

PROTECTING THE INNOVATOR, NOT ONLY THE INNOVATION: THE ANTITRUST ASSESSMENT OF INNOVATION MAVERICK ACQUISITIONS¹

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Abstract: This paper explores the antitrust assessment of innovation maverick acquisitions, a category of firms that continuously introduce new products, technologies, or business models, disrupting markets and driving competitors to innovate. While price mavericks have traditionally been the focus of antitrust analysis, innovation mavericks pose distinct challenges and may have a deeper impact on market dynamics. The acquisition of innovation mavericks may result in reduction of innovation efforts in the future of both the merging parties and across the market. The paper highlights the inadequacy of traditional antitrust framework, which tends to focus on price competition, and argues for the adoption of a new approach. By doing so, antitrust authorities can not only prevent collusion but also promote long-term innovation incentives, ensuring that industries remain competitive and innovative. This paper takes the first step toward developing a framework for assessing innovation maverick acquisitions, emphasizing the importance of dynamic efficiencies and innovation competition.

Keywords: Antitrust; Mergers; Innovation; Mavericks; Innovation Competition.

Resumo: Este artigo explora a avaliação antitruste de aquisições de mavericks de inovação, uma categoria de empresas que continuamente introduzem novos produtos, tecnologias ou modelos de negócios, revolucionando mercados e impulsionando concorrentes a inovar. Enquanto os mavericks de preço têm sido tradicionalmente o foco da análise antitruste, os mavericks da inovação apresentam desafios distintos e podem ter um impacto mais profundo na dinâmica do mercado. A aquisição de mavericks da inovação pode resultar na redução de esforços de inovação no futuro de ambas as partes e no mercado como um todo. O artigo destaca a inadequação do framework tradicional do antitruste, que tende a focar na concorrência de preços, e defende a adoção uma nova abordagem. Ao fazer isso, as autoridades antitruste não apenas previnem a colusão, mas também promovem incentivos a inovar de longo prazo, garantindo que as indústrias permaneçam competitivas e inovadoras. Este artigo dá o primeiro passo no desenvolvimento de um framework para avaliar aquisições de mavericks da inovação, enfatizando a importância das eficiências dinâmicas e da concorrência em inovação.

Palavras-chave: Antitruste; Fusões; Inovação; Mavericks; Concorrência em inovação.

Summary: 1 Introduction; 2 Maverick firms theory and practice; a) Identifying maverick; b) Mavericks and anticompetitive effects; 3 Mavericks and Innovation; a) Anticompetitive effects

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of innovation maverick acquisitions; b) Innovation Competition; a few insights for the assessment; c) Challenges for the assessment of innovation maverick acquisitions; 4 Concluding Remarks; 5 Bibliographic References.

1 Introduction

Preserving competition is the main objective of antitrust authorities. In a world increasingly concerned with the economic power held by large firms, such as Big Tech companies, their role in maintaining healthy markets is more important than ever. To fulfill their mandate of protecting competition, certain firms play a particularly important role in applying competitive pressure to markets and deserve special attention. These firms are known as mavericks.

Mavericks are firms that disrupt market norms, as defined by the 2023 DOJ/FTC Merger Guidelines.⁴ According to Gilo & Porat⁵, a maverick is a firm with incentives to compete in the short term, in contrast to rivals who have incentives to maintain collusion. Mavericks challenge competitors through aggressive strategies, including pricing or innovation, bringing competitive pressure to rivals and making collusion harder. They deserve special antitrust protection due to their important role in disciplining markets.⁶

The 2010 version of the US Horizontal Merger Guidelines describes the portfolio of strategies and characteristics of a maverick: (i) a threat to disrupt market conditions with a new technology or business model; (ii) an incentive to lead in price-cutting or resist industry-wide price increases; (iii) the ability and incentive to expand production rapidly using available capacity; and (iv) resistance to prevailing cooperation norms in the industry.⁷ CADE, the Brazilian antitrust authority, defines mavericks as firms that “...usually have low production

⁴ UNITED STATES. U.S. Department of Justice and the Federal Trade Commission. **Horizontal Merger Guidelines**, 19 aug. 2010. Available at: <https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf>. Access in: 4 dec. 2024.

⁵ GILO, David; PORAT, Ariel. The Hidden Roles of Boilerplate and Standard-Form Contracts: Strategic Imposition of Transaction Costs, Segmentation of Strategic Imposition of Transaction Costs, Segmentation of Consumers, and Anticompetitive Effects Consumers, and Anticompetitive Effects. **Michigan Law Review**, v. 104, n. 5, p. 983-1031, 2006. Available at: <https://repository.law.umich.edu/mlr/vol104/iss5/6>. Access in: 4 dec. 2024.

⁶ OWNINGS, Taylor M. Identifying a Maverick: When Antitrust Law Should Protect a Low-Cost Competitor. **Vanderbilt Law Review**, v. 66, n. 1, p. 323-354, 2013. Available at: <https://scholarship.law.vanderbilt.edu/vlr/vol66/iss1/5/>. Access in: 4 dec. 2024.

