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Tilburg Law and  
Economics Center

# TILEC Annual Report 2018

**TILEC**  
**Annual**  
**Report**  
**2018**

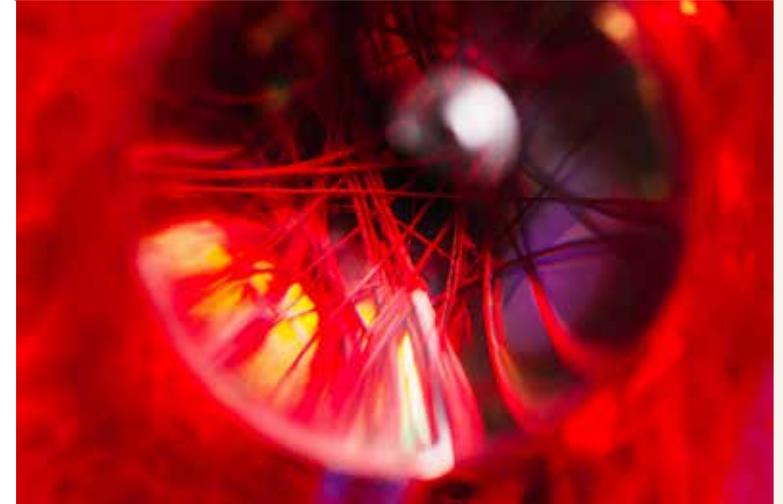
## MISSION, VISION

The Tilburg Law and Economics Center (TILEC) was created in 2003 as a joint research center of the Tilburg School of Economics and Management (TiSEM) and the Tilburg Law School (TLS) at Tilburg University.

TILEC's vision is to be, and be recognized as, a global leader in the research on governance of economic activity at the frontier between law and economics, known for its interdisciplinary method, path-breaking research output and societal relevance.

TILEC research is distinguished by the following characteristics:

- **Interdisciplinary:** TILEC research integrates law and economics together on an equal footing, or at least includes substantial input from the other discipline;
- **Innovative:** TILEC brings law and/or economics further, and opens up new perspectives. Whilst this might imply that it leaves established paths in each discipline, it remains state of the art at the technical and methodological level;
- **Fundamental:** TILEC research addresses basic questions of each discipline, including the relationship between the two disciplines and how they can mutually strengthen each other;
- **Relevant:** TILEC research is inspired by real world problems and aims to contribute to the ultimate solution of these problems.



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# TILEC celebrated its fifteenth anniversary in 2018.

The Tilburg Law and Economics Center (TILEC), a Center of Excellence at Tilburg University, celebrated its fifteenth anniversary in 2018. This was not only a year of celebration but also of intensive reflection on TILEC's new Research Program for the period 2018-2023. For this new period, we will be devoting special attention to the influence of digitalization in the governance of economic activity. We consider new technologies as important game-changers that must be taken into account when public intervention with market forces is being contemplated. Our research efforts will focus on three specific themes: (a) the design and characteristics of well-functioning institutions; (b) competition; and (c) innovation.

The research themes chosen are closely connected with one another and are expected to generate results that are relevant for more than one theme. For more information, please visit:

<https://www.tilburguniversity.edu/research/institutes-and-research-groups/tilec/research/>

At the end of 2018, after being a separate Department for five years, TILEC joined forces with the Tilburg Institute on Law, Technology, and Society (TILT), a leading institute in fields such as privacy, data protection and cybersecurity, to create a new Department that will strive to become a global player in research and education at the intersection of law, markets and technology. This merger could prove to be a catalyst for the ever-increasing generation of world-class research and education surrounding technology-related societal challenges. Lots of enthusiasm is currently leading our joint work.

In the pages that follow, you will witness that 2018 was once again a very successful year for TILEC. No less than 48 articles in high-ranked journals were published by TILEC members, exemplifying the benefits of creating an intellectually stimulating, interdisciplinary environment in which economists and legal scholars can reflect on existing concepts, test new ideas, and launch innovative projects.

TILEC's research continued to draw the attention of policy and societal circles but also to shape the thinking of public authorities. In October 2018, TILEC responded to the DG Competition call for contributions on 'Shaping Competition Policy in the Era of Digitization'. TILEC's contribution tackled all three themes set out by the call: (1) competition, data, privacy and artificial intelligence; (2) market power and digital platforms; and (3) preserving digital innovation through competition policy. You can find the contribution on TILEC website and on SSRN. Furthermore, in the recent *Ohio v American Express Co.* judgment of the US Supreme Court in June 2018, the published version of TILEC Discussion Paper 2013-09, entitled "Market Definition in Two-Sided Markets: Theory and Practice" (*Journal of Competition Law and Economics*, 10, 293-339 (2014)) was cited extensively in the Court's majority opinion. Congratulations to TILEC Members Lapo Filistrucchi, Damien Geradin and Eric van Damme (and also to their co-author, Pauline Affeldt) for this great achievement!

In 2018, we welcomed our third Ronald Coase Visiting Professor on Law and Economics, Professor Giorgio Monti of the European University Institute (EUI). Giorgio is a leading expert in competition law and a renowned scholar in the broader field of EU economic regulation. This visiting professorship, offered annually, brings to TILEC some of the leading minds in the field. For this professorship, typically addressed to full professors, we accept expressions of interest throughout the year.

Those of you who follow TILEC's activities would know that we were in the process of hiring a full Professor of Competition Law. I am delighted to announce that, as of August 2019, Giorgio Monti will be TILEC's Professor in Competition Law. With Giorgio's addition, the economic and competition law team in Tilburg will soon make its mark!

TILEC continued strengthening its ties with other academic institutions, regulatory authorities, European institutions and private companies, offering, where appropriate, informed insights in policy debates and contributing to a better understanding of complex market mechanisms and regulatory concerns. On fundamental and policy issues alike, when it comes to the role and design of institutions; competition and regulation; innovation and network industries; or international trade, our expertise is routinely sought after. We strive to make sure that the knowledge we produce is not only accessible to our fellow researchers through academic publications, but that we also disseminate it to students, market participants and policy-makers through our education programs, contract research, policy workshops and conferences, or other policy-related work.

We remain eager to engage with partners within and outside academia. If you want to hear more about TILEC's expertise and discuss sponsorship options, please contact us at: [tilec@uvt.nl](mailto:tilec@uvt.nl).

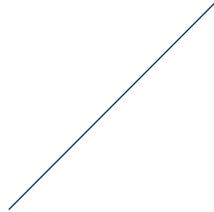
I am confident that this report on our 2018 activities will give you an accurate picture of what we do, and what we stand for. If you want to hear regularly from us, please subscribe to TILEC newsletter (<https://forms.tilburguniversity.edu/205>).

I would like to finish with a personal note: Coming September, I will be celebrating 8 years as TILEC Director; out of this period, I served five years as Head of the TILEC Department at the Tilburg

Law School. During these eight years, TILEC has reached all the goals it set for itself as a Center of Excellence: (1) it is reputed to be a globally leading research center in the field of economic regulation and policy, renowned for its interdisciplinary method; (2) TILEC's research is routinely cited in national High Courts' decisions and top-ranked academic journals; in annual reports of international organizations and high-level policy circle meetings. By way of illustration, TILEC's Discussion Paper Series is one of the most highly regarded series on SSRN, with some 850 papers which were downloaded over 390'000 times; (3) TILEC's finances flourished: we more than tripled TILEC turnover and its reserves, which we invest in carefully selected research areas; (4) we have further worked with academic partners and economic actors to produce first-rate research of high-societal relevance. We have managed to meet our goals which has been the result of meticulous planning and continuous bottom-up strategic thinking, in constant consultation with the most dedicated TILEC Members. TILEC has never been a one-man show but rather the result of commitment and hard work by all TILEC Members

As all the goals we set for TILEC back in 2011 were achieved, I decided to step down from the position of the TILEC Director this year, knowing that there is sufficient room for new ideas, more creative thinking and entrepreneurship in this demanding managerial position. I would like to thank all TILEC members for their support and in particular Cedric Argenton, who as TILEC Co-director has been a magnificent 'partner in crime' for 6 years, and Florian Schütt, who pushed us not to lose sight of the important battles ahead of us. My gratitude also goes to Randall Lesaffer, former TLS Dean, but also Pierre Larouche and Eric van Damme, the TILEC founding Directors, for their trust, support and encouragement.

Panos Delimatsis  
TILEC Director



*Panos Delimatsis*

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Research

# RESEARCH

In 2018 TILEC launched a new five-year research program titled ‘The Governance of Economic Activity in the Digital Age’. The program’s starting point is the growing digitalization of society, exemplified by the increasingly important role played by big data and artificial intelligence in the functioning of markets and other forms of social interaction. Generally, TILEC research over the next five years will investigate how economic institutions and structures should be designed in the digital age, and what types of incentives can be adopted to ensure the attainment of public policy objectives. The program consists of three broad research themes: i) institutions, ii) competition and iii) innovation.



## 1.1 RESEARCH OUTPUT AND KEY RESULTS

### 1.1.1 Overview

The table below provides a summary of the research output of TILEC members in 2018. For each category, it shows the number of publications that fall within the scope of the TILEC research program. An exhaustive overview of TILEC publications is provided in Appendix B; the full list of TILEC members is to be found in Appendix A.

