Frier, Facebook's $22 Billion WhatsApp Deal Buys $10 Billion in Sales, BLOOMBERG BUSINESS (Oct. 29, 2014), http://www.bloomberg.com/news/articles/2014-10-28/facebook-s-22-billion-WhatsApp-deal-buys-10-million-in-sales.
187 Curwen, supra note 172.
```

acquisition. 188 Interviews with the CEO of Facebook suggest that the acquisition of WhatsApp is not about making profits, at least in the present, but instead is about gaining users. 189 Facebook has said it wants to encourage WhatsApp to reach the milestone of a billion users and only then will it monetise its investment in WhatsApp. However, this is a risky strategy because the dynamic nature of the market makes it possible that by the time WhatsApp reaches its target of one billion users, the market would have changed and WhatsApp may not be popular anymore.

The discussion in this section shows that the nature of this acquisition was strategic rather than profit maximizing. A rational firm intending to maximize profits would likely not have paid so much for a firm that has not produced any profits as yet and does not intend to do so in the near future. Accordingly, insights from business strategy could be helpful to understand the reasons behind Facebook's acquisition of WhatsApp. WhatsApp posed a threat to Facebook due to its fast-growing users in the sphere of social messaging and photo sharing in smartphones through its increasingly popular messaging service and given the changing nature of the market and growing importance of mobile communications Facebook may have believed that WhatsApp would prove to be an increasingly significant competitor in the future.

5.2 Are Facebook and WhatsApp Close Competitors?

A relevant consideration for assessing a merger is whether the merging firms would have been head-to-head competitors absent the merger. 190 The nature of rivalry is an important consideration in the analysis of horizontal mergers particularly under the theory of unilateral effects if the merger removes a firm that affected an important competitive constraint to the market. To determine if merging firms are close competitors, competitor analysis within management studies can be useful to assess the degree of rivalry or competition between firms. 191 Competitor analysis considers the extent to which two firms share markets and the importance of the market for each firm. 192 Not all firms in an industry compete to the same degree with each other, some markets have more strategic importance for certain firms than others and competitive positions between firms are not always symmetric. 193 Some firms within an industry share more markets with each other than with other firms in the same industry. The Commission is also using tools of analysis that are adapted from business studies to determine the closeness of competition between merging parties. 194

188See Eat or Be Eaten, The Economist (May 9, 2015),

http://www.economist.com/news/business/21650559-wave-consolidation-prospect-americas-big-internet-firms-look-set-divide.

189 See Curwen, supra note 172 (arguing that valuing the acquisition at such a high amount based on current or future user numbers is dangerous as it is a reminder of what occurred in the previous Internet bubble).

190 See e.g. US Merger Guidelines, supra note 28, at §2.1.4.

191 See Ming-Jer Chen, Competitor Analysis and Inter-Firm Rivalry: Towards a Theoretical Integration, 21(1) ACAD. MGMT. REV. 100 (Jan., 1996).

192See Chen, id. at 101.

193 See Chen, id. at 101, 106.

194In *Crown Holdings*, the Commission examined the competitive advantages of the merging parties vis-à-vis competitors in the market to see if the merging parties were close competitors. This analysis is very similar to the kind carried out in business strategy. *See* McGeown & Barthélemy, *supra* note 48, at 448-49 (analysing *Crown Holdings / Mivisa*, Commission of the European Communities Decision No.

In this case the Commission found that WhatsApp and Facebook compete in two different markets i.e., the market for consumer communications services and the market for social networking services. However, Facebook and WhatsApp operate the two most popular messaging services being used in the market right now. Despite this fact, the Commission did not find Facebook and WhatsApp to be close competitors in both markets. The Commission stated that the main drivers of competition in the market for consumer communications were: (i) the functionalities offered, and (ii) the extent of the network.195 On this basis, Facebook and WhatsApp were found to differ in the following ways: (i) in the way the services are accessed and contacts are formed (Facebook via membership on the Facebook social network and WhatsApp via phone numbers and phonebook contacts), and (ii) by offering different user experiences (Facebook's messenger is integrated with its other services, which is different from WhatsApp's phone based messenger). 196 The Commission further noted that competition between providers of communication apps is to offer the best "communication experience" which means offering better functionalities such as by improving reliability and offering more privacy. 197 The Commission also found that WhatsApp competed more closely with Viber while Facebook's messenger services competed more closely with Google's 'Hangouts' service and with Twitter. 198 The Commission observed that consumers generally install and use several communication apps on their smartphones simultaneously, and in particular, many consumers install and use Facebook and WhatsApp at the same time. 199 Further, there are no unique features offered by Facebook or WhatsApp that are not also offered by the many other players in the market. 200 Thus, the Commission concluded that Facebook and WhatsApp do not compete directly with each other but offer complimentary services to users.

However, considered from a business perspective, this is a rather limited view of competition in this market. Announcing the acquisition, Zuckerberg stated, "Our mission is to make the world more open and connected. We do this by building services that help people share any type of content with any group of people they want." 201 The strategic position of Facebook made it a direct competitor with WhatsApp. In digital markets firms compete to create products that can disrupt the market and make the products of competitors irrelevant. Facebook was competing not only to create a better "communication experience" but to change the very nature of the communication experience being offered by competitors. In such a view of competition, it is not surprising that WhatsApp threatened Facebook's superiority as a platform for sharing and communicating with others.

