

## MaCCI Letter 2025

Dear reader,

The tenth Annual MaCCI Letter is on your screen or in your hands. We report on a few research highlights and alert to forthcoming events.

2025 was another year full of MaCCI activities. We ran the MaCCI Annual Conference, the MaCCI Summer Institute, the MaCCI Career Day, and the MaCCI Law and Economics Conference. In addition, we had our regular Mannheim Competition Policy Forum, our seminar series with practitioners as speakers and organized several one-off events. Notably, MaCCI organized a by-invitation-only workshop in Mannheim to discuss key issues in the revision process of the EU Merger Guidelines, bringing together MaCCI researchers, external academics and members of the Chief Economist Team of the European Commission's DG Competition. Some talks from a few MaCCI events have been recorded and are available on YouTube. Please subscribe to our channel if you want to stay informed, as we occasionally add recordings.

2026 promises to be another very active year for MaCCI. For the 2026 MaCCI Annual Conference, we have a great set of submissions and keynote speakers Cani Fernandez (CNMC) and Jean Tirole (TSE). Apologies to those submitters we could not include because of space constraints. Many economics consultancies as well as the Bundeskartellamt and the German Monopolies Commission will be present at the 2026 MaCCI Career Day. Once again, we include a panel on "Working as a competition economist". The MaCCI Law and Economics Conference in the Fall will focus on "Industrial Policy". We will also host EARIE 2026, organized by the ZEW in cooperation with the University of Mannheim and the MaCCI Association. Several additional events are planned. Our website will contain an updated list of MaCCI activities.

We are grateful for the continuing support from the other MaCCI Advisory Board Members. MaCCI receives support from the ZEW and the University of Mannheim through a variety of funding vehicles as well as from the MaCCI Association. In addition, the MaCCI Association, a charitable foundation, supports some MaCCI activities. This support is made possible through donations. In 2025, the MaCCI Association had supporting members CRA and Solve Economics (platinum members), and Compass Lexecon, Oxera, and RBB Economics (gold members). As a general policy, the MaCCI Association is happy to accept donations from individuals, foundations, economics consultancies, and law firms.

If you are not yet on our mailing list, please drop a line to [macci@zew.de](mailto:macci@zew.de) to be included; similarly, if you change your address or wish to be removed from the list.

My thanks to everybody in the MaCCI community who has contributed to the success of MaCCI. Special thanks to Eliza Stenzhorn and Lion Holste for their dedication and their work mostly behind the scenes.

MaCCI is still up and running. Please spread the word.

Greetings,

Martin Peitz on behalf of the MaCCI Board of Directors



SCAN ME

## // Research Highlights in 2025

### **BERNHARD GANGLMAIR ON LEARNING WHEN TO QUIT: AN EMPIRICAL MODEL OF EXPERIMENTATION IN STANDARDS DEVELOPMENT**

Many research & development projects die quiet deaths long before they become visible as patents or published standards. As a result, what we typically see are the successes that make it to the finish line. The "missing mass" of abandoned ideas, however, is central to understanding innovation productivity. Why do researchers abandon (or not abandon) ongoing projects? Are abandoned projects necessarily bad, or did researchers step away from them for different reasons? And how do researchers actually learn when to cut their losses and move on?

In the paper "Learning When to Quit: An Empirical Model of Experimentation in Standards Development," Bernhard Ganglmair, Timothy Simcoe, and Emanuele Tarantino develop and estimate a dynamic model of how researchers decide whether to continue or abandon R&D projects in the context of Internet standards at the Internet Engineering Task Force (IETF). Using data on roughly 16,000 IETF proposals and all their versions, the paper models project continuation as a two phase process: a pre breakthrough experimentation phase, where teams are uncertain whether their proposal can ever reach a stage of broad consensus, and a post breakthrough polishing phase, where consensus is effectively achieved and remaining decisions concern how much to refine the standard before publication. The core object of interest is the speed of learning about project quality, captured by a breakthrough arrival rate in a two armed bandit framework combined with an optimal stopping problem. The model is estimated structurally using the observed sequence of revisions and outcomes (published vs abandoned) plus patent citations as a payoff proxy.

Empirically, the paper shows that most IETF proposals are abandoned and only about 24 percent become published standards, yet its estimates imply that ex ante roughly 59 percent of projects are "good" in the sense that they could eventually reach a stage of consensus. Conditional on a good project, the estimated probability that a revision yields a breakthrough is about 17 percent, but around two thirds of good ideas are still abandoned because the opportunity costs of continued experimentation are high relative to expected payoffs, which themselves are modest even for successful standards.