	2018
<b>Academic publications</b>	
Journal articles	48
Book chapters	20
Reports	3
Other	8
<b>Professional publications</b>	
Journal articles	10
Book chapters	0
Reports	2
Other	13
<b>Discussion papers</b>	<b>42</b>

*Table: Relevant publications by TILEC members*

In 2018, TILEC members produced cutting-edge academic research and successfully ran a number of externally financed research projects. This is reflected not only in the volume of TILEC research output but also in its quality, as evidenced by publications in top journals and their very good or excellent inter- or multidisciplinary quality. Given the broad scope of the TILEC research program and the many results achieved, what follows is only a summary of key substantive results across the different areas of the TILEC research program.

Jorge  
Contreras

Professor  
of Law S.J.  
Quinney  
College of  
Law

“Working at TILEC was an invaluable academic experience that expanded my understanding of European and global economic issues. Tilburg University is a renowned center of learning within Europe, and TILEC is one of its crown jewels – bringing together leading legal and economics scholars in a collaborative and friendly environment. TILEC offers constant opportunities for engagement, discussion and interaction with both senior scholars and talented students from around the world.”



### 1.1.2 Institutions

Within this research cluster, TILEC studies the formal and informal institutions that underlie and govern the production and exchange of goods or services, and contribute to other public policy objectives with a view to strengthening their resilience and adaptability. Formal institutions at the center of TILEC’s work comprise legal regimes such as contract, criminal and competition law, private standard-setters as well as administrative and judicial institutions entrusted with the task of enforcing substantive rules disciplining economic activity. Informal institutions include evolving social norms and private networks.

The volume edited by TILEC member **Leigh Hancher**, Adrien de Hauteclocque (Référéndaire at the European Court of Justice) and Francesco Maria Salerno (partner at Gianni Origoni Grippo Cappelli & Partners), and titled “State aid and the energy sector” (Hart Publishers: 2018) is a fitting example of TILEC’s work in the area of economic institutions. Through the contributions of leading experts, the volume offers a comprehensive and compelling account of State aid law and policy and its application to the energy sector. It represents the first book-length treatment of EU state-aid law in the energy sector, and draws a full picture of an increasingly complex and controversial area. The chapters explore general legal questions including the definition of State aid, its impact on price regulation and taxation, and the compatibility of State aid rules with the World Trade Organization’s subsidy rules. The book also addresses the application of State aid rules to the energy sector in the national courts of selected EU Members, and examines questions of procedure and compatibility between State aid rules and European rules.

Understanding bargaining is critical to many important questions related to the governance of economic activity. One of the canonical bargaining models in economics is the Nash demand game. In that game, two players have to split a pie and simultaneously submit claims on that pie. If the claims are compatible (i.e., if they sum up to no more than the total size of the pie), each player gets their claim; otherwise both get zero. Despite its appeal in terms of simplicity, the Nash demand game has infinitely many Nash equilibria and is therefore not very helpful to predict bargaining outcomes. In their article “Robustness to strategic uncertainty in the Nash demand game” (Mathematical Social Sciences, 91, 1-5), TILEC member **Cédric Argenton** and his co-authors Ola Andersson (Research Institute of Industrial Economics) and Jörgen Weibull (Stockholm School of Economics) show that a selection criterion based on strategic uncertainty can select a unique

equilibrium in the Nash demand game. Strategic uncertainty refers to a player being uncertain about the other player's behavior. In the Nash demand game, such uncertainty plays an important role, as equilibrium strategies have a knife-edge nature: even the slightest uncertainty about the other player's strategy might lead a player to deviate. A strategy profile is said to be robust to strategic uncertainty if it is the limit, as uncertainty vanishes, of some sequence of strategy profiles in which every player's strategy is optimal under his or her uncertainty about the others. The authors show that stipulating robustness to strategic uncertainty allows them to make a sharp prediction about the bargaining outcome in the Nash demand game, as this criterion selects the generalized Nash bargaining solution as the unique equilibrium.

In "Global standard-setting 2.0: How the WTO spotlights ISO and impacts the transnational standard-setting process" (Duke Journal of Comparative and International Law, 28, 273-326), TILEC member **Panos Delimatsis** zooms in on private regulatory activity and the interplay between international economic law and self-regulation. Reflecting on the demand for more accountability and inclusiveness in the global legal order, Delimatsis critically analyzes the properties and mechanics of international standard-setting processes within the International Organization for Standardization (ISO). Discussing procedural and substantive guarantees regarding transparency, openness, deliberation and participation, his appraisal reveals that the reform of ISO processes has not been satisfactory; structural concerns persist with respect to transparency and inclusiveness. Delimatsis suggests that the WTO ruling in US - Tuna II demonstrates that the Appellate Body is ready to inquire into due process features of standard-setters on the basis of the 2000 Decision of the WTO Technical Barriers to Trade Committee. This approach could be instrumental in spurring standard-setters such as ISO in improving their practices on the basis of WTO-established criteria.

In the volume 'Corporate social responsibility, human rights, and the law' (Routledge: 2018), TILEC senior member **Stephanie Bijlmakers** critically assesses the legal status of the 'corporate responsibility to respect human rights' as articulated by the United Nations Guiding Principles on Business and Human Rights (UNGPs) and their implementation in national and transnational contexts. Bijlmakers makes a unique analysis of the triangular relationship between corporate social responsibility (CSR), human rights and law. She critically revisits sources at various governance levels, from the UN Guiding Principles to the 2014 EU Directive on non-financial disclosure, culminating in a refreshing approach to corporate due diligence and CSR. The book contemplates the various

founding perspectives of the UNGPs, and how the integration of notions such as 'principled pragmatism' and 'polycentric governance' within its framework offers insights into the future course of law and policy, compliance, and corporate respect for human rights. The book embraces a global focus, examining the interaction of CSR, human rights and the law in a global governance context. Bijlmakers concludes by setting out possible future scenarios for the legalisation of the corporate responsibility to respect human rights, which are informed by the UNGPs' founding perspectives and reflect current realities in the human rights landscape.

As more and more economic and social transactions take place via the internet, sellers are increasingly able to access and analyze detailed data on consumers' characteristics and preferences. At its extreme, this development would approach a situation of perfect price discrimination, where the seller knows each individual's willingness-to-pay and can extract the entire consumer surplus. In TILEC Discussion Paper No. 2018-014, entitled "Consumers' Privacy Choices in the Era of Big Data", TILEC members **Sebastian Dengler** and **Jens Prüfer** examine how consumers can be expected to respond to this threat, and how their response depends on their strategic sophistication. Consumers may have an incentive to protect themselves against surplus extraction by concealing their identity from sellers. But if such anonymization is costly, the seller knows that only high-valuation consumers will anonymize. The seller thus optimally increases the price charged to consumers buying via the anonymous channel. The authors construct a model where consumers are less strategically sophisticated than the seller and may fail to anticipate the seller's behavior. They show that the anonymous, privacy-protecting channel is used in equilibrium even in the absence of an explicit taste for privacy if consumers' strategic sophistication is sufficiently low. This provides a micro-foundation for observed privacy choices. However, the availability of anonymization is not unambiguously beneficial for consumers: some benefit but others suffer from anonymization.

Do religious people hold different moral views than non-religious people? Where exactly are the differences between Catholics, Protestants, and other believers, compared to non-religious people? And, more importantly for policy insights, are there significant differences not only in views but also in economically relevant actions? In their article "Religion, Moral Attitudes, and Economic Behavior" (Journal of Economic Behavior and Organization, 148, 282-300), TILEC member **Jens Prüfer** and his co-authors Isadora Kirchmaier and Stefan Trautmann (both University of Heidel-

berg) attempt to answer these questions. Using data from a representative sample of the Dutch population with information about participants' religious background, they find that religious people are less accepting of unethical behavior and report more volunteering. In contrast with these self-reported attitudes, the authors find that, in an anonymous experimental game, religious people are equally likely to betray another person's trust as non-religious people. They also report that Catholics betray less than non-religious people, while Protestants betray more than Catholics and are indistinguishable from the non-religious.

In "Corporate disruption: The law and design of organisations in the twenty-first century" (European Business Organisation Law Review 19(4), 737-769), TILEC members **Joseph McCahery** and **Erik Vermeulen**, together with William Callison (Faegre Baker Daniels LLP) and Mark Fenwick (Kyushu University) explore the issue of 're-making' corporate law through the prism of the United Nations Commission on International Trade Law's (UNCITRAL) efforts at developing a simplified organizational form that aims to bring micro- and small-sized business enterprises into the formal economy, particularly in the context of emerging markets. A new legal form has the potential to offer anyone wishing to start and scale a business with the legal means to do so. In this way, a simplified organizational form contributes to strengthening both the local economy and the startup community, and may provide opportunities for smaller businesses to scale into successful national, and possibly global, enterprises. Starting from this pressing need to identify flexible organizational forms to accommodate the diversity of micro- and small-size enterprises, the authors compellingly argue for 'un-corporating' corporate laws in favor of flat, non-hierarchical organizational structures. The authors suggest that alternative approaches are preferable where regulators and policy makers go back to the fundamentals and attempt to build from the ground up based on the real-world needs of entrepreneurs in emerging markets, rather than work on already existing legal solutions.