```
M.7104 (Mar. 14, 2014),
http://ec.europa.eu/competition/mergers/cases/decisions/m7104_20140314_20212_3612433_EN.pdf).

195See Facebook / WhatsApp, supra note 167, at § 86.

196See HITT et al., supra note 9, at 8.

197See Facebook / WhatsApp, supra note 167, at § 87.

198See Facebook / WhatsApp, id. at § 106.

199See Facebook / WhatsApp, id. at § 87.

200See Facebook / WhatsApp, id. at § 104.

201 Facebook buys WhatsApp: Mark Zuckerberg Explains Why, The Telepgraph (19 Feb 2014),
https://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/digital-media/10650340/Facebook-buys-WhatsApp-Mark-Zuckerberg-explains-why.html.
```

With respect to the market for social networking services, the Commission examined whether WhatsApp was a potential entrant in this market. The EC Merger Guidelines state that mergers with a potential competitor are anticompetitive only if the potential competitor already exerts a significant constraining influence or there is a significant likelihood that it will grow into an effective competitive force. 202 In this case the Commission did not really examine whether or what kind of influence WhatsApp exerted on Facebook.

Several third party respondents to questionnaires sent by the Commission were of the view that absent the acquisition WhatsApp would have competed with Facebook in the provision of social networking services; others were of the view that WhatsApp was already competing with Facebook in the market for social networking services. 203 The Commission however, ignored these responses and did not consider WhatsApp to be a potential competitor to Facebook in the market for social networking services because it said there was no indication that WhatsApp would enter the market and compete with Facebook.204 The Commission concluded that Facebook and WhatsApp served different markets and fulfilled different consumer needs. 205 Here the Commission was wrong to not further explore the third party responses, which suggested that in a way WhatsApp had already entered the market for social networking services by gradually providing more of the services that Facebook was providing on its platform, such as sharing of content between groups of people. These features are gradually allowing consumers to use WhatsApp instead of Facebook for more kinds of social networking activities. The Commission could have further explored the trends in the use of Facebook and WhatsApp over time and whether consumers were inreasingly using WhatsApp for activities that they previously performed using Facebook. The acquisition could curtail WhatsApp's developing many services in competition with Facebook in the future. It is also worth noting that ultimately the Commission did not make a definite statement about whether WhatsApp was a competitor to Facebook in social networking services. The Commission felt that including WhatsApp in this market would also introduce many other players into this market and therefore, the acquisition would not significantly increase concentration in this market. Here of course it is again worth noting that WhatsApp was the fastest growing and diversifying firm among these competitors and so more likely to be a competitor to Facebook in social networking than all the other players.

Yet, internal Facebook documents have revealed that in 2013 Facebook viewed messaging services such as WhatsApp as "pure competitor" and a potential replacement for Facebook.206 Facebook also kept a list of strategic competitors. Tech writer Om Malik believes that the acquisition was a defensive move by Facebook due to WhatsApp's large user base as a mobile-based application.207 Malik believes that having control over user attention on mobile phones will define the success and

