## Submission to the ACCC regarding the Draft Merger Assessment Guidelines

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In this submission, we provide feedback on the ACCC's draft merger assessment guidelines based on our training and experience as economists. Simon Loertscher is a Professor of Economics at the University of Melbourne, and Leslie M. Marx is a Distinguished Professor of Economics at Duke University. Our vitae are available here: CV-Loertscher and CV-Marx. As shown in our CVs, we are two-time recipients of Australian Research Council Discovery Project Grants pertaining to Industrial Organization and Competition Policy.

We are pleased to offer feedback grounded in our academic research and hope that it is useful to the ACCC. We adhere to the understanding that *coordinated effects* refer to effects of a merger that involve changes in the number of firms *and* their conduct—for example, from static Nash equilibrium to collusion—and *unilateral effects* refer to merger effects that arise when only the number of firms changes while conduct stays the same (e.g., static Nash equilibrium in the same oligopoly game before and after the merger).

With this in mind, we make two points related to coordinated effects and one that pertains to unilateral effects. Specifically, we first highlight insights from our research on coordinated effects (Loertscher and Marx, 2021), which considers departures from static Nash equilibrium play and develops methods to quantify the risk of coordination and to define maverick firms. Second, we propose to broaden the analysis of and scope for coordinated effects by considering changes in the oligopoly game that may adversely affect consumers even in static (or one-shot) Nash equilibrium play (see, e.g., Byrne et al., 2025). This allows us to highlight a challenge for predicting the competitive effects of price transparency. Third, we draw attention to consumer harm that may arise from mergers even when no rival firms are involved because the merger can allow the merged firm to price-discriminate in a way that is not available to the standalone firms (see, e.g., Loertscher and Muir, 2024).

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- 1. Coordinated effects as departures from static Nash equilibrium play: As stated in the draft guidelines, a merger raises concerns for "coordinated effects if it makes coordination among firms more likely, more complete, or more sustainable" (para. 3.2). Further, the draft guidelines note that a merger may increase the potential for coordinated effects by (i) reducing the number of competing firms; (ii) removing or weakening competitive constraints (such as by removing a 'maverick'); or (iii) making the market more vulnerable to coordination (para. 3.5).
  - (a) Vulnerability to coordination: Regarding point (iii), the ACCC could offer further guidance regarding how a merger might make a market more vulnerable to coordinated effects. The economics literature offers guidance on this point. Specifically, Loertscher and Marx (2021) identify factors that affect the vulnerability of a market to coordination among a subset of the firms in the market, including that the market is:
    - more vulnerable if the potentially coordinating firms are relatively large and relatively symmetric with one another;
    - more vulnerable if there is relatively little competition from firms outside the set of potentially coordinating firms;
    - less vulnerable if downstream buyers have greater buyer power or if the downstream buyers are vertically integrated.

As an **action item** for the draft guidelines, the ACCC could expand point (iii) in paragraph 3.5 to say instead: making the market more vulnerable to coordination, such as, for example, creating a set of relatively large and symmetric firms that are unlikely to be significantly constrained by outside competition or buyer power.

(b) Maverick firms: The draft guidelines describe maverick firms loosely as firms that are "known as vigorous and effective competitors" (para. 5.2). In the context of coordinated effects, the key aspect of a maverick firm is that the market is not at risk for coordination among a particular subset of firms when the maverick firm is present, but, should the maverick be removed from the market, the market would be at risk for coordination among that subset of firms. By this way of thinking, a firm's "maverick status" is specific to the subset of firms whose coordination the maverick disrupts. Further, while the elimination of a maverick would risk coordination, the acquisition of a maverick by a firm in the market need not necessarily increase the risk of coordination. In Loertscher and Marx (2021, Prop. 4), we provide conditions under which the acquisition of a maverick increases the risk of coordinated effects, and

conditions under which it does not. For example, if a maverick is acquired by a relatively small firm, the increased symmetry in the post-merger market can facilitate coordination, but if a maverick is acquired by a relatively large firm, the increased asymmetry in the post-merger market can reduce the risk of coordination.