Recent literature suggests that stock prices may not always immediately reflect all available information. Many publicly traded firms are organized as networks of parent company and subsidiaries. In principle, this kind of network structure could either enhance investors' information by providing multiple information channels, or increase opacity if investors are not fully aware of ownership connections. In TILEC Discussion Paper No. 2018-022, entitled "Are investors aware of ownership connections?", TILEC member **Luc Renneboog** and his co-authors Edith Ginglinger and Camille Hebert (Université Paris-Dauphine) examine the market reactions to earnings announcements

within a parent-subsidary ownership structure. To do so, they identify parent-subsidary ownership structures where both parent and subsidiary are publicly listed and their sets of shareholders only partially overlap. The authors find that the parents' investors react to all announcements within the group either immediately or with delay. Multiple announcements within a group lead to enhanced transparency for parents' investors, who benefit from detailed information on the origin of their firm's earnings. By contrast, subsidiaries' investors only react to their own firm's announcements, ignoring predictive information released by the parent. Subsidiaries' investors appear unaware of ownership links. With the exception of active investors owning shares in both parent and subsidiary companies, institutional investors do not seem to be smarter at understanding group structures.

### 1.1.3 Competition

Within this research cluster, TILEC members investigate the design and application of competition law and policy, paying special attention to the way in which economics can be integrated into the competition policy framework, while retaining the prime features of a sound legal system. TILEC members also study the benefits and costs of competition as a governance mechanism. In addition, their work in the area of competition encompasses the study of the regulation of important sectors of the economy such as the network industries and healthcare markets.

In "Algorithms and fairness: What role for competition law in targeting price discrimination towards end consumers" (Columbia Journal of European Law 24(3), 541-559), TILEC member **Inge Graef** appraises whether competition law can, and should, address price discrimination towards end-consumers made possible by the use of algorithms. Personalized pricing is a form of price discrimination between consumers whereby a firm charges each consumer a different price depending on willingness to pay. As the advent of data analytics and algorithm-based services has made it easier for firms to engage in price discrimination, the article clarifies its legality under competition law. Graef discusses the extent to which competition enforcement can be desirable for targeting price discrimination towards end consumers. Her rich analysis encompasses other regimes as well such as data protection, consumer protection, and anti-discrimination law. Graef concludes that personalized pricing towards end consumers does not entirely fit the scenarios for discrimination generally accepted under Article 102 TFEU. However, the rise of algorithms increases the need to clarify the potential of competition enforcement in addressing price discrimination. Graef notes that Article 102 TFEU is sufficiently flexible to capture these—so far—rare

forms of discrimination, but it remains a policy question whether and to what extent competition enforcement should apply to personalized pricing. Graef argues that not only the welfare effects of discriminatory behavior should be considered more thoroughly, but also the added value of employing competition law should be carefully evaluated with respect to remedies available under other regimes.

In many environments where players are competing for a single prize, they can choose how much risk to take in an effort to win the prize. By taking more risk, players increase the probability of high performance but also the probability of low performance. For example, a figure skater can choose to do a more difficult exercise, which gives more points if well executed but is also more likely to result in failure. In their article “The effect of competition on risk taking in contests” (Games, 9(3), 72), TILEC member **Jan Potters** and his co-author Lorenzo Spadoni (University of Siena) experimentally study how competition affects the kind of risk taking described above. They vary the degree of competition along two dimensions: the number of players participating in the contest, and the sensitivity of players’ win probability to their level of performance. They hypothesize that an increase in the degree of competition in either dimension leads subjects to take more risk. Their results are only partly in line with these hypotheses. While an increase in the number of contestants raises risk taking when winning is highly sensitive to performance, the same is not true when winning is not as sensitive to performance. Similarly, an increase in the sensitivity of win probabilities to performance raises risk taking only when the number of contestants is high. The results of the experiment point to an important interaction between the two dimensions of competition the authors study.

The link between competition and risk taking may also have played an important role during the financial crisis. Observers have attributed the crisis in part to perverse incentives within banks which led traders to take excessive risk. One explanation for such incentive schemes is that banks knew they were going to be bailed out in the event of large losses. In their article “Competition for traders and risk” (RAND Journal of Economics, 49(4), 855-876), TILEC members **Michiel Bijlsma** and **Jan Boone**, together with TILEC extramural fellow **Gijsbert Zwart** (University of Groningen), offer an alternative explanation: labor-market competition for top traders may have led to the high bonus payments observed. They develop a model in which banks design contracts to solve both a moral hazard and an adverse selection problem: the bank must induce traders to choose appro-

prate investment projects but must also attract talented traders. Since top results are more easily achieved by top traders, bonus payments rewarding extremely high performance are effective at screening out untalented traders. At the same time, however, these bonuses lead top traders to take more risk. As competition for traders increases, the importance of screening the top traders (and avoiding paying similarly high compensations to traders of average ability) grows, whereas the costs of inducing the traders to take excessive risks remain unchanged. As a result, competition leads to bonus schemes that favor excessive risk taking.

Both the United States and the European Union have a strong legal regime designed to protect competition and to foster innovation. Because competition and intellectual property (IP) regimes are occasionally in conflict, each jurisdiction has developed detailed legal rules that govern when and how competition law restrictions apply to IP rights. In ‘Antitrust and Intellectual Property in the United States and the European Union’ (Gabiella Muscolo and Marina Tavassi (Eds.) *The Interplay Between Competition Law and Intellectual Property. An International Perspective*: Kluwer Law International), TILEC member **Damien Geradin**, together with his co-authors Douglas H. Ginsburg (U.S. Court of Appeals for the District of Columbia Circuit and George Mason University) and Keith Klovers (US Federal Trade Commission) analyze and compare applicable provisions in the U.S. and the EU and identify the most prominent differences between the two regimes. Both jurisdictions recognize that innovation and competition are often aligned and therefore prescribe relatively limited prohibitions upon a patentee’s rights. Nonetheless, the two jurisdictions have adopted different approaches concerning specific practices. For example, Article 101 TFEU takes a more restrictive position than does Section 1 of the Sherman Act regarding vertical licensing provisions whether price or non-price in nature. However, unlike the Sherman Act, it permits a patentee to charge royalties for the use of an invention after the relevant patent expires. On the other hand, Article 102 TFEU imposes more restrictions upon a patentee’s unilateral IP activity than does Section 2 of the Sherman Act.

Since the 1990s, regulators in network industries have moved away from cost-plus regulation and towards price-cap regulation, which is deemed to provide greater incentives for cost efficiency. Recently, however, observers have raised the concern that price caps could discourage capacity investments when future demand is highly uncertain. What is the best way of regulating a network operator holding private information about the costs of expanding capacity? TILEC member

**Bert Willems** and TILEC extramural fellow **Gijsbert Zwart** provide an analysis of this question in their article “Optimal regulation of network expansion” (RAND Journal of Economics, 49(1), 23-42). They consider a regulated network operator that has to invest in capacity to cope with a stochastic growth in demand and has private information on investment costs. The regulator contracts with the firm about when it should expand capacity (and when it would be better to delay), at which price the capacity should be sold, and which fraction of its revenues it may keep. In the total-surplus maximizing regulatory mechanism, prices for network access are above marginal cost when there is congestion. Capacity is expanded whenever the price for capacity reaches a threshold value. In line with the existing legal regime, which includes prohibitions on state aid, the authors assume that the regulator cannot subsidize the firm. Hence, investment costs must be financed from revenues. Any operating profits that remain after those costs have been paid for could be taxed by the regulator. Under optimal regulation, however, the regulator does not tax the firms that report to be efficient. This is required to induce efficient firms to reveal their types. When information asymmetry is large, a laissez-faire regime is optimal for those firms.

In “Independence, regulatory competences and the accountability of National Regulatory Authorities in the EU” (TILEC Discussion Paper no. 2018-038), TILEC member **Saskia Lavrijssen** analyzes whether EU independence requirements necessitate that broad and discretionary regulatory competences are attributed to independent administrative bodies such as national competition authorities. EU requirements provide that national regulatory authorities (NRAs) shall be independent from market actors and the political realm as well. The latter requisite entails that NRAs implement EU legislation independent from national executive and legislative bodies. Member States have however resisted giving effect to the independence requirements of NRAs in light of fundamental questions as to whether delegating discretionary powers to independent bodies is in line with national constitutional principles of democracy and legality. Such principles hold, respectively, that citizens should be always directly or indirectly involved in the formulation of decisions, and that state intervention affecting citizens’ rights and freedoms must be grounded on a legal basis. In her analysis, Lavrijssen holds that the development of independent NRAs can be reconciled with principles of democracy and legality. She argues that such principles allow for alternative, and more nuanced, conceptualizations of the traditional ‘primacy of the legislator’. It is, however, fundamental that legal safeguards are envisioned which incorporate adequate accountability and transparency mechanisms. In particular, she notes, citizens should be offered venues for participation and input, and NRAs should be held accountable before independent national judges.

The EU market for services belatedly came to the forefront of harmonization efforts when the economic case for further service liberalization became clear. In “From Sacchi to Uber: 60 years of services liberalization, ten years of the services directive in the EU” (Yearbook of European Law 37, 188-250) TILEC member **Panos Delimatsis** asks how EU positive integration has evolved in the domain of services 10 years after the adoption of the Services Directive. The path of convergence in the regulation of services across EU Member States has been difficult and, at times, explicitly contested. Delimatsis reviews more than 60 years of case law in the area of services, the last ten of which in combination with the adoption of the Services Directive. He argues that the Directive constitutes a powerful tool for the Court of Justice of the EU (CJEU) to pursue the Treaty goals of freedom of establishment and freedom to provide services. The Directive has been instrumental in creating transparency and communication between regulatory authorities and the Commission, thereby contributing to the establishment of trust, with some notable progress being made. However, the Directive still leaves considerable discretion to Member States in establishing restrictions to free movement of services. A key role for the actual extent of market integration will be played by the approach chosen by the CJEU in recognizing such a margin for manoeuvre to Member States.