⁷ UNITED STATES. U.S. Department of Justice and the Federal Trade Commission. **Horizontal Merger Guidelines**, 19 aug. 2010. Available at: <https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf>. Access in: 4 dez. 2024.

costs and prices, pushing market prices down, or are inventive firms that foster ongoing innovation in their industry.”⁸

Despite the various strategies these firms may engage in, literature and practice usually do not differentiate between the types of maverick firms when discussing the assessment of their acquisitions. However, we argue in this paper that maverick firms can be grouped into two types based on their main market-disrupting strategies. *Price mavericks* are firms that engage in aggressive pricing to gain market share and challenge incumbent rivals. *Innovation mavericks* are firms that continuously and aggressively introduce innovations—both in the form of new and improved versions of their products as well as new features and accessories—to gain market share at the expense of their rivals, who typically lag behind in terms of innovation.

This distinction is crucial because different types of mavericks generate different anticompetitive effects. Furthermore, the specific nature of price competition and innovation competition requires different approaches to identifying maverick firms and assessing their acquisitions. Antitrust enforcement usually focuses on price mavericks, as the assessment of innovation competition is far from reaching consensus in both literature and practice.

The main goal of this paper is to provide insights for a framework to assess innovation maverick acquisitions. We examine both the literature and case law on maverick acquisitions—regarding both identification and anticompetitive effects—to explore the main challenges. Additionally, we briefly review the literature on innovation competition. Finally, we provide insights for the assessment of innovation mavericks, taking into account the specificities of innovation competition. The lack of debate on the assessment of innovation mavericks is an important gap in literature, and this paper aims to contribute as a first step toward developing a proper framework.

This paper is structured as follows: section 2 discusses maverick firms, addressing both the maverick theory and the relevant case law. The two main topics covered are the identification of mavericks and the anticompetitive effects related to their acquisitions. Section 3 focuses on innovation mavericks, presenting the anticompetitive effects associated with their acquisitions, insights from the literature on innovation competition, and the main challenges for assessment. Section 4 presents concluding remarks.

⁸ BRASIL. Ministério da Justiça. Conselho Administrativo de Defesa Econômica. **Guide for Horizontal Merger Review**, jul. 2016, p. 47. Disponível em: <https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/guias-do-cade/Guide-for-Horizontal-Merger-Review.pdf>. Acesso em: 4 dez. 2024.

2 Maverick firms: theory and practice

While there is relative consensus on the need to protect mavericks, there is much debate on how to identify these firms and assess their acquisitions in merger control. This section presents the debate on these two challenges.

a) Identifying mavericks

When a maverick is identified, the authorities consider this status during merger assessment. However, identification is not an easy task. As we will discuss in this subsection, literature and case law struggle to reach a consensus on how to approach this process. To begin with, we briefly present the theoretical and empirical literature.

Baker⁹ proposes three strategies for identifying mavericks: (i) the *revealed preference* strategy, which focuses on the success of past pricing practices; (ii) the *natural experiment* strategy, which depends on the availability of data and looks at whether a change in the alleged maverick's marginal costs affects industry prices by comparing the market to a competitive counterfactual; and (iii) the *a priori factors* approach, which is based on the firm's characteristics and considers whether it acts as a constraint on industry prices, and whether an acquisition would remove this constraint.

Scheffman & Coleman¹⁰ propose some analyses: (i) *natural experiments*, as Baker does, if the alleged maverick does not compete in all geographic areas; and (ii) assessing whether the firm's behavior was aggressive, based on turnover information if available, by considering the share of new customers directed to the firm and the deviation of rivals to the firm.

⁹ BAKER, Jonathan B.; *Mavericks, Mergers, and Exclusion: Proving Coordinated Competitive Effects under the Antitrust Laws*. *New York University Law Review*, v. 77, n. 135, p. 135-203, apr. 2002. Available at: <https://www.nyulawreview.org/wp-content/uploads/2018/08/NYULawReview-77-1-Baker.pdf>. Access in: 4 dec. 2024.

¹⁰ SCHEFFMAN, David; COLEMAN, Mary. *Quantitative Analyses of Potential Competitive Effects from a Merger*. *George Mason Law Review*, v. 12, n. 2, p. 319-369, 9 jun. 2003. Available at: https://demotesturl.com/george-mason/wp-content/uploads/2014/03/12-2_Scheffman-Coleman.pdf. Access in: 4 dec. 2024.

Owings¹¹ understands maverick firms as disruptive innovators and proposes using the definition from Christensen¹²: a disruptive innovator is a firm that uses a new technology or business model to introduce a product or service that is cheaper but inferior to the industry standard and focused on a specific niche. Ultimately, the maverick may grow and become a substitute for incumbents' products, while the latter fails to catch up, as their management systems and cultures prevent them from successfully adopting disruptive behavior associated with low-profit margins.

Other authors propose empirical and theoretical models to identify maverick firms. Breunig & Menezes¹³ and Bromfield¹⁴ propose time series methods. Bromfield models the maverick as a firm with asymmetric capacities and contrasting preferences, making the firm unwilling to coordinate. Loertscher & Marx¹⁵ and Kim & Park¹⁶ offer theoretical models: Loertscher & Marx view maverick acquisitions as generating a risk of coordination in a competitive market, while Kim & Park understand mavericks as firms that prevent coordination, whose elimination could facilitate collusive behavior. Zou¹⁷ suggests an identification method based on an experiment comparing the prices of colluding firms with and without the maverick firm.