In light of this, an **action item** could be to revise the final sentence of paragraph 5.3 to say: If the maverick is no longer an independent firm as a result of a merger, then a *subset* of the remaining firms may find it easier to coordinate, and the merger may make coordination among that subset more likely, more complete, or more sustainable.

- (c) Quantification: Overall, the comments above highlight the potential value of a more systematic approach to coordinated effects analysis. The approach developed in Loertscher and Marx (2021) focuses on coordination that takes the form of a market allocation. In that context, one can quantify the extent to which a market allocation among a subset of firms would be profitable (or unprofitable) and can construct an index that identifies whether a particular merger would cause a market that is not at risk for coordination to become at risk.<sup>3</sup> The coordinated effects index developed in that paper provides a way to evaluate and screen mergers for whether they should be challenged based on a coordinated effects theory of harm. The approach also permits a clear-cut definition of a maverick firm and a test for whether a given firm is a maverick, relative to a set of potentially coordinating firms.
- 2. Coordinated effects in one-shot Nash equilibrium: While the traditional approach to coordinated effects tends to focus on whether a merger facilitates coordination or collusion, another way to conceptualize coordinated effects (or non-unilateral effects) is in terms of whether the merger "changes the game" being played by firms in the market. To explain this, we begin with a brief overview of how economists typically model oligopoly markets.
  - (a) Oligopoly: A typical economic approach to conceptualizing oligopoly competition is through a model in which there are some number of firms that participate in a "game," in the sense of game theory. It is assumed that in each period, each firm in the market independently makes some strategy choice, which might be a quantity or price or quality or investment, and the set of all choices made by all the firms then jointly determine the profit that each firm

<sup>&</sup>lt;sup>3</sup>As noted in Sokol and Sullivan (2024, p. 273), "academics and enforcers have stigmatized unquantified predictions of harm as poor evidence in merger cases."

gets in that period. Economists use the notion of the equilibrium of a game to predict what the firms' choices will be in each period. For example, in a one-shot Cournot oligopoly (Cournot, 1838; Farrell and Shapiro, 1990), firms are viewed as simultaneously and independently choosing their quantities, and the equilibrium notion is that of a Nash equilibrium.

- (b) Unilateral effects: In the context of the oligopoly model, we can view unilateral effects as describing the change in outcomes in a market when the number of firms in the market is reduced but when the game being played, the set of strategic choices considered by the firms, and the equilibrium notion are held constant. The unilateral effects arise because with a smaller number of firms playing the game, in equilibrium each individual firm makes a different strategic choice, which leads to different market outcomes.
- (c) Coordinated effects: Turning to coordinated effects, one can conceptualize coordinated effects as being different from unilateral effects because they involve a change in the game in the sense that (i) new strategic choices are introduced, (ii) the information structure is altered, and/or (iii) the nature of the equilibrium is changed. To make this concrete, consider the ACCC action in Informed Sources, which required Coles to exit the Informed Sources platform. As shown in Byrne et al. (2025), price data indicate that the change in market structure resulting from the exit of Coles from the platform led to a change in the nature of the game being played in the industry. With Coles no longer providing its prices electronically to the platform, Informed Sources redirected resources to manually collect Coles' prices and provide them electronically to the other retailers. As a result, while Coles was no longer able to easily observe the prices of its rivals, its rivals could observe Coles' prices. This led to Coles acting as the price leader in the market, with others acting as followers. Thus, the changes to the market structure led to a change in the nature of the game being played by the firms in the market. If one conceptualizes coordinated effects as relating to a change in the game, then these effects would be categorized as coordinated effects.