A key contribution of the paper is to use the estimated model to simulate innovation policies that change either the payoff to success (a publication prize) or the per revision cost (an R&D subsidy), holding total "budget" in expected patent citations fixed and allowing for spillovers. The paper finds that subsidies always raise research output more than prizes for a given budget, but that their welfare ranking depends on the size of spillovers. When spillovers are small, prizes are preferable because they dampen over exploration of "dry wells", while for large spillovers subsidies dominate because they encourage both more exploration and more post breakthrough refinement, which is socially valuable but privately under provided. The paper's framework is portable to other sequential innovation environments with observable revision histories (e.g., journal peer review, open source software).

Ganglmair, Bernhard, Timothy Simcoe and Emanuele Tarantino, "Learning When To Quit: An Empirical Model of Experimentation in Standards Development", *American Economic Journal: Microeconomics* 2025, vol. 17(3), 164-190.

## VOLKER NOCKE AND NICOLAS SCHUTZ ON MERGER ANALYSIS WITH MULTIPRODUCT FIRMS

In a recent article in the *RAND Journal of Economics*, Volker Nocke and Nicolas Schutz develop a new theoretical framework for the analysis of horizontal mergers between multiproduct firms in markets with differentiated products. Almost all mergers reviewed by competition authorities involve firms that sell multiple products, often with large and heterogeneous product portfolios. Yet much of the classic merger theory underlying modern antitrust practice is built on models with single-product firms or homogeneous goods. The paper provides a tractable and policy-relevant framework that helps close this gap.

The analysis is based on an oligopoly model of price competition with CES or multinomial logit demand, allowing for arbitrary heterogeneity in product qualities, costs, and firm portfolios. A key methodological contribution is the use of an “aggregative games” approach: despite the apparent complexity of multiproduct competition, each firm’s behaviour depends on rivals’ actions only through a single aggregate statistic. The framework also gives rise to a powerful “type aggregation” property, whereby all economically relevant information about a firm’s entire product portfolio can be summarized by a one-dimensional sufficient statistic. This allows mergers, including those involving cost efficiencies, quality changes, or product entry and exit, to be analysed in a unified and transparent way.

Using this framework, the paper delivers several results of direct relevance for merger control. First, it characterizes when a merger raises or lowers consumer surplus. As in classic merger models, mergers without efficiencies harm consumers, but the analysis shows how the magnitude of efficiencies required to offset market power depends systematically on the intensity of competition and the size of the merging firms. Second, embedding the static model in a dynamic setting with endogenous merger proposals, the authors show that a myopic merger approval policy—approving a merger whenever it increases consumer surplus given current market conditions—is dynamically optimal. This result extends earlier insights from homogeneous-goods Cournot models to differentiated-products price competition and provides theoretical support for consumer-surplus-based enforcement standards used in practice.

Beyond consumer surplus, the paper also studies the effects of mergers on aggregate surplus and on non-merging firms. It provides conditions under which a merger raises total welfare and shows that these conditions are generally weaker than those required for consumer surplus to increase. In addition, the authors analyse the external effects of mergers, defined as the combined impact on consumers and rival firms, and derive simple tests—based only on pre-merger market shares and demand parameters—to assess when a consumer-surplus-decreasing merger may nonetheless generate positive external effects.

Finally, the paper sheds new light on the use of concentration indices in merger guidelines. Defining the “market power effect” of a merger as its welfare impact absent efficiencies, the authors show that this effect can be approximated by the naively computed merger-induced change in the Herfindahl index. This result provides a formal justification for the prominent role played by HHI changes in merger screening by competition authorities, even in complex multiproduct environments.

Nocke, Volker and Nicolas Schutz. “An Aggregative Games Approach to Merger Analysis in Multiproduct-Firm Oligopoly.” *RAND Journal of Economics* 2025, vol. 56(3), 233–250.

## MORITZ RENNER ON HERAUSFORDERUNGEN VON PRIVATE CREDIT

Private credit – lending by funds and institutional investors outside the banking sector – has become the fastest-growing segment of corporate debt financing since the global financial crisis of 2007/2008. Originally a niche source of funding for mid-sized companies without direct access to capital markets, private credit has now expanded to large-scale corporate, transaction, and real estate finance, with global volumes estimated at over USD 2 trillion. While the economic literature has engaged with this development for some time, legal scholarship has largely treated private credit as terra incognita.

Torsten Kindt and Moritz Renner provide a comprehensive overview of the legal framework governing private credit transactions under German law. They show that private credit falls outside the strict regime of banking supervision under the KWG and is instead regulated under the KAGB framework for alternative investment funds, which – even after the recent AIFMD II amendments – remains significantly less stringent. This regulatory asymmetry raises concerns about shadow banking risks and market transparency.