After discussing the various propositions from the literature, we move forward to examine how antitrust practice has identified mavericks. When analyzing case law, there is no well-established procedure to identify a maverick. While Brazil and the European Commission broadly identify mavericks, mostly by considering increases in market shares in the recent past,

¹¹ OWNINGS, Taylor M. Identifying a Maverick: When Antitrust Law Should Protect a Low-Cost Competitor. *Vanderbilt Law Review*, v. 66, n. 1, p. 323-354, 2013. Available at: <https://scholarship.law.vanderbilt.edu/vlr/vol66/iss1/5/>. Access in: 4 dec. 2024.

¹² CHRISTENSEN, Clayton M. *The Innovator's Dilemma - When New Technologies Cause Great Firms to Fail*. Cambridge: Harvard Business School Press, 1997.

¹³ BREUNIG, Robert Vicent; MENEZES, Fabio Marques. Empirical Approaches for Identifying Maverick Firms: an Application to Mortgage Providers in Australia. *Journal of Competition Law & Economics*, Oxford University Press, v. 4, n. 3, p. 811-836, 2008. Available at: <https://ssrn.com/abstract=1277771>. Access in: 4 dec. 2024.

¹⁴ BROMFIELD, Joseph Peter. *Maverick Firms and Merger Policy*. 2015. Thesis (Doctor of Philosophy) – Aston University, Birmingham, 2015. Available at: https://publications.aston.ac.uk/id/eprint/33329/1/Bromfield_J._2017.pdf. Access in: 4 dec. 2024.

¹⁵ LOERTSCHER, Simon; MARX, Leslie M. Coordinated Effects in Merger Review. *The Journal of Law and Economics*, v. 64, n. 4, article 3, p. 705-744, 2021. Available at: <https://chicagounbound.uchicago.edu/jle/vol64/iss4/3>. Access in: 4 dec. 2024.

¹⁶ KIM, Soo Jin; PARK, Yongjoon. *Examining the Coordinated Effects of the AA/USAir Merger*. 26 fev. 2024. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3877895. Access in: 4 dec. 2024.

¹⁷ ZOU, Yanchi. *A Method to Identify Maverick Firms: From the Perspective of Anti-Coordination Effects*. Northeastern University, 11 apr. 2023. Available at: <https://papers.ssrn.com/sol3/papers.cfm?abstractid=4415349>. Access in: 4 dec. 2024.

U.S. agencies adopt different strategies but focus on the pricing behavior of the alleged maverick.

In Brazil, much of the debate surrounding cases revolves around whether a firm is a maverick. Deluca¹⁸ identifies 18 cases assessed by CADE – Conselho Administrativo de Defesa Econômica, the Brazilian antitrust authority – in which the possibility of maverick elimination was discussed between 2001 and 2018. In both Gol/WebJet (CADE – 2011)¹⁹ and Ipiranga/Alesat (CADE – 2017)²⁰, some commissioners argued that a maverick needed to present some innovation or product differentiation, not just aggressive pricing. In the first case, Reporting Commissioner Ricardo Ruiz did not consider the airline WebJet a maverick despite its lower fares, arguing that its model was similar to those applied by larger airlines.²¹ In the second case, Commissioner Cristiane Schmidt did not consider the fuel distributor Alesat a maverick, as she believed mavericks needed to present differentiated technology. In these cases, low prices alone did not seem sufficient for a firm to be considered a maverick. In Itaú/XP (CADE – 2018)²², the authority easily considered XP a maverick, given that, besides presenting high growth rates, low fares, and high profitability, XP introduced a new business model. However, in JBS/Rodopa (CADE – 2014)²³, the authority considered Rodopa a maverick not due to innovation but because of its unparalleled growth.²⁴

We can conclude that CADE's experience in identifying mavericks lacks consensus. Despite Deluca's observation that the main measure for identifying mavericks was the firm's

¹⁸ DELUCA, Patrícia Serson. O Papel de Empresas Maverick no Controle de Concentrações Econômicas. **Revista do IBRAC**, v. 24, n. 2, p. 142-163, 2018. Disponível em: <https://revista.ibrac.org.br/index.php/revista/article/view/156>. Acesso em: 4 dez. 2024.

¹⁹ Acquisition of Webjet by Gol, assessed by CADE. Merger case no. 08012.008378/2011-95.

²⁰ Acquisition of Alesat by Ipiranga, assessed by CADE. Merger case no. 08700.006444/2016-49.

²¹ Deluca goes further, arguing that WebJet would fit the definition of disruptive innovator proposed by Owinings and attributing the problem to the unclear definition of the maverick concept. See DELUCA, Patrícia Serson. O Papel de Empresas Maverick no Controle de Concentrações Econômicas. **Revista do IBRAC**, v. 24, n. 2, p. 142-163, 2018. Disponível em: <https://revista.ibrac.org.br/index.php/revista/article/view/156>. Acesso em: 4 dez. 2024.

²² Acquisition of minority sharehold of XP by Itaú, assessed by CADE. Merger case no. 08700.004431/2017-16.

²³ BRASIL. Ministério da Justiça. Conselho Administrativo de Defesa Econômica. Superintendência-Geral do CADE. Coordenação-Geral de Análise Antitruste 1. **Parecer Técnico n. 138 – Caso 08700.010688/2013-83**. Disponível em:

https://sei.cade.gov.br/sei/modulos/pesquisa/md_pesq_documento_consulta_externa.php?xgSJD3TI7Rh0CrGYtJb0A1Onc6JnUmZgGFW0zP7uM_isGtU22-m8ewnOSdIvPH-yVwcJSMOFbxNuj32YrsONkpOrH_83hgsRJtNlaBxWRPhirly8vGwO2ryQ0bs3EGh. Acesso em: 4 dez. 2024.