Economists model collusion as a repeated prisoners’ dilemma game, in which firms interact with the same set of rival firms over and over again. In many real-world environments, however, repeated interaction is not as predictable. Firms may interact with some of their competitors again but not with others, or they may interact more frequently with some than with others. How does the likelihood of collusion depend on the probability of meeting the same firm again in the future? In TILEC Discussion Paper No. 2018-007, entitled “Perfect and Imperfect Strangers in Social Dilemmas”, TILEC member **Sigrid Suetens** and her co-authors Riccardo Ghidoni (Tilburg University) and Blair Llewellyn Cleave (University of Melbourne) conduct an experiment to study how cooperation in the prisoner’s dilemma is affected by the probability of being re-matched with the same players. In all three of their treatments, subjects are randomly matched with a partner and play the prisoner’s dilemma. The treatments differ in the probability of being re-matched with the same partner in the future. In one treatment, subjects are always matched with ‘perfect strangers’ who they have never met and will never meet again. In the two other treatments there is some chance of being re-matched with the same partner. The authors find that the higher the likelihood of being re-matched with the same partner, the higher is the observed level of cooperation.

In the oligopoly context, these findings suggest that we should expect the incidence of collusion to increase when firms are more likely to interact with the same rivals in the future.

In “Innovation in EU competition law: The resource-based view and disruption” (*Yearbook of European Law* 31, 305-343) TILEC member **Francisco Costa-Cabral** analyzes how innovation is handled under competition law. So far innovation has been addressed according to market structure, assuming that market power allows undertakings to evade competitive pressure. Costa-Cabral argues that the limits of this approach have become apparent, as competition law is increasingly characterized by a static outlook and called on to apply theories of harm to innovation unrelated to market power. He proposes to complement a structural approach with two advances from strategic management studies. The first is the ‘resource-based view’ connecting competitive advantage with undertaking heterogeneity. Since undertakings have varying innovation capabilities, competitive markets may not compensate for excluding innovators. Harm to innovation is thus centered on assets with innovation capabilities, as shown by cases of abusive refusal to license and parallel research. The second advance is the theory of disruptive innovation, which explains major changes in consumer preferences and production methods. Strategic management has established that an inefficient start is an integral part of disruption, allowing disruptors to be ignored until their productive efficiency increases enough to shift the market. This contrasts with competition law’s assumption that the exclusion of less efficient competitors is beneficial for market structure. Costa-Cabral advocates that competition law should adapt to strategies against disruption which do not immediately degrade competitive parameters.



Pablo Ibanez-Colomo

London School of Economics and Political Science

“TILEC has achieved something genuinely unique in Europe: it has created a community of economists and lawyers that not only understand each other but speak a common language. Economists and lawyers co-operate with each other every step of the way and develop new and meaningful ways to advance knowledge in the two areas. TILEC’s visibility and reputation as a premier centre for research at the crossroads of law and economics is fully deserved.”

### 1.1.4 Innovation

Within this research cluster, TILEC researchers investigate the phenomenon of innovation, broadly construed as the creation and diffusion of new knowledge. Innovation has long been recognised as the main driver of economic growth and holds the potential to provide solutions to a wide array of societal problems, ranging from combating diseases through medical innovation to fighting climate change through green technology. Putting in place a regulatory framework that is conducive to innovation has been a central policy concern within the EU for many years. Although TILEC studies innovation in general, it focuses particularly on innovation in the areas of ICT, as well as in the creative industries and data-intensive industries.

In the biopharmaceutical industry and other high tech sectors, non equity alliances are important vehicles to collaborate with external partners, particularly in collaborations that require knowledge sharing, such as R&D collaborations. To guide these collaborations effectively, partners can use the contract to put in place administrative controls. These controls can take the form of board like joint committees having explicitly delineated authority over certain alliance activities. In their article “Knowledge sharing and safeguarding in R&D collaborations: The role of steering committees in biotechnology alliances” (Strategic Management Journal, 39(7), 1912-1934), TILEC member **Shivaram Devarakonda** and his co-author Jeffrey Reuer (University of Colorado) study R&D alliances in the biopharmaceutical industry. This sector serves their purposes well because pharmaceutical firms rely heavily on collaborations for innovation and make extensive use of patents to protect their inventions. Using data on alliance contracts that they match to patent data, the authors demonstrate that joint committees facilitate knowledge flows within the scope of an alliance. They also show that joint committees safeguard against misappropriation hazards, particularly when a partner possesses the incentive and ability to engage in such behavior.

In TILEC Discussion Paper 2018-034, entitled “Standardization, Open Source, and innovation: Sketching the effect of IPR policies”, TILEC member **Martin Husovec** tackles the two ‘stewards of innovation’: Open Source and standardization. Although they are underpinned by different ecosystems with diverging sets of rules and objectives, Open Source and standardization share the same purpose, which is to advance the frontier of innovation. The latest technological developments are incentivizing firms and individuals to work more closely together in these ecosystems. However, under whose rules? And with what consequences for the innovation ecosystem?

Husovec argues that patent and copyright royalties may discourage the use of standards within Open Source projects. For patent royalties, these effects can be addressed outside of the standardization process by means of defensive and licensing patent pools or aggregated individual commitments. Secondly, Open Source licenses with royalty-free patent grants might accelerate diffusion of specifications, especially if done within the reference implementations of standard developing organizations (SDOs), and encourage a new set of innovators to join the process. Third, given that we observe that both royalty-free and royalty-bearing layers are able to sustain innovation investments in the ICT, neither of the two approaches seems inherently superior. However, the choice can influence the make-up of innovators and technological trajectories. From this perspective, Husovec concludes that both approaches have their place in the innovation ecosystem. SDOs should therefore promote a choice between them on a project basis.

In ‘When disruptive meets streamline: International standardization in blockchain’ (TILEC Discussion Paper DP 2018-025), TILEC senior member **Panos Delimatsis** analyzes the role of international standardization in advancing the development of blockchain solutions. It is often claimed that the emergence of blockchain may transform the way we work, operate and interact. Through the use of distributed ledger technology, blockchain challenges the fundamentals of any business model built around middlemen and centralization, while ensuring anonymity, market confidence and trust. Depending on the manner it is structured, blockchain has the advantage of lowering entry barriers, transaction costs and information asymmetries. Blockchain possesses the necessary features to alter the way sectors such as health, business and financial services and government services operate. Delimatsis argues that in order to unfold blockchain’s full potential, a common vernacular needs to be developed. Standardization can successfully offer such vernacular, which could constitute the foundation for enhancing market confidence around the new technology. Against this background, the paper critically appraises recent developments on standardizing blockchain at the international level. In particular it discusses the focus areas on which international standardization within the International Organization for Standardization (ISO) can be meaningful and indeed crucial if this technology is to benefit from rapid expansion.

In “Legal tech and blockchain for corporate governance and shareholders” (in Vanessa Mak, Eric Tjong Tjin Tai, & Anna Berlee (Eds.) Research handbook in data science and law. Edward Elgar: 2018), TILEC senior member **Anna Lafarre** and Christoph Van der Elst (TLS) (in Vanessa Mak,

Eric Tjong Tjin Tai, & Anna Berlee (Eds.) Research handbook in data science and law. Edward Elgar: 2018) discuss blockchain as a possible solution to the agency problem (and its associated costs) between shareholders and corporate board members in corporate governance. The authors posit that blockchain and smart contracting technology can offer new solutions for the thorny agency problem in corporate governance and provide tools for improving governance processes. Lafarre and Van der Elst acknowledge that a fully decentralized organization may not be an efficient solution yet, as it has proven to still suffer from different (governance) problems. This notwithstanding, their contribution argues that blockchain technology can play an important role in the modernization process of the annual general meeting of shareholders (AGM). Blockchain technology can substantially lower shareholder voting costs. In addition, it can decrease the organizational costs for companies and increase the speed of decision-making, making the AGM a faster and leaner corporate organ. Recent prototypes of blockchain-based AGMs, some of which have already been tested in practice, show that this modernization of the AGM is indeed feasible.

Copyright is intended to promote the creation of artistic and other work. In the digital age, practical difficulties often prevent copyright holders from enforcing their rights against individual infringers. To facilitate enforcement, the law provides that intermediaries such as YouTube can be held liable for their users' uploads of infringing content. This is organized according to the principle of 'notice and takedown': once an intermediary has been notified about an infringing content, that content must be removed, or the intermediary faces liability. Observers have argued that this creates incentives for the removal of content regardless of the merits of infringement claims. They fear that such over-enforcement could stifle creativity. TILEC Discussion Paper no. 2018-028, entitled "Using experimental evidence to design optimal notice and takedown process" and co-authored by TILEC members **Lenka Fiala** and **Martin Husovec**, is a great example of interdisciplinary work undertaken at TILEC, in which the authors study the notice and takedown process by means of a laboratory experiment. In their experiment, subjects playing intermediaries must decide whether a puzzle has a specific solution but are not given enough time to reliably assess this. Subjects playing users have more time, and thus a better idea of the truth, but only have access to an inefficient punishment technology to convince the intermediary to change their decision. The results indicate that the setup indeed leads to excessive removal and that an alternative dispute resolution mechanism, whereby users can ask for an independent assessment of the infringement claim against payment of a fee, could be an effective counter measure.

