

MaCCI Letter

Research Highlights in 2020

Volker Nocke on **Merger Policy in Dynamic Markets**

Most analyses of optimal horizontal merger policy in the economics literature are static and focus on the short-run price effects of mergers. But many real-world mergers occur in markets in which dynamic issues are a central feature of competition among firms. As a result, antitrust authorities are regularly confronted with the need to consider likely future effects of a merger on an industry's evolution when deciding whether to approve the merger.

Mermelstein, Nocke, Satterthwaite and Whinston (2020) study optimal merger policy in a dynamic setting in which investment plays a central role, as the presence of economies of scale presents firms with the opportunity to lower their average and marginal costs through capital accumulation. These scale economies are also the source of merger-related efficiencies, as a combination of firms' capital through merger lowers average and marginal costs. In such a setting, an antitrust authority's merger approval decisions must weigh any increases in market power against the changes in productive efficiency caused by a merger. Approval of the merger will lower production costs immediately by increasing the scale of the merged firm ("external growth"), which may mean that there is an immediate increase in welfare. However, if the merger is rejected, the firms that wished to merge might instead invest individually to gain scale and lower their costs over time ("internal growth"). Moreover, rivals' investments may change as a result of the merger, altering their efficiency and pricing. Finally, while approval or disapproval of a particular merger may affect welfare, merger policy can alter firms' pre-merger investment behaviors, since those behaviors may be affected by the likelihood that mergers will be approved in the future.

Mermelstein, Nocke, Satterthwaite and Whinston (2020) develop and computationally solve a dynamic model in which forward-looking Cournot firms invest in capital to produce a homogeneous product. The model has three significant innovations relative to previous computational dynamic industry models. First each firm in each period can flexibly decide how many additional units of capital it wishes to purchase. Second, this investment

technology is (approximately) merger neutral in the sense that the investment opportunities available in the market are unchanged following a merger, offering a much more attractive setting for studying merger policy than the original Ericson and Pakes (1995)/Pakes and McGuire (1994) model. Third, Mermelstein, Nocke, Satterthwaite and Whinston (2020) introduce an antitrust authority as an active, maximizing player that cannot commit to its future merger approval policy. Because of the time inconsistency difficulties that arise in dynamic games the authority is unable to achieve as high a level of welfare as an authority that can commit would be able to achieve.

Mermelstein, Nocke, Satterthwaite and Whinston (2020) make five key observations:

First, the desirability of approving a merger can depend importantly on the investment behavior that will follow if it is or is not approved. However, this involves more than just the behavior of the merging firms, as the investment behavior of outsiders to the merger (here, new entrants) can have significant welfare effects. In particular, when entrants (or, more generally, small firms) have higher investment costs than large established incumbents, entry for buyout behavior can impose significant welfare losses and make merger approvals much less attractive for an antitrust authority.

Second, in the other direction, investment behaviors can be greatly influenced by firms' beliefs about future merger policy. Importantly, when the antitrust authority adopts a less restrictive policy, this may spur entry for buyout behavior by firms seeking to be acquired.

Third, the inability to commit may be costly for an antitrust authority. In fact, in cases in which aggregate value is the true social objective, it can often be better to endow the antitrust authority with a consumer value objective (which roughly corresponds to the objective of most antitrust authorities, including the U.S. and EU).

Fourth, the optimal antitrust policy for maximizing aggregate value in our model can differ significantly from the optimal static policy that considers a merger's effects only at the time it would be approved, although it may be either more or less permissive than the static policy.

Finally, externalities on rivals arising from mergers in markets with more than two firms can have significant effects on firms' investment incentives and thereby shape the antitrust authority's optimal policy.

Mermelstein, Ben, Volker Nocke, Mark A. Satterthwaite and Michael D. Whinston (2020), Internal versus External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy, Journal of Political Economy, vol. 128(1), 301-341.

Thomas Fetzter on Due Process in Antitrust Enforcement: Normative and Comparative Perspectives

As part of a MaCCI-sponsored research projekt MaCCI Director Thomas Fetzter (together with Professor Christopher S. Yoo (University of Pennsylvania School of Law and Prof. Huang-Yong (UIBE, Beijing) finished a paper on the importance of due process in antitrust enforcement and the benefits of strong procedural protection. They recommend reforms to enforcement procedures that promote reasoned decisionmaking, fairness to the parties and transparency.

By comparing the enforcement policies of China, the European Union, and the United States, the authors call for better disclosure of evidence, participation of legal counsel, and protection of the procedural and substantive rights of the respondent in the investigation process. In conducting evidence review and arriving at punitive decisions, the enforcement agency should establish a separation between investigatory and adjudicatory functions. Finally, the issued punishment decision should contain more comprehensive information and be subject to judicial review of the court. While the already existing guidelines and best practices are helpful, they are pitched at a high level of generality and stop short of detailed application to national law. This article strives to fill that void by engaging in a detailed comparison of procedures employed by competition law officials in China, the European Union (EU), and the United States (U.S.) and making nine recommendations that would improve due process.