²⁴ According to CADE's General Superintendence, Rodopa more than doubled its production between 2010 and 2013. BRASIL. Ministério da Justiça. Conselho Administrativo de Defesa Econômica. Superintendência-Geral do CADE. Coordenação-Geral de Análise Antitruste 1. **Parecer Técnico n. 138 – Caso 08700.010688/2013-83**. Disponível em:

https://sei.cade.gov.br/sei/modulos/pesquisa/md_pesq_documento_consulta_externa.php?xgSJD3TI7Rh0CrGYtJb0A1Onc6JnUmZgGFW0zP7uM_isGtU22-m8ewnOSdIvPH-yVwcJSMOFbxNuj32YrsONkpOrH_83hgsRJtNlaBxWRPhirly8vGwO2ryQ0bs3EGh. Acesso em: 4 dez. 2024.

growth following the publication of the New Competition Law in 2012²⁵, other characteristics are also assessed to determine whether a firm is a maverick. In some cases, the authority associated the characterization of mavericks with the presence of innovation.

Bromfield & Olczak²⁶ looked at cases assessed by the European Commission between 2000 and 2013. Out of the 274 cases that were not cleared in Phase 1 and had an English report, 22 cases (8%) applied the maverick concept. Among these, the EC established the existence of a maverick in five cases, while in the other 17, the authority either studied the possibility of the firm being a maverick or discussed the potential for mavericks in the segment.²⁷ The five mavericks shared a common characteristic: they were small firms with market shares around 9%. The authors argue that the identification was usually based on recent increases in market shares. In Linde/BOC (EC – 2006), there were two potential mavericks with aggressive pricing, but only Linde was considered a maverick, as the other firm did not have the ability and incentive to expand like Linde.

Owings²⁸ examined U.S. case law, including both the Department of Justice and the Federal Trade Commission, from 2009 to 2011. Five out of the 82 cases challenged by the agencies were based, at least partially, on the role a firm played as a disruptive force in the industry: Ticketmaster/Live Nation (DoJ – 2010)²⁹, Dean Foods/Foremost Farms (DoJ - 2010)³⁰, LabCorp/Westcliff (FTC - 2010)³¹, H&R Block/TaxACT (DOJ – 2011)³², AT&T/T-Mobile (DOJ – 2011)³³. The common element in these cases was pricing below competitors.

²⁵ BRASIL. **Lei n.º 12.529, de 30 de novembro de 2011**. Estrutura o Sistema Brasileiro de Defesa da Concorrência; dispõe sobre a prevenção e repressão às infrações contra a ordem econômica; altera a Lei nº 8.137, de 27 de dezembro de 1990, o Decreto-Lei nº 3.689, de 3 de outubro de 1941 - Código de Processo Penal, e a Lei nº 7.347, de 24 de julho de 1985; revoga dispositivos da Lei nº 8.884, de 11 de junho de 1994, e a Lei nº 9.781, de 19 de janeiro de 1999; e dá outras providências. Brasília-DF: Presidência da República. Disponível em: https://www.planalto.gov.br/ccivil_03/ato2011-2014/2011/lei/112529.htm. Acesso em: 4 dez. 2024.

²⁶ BROMFIELD, Joseph Peter; ŌLCZAK, Matthew. The Role of the Maverick Firm Concept in European Commission Merger Decisions. **Journal of Competition Law & Economics**, Oxford University Press, v. 14, n. 2, p. 179-192, 2018. Available at: <https://ideas.repec.org/a/oup/jcomle/v14y2018i2p179-192.html>. Access in: 4 dec. 2024.

²⁷ The five cases with the existence of mavericks were T-Mobile Austria/tele.ring (EC - 2006 – Case no. IV/M.3916), Linde/BOC (EC – 2006 – Case no. IV/M. 4141), StatoilHydro/ConocoPhillips (EC – 2008 - IV/M.4919), Oracle/Sun Microsystems (EC – 2010 - IV/M.5529) and T-Mobile/Orange (EC – 2010 - IV/M.5650).

²⁸ OWNINGS, Taylor M. Identifying a Maverick: When Antitrust Law Should Protect a Low-Cost Competitor. **Vanderbilt Law Review**, v. 66, n. 1, p. 323-354, 2013. Available at: <https://scholarship.law.vanderbilt.edu/vlr/vol66/iss1/5/>. Access in: 4 dec. 2024.

²⁹ Merger between Live Nation and Ticketmaster, assessed by the US DoJ, Merger case 1:10-cv-00139.

³⁰ Acquisition of Foremost Farms by Dean Foods, assessed by the US DoJ. Merger case 1:10-cv-0059.

³¹ Acquisition of Westcliff by LabCorp, assessed by the FTC. Matter no. 1010152, Docket no. 9345.

³² Acquisition of TaxACT by H&R Block, assessed by the US DoJ. Merger case 1:11-cv-00948.

³³ UNITED STATES. Department of Justice. In the United States District Court for the District of Columbia. **Case 1:11-cv-01560-ESH Document 39 Filed 30 set. 2011**, p. 1-35. Available at: <https://www.justice.gov/atr/case-document/file/487726/download>. Access in: 4 dez. 2024.