In many high-tech industries, key innovations are developed as part of a cooperative effort by firms working towards a technical standard. These efforts are typically carried out within standard-setting organizations (SSOs), i.e., collectively self-governed industry associations, formed by innovators and implementers. In addition, the successful diffusion of new technologies often depends on the emergence of a single standard and thus on SSOs. For these reasons, it is important to understand how the governance of SSOs influences firms' investment, participation, and pricing strategies. In TILEC Discussion Paper no. 2018-042, entitled "Membership, governance and lobbying in standard setting organizations", TILEC members **Maria Larrain** and **Jens Prüfer** study the incentives of heterogeneous innovators and implementers to join an SSO as well as the effect of SSO governance on membership incentives and on members' investments in the quality of the standard. The membership decision trades off the probability of getting a technology included in the standard and the intensity of knowledge spillovers against the cost of membership. Under some conditions, the equilibrium membership composition includes small and large innovators but not those of intermediate size. Small firms join to benefit from knowledge spillovers, while large firms join to get their technology included in the standard. Intermediate firms are caught in the middle: they are too large to learn much from their larger peers, but too small to get their technology into the standard. These results offer an explanation for the observation that many SSO member firms are small and do not contribute technologies themselves, while standardized technologies are predominantly contributed by large firms. The authors also show that an increase in the supermajority requirement needed for inclusion of technologies leads to a lower royalties and less investment, with ambiguous effects on consumer surplus and welfare.

In "Data portability and data control: Lessons for an emerging concept in EU law" (German Law Journal 19(6), 1359-1398), TILEC senior members **Inge Graef** and **Martin Husovec**, together with their co-author Nadezhda Purtova (TILT), explore the intricacies of data portability and data control in the context of the right to data portability (RtDP) introduced by Article 20 of the General Data Protection Regulation (GDPR). The RtDP is the first attempt to establish a general-purpose control mechanism of horizontal application which aims to facilitate reuse of personal data held by private companies. Article 20 GDPR is agnostic about the use made of the ported data and its further diffusion. This contrasts with forms of portability facilitated under competition law, and which can only occur for purpose-specific goals with the aim of addressing anticompetitive behavior. The RtDP still cannot be said to create ownership-like control over ported data. Even more, this regu-

latory innovation will be limited in its aspirations where intellectual property rights of current data holders, such as copyright, trade secrets and sui generis database rights, cause the two regimes to clash. In such cases, a reconciliation of the interests might confine the follow-on use of ported data to a specific set of socially justifiable purposes, possibly in combination with fair remuneration. The authors argue that to the extent that other regimes will try to replicate the RtDP, they should closely consider the nature of the resulting control, its breadth and its impact on incentives to innovate. In any case, the creation of data portability regimes should not become an end in itself. With an increasing number of instruments, orchestrating the consistency of legal regimes within the Digital Single Market and their mutual interplay should become an equally important concern of legislators.

### 1.2 PhD Dissertations

On 7 February 2018, **Venetia Argyropoulou** defended her PhD dissertation titled 'Investors' rights in case of sovereign default: Recent lessons from the EU financial crises', written under the supervision of **Panos Delimatsis** and **Pierre Larouche**. The dissertation explores the measures taken by investors in response to the losses incurred in the Cyprus banking crises and the Greek financial crises. It exposes a series of deficiencies in the current EU and national legal frameworks concerning investors protection from both banking and sovereign default. Argyropoulou concludes by setting forth a proposal for a more efficient and equitable legal framework addressing debt restructuring. The PhD Committee members included, in addition to the two supervisors, Robert Howse (New York University), Freya Baetens (University of Oslo), Tarcisio Gazzini (University of East Anglia) and Merris Amos (Queen Mary University).

## Saskia Lavrijssen

“Working in an interdisciplinary environment with academics, students and practitioners is stimulating and challenging. It creates an excellent environment for researching and advancing big societal challenges such as climate change and the digitalization of the economy.”



### 1.3 Events and dissemination of research

TILEC maintained a busy program of regular activities in 2018. Following TILEC's well-established tradition, members met every Wednesday morning to discuss recent developments and present their research. In addition, monthly seminars gave TILEC members the opportunity to interact with leading scholars working in the areas of the TILEC research program. As space is lacking to display the full range of TILEC events, Appendix C provides a list of all events organized and held by TILEC in 2018. Here we mention only a handful of major events.

#### 1.3.1 Institutions



*Presentation Saskia Lavrijssen  
Judicial review and safe-  
guarding effective legal protec-  
tion in energy regulation*

TILEC member **Prof. Saskia Lavrijssen**, with TLS colleagues Ernst Hirsch Ballin and Jurgen Poorter, organized a two-day conference on 18 and 19 January 2018 titled "Judicial Review in the Administrative State". The constitutional design of administrative law has traditionally been associated with the concept of the trias politica in which the executive power is considered to execute what has been decided by the legislator, supplemented by permanent control and political accountability to a democratically elected body. In this mechanism of political control and accountability the executive finds its legitimacy. This constitutional design also affects how we perceive the relationship between the executive branch and the judiciary. Courts are supposed to review administrative decisions involving discretion only marginally in light of the democratic legitimacy of the administrative decision-making process. However, the question arises to what extent this traditional constitutional

framework corresponds with the actual relationship between the different actors in what is called 'the administrative state'. The conference questioned the assumptions on judicial review of discretion in light of the changes in traditional constitutional frameworks and the rise of new forms of administrative governance and decision-making in the administrative state. International speakers invited included John Bell (Cambridge University), Peter Lindseth (Connecticut Law School), Joana Mendes (University of Luxembourg), Ittai Bar-Siman-Tov (Bar-Ilan University) and Deni Manzari (Reading University).

On 31 May and 1 June 2018, an author development workshop titled 'Healthcare Financing' took place under the auspices of the Dutch Healthcare Authority. The workshop was organized by TILEC Members **Wolf Sauter** and **Misja Mikkers**, together with Jos Boertjens and Johan van Manen from the Dutch Healthcare Authority (NZa) in preparation for a book on the same topic that will soon be published by Edward Elgar. The event was opened by a keynote by Bill Sage of the University of Texas at Austin. During the workshop, the authors of nine country reports, ranging from the UK to Colombia, and the five thematic chapters of the future book discussed their work and exchanged views on the various models and problems in healthcare financing in a number of selected jurisdictions.

#### 1.3.2 Competition



*Marina Lao; discussion on  
dominance and harm in  
digital markets on the two  
sides of the Atlantic*

On 9 November 2018, TILEC celebrated its 15th anniversary with an engaging conference held at the Tilburg University campus titled “Legal and Economic Challenges in Competition Policy”. The format of the event reflected TILEC’s signature approach of facilitating exchange between legal scholars and economists, and scholars from both disciplines were equally represented on the program. The anniversary conference was opened by Prof. Geert Duysters, vice-dean of research (now dean of the Tilburg School of Economics and Management (TiSEM)), who congratulated TILEC for its achievements over the past years. The four panels provided participants with an inspiring mix of cutting-edge interdisciplinary academic research, presented by top scholars in law and economics from Europe and the United States. The topics discussed included the role of innovation in competition law, novel theories of abuse of dominance, as well as behavioral economics and competition policy. In addition, four promising external PhD researchers in competition law and economics were selected to discuss their research with participants in the form of poster presentations. The event stimulated exchange of approaches and ideas among economists and legal scholars on topical developments in competition law and policy, once again illustrating the strength of the TILEC formula.

### 1.3.3 Innovation



*Expert workshop: “Mapping Flexibilities for Injunctive Relief in Patent Law: What Can the Member States of the European Union and the United States Learn From Each Other?”*

On 29 of June 2018, TILEC member **Martin Husovec**, together with TILT-TILEC visiting professor **Jorge Contreras**, organized an expert workshop: “Mapping Flexibilities for Injunctive Relief in Patent Law: What Can the Member States of the European Union and the United States Learn From Each Other?”. The event brought together leading legal experts of patent remedies in the United States, the United Kingdom, Germany, France, the Netherlands, Italy, and Poland. Along with the

academics, three leading European judges - Justices Arnold, Blok, and Grabinski - also participated in the event. For the workshop, national experts were appointed and asked to prepare draft reports on national situations regarding injunctive relief in their jurisdictions following a pre-developed typology. These formed the basis of the workshop discussions. The goal of the workshop was twofold: (a) to map the existing and potential doctrines as they are applied and/or discussed on the domestic level, (b) reflect on these flexibilities and tailoring of injunctive relief at a cross-country level in order to identify current trends and next possible avenues for judicial practice and research. The workshop was highly successful and the organizers are in the process of putting together an edited volume based on the workshop proceedings to be published with a leading publisher in the field.