```
202See EC Merger Guidelines, supra note 816, at § 60.
203See Facebook / WhatsApp, supra note 167, at § 144.
204See Facebook / WhatsApp, id. at § 145.
205See Facebook / WhatsApp, id. at § 157-158.
206 Sam Schechner & Parmy Olson, Facebook Feared WhatsApp Threat Ahead of 2014 Purchase,
Documents Show, The Wallstreet Journal (6 Nov. 2019), https://www.wsj.com/articles/facebook-feared-whatsapp-threat-ahead-of-2014-purchase-documents-show-11573075742.
207 Why did Facebook buy WhatsApp, CNN Live (20 Feb 2014), at
https://www.youtube.com/watch?v=ocMyXXAYnVY.
```

failure of companies and Facebook was worried about its long-term prospects given its poorer performance in mobile.208

WhatsApp was bought because of Facebook's fear that it would morph into another Facebook. WhatsApp posed a competitive threat to Facebook and was a close competitor in this market. WhatsApp's presence as an independent entity may have given Facebook more incentives to innovate and improve its product. Accordingly, the Commission should have assessed the reasons for the acquisition in greater detail including why Facebook paid so much for WhatsApp and the potential efficiencies from the acquisition.

6. Conclusion

What should agencies or courts reviewing mergers do when firms make representations regarding their conduct? In the two case studies undertaken in this paper the courts/agencies were hampered in their ability to understand firm conduct by the framework of firm rationality within which they were working. In the Falstaff case, the court did not believe Falstaff's statements that it would not have entered *de novo* because there was no reason for a profit maximizing firm not to have taken that decision. In the Facebook case, the agency believed that WhatsApp did not intend to compete with Facebook and that they were not close competitors based on a traditional definition of the market as well as Facebook's submissions. In both these cases agencies/courts were mistaken. The analysis of the acquisitions would have been greatly helped by a better understanding of firm behaviour.

This paper has shown how decisions to merge can often depart from the strict assumptions of rationality and be motivated by managerial biases such as overconfidence bias or hubris or by strategic considerations such as removing a potentially dangerous rival from the market or preventing a competitor from acquiring a firm. Taking these insights seriously will aid antitrust law to make better predictions regarding firm conduct.

Mergers sometimes occur in waves resulting in increased concentration in an industry. Merger waves are explained with psychological phenomena, such as herd behaviour (merging because everyone else is merging), information cascades and framing effects. One example is the US airline industry where a spurt of mergers has reduced the number of major airlines in the US by half. 209 The increase in concentration in the US airline industry has reduced consumer choice and arguably may have detrimentally impacted consumer welfare.210 An empirical study finds that only one quarter of mergers lead to improvements in consumer welfare.211 M&A could thus potentially have a significant anticompetitive impact on a market.212 Nevertheless, Based on evolving economic thought, even mergers in highly

```
208 Id.
209See Airlines in America: No Choice, THE ECONOMIST (July 14, 2015), http://www.economist.com/blogs/gulliver/2015/07/airlines-america 210See id.
```

²¹¹ Tichy, supra note 3, at 385.

²¹²See Tichy, *id.* at 379-381 (arguing that there is mixed evidence of mergers increasing concentration but also finding that increased concentration is likely to reduce consumer welfare and accordingly advocating for a more careful scrutiny of mergers in competition law).

concentrated markets are no longer challenged unless anticompetitive effects can be proven and barriers to entry are high enough to impede the exercise of market power by the post-merger firm.213