We can conclude that maverick identification is far from consensual in both literature and practice. While different authors have presented strategies for identifying these firms, practitioners commonly adopt revealed preference strategies when assessing these acquisitions by directly evaluating maverick behavior. While CADE and the EC focus on the results of mavericks' strategies—their growth—the common element in U.S. case law is the adoption of maverick behavior itself, despite the differing strategies used by agencies to identify mavericks. Notably, other factors are also considered when concluding that a firm is a maverick, particularly in Brazilian merger control case law.

While identifying a maverick is likely the greatest challenge when assessing the acquisitions of these firms, evaluating the anticompetitive effects is far from simple. The next subsection explores the anticompetitive effects of maverick acquisitions.

b) Mavericks and anticompetitive effects

After identifying a maverick, the authority must assess the competitive impact of its acquisition, which is usually associated with coordinated effects. There are two ways a maverick acquisition usually may impact competition: (i) the elimination of these firms as independent competitors threatens competition by increasing the likelihood of coordination—known as the Maverick Theory of Anticompetitive Harm (MTAH); or (ii) if a merger involves non-maverick firms, the existence of a maverick in the industry may constrain the exercise of market power by the merged entity and prevent coordination.³⁴

Despite the association of maverick elimination with coordinated effects— as represented by the MTAH – the European Commission case law shows a different scenario. Of the five cases listed by Bromfield & Olczak (2018) where the EC identified a maverick, only in Linde/BOC (EC -2006) the authority clearly associated the case with coordinated effects: the possibility of increasing tacit collusion. In T-Mobile Austria/tele.ring (EC - 2006), StatoilHydro/ConocoPhillips (EC – 2008), and Oracle/Sun Microsystems (EC – 2010) the concept was applied in relation to unilateral effects.³⁵ In T-Mobile/Orange (EC – 2010) the main concern of the EC was the possibility of market foreclosure.

³⁴ BAKER, Jonathan B.; *Mavericks, Mergers, and Exclusion: Proving Coordinated Competitive Effects under the Antitrust Laws*. *New York University Law Review*, v. 77, n. 135, p. 135-203, apr. 2002. Available at: <https://www.nyulawreview.org/wp-content/uploads/2018/08/NYULawReview-77-1-Baker.pdf>. Access in: 4 dec. 2024.

³⁵ However, in T-Mobile Austria/tele.ring the EC did not discard the possibility of coordinated effects.

Inspired by the EC's experience, Bromfield & Olczak³⁶ argue in favor of using the maverick concept for unilateral effects analysis. They suggest it will be useful for assessing the potential repositioning or closure of the maverick in the post-merger scenario.

To conclude this section, it is important to note that there is more debate than consensus on maverick acquisitions. While various theoretical approaches have been introduced, case law tends to adopt the revealed preference strategy. However, Brazilian cases such as Gol/WebJet and Ipiranga/Alesat show that this strategy alone is not sufficient to reach consensus on identifying maverick firms. The concerns expressed by some commissioners may be addressed through a more thorough assessment of the different types of mavericks. Additionally, this typology may help authorities prevent different types of anticompetitive effects. The next section delves into these categories by discussing innovation mavericks.

3 Mavericks and Innovation

As discussed at the beginning of this paper, there are two types of mavericks: price mavericks and innovation mavericks. While price mavericks are associated with price competition, innovation mavericks are linked to innovation competition. Given the specificities of these categories, they require different assessment approaches. In this section, we delve into the particularities of innovation maverick acquisitions. First, we discuss the anticompetitive effects related to these cases, as they differ from those typically associated with maverick acquisitions. Second, we briefly explore the literature on innovation competition to gather insights for evaluating these cases. Finally, the last subsection presents the challenges of assessment.

a) Anticompetitive effects of innovation maverick acquisitions

As discussed in theory, maverick acquisitions are closely related to coordinated effects. The maverick theory of anticompetitive harm suggests that eliminating these firms increases the likelihood of coordination. This holds true for both price and innovation mavericks, as firms that engage in aggressive strategies bring competitive pressure to rivals -

³⁶ BROMFIELD, Joseph Peter; OLCZAK, Matthew. The Role of the Maverick Firm Concept in European Commission Merger Decisions. *Journal of Competition Law & Economics*, Oxford University Press, v. 14, n. 2, p. 179-192, 2018. Available at: <https://ideas.repec.org/a/oup/jcomle/v14y2018i2p179-192.html>. Access in: 4 dec. 2024.

preventing coordination - regardless of the nature of their strategies. However, innovation maverick acquisitions may also result in other types of harm.

Kokkoris & Valletti³⁷ present two channels of post-merger harm to innovation: (i) a merger might delay or discontinue the development of new products and/or (ii) reduce incentives for future innovation efforts. The first case usually relates to mergers where a specific innovation demands antitrust protection. For instance, suppose that two pharmaceutical firms are merging, both of which have medications in development (in pipeline stages) to treat a specific illness. The merger could ease the competitive pressure to bring the medication to market as quickly as possible. In the post-merger scenario, the reduced incentive to innovate may lead to delays or discontinuation of some medications. In such cases, antitrust authorities must protect that innovation to prevent that incentives to bring the product are reduced.