On 29 November 2018, TILEC organized a conference on competition policy and innovation in Brussels. Since the European Commission’s 2017 merger decision in the Dow/Dupont case, innovation concerns have been at the forefront of the policy discussion related to merger control in particular and competition policy in general. The event provided a platform for academics, policy-makers, and practitioners to discuss these issues. The day started with a keynote lecture by Philippe Aghion (Collège de France) focusing on the link between competition and economic growth. Among other things, Prof. Aghion presented a Schumpeterian growth model with superstar firms which can explain a number of stylized facts about productivity growth, investment, and markups.



*Keynote lecture by Philippe Aghion (Collège de France)*

His lecture was followed by the first panel, on “Merger Control, Vertical Restraints, and Innovation”, with presentations of three papers dealing with the effect of mergers on the incentives to invest in R&D as well as a fourth paper on vertical restraints and technology adoption. In the afternoon, Ariel Ezrachi (Oxford University) delivered a keynote lecture discussing the implications of digitalization, data, and artificial intelligence for competition policy, tracing out a number of worrisome recent developments. The second panel, “Next Steps for Competition Law”, debated the value of innovation concerns in competitive enforcement and how they fit the existing framework.

## Mark Schankerman

Professor of Economics,  
London School of Economics;  
Ronald Coase Visiting Professor  
in Law and Economics at  
TILEC during academic year  
2017-2018



“As the Ronald Coase Visiting Professor of Law and Economics, I had the opportunity to spend three months at TILEC during 2017-18, for which I am very grateful to the TILEC Management Team, and especially to Prof. Panos Delimatsis and Dr. Florian Schuett. TILEC is a vibrant, intellectually stimulating and welcoming environment, with high quality seminars and strong interaction between economists and legal scholars. It is one of only a few such institutions in Europe, and I highly recommend it to scholars with interests in law and economics.”

#### 1.4 Ronald Coase Visiting Professorship

The Ronald Coase Visiting Professorship in Law and Economics is a visiting chair that aims to bring to Tilburg University and TILEC experienced scholars of academic distinction, who will conduct research and offer seminars of high quality while in residence. The holder of the 2018-2019 Ronald Coase Visiting Professorship is Giorgi Monti of the European University Institute (EUI) in Florence. Before joining the EUI in 2010, **Giorgio Monti** taught law at the University of Leicester (1993-2001) and at the London School of Economics (2001-2010). While Monti's main research focus is in the field of competition law, he has also engaged in research projects in fields ranging from feminist legal studies, to commercial law, to comparative tort law. During his stay in Tilburg, Professor Monti will collaborate with TILEC researchers working in the area of competition policy and innovation. In addition, he will share his knowledge and expertise with TILEC PhD researchers, commenting on their PhD projects. He will also deliver guest lectures in the advanced competition law classes offered by TILEC at the Tilburg Law School. The Ronald Coase Chair in Law and Economics was established in 2008. The late Nobel Memorial Prize Laureate in Economic Sciences Ronald Coase (1910-2013), globally renowned for his pioneering and inspiring work on institutional economics, and transaction costs in particular, gave his personal consent to the establishment of the Chair.



Francisco  
Costa-Cabral

“TILEC remains one of the leading institutions in law and economics in Europe. I was happy to meet a community, both in residence and visiting, that has enriched my research and my academic life.”

2

Education

## EDUCATION

### 2.1 Teaching

Although TILEC is not formally responsible for running any of the university's educational programs, it plays a key role in a number of them. TILEC members are very active in the BSc and MSc Economics programs at TiSEM (in the Competition and Regulation track, in particular) as well as the Global Law Bachelor, the Data Science Bachelor, the International Business Law Master and the Master in International and EU law at TLS. Additional courses are also offered at the PhD level. In 2018, on top of general courses, many courses directly linked up with the TILEC research program.

Examples on the TiSEM side include the bachelor courses “Industrial Economics” (**Florian Schuett**) and “Competition Policy and Regulation” (**Jan Boone** and **Moritz Suppliet**), as well as the master courses “Seminar Competition Policy” (**Misja Mikkers** and **Erik Brouwer**) and “Seminar Innovation and Networks” (**Jens Prüfer** and **Madina Kurmangaliyeva**).

Examples on the side of TLS include the master courses “European Competition Law” (**Inge Graef** and **Zlatina Georgieva**), “Banking and Securities Regulation” (**Joseph McCahery**), “Advanced EU Competition Law and Economic Regulation” (**Leigh Hancher** and **Zlatina Georgieva**), “Crisis and EU Law” (**Anna Marhold** and **Francisco Alves da Costa-Cabral**), and “Trade and WTO law”, “EU Internal Market Law”, and “EU External Relations” (**Panos Delimatsis**). TILEC TLS researchers are also involved in a number of bachelor-level courses, such as “Mededingingsrecht/ Competition law” (**Saskia Lavrijssen**), the Data Science Bachelor course “Innovation and Regulation” (**Inge Graef** and **Francisco Alves da Costa-Cabral**), and the Global Law Bachelor courses “Methods and Techniques of Legal Research” (**Anna Marhold**, **Zlatina Georgieva** and **Panos Delimatsis**) and “Final Essay” (**Panos Delimatsis** and **Zlatina Georgieva**). In addition, **Sebastian Dengler**, who obtained his PhD in economics with TILEC and is now a TILT postdoc, teaches a new standalone course on “Innovation and Privacy”, where **Freek van Gils** (TILEC junior member, TiSEM) is a teaching assistant. This is a new level of cooperation in education between TLS and TiSEM, and it came about thanks to TILEC.

TILEC does not have its own PhD program but accommodates doctoral students through its affiliation with the graduate schools of its parent schools. Doctoral students who become TILEC junior members are provided with regular supervision by a team of academic experts from both TiSEM and TLS and become part of a congenial research environment. In 2018, 9 new junior members started their doctoral studies at TILEC, and 21 junior members (resident and external) continued their doctoral studies at TILEC.

### 2.2 TILEC Best Master Thesis

Through its Best Master Thesis prize, inaugurated in 2013, TILEC encourages and promotes innovative attempts towards high quality and interdisciplinary research by students. Excellent theses are eligible for the Best Master Thesis award if they fit within TILEC's research program and are written under the supervision of a TILEC member. Each nomination is assessed on the quality of the writing, the strength of the argument provided, the importance of the insights generated, and the extent to which it adopts an inter-disciplinary approach.

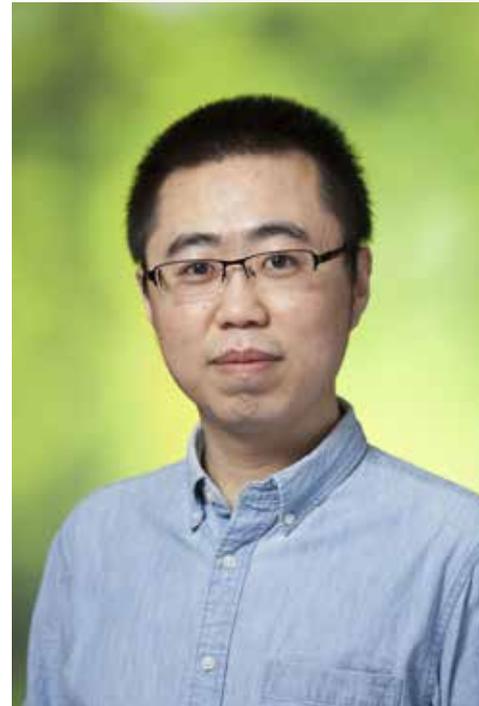
TILEC awarded its Best Master Thesis prize for the academic year 2017/2018 on 20 September 2018, at the annual TILEC Retreat. This year's laureate is Sam Lee (MSc Economics), whose thesis is entitled “Internalizing the Harm of Privacy Breaches: How Effective are Disclosure Policies in Providing Incentives to Improve Data Protection? An Event Study”. The thesis, written under the supervision of Prof. Eric van Damme, provides persuasive evidence on the stock market effect of privacy breaches, and does so with high scientific rigor. It is well written and stands out for the relevance of its conclusions for policy, in particular concerning disclosure requirements. In addition, the thesis adds an interdisciplinary angle by incorporating insights from legal scholarship.

Laureates of the TILEC Best Master Thesis prize are awarded a certificate of acknowledgment of their achievement and a monetary prize of EUR 500 (to be paid in vouchers).

## Michelle Sovinsky

Professor of Economics,  
University of Mannheim

“TILEC provides a unique environment to facilitate valuable communication among academics, lawyers, and policy makers on topics of shared interest in a relaxed setting.”



## Xiaoyu Wang

“When I was offered the chance to pursue a PhD career here in Tilburg in 2014, I immediately joined TILEC as a junior member. TILEC offers a unique environment to improve my research and to sharpen my thinking skills in law and economics. The interdisciplinary audience pushes me to

think hard about the intuition behind the economic model and to relate the results to a real-life context. I also benefit a lot from the seminars and conferences that TILEC organizes. They provide great opportunities to talk to outside scholars, policy makers and people from regulatory agencies.”

# 3 Finances

## FINANCES

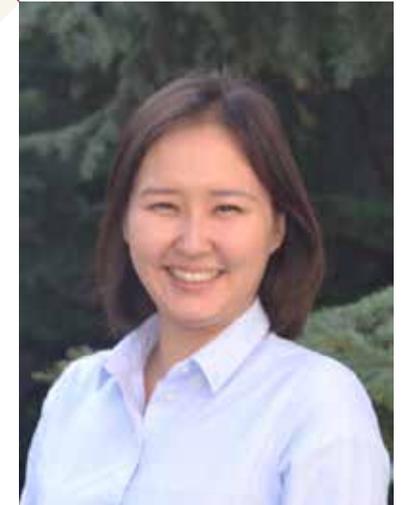
TILEC is funded through a mix of internal funds provided by the University or TILEC's parent schools, as well as external funds. External funds comprise research funding obtained from the Netherlands Organization for Scientific Research (NWO) and assimilated institutions, larger-scale agreements with public authorities or private firms, and revenues from research contracts.