Points 1 and 2 reveal a tension. A merger (or merger remedy) that results in reduced price transparency in a market has the potential to make anticompetitive coordination in the market more challenging, which would be good for consumers, but it also has the potential to trigger a change in the game being played, which could potentially be bad for consumers. This suggests that it might be appropriate to allow some additional nuance in paragraphs 3.10–3.12 on "Transparency." While transparency can facilitate anticompetitive coordination in a repeated-game context,

the lack of transparency can facilitate anticompetitive leader-follower equilibrium in a price-setting static-game context. Thus, it seems important to distinguish whether concerns about coordination arise from Point 1 or from Point 2.

As an **action item**, the ACCC could change the first sentence of paragraph 3.12 to say: Markets do not need to be fully transparent to all firms for coordinated conduct to arise, but there must be some mechanism for monitoring and detecting deviations from the coordinated outcome. As another **action item**, the ACCC could add to the end of paragraph 3.10, the sentence: The competitive effects of transparency can differ depending on the nature of competitive interaction.

3. Consumer harm without rival or competitive effects: The draft merger guidelines emphasize the importance of rivalry for competitive outcomes. Without disagreeing, we think it is important to draw attention to the possibility that downstream buyers can be harmed from a merger between upstream firms that, prior to the merger, were independent in the sense that the cross-price elasticities of the demands for their products were zero. Consumer harm can arise if, post merger, the merged firm, which now offers multiple products, price-discriminates in the sale of its products.<sup>4</sup>

As a case in point, consider the merger between two online platforms whose user segments, for the sake of the argument, do not overlap with the market of interest, which we take to be online advertisements. Prior to the merger, ads are priced independently at each platform. Post merger, the integrated platform optimally offers a baseline ad, which leaves the advertiser in the dark as to the user segment to which the ad will be offered. For a price premium, the advertiser can get a premium product, whereby it is assured that the ad will be shown to the consumer segment in which it is most interested. This post-merger price discrimination harms the buyers of online advertisements.

Analogous harm can arise to workers through the merger of two seemingly independent employers.

As an **action item**, in paragraph 4.27, the ACCC could add the possibility of price discrimination that becomes available due to the merger, and following paragraph 4.27 and Box 6, the ACCC could add an additional box: Box 7 Example of price discrimination: Two online platforms serve different types of customers and sell

<sup>&</sup>lt;sup>4</sup>The formal background for these statements is a Hotelling model with linear transportation costs, uniformly distributed consumers and products at either end of the Hotelling line. For intermediate gross values of consumption, two standalone firms do not cover the whole market, and hence their markets appear independent. Post merger, the multi-product firm offers a baseline product and premium products, which are priced higher than pre merger. See Loertscher and Muir (2024).

advertising based on those customer types. After the merger, the combined platform can price discriminate by requiring premium prices for an advertiser to access its preferred demographic.

As an additional **action item**, the ACCC could add a sentence to the end of paragraph 13 of Appendix 1 saying: In some settings, the merger of firms operating in separate markets can lead to anticompetitive effects when, for example, the merger results in price discrimination by the merged entity that harms counterparties.

## References

- Byrne, D. P., N. de Roos, M. S. Lewis, L. M. Marx, and X. Wu (2025): "Asymmetric Information Sharing in Oligopoly: A Natural Experiment in Retail Gasoline," *Journal of Political Economy*, 133.
- Cournot, A. (1838): Rechereches sur les Principles Mathématiques de la Théorie des Richesses, Paris.
- FARRELL, J. AND C. SHAPIRO (1990): "Horizontal Mergers: An Equilibrium Analysis," *American Economic Review*, 80, 107–126.
- LOERTSCHER, S. AND L. M. MARX (2021): "Coordinated Effects in Merger Review," *Journal of Law & Economics*, 64, 705–744.
- LOERTSCHER, S. AND E. V. Muir (2024): "Optimal Hotelling Auctions," Working Paper, University of Melbourne.
- SOKOL, D. D. AND S. P. SULLIVAN (2024): "The Decline of Coordinated Effects Enforcement," Florida Law Review, 76, 265–319.