The second channel of harm to innovation is more closely related to our discussion. A merger involving at least one firm that engages in innovation efforts may result in reduced incentives for future innovation. For example, consider one of the merging parties is an innovation maverick - i.e., a firm that continuously and aggressively innovates in a market where innovation is not the norm. The acquisition of this firm may reduce competitive pressure to innovate if the post-merger behavior of the acquirer does not follow the strategy adopted by the maverick. Given the unique role of innovation mavericks in introducing innovations and pushing the industry forward, their elimination could cause two distinct harms: (i) reduced head-to-head innovation competition between the two parties, easing competitive pressure on each other and therefore reducing innovation incentives, and (ii) reduced overall incentives to innovate across the industry.³⁸ In both cases, the result is less innovation efforts in the future. Thus, rather than focusing on protecting the innovation itself, the authority should focus on protecting the innovator when innovation mavericks are acquired.

In AT&T/T-Mobile³⁹, T-Mobile was considered both a price and an innovation maverick. When it comes to innovation, T-Mobile consistently introduced innovations to the mobile wireless telecommunications market, pushing the industry forward. The DoJ listed

³⁷ KOKKORIS, Ioannis; VALLETTI, Tommaso. Innovation Considerations in Horizontal Merger Control. *Journal of Competition Law & Economics*, v. 16, n. 2, p. 220-261, jun. 2020. Available at: <https://doi.org/10.1093/joelc/nhaa008>. Access in: 4 dec. 2024.

³⁸ The reduction of the overall incentives to innovate due to the merger of an important innovator is one of the concerns of the European Commission when proposing its new procedure to assess innovation competition cases, the *four-layer competitive assessment*, discussed in the next subsection.

³⁹ UNITED STATES. Department of Justice. In the United States District Court for the District of Columbia. **Case 1:11-cv-01560-ESH Document 39 Filed 30 set. 2011**, p. 1-35. Available at: <https://www.justice.gov/atr/case-document/file/487726/download>. Access in: 4 dec. 2024.

innovations brought to the market by T-Mobile and emphasized that its aggressive approach to innovation would likely continue without the acquisition, based on the firm's expansion plans found in internal documents. The complaint explained both how (i) AT&T felt competitive pressure from T-Mobile and had to innovate to compete (head-to-head competition), and (ii) how, in general, rivals would have fewer incentives to invest (a reduction in overall industry innovation incentives). The DoJ decided to block the acquisition, citing the likely reduction in innovation and product variety, among other concerns.⁴⁰

Having presented the anticompetitive effects of innovation maverick acquisitions, the next subsection briefly introduces insights from the innovation competition literature.

b) Innovation Competition: a few insights for the assessment

The case law and literature do not emphasize the different particularities between price and innovation mavericks when discussing the anticompetitive effects of their acquisitions. The first key difference lies in the nature of competition. Price competition is closely tied to traditional microeconomic models: firms usually compete through quantities and prices in models found in textbooks, such as perfect competition, monopoly, and oligopoly. These models are built in static scenarios. Antitrust analysis adopts such models frequently (e.g., Cournot for quantity competition and Bertrand for price competition).⁴¹ However, innovation competition cannot be assessed in a static scenario. According to Schumpeter⁴², competition has a passive and static side—price competition—and an active and dynamic side—innovation competition. The latter is responsible for changing the economic structure through creative destruction. Assessing innovation competition requires analysts to consider future developments stemming from present-day changes in the market.

Secondly, given the dynamic nature of innovation competition, the concept of welfare pursued by authorities must shift. In price competition cases, reductions in welfare are usually measured by reductions in static allocative efficiency (and frequently productive efficiency). Short-term price increases result in a loss of efficiency and, therefore, a loss of welfare. In

⁴⁰ UNITED STATES. Department of Justice. In the United States District Court for the District of Columbia. **Case 1:11-cv-01560-ESH Document 39 Filed 30 set. 2011**, p. 1-35. Available at: <https://www.justice.gov/atr/case-document/file/487726/download>. Access in: 4 dec. 2024.

⁴¹ BUDZINSKI, Oliver. Monoculture versus diversity in competition economics. **Cambridge Journal of Economics**, Cambridge Political Economy Society, v. 32, n. 2, p. 295-324, mar. 2008. Available at: <https://ideas.repec.org/a/oup/cambje/v32y2008i2p295-324.html>. Access in: 4 dec. 2024.

⁴² SCHUMPETER, Joseph A. **Capitalism, Socialism, and Democracy**. 3rd ed. Harper Perennial Modern Thought, 2008.

contrast, assessing innovation competition involves a longer time frame. While reductions in innovation may affect short-term welfare (e.g., through the discontinuation of a project close to market launch), harm to innovation is typically felt in the long run. A merger may delay or stop the development of a new product or reduce future innovation efforts.

Focusing on static efficiency can be detrimental to innovation: a merger that enhances the ability and incentive to innovate could be blocked due to short-term price effects, and vice versa. An alternative goal for antitrust authorities is to pursue dynamic efficiencies, which incorporate intertemporal elements into static allocative efficiencies and protect innovation incentives.⁴³ Therefore, proper assessments of innovation competition cases must focus on the long term and consider dynamic efficiencies.

Thirdly, given the unique characteristics of innovation competition, antitrust procedures must adapt to ensure a proper fit. For instance, market definition cannot be approached through traditional methods like the Hypothetical Monopolist Test, as in some innovation competition cases, there may be no product market (e.g., firms developing a new medical treatment and racing to be first on the market).⁴⁴ Both literature and practice have begun addressing this challenge.