More specifically, research at TILEC for 2018 was funded by the following organizations:

- **Qualcomm Inc.**, for research on innovation, intellectual property, standard setting, and competition
- **The European Research Council (ERC)**, for research on the resilience of non-State regulatory bodies in times of crisis
- **JRC Sevilla**, for research on the interplay of SDO and IPR systems in the ICT industry
- **Netherlands Organization for Scientific Research (NWO)**, in cooperation with the think tank NGInfra, for research into legal and organizational network and governance aspects of data-driven innovations in infrastructure management
- **Netherlands Organization for Scientific Research (NWO)**, for research into innovative possibilities for horizontal cooperation between trade and production companies in the logistics sector
- **VEMW** for the chair "Economic regulation and market governance of network industries"
- **Tilburg Law School**, for research into how data portability in big data affects individuals, innovation and competition
- **Greenpeace E.V.**, for a legal study on the design of WTO-compliant sustainable commodities regulation

## Madina Kurmangaliyeva

"As a new member of the TILEC community, I am happy for its intellectually stimulating atmosphere and cutting-edge research agenda. TILEC has a great team of legal scholars and economists who have passionate, thought-provoking debates on social topics in a friendly setting. The greatest strength of the Center is its truly interdisciplinary nature, a rare opportunity."



# Appendix

## APPENDIX A – MEMBERS PER 31 DECEMBER 2018

### Senior

Senior members	TiSEM/TLS	II	CP	IN	FTE applicable
Costa-Cabral, Francisco	TLS		*	*	1.0
Argenton, Cédric	TiSEM		*	*	0.3
Bijlmakers, Stephanie	TLS	*			0.9
Bijlsma, Michiel	TiSEM		*	*	0.1
Boone, Jan	TiSEM	*	*		0.2
Borowicz, Maciej Konrad	TLS	*			0.9
Brouwer, Erik	TiSEM			*	0.4
Da Rin, Marco	TiSEM			*	0.1
Damme, Eric van	TiSEM	*	*		0.4
Delimatsis Panos	TLS	*	*		0.4
Dengler, Sebastian	TLS/TiSEM	*		*	0.8
Devarakonda, Shivaram	TiSEM			*	0.2
Filistrucchi, Lapo	TiSEM		*		0.2

II: Institutions  
 CP: Competition  
 IN: Innovation

Senior members	TiSEM/TLS	II	CP	IN	FTE applicable
Geradin, Damien	TLS		*	*	0.2
Graef, Inge	TLS		*	*	0.5
Hancher, Leigh	TLS		*		0.1
Husovec, Martin	TLS			*	0.5
Klein, Tobias	TiSEM		*		0.1
Kurmangaliyeva, Madina	TiSEM		*	*	1.0
Lafarre, Anne	TLS			*	0.1
Lavrijssen, Saskia	TLS	*	*		0.4
Marhold, Anna	TLS	*			1.0
Le Mouel, Marie	TiSEM			*	1.0
McCahery, Joseph	TLS	*			0.1
Mikkers, Misja	TiSEM			*	0.1
Müller, Wieland	TiSEM		*		0.1
Partiti, Enrico	TLS	*			0.9
Potters, Jan	TiSEM	*			0.1

Senior members	TiSEM/TLS	II	CP	IN	FTE applicable
Prüfer, Jens	TiSEM	*	*	*	0.2
Renneboog, Luc	TiSEM	*		*	0.2
Ruys, Pieter	TiSEM		*		0.0
Schindler, David	TiSEM	*			0.1
Schütt, Florian	TiSEM			*	0.5
Suetens, Sigrid	TiSEM	*			0.1
Vermeulen, Erik	TLS	*		*	0.1
Willems, Bert	TiSEM	*	*		0.2
Wolswinkel, Johan	TLS	*			0.1

## Junior

Junior members	TiSEM/TLS	II	CP	IN
Atik, Can	TLS			*
Bonani, Michela	TiSEM			*
Capkurt, Fatma	TLS		*	
Espinosa Apraez, Brenda	TLS	*		*
Gils, Freek van	TiSEM	*		*
Fiala, Lenka	TiSEM	*		
Fiedler, Clemens	TiSEM		*	*
Hrynkiv, Olha	TLS	*		
Kanevskaia, Olia	TLS	*		*
Li, Jing	TLS			*
Pusceddu, Piergiuseppe	TLS	*		
Ruhela, Shanya	TLS	*		
Shacham, Ittai	TiSEM		*	*

II: Institutions  
 CP: Competition  
 IN: Innovation

Junior members	TiSEM/TLS	II	CP	IN
Srivastava, Vatsalya	TiSEM	*		
Verghese, Zuno	TLS	*	*	*
Wang, Takumin	TiSEM	*		*
Wang, Xiaoyu	TiSEM	*	*	
Wipusanawan, Chayanin	TiSEM			*
Yang, Yadi	TiSEM			*

## Extramural fellows

Mauricio Rodriguez Acosta  
 Konstantina Bania  
 Paul de Bijl  
 Jan Burke  
 Jan Broulík  
 Gert Brunekreeft  
 Riccardo Calcagno  
 Elena Carletti  
 Firat Cengiz  
 Amrita Chaudhuri  
 Filomena Chirico  
 Peter Cserne  
 Peter Cziraki  
 Victoria Daskalova  
 Hans Degryse  
 Theon van Dijk  
 Angelos Dimopoulos  
 Roxana Fernandez Machado  
 Natalia Fiedziuk  
 Eva Maria Földes  
 Barbara Gabor  
 Suren Gomtsian  
 Ilse van der Haar  
 Rein Halbersma  
 Branislav Hock  
 Sofia Johan  
 Vikas Kathuria  
 Safari Kasiyanto  
 Vincent van Kervel  
 Pierre Larouche

*Universidad del Rosario, Colombia  
 EBU  
 Radicand Economics  
 The bar of Ireland, The Law Library  
 University in Prague  
 Jacobs University  
 EMLyon  
 European University Institute  
 University of Liverpool  
 University of Winnepe  
 European Commission  
 University of Hull  
 University of Toronto  
 University of Twente  
 KU Leuven  
 E.CA Economics  
 Queen Mary, University of London  
 CREST  
 European Commission  
 Universität Wien  
 European Commission  
 University of Leeds  
 Tele2  
 Kansspelautoriteit  
 University of Portsmouth  
 York University  
 Bennet University  
 Bank of Indonesia  
 Pontificia Universidad Catolica de Chile  
 Université de Montréal*

Alan Littler  
 Karin Luttkhuis  
 Evgenia Motchenkova  
 Machiel Mulder  
 Matteo Negrinotti  
 Bastiaan Overvest  
 Maria Fabiana Penas  
 Christoph Schottmüller  
 Gyula Seres  
 Gregory Sidak  
 Jasper Sluijs  
 Moritz Suppliet  
 Peter Szilagyi  
 Alessandro Tajana  
 Emanuele Tarantino  
 Vincent Verouden  
 Jun Zhou  
 Nicolo Zingales  
 Gijsbert Zwart

*Kalff Katz & Franssen*  
*Li & Van Wieringen*  
*VU University Amsterdam*  
*University of Groningen*  
*Italian Competition Authority*  
*CPB*  
*Universidad Torcuato Di Tella*  
*University of Cologne*  
*Humboldt University*  
*Criterion Economics*  
*Andersson Elffers Felix*  
*European Commission*  
*CEU Business School*  
*Johnson & Johnson*  
*University of Mannheim*  
*E.CA Economics*  
*Bar-Ilan University*  
*University of Sussex*  
*University of Groningen*

## External PHD Students

Argyropoulou, Venetia  
 Bolhuis, Machiel  
 Butenko, Anna  
 Comnenus, George  
 Corte, Emmanuel de  
 Edens, Marga  
 Hiemstra, Liebrich  
 Katona, Katalin  
 Lugard, Paul  
 Ochieng Pernet, Awilo  
 Trias, Ana  
 Vitéz, Blanka

*European University Cyprus*  
*Eneco Group*  
*University of Amsterdam*

*Staedion*  
*Energy Trading*  
*Nederlandse Zorgautoriteit*  
*Baker Bots LLP*  
*Codex Alimentarius Commission*

## APPENDIX B – PUBLICATIONS

List of publications by TILEC members falling within the scope of the TILEC research program.

### ENGLISH PUBLICATIONS

#### Academic publications – Journal articles

##### Argenton, C.

Robustness to strategic uncertainty in the Nash demand game. *Mathematical Social Sciences*, 91, 1-5 (with Andersson, O. & Weibull, J.W.).

##### Boone, J.

Basic versus supplementary health insurance: Access to care and the role of cost effectiveness. *Journal of Health Economics*, 60, 53-74.

Competition for traders and risk. *RAND Journal of Economics*, 49(4), 855-876 (with Bijlsma, M & Zwart, G.).