Beyond supervisory law, the authors identify a range of challenges in contract law, corporate law, and insolvency law. The close, relational character of private credit financing gives rise to questions about implied duties of loyalty, the validity of market-standard clauses such as payment-in-kind arrangements and covenants under the German rules on unfair contract terms (AGB-Kontrolle), and the potential reclassification of lender claims as subordinated quasi-equity in insolvency. The article argues that these questions can only be answered adequately if the distinctive structural features of private credit – in particular the blurring of debt and equity and the concentration of creditor power – are taken into account across all relevant areas of law.

Kindt, Torsten and Moritz Renner, 2025, "Rechtliche Herausforderungen von Private Credit", *Zeitschrift für Bankrecht und Bankwirtschaft*, 2–23.

## // Selected MaCCI News in 2025

### OCTOBER 2025: 14TH MACCI LAW & ECONOMICS CONFERENCE IN MEMORY OF HEIKE SCHWEITZER

On 23 and 24 October 2025, experts in competition law and economics from academia and practice based in Germany and abroad contributed to this year's MaCCI Law & Economics Conference "Advances in Competition Law and Policy". The conference took place in honour of the former director and member of the Advisory Board of MaCCI Heike Schweitzer, who passed away last year, and featured presentations ranging from the foundation of competition law to digital market regulation and industrial policy. The rector of the University of Mannheim, Thomas Fetzner, and the president of the ZEW, Achim Wambach, reflected on Heike Schweitzer's contributions in their opening and closing remarks. The annual MaCCI Law & Economics Conference provides an international platform for exchange and discussion between academic researchers and practitioners in public authorities, legal counsel, and economic consultancies.

### OCTOBER 2025: WORKSHOP ON THE EU MERGER GUIDELINES

The European Commission is currently revising its Merger Guidelines. In this context, MaCCI, in collaboration with the Chief Economist Team of the European Commission, organized a workshop addressing key issues in the revision process. Members of the Chief Economist Team at DG Competition engaged in discussions with MaCCI researchers Jens-Uwe Franck, Volker Nocke, Martin Peitz, and Nicolas Schutz, as well as with external academics Igor Letina, Nathan Miller, Markus Reisinger, and Joel Stiebale.

### MAY 2025: MACCI IO DAY

Last year's MaCCI IO Day was held on 23 May 2025 at the University of Mannheim. More than 20 members gathered for a day of presentations and discussions on papers covering airline markets, the impact of environmental regulation on technology spillovers, the effect of IPOs on venture capital investments, and substitution patterns in social media usage.

The MaCCI IO Day is an annual workshop for members of the departments of law and economics, as well as ZEW, to present current theoretical and empirical research in the field of industrial organization in all its shades and colours.

### MARCH 2025: TWELFTH MACCI ANNUAL CONFERENCE WITH A FOCUS ON ANTITRUST AND DIGITAL ECONOMICS

On 20 and 21 March 2025, the Mannheim Centre for Competition and Innovation hosted the 14th MaCCI Annual Conference. Around 130 participants gathered to discuss current questions in research on competition and innovation. This year's program consisted of two key-note lectures and many sessions on the regulation of digital platforms, market dominance, and competition. Two panels organized by the Studienvereinigung Kartellrecht discussed the future application of Article 102 TFEU to exclusionary conduct of dominant firms, and the challenging competitive regulatory environment for merger control, foreign direct investment, and foreign subsidies. In addition, there were two more special sessions featuring recent investigations by the German Bundeskartellamt, and cases of the European Commission on merger control and state aid, respectively.

On the first conference day, Pablo Ibáñez Colomo (London School of Economics) gave the Heike Schweitzer Keynote Lecture in memory of the former member of the MaCCI Board and the MaCCI Advisory Board. In his talk, Professor Ibáñez Colomo addressed the question whether the Ordoliberal Compact is approaching its end with regards to the executive branch of competition law.

As another highlight of the conference, there was a keynote lecture by Nancy Rose (Massachusetts Institute of Technology) on the "Economics of Efficiencies in Merger Analysis". Before Professor Rose's talk, MaCCI honoured Massimo Motta (Universitat Pompeu Fabra and Barcelona School of Economics) and William Kovacic (The George Washington University), the latter of whom unfortunately could not attend the ceremony in person, for their lasting efforts and selfless commitment to MaCCI by appointing them MaCCI Honorary Fellows.

## // Upcoming Events

» 08.05.2026

**MaCCI IO Day**

» 01.06.–05.06.2026

**MaCCI Summer Institute on Competition Economics**

» 25.06.2026–26.06.2026

**24<sup>th</sup> ZEW Conference on the Economics of Information and Communication Technologies**

» 28.09.2026–29.09.2026

**DISS Workshop (Fall Edition)**

» 12.11.2026–13.11.2026

**MaCCI Law & Economics Conference**



**MORE INFORMATION**

For more information on all activities of MaCCI please check  
**[www.macci.eu](http://www.macci.eu)**