Recognizing the limitations of the traditional assessment for some innovation competition cases, authors such as Gilbert & Sunshine⁴⁵, Katz & Shelanski⁴⁶, Sidak & Teece⁴⁷, and Kerber⁴⁸ propose adopting a capabilities-based assessment. This approach includes firms with the capability to innovate as part of the relevant innovation market and assesses the competitive significance of these firms based on their capabilities. In practice, the European Commission has introduced a new framework for assessing innovation competition cases. The

⁴³ BAUMOL, William; ORDOVER Janusz., Antitrust: Source of Dynamic and Static Inefficiencies? *In*: JORDE, Thomas M.; TEECE, David J. **Antitrust, Innovation, and Competitiveness**. New York: Oxford University Press, 1992.

⁴⁴ The Hypothetical Monopolist Test is a commonly applied method to define relevant markets. This test simulates a hypothetical monopolist and checks whether it is able to profitably apply a small but significant non-transitory price increase in the market. See BRASIL. Ministério da Justiça. Conselho Administrativo de Defesa Econômica. **Guide for Horizontal Merger Review**, jul. 2016, p. 47. Disponível em: <https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/guias-do-cade/Guide-for-Horizontal-Merger-Review.pdf>. Acesso em: 4 dez. 2024.

⁴⁵ GILBERT, Richard J.; SUNSHINE; Steven C. Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets. **Antitrust Law Journal**, v. 63, n. 2, p. 569-601, 1995.

⁴⁶ KATZ, Michael; SHELANSKI, Howard A. Mergers and Innovation. **Antitrust Law Journal**, Winter 2006, v. 75, n. 1, p. 1-85, 22 aug. 2006. Available at: <https://ssrn.com/abstract=894346>. Access in: 4 dec. 2024.

⁴⁷ SIDAK, J. Gregory; TEECE, David J. Dynamic Competition in Antitrust Law. **Journal of Competition Law & Economics**, v. 5, n. 4, p. 581-631, dec. 2009. Available at: <https://academic.oup.com/jcle/article/5/4/581/755200>. Access in: 4 dec. 2024.

⁴⁸ KERBER, Wolfgang. Competition, Innovation and Competition Law: Dissecting the Interplay. **MAGKS Joint Discussion Paper Series in Economics**, n. 42, 2017. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3051103. Access in: 4 dec. 2024.

four-layer competitive assessment was first applied in Dow/DuPont (EC – 2017) and addresses price and innovation competition simultaneously.⁴⁹

The three aspects mentioned here are critical for the assessment of innovation maverick acquisitions. First, the effects must be addressed by considering a dynamic scenario: the elimination of a maverick results in reduced innovation efforts in the future, which is a harm felt over an unforeseeable time horizon. Second, authorities must pursue dynamic efficiencies: a strict focus on allocative and productive efficiency may be detrimental to innovation. Despite the recent growth of the debate on non-price effects, antitrust remains focused on price competition. However, given the long-term implications, a pure innovation maverick (without aggressive pricing) needs the same protection as a price maverick. Third, assessments must account for the specificities of innovation competition. For example, the presence of firms with similar innovation capabilities outside the relevant market must be considered, as they may have the incentive and ability to enter the market and assume the role of the maverick, mitigating the effects of the acquisition.

c) Challenges for the assessment of innovation maverick acquisitions

Assessing maverick acquisitions presents many challenges. As discussed in Section 2, both identifying and evaluating these cases are difficult tasks for authorities. When it comes to innovation mavericks, the challenges are even greater. This subsection explores potential ways to undertake these tasks.

Case law shows that the revealed preferences strategy is commonly used in practice to identify a maverick. A similar approach could be applied to innovation mavericks by evaluating past experiences in innovation and the growth of the firm as a proxy for their success. Furthermore, agencies can investigate whether rival firms have innovated in response to innovations introduced by the maverick. For example, in AT&T/T-Mobile, the DoJ listed the various innovations introduced by T-Mobile.⁵⁰

⁴⁹ There are two price/product competition layers (between incumbent products and late-stage products in development) and two innovation competition layers (between products in development in earlier stages and related to capabilities to innovate in earlier stages. See EUROPEAN COMMISSION. **Case M.9461 - ABBVIE / ALLERGAN. Regulation (EC) n. 139/2004 Merger Procedure**, Brussels, 10 jan. 2020, p. 1-59. Available at: https://ec.europa.eu/competition/mergers/cases/decisions/m9461_1187_3.pdf. Access in: 4 dec. 2024.

⁵⁰ Such as the first Android headset, Blackberry wireless e-mail, national Wi-fi hotspots access, among others. See UNITED STATES. Department of Justice. In the United States District Court for the District of Columbia. **Case 1:11-cv-01560-ESH Document 39 Filed 30 set. 2011**, p. 1-35. Available at: <https://www.justice.gov/atr/case-document/file/487726/download>. Access in: 4 dec. 2024.

However, this strategy has limitations, as identification may be easier in some markets than others. Consider two markets: in the first, innovation is not the norm, and a specific firm not only innovates but does so aggressively and continuously, challenging the market with new and improved products. The firm's success in these innovations leads to increased market share over time. In the second case, a potential maverick continuously invests in innovation, but the market is innovation-intensive (e.g., pharmaceuticals), meaning innovation is a key variable for competition and survival. In the first example, identification is easier because innovation itself is a disruptive strategy if done intensively. In the second case, the analyst must distinguish between a regular innovator and an innovation maverick.