Yoo, Huang, Fetzter and Jiang conclude that although agencies are powerful instruments, they also threaten due process, transparency, and even rational decision-making – the main advantage of their existence. Imposing procedural restraints on enforcement agencies can help countries reap the benefits of antitrust laws without incurring the social costs that unrestrained agencies impose. The jurisdictions in China, the EU, and the U.S. all three have room for improvement in pursuing rational, fair, and transparent antitrust enforcement regimes. The procedures proposed in this article can help bolster the three

jurisdictions' systems. If China, the EU, and the U.S. can strike the right balance, the global economy will have much to celebrate in the coming years.

The comparative law research project by Fetzer, Yoo, and Huang will be continued in 2021 with a joint paper on the importance of data in competition law cases in Europe, the U.S., and China.

Yoo, Christopher S., Thomas Fetzer, Shan Jiang and Yong Huang (forthcoming), Due Process in Antitrust Enforcement: Normative and Comparative Perspectives, Southern California Law Review.

Bastian Krieger on **Unbundling, Regulation, and Pricing: Evidence from Electricity Distribution**

Unbundling of vertically integrated utilities (VIU) has become a major instrument when it comes to the regulation of network industries in many jurisdictions around the globe. Given that the network represents an essential input for downstream retailers, VIUs may have incentives to disadvantage retail competitors by setting excessively high grid charges, which the VIUs themselves can cross-subsidize. Thus, unbundling of the network stage intends to eliminate incentives for price discrimination against rivals and to foster competition in the retail segment.

In contrast to the extreme form of full ownership unbundling, which may destroy vertical synergies, legal unbundling represents a softer regulation, which requires the former VIU to disintegrate its distribution network into a new legal entity. Legal unbundling thus intends to decrease discrimination incentives and foster downstream competition by strengthening the formal independence of the distribution system operator, while at same time, it may partly retain vertical economies. Nevertheless, the idea of unbundling, is still subject to contentious debate, as there is much empirical evidence that it eliminates economies of vertical integration, though evidence on its overall price effects is still lacking.

The authors study the effect of legal unbundling on grid charges using panel data of German electricity utilities for the period 2005–2014 by the means of a difference-in-differences approach. They make use of the fact that only firms with more than 100,000

customers had to legally unbundle, and also exploit the variation in the timing of the implementation of unbundling measures. They find that the implementation of legal unbundling leads to a decrease in distribution grid charges by 5%–9%, depending on the form of price regulation in place (rate-of-return or incentive regulation). Their findings corroborate the hypothesis that legal unbundling is indeed effective in limiting the incentives for price discrimination against downstream rivals.

The analysis extends the relatively limited literature on the potential benefits of unbundling in general and of legal unbundling in particular. Given that the loss of vertical economies should become minimized with legal unbundling, while it still has a price decreasing effect, our findings suggest that legal unbundling may indeed represent a “golden mean” between the two extremes of ownership unbundling and vertical integration. From this perspective, our results are “good news” to many jurisdictions that already apply (e.g. most EU member states and many US states) or are planning on introducing (e.g. Japan) legal unbundling in combination with incentive regulation.

Heim, Sven, Bastian Krieger and Mario Liebensteiner (2020), Unbundling, Regulation, and Pricing: Evidence from Electricity Distribution, The Energy Journal 42. Special Issue.

Selected MaCCI News in 2020

December 2020: Innovation Economists Meet for Two-Day Virtual Workshop

MaCCI co-organized the second CRC TR 224-MaCCI-ZEW Workshop "Economics of Innovation" that was held online on December 9 and 10. Current and former members joined a list of economists to present and discuss recent research on the economics of innovation. Prof. Monika Schnitzer, LMU Munich and member of the German Council of Economic Experts, and Shane Greenstein, Harvard Business School, rounded off the event with two keynote lectures.

November 2020: MaCCI Competition and Regulation Day

This year's MaCCI Competition and Regulation Day was hosted by the law department at the University of Mannheim. The workshop provides an annual platform for members of the departments of law and economics as well as ZEW serving to strengthen the ties between members of the university active in research related to competition and regulation. It also serves to gather feedback and improve the quality of the papers presented. Due to the pandemic the workshop was moved online and shortened slightly. The papers presented dealt with predation, algorithmic pricing, the EU commission's „New Competition Tool“ and the sanctioning of cartels.

October 2020: Virtual Seminar Series on Consumer Search

MaCCI hosted a series of virtual seminars on consumer search starting in October. The series was co-organized by MaCCI researcher Daniel Savelle.

April 2020: MaCCI Launches New Virtual Seminar Series on Privacy and Competition

MaCCI and the Collaborative Research Center Transregio 224 "EPoS" at the University of Bonn and the University of Mannheim have launched a new virtual seminar series, organized by MaCCI members Eleftheria Triviza and Bernhard Ganglmair. The scheduled papers were related to the broader topic of privacy and competition.

Upcoming Events in 2021

11.03.2021-12.03.2021: MaCCI Annual Conference

March 2021-May 2021: Mannheim Virtual IO Seminar Series

25.05.2021: MaCCI IO Day

More Information

For more information on all activities of MaCCI please check www.macci.eu.