Before discussing the assessment of these acquisitions, two observations can be made. First, not all mavericks that are disruptive innovators are innovation mavericks. Consider Itaú/XP (CADE – 2018) as an example. XP introduced a new business model, but the behavior that led to its characterization as a maverick was related to its lower fees and higher profitability.⁵¹ An innovation maverick, by contrast, is a firm whose disruptive behavior is associated with the continuous introduction of innovations. Second, a maverick can be both a price and innovation maverick. In AT&T/T-Mobile, the DoJ emphasized how T-Mobile's strategy was based not only on aggressive pricing but also on innovation, which exerted competitive pressure on other players.

Once an innovation maverick is identified, the next step is to assess whether the merger may result in anticompetitive effects. As seen above, the removal of an innovation maverick may reduce future innovation efforts in two ways: (i) reduced innovation competition between the two firms and (ii) reduced incentives to innovate across the industry. While the first case represents a clear unilateral effect, the second is better defined as a coordinated effect.

The first type of anticompetitive effect relates to the loss of competition between the acquirer and the acquired. The potential loss in head-to-head competition is often assessed in price competition cases using pricing pressure indexes such as GUPPI (Gross Upward Pricing Pressure) and UPP (Upward Pricing Pressure) when product differentiation exists.⁵² These models assess the impact of the elimination of negative externalities imposed by firms on each

⁵¹ BRASIL. Ministério da Justiça e da Segurança Pública. Conselho Administrativo de Defesa Econômica (CADE). **Anexo ao Parecer Técnico no. 24 – Processo 08700.004431/2017-16**. Available at: https://sei.cade.gov.br/sei/modulos/pesquisa/md_pesq_documento_consulta_externa.php?xgSjhd3TI7Rh0CrGYtJb0A1Onc6JnUmZgGFW0zP7uM_isGtU22-m8ewnOSdlvPH-yVwcJSMOFbxNuj32YrsONkpOrH_83hgsRJtNlaBxWRPhirly8vGwO2ryQ0bs3EGh. Acesso em: 4 dez. 2024.

⁵² FARRELL, Joseph; SHAPIRO, Carl. Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition. **The B.E. Journal of Theoretical Economics - Policies and Perspectives**, v. 10, n. 1, p. 1-41, 2010. Available at: <https://faculty.haas.berkeley.edu/shapiro/alternative.pdf>. Access in: 4 dec. 2024.

other when competing. A similar concept for innovation is the Innovation Diversion Ratio, which measures how much an innovation improves one firm's profits at the expense of the other.⁵³ This index could be applied to assess the effects of the acquisition on the firms' head-to-head competition, considering their historical success in introducing innovations.

The second type of anticompetitive effect relates to the overall industry. The removal of an innovation maverick can affect innovation across the entire industry. Some rivals may innovate in response to the maverick's behavior, and the removal of the maverick will reduce the threat posed by continuous innovation. Identifying this type of harm is more complex and may involve determining whether innovations introduced by rivals can be classified as "catching up" strategies to avoid losing market share to the innovation maverick. The elimination of the maverick increases the likelihood that rivals will reduce their innovation efforts, representing a coordinated effect in innovation.

4 Concluding Remarks

Price and innovation mavericks are distinct and require specific assessments. The first type of firm is more traditional: companies that engage in aggressive pricing to gain market share. Innovation mavericks, though less common, pose a potentially greater risk when acquired. These companies challenge their rivals by continuously introducing new and improved products, business models, and technologies, forcing competitors to innovate to avoid falling behind. Innovation mavericks play a fundamental role in disrupting markets.

Current antitrust frameworks tend to emphasize price competition, an approach that can be detrimental to innovation. Although recent efforts toward focusing on non-price effects suggest that authorities are willing to update their procedures, this area of antitrust remains underdeveloped. A key argument in this paper is the need to adopt dynamic efficiencies and innovation competition analysis to safeguard the role played by innovation mavericks. By giving these firms special antitrust protection, authorities not only reduce the likelihood of coordination but also prevent the long-term consequences of diminished innovation incentives.

This paper takes the first step in advocating for better assessment of innovation maverick acquisitions, considering their unique role in promoting innovation. We argue in favor

⁵³ FARRELL, Joseph; SHAPIRO, Carl. Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition. *The B.E. Journal of Theoretical Economics - Policies and Perspectives*, v. 10, n. 1, p. 1-41, 2010. Available at: <https://faculty.haas.berkeley.edu/shapiro/alternative.pdf>. Access in: 4 dec. 2024.

of a capabilities-based assessment, which is a suitable approach for addressing the competitive significance of these firms by focusing on their innovation capabilities as strengths.

The next steps for antitrust involve refining the approach to better identify and protect innovation mavericks. Developing tools to distinguish between regular innovators and innovation mavericks in innovation-intensive markets is a challenge that should be part of the research agenda. Exploring the economics of innovation literature is an excellent starting point for this challenge.

In conclusion, protecting innovation is crucial to ensuring that industries remain vibrant. By preserving the competitive pressure exerted by innovation mavericks, antitrust policies align with the way competition functions in many modern markets, which are increasingly driven by innovation rather than price competition. Preserving competition means not only safeguarding today's prices but also fostering tomorrow's innovations.

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