##### Delimatsis, P.

From Sacchi to Uber: 60 years of services liberalization, ten years of the services directive in the EU. *Yearbook of European Law*, 37, 188-250.

Global standard-setting 2.0: How the WTO spotlights ISO and impacts the transnational standard-setting process. *Duke Journal of Comparative and International Law*, 28, 273-326.

National tax regulation, voluntary international standards and the GATS: Argentina – financial services. *World Trade Review*, 17, (2), 265-290 (with Bernard Hoekman).

##### Dengler, S.

Climate policy commitment devices. *Journal of Environmental Economics and Management*, 92, 331-343 (with Gerlagh, R., Trautmann, S.T. & Van De Kuilen, G.).

Marshallian forces and governance externalities: Location effects on contractual safeguards in R&D alliances. *Organization Science*, 29(6), 1112-1129 (with McCann, B. & Reuer, J.).

##### Geradin, D.

Antitrust and Intellectual Property in the United States and the European Union in *The Interplay Between Competition Law and Intellectual Property - An International Perspective*, Gabriella Muscolo and Marina Tavassi eds., Kluwer Law International, (Ginsberg, D.& Klovers, K.).

An Introduction to the Competition Law and Economics of ‘Free’, Antitrust Chronicle, *Competition Policy International*, (1-8), September 2018 (with Edelman, B.).

##### Graef, I.

Algorithms and fairness: What role for competition law in targeting price discrimination towards end consumers. *Columbia Journal of European Law*, 24(3), 541-559.

Fairness and enforcement: Bridging competition, data protection, and consumer law. *International Data Privacy Law*, 8(3), 200-223 (with Clifford, D. & Valcke, P.).

iFairness: Constructing fairness in IT (and other areas of) law through intra- and interdisciplinarity. *Computer Law and Security Review*, 34(4), 707-714. (with Valcke, P. & Clifford, D.).

##### Hancher, L.

A common EU framework regulating import pipelines for gas: Exploring the Commission’s proposal to amend the 2009 gas directive. In: *Journal of Energy and Natural Resources Law*, 1-33 (with Anna Marhold).

##### Husovec, M.

Data portability and data control: Lessons for an emerging concept in EU law. *German Law Journal*, 19(6), 1359-1398 with Graef, I. & Purtova, N.).

##### Kurmangaliyeva, M.

Missing rich offenders: Traffic accidents and the impartiality of justice. *Review of Law and Economics*, 14(1).

**Lavrijssen, S.**

Good governance in the development of network codes for the EU internal electricity market, *Review of European Administrative Law*, 2018, 2 (with Thomas Kohlbacher).

**Li, J.**

Platform economy in legal profession: An empirical study on online legal service providers in China. *UCLA Pacific Basin Law Journal*, 35(2), 97-153.

**Mc Cahery, J.D.**

Corporate disruption and the design of organizations: The law and design of organizations in the 21st century. *European Business Organization Law Review*, 19(4), 737-769 (with Callison, W., Fenwick, M. & Vermeulen E.).

Fintech and the financing of SMEs and entrepreneurs. In D. Cumming, & L. Hornuf (Eds.). *The Economics of Crowdfunding: Startups, Portals and Investor Behavior* (pp. 103-130). London: Palgrave (with Vermeulen E. & Fenwick M.).

**Marhold, A.**

A reply to David Kennedy. *Tilburg Law Review: Journal on international and comparative law*, 1-5.

EU state aid law, WTO subsidies disciplines and renewable energy support schemes: Disconnected paradigms in decarbonizing the grid. *European Journal of Risk Regulation*, 1-39.

Externalizing Europe's energy policy in EU free trade agreements: A cognitive dissonance between promoting sustainable development and ensuring security of supply, *Europe and the World: A Law Review*, 1-30.

**Mikkers, M.**

Competition and quality indicators in the health care sector: Empirical evidence from the Dutch hospital sector. *The European Journal of Health Economics*, 19(1), 5-19 (with Croes, R. & Krabbe, Y).

**Partiti, E.**

The UN Guiding Principles on Business and Human Rights in (national) action: The Dutch Agreement on Sustainable Garment and Textile. *Netherlands Yearbook of International Law*, 49, 381-409 (with Duval, A.).

**Potters, J.**

An experiment on cooperation in ongoing organizations. *Journal of Economic Behavior & Organization*, 147, 28-40 (with Xiu, X.).

The effect of competition on risk taking in contests. *Games*, 9(3), [72] (with Spadoni, L.).

**Prüfer, J.**

Religion, moral attitudes & economic behavior. *Journal of Economic Behavior & Organization*, 148, 282-300 (with Kirchmaier, I. & Trautmann, S.).

Trusting privacy in the cloud. *Information Economics and Policy*, 45, 52-67.

**Pusceddu, P.**

Assessing access to medicines in preferential trade agreements: From the trans-pacific partnership to the comprehensive and progressive agreement for trans-pacific partnership. *International Review of Intellectual Property and Competition Law*, 49 (9), 1048-1079.

**Renneboog, L.**

Beauty and appearance in corporate director elections. *Journal of International Financial Markets, Institutions and Money*, 55, 1-12 (with Geiler, P. & Zhao, Y.).

Do confident individuals generally work harder? *Journal of Multinational Financial Management*, 44, 51-60 (with Pikulina, E. & Tobler, P.).

Financial stability in networks of financial institutions and market infrastructures. *Journal of Financial Stability*, 35, 120-135 (with Berndsen R. & Leon Rincon, C.).

Future-time framing: The effect of language on corporate future orientation. *Organization Science*, 29(6), 1093-1111 (with Liang, H., Marquis & Lis Sun, S.).

#### **Sauter, W.**

The consistency requirement in EU law. *Columbia Journal of European Law* 24, 39-73 (with Jurian Langer).

#### **Suetens, S.**

Heterogeneous guilt aversion and incentive effects. *Experimental Economics*, 21(2), 316-336 (with Bellemare, C., Sebald, A.).

Instrumental reciprocity as an error. *Games*, 9(3), [66] (with Reuben, E.).

Labor supply effects of winning a lottery. *The Economic Journal*, 128(611), 1700-1729 (with Picchio, M., & van Ours, J.).

Predictably angry: Facial cues provide a credible signal of destructive behavior. *Management science*, 64(7), 3352-3364 (with van Leeuwen, B., Noussair, C., Offerman, T. van Veelen, C. M., & van de Ven).

#### **Vermeulen E.**

Why blockchain will disrupt corporate organizations: What can be learned from the “digital transformation”. *The Journal of the British Blockchain Association*, 1(2), 91-100 (with Fenwick, M., & Kaal, W.).

#### **Willems, B.**

Optimal regulation of network expansion. *RAND Journal of Economics*, 49, (1), 23-42 (with Gijsbert Zwart).

### **Academic publications – Book chapters**

#### **Graef, I.**

Blurring boundaries of consumer welfare: How to create synergies between competition, consumer and data protection law in digital markets. In: *M. Bakhroum, B. Conde Gallego, M-O. Mackenrodt,*

*& G. Surblytė-Namavičienė (Eds.), Personal data in competition, consumer protection and intellectual property law: Towards a holistic approach* (121-151). (MPI Studies on Intellectual Property and Competition Law). Springer Verlag.

When data evolves into market power: Data concentration and data abuse under competition law. In M. Moore, & D. Tambini (Eds.), *Digital dominance: The power of Google, Amazon, Facebook, and Apple* (71-97). Oxford University Press.

#### **Hancher, L.**

Aid to nuclear and coal. In: *State Aid in the Energy Sector, (201-234)*. L. Hancher, A. de Hauteclocque and FM Salerno (eds ). Oxford: Hart Publishing

Capacity mechanisms and auctions. In: *State aid and the energy sector, (145-178)*. L. Hancher, A. de Hauteclocque and FM Salerno (eds). Oxford Hart Publishing.

#### **Kanevskaia, O. & Delimatsis, P.**

Exit, voice and loyalty: Strategic behaviour in IEEE, *EURAS proceedings 2018: Standards for a smarter future* (86-106). O’Connor, R. & Jakobs, K. (eds.). Verlag Mainz.

#### **Lafarre, A.**

Legal tech and blockchain for corporate governance and shareholders. In, *Research handbook in data science and law* (153-182). V. Mak, E. Tjong Tjin Tai, & A. Berlee (Eds.) Edward Elgar. (with van der Elst, C.).

#### **Marhold, A.**

Energy and fossil fuels as a topic in WTO accession protocols. In: *European Yearbook of International Economic Law 2018*. (1-17). Bungenberg, M., Krajewski, M., Tams, C., Terhechte, JP. & Ziegler, AR. (eds.), 2018. Springer (with Friedl Weiss).

Subsidies in WTO Law and Energy Regulation: Some Implications for Fossil Fuels and Renewable Energy, In: *State Aid in the Energy Sector*. (25) L. Hancher, A De Hauteclocque and FM Salerno (eds), Oxford: Hart Publishing.

The interplay between liberalization and decarbonization in the European internal energy market for electricity, *Energy law and economics*. Mathis, K. & Huber, B. (eds.), 1 ed. Springer International Publishing, 5, 59-75.

**Mc Cahery, J.D.**

Corporate litigation in specialized business courts. In: J. Gordon, & W-G. Ringe (Eds.), *Oxford Handbook of Corporate Law and Governance* (1-35). Oxford: Oxford University Press. (with Roode A.).

**Potters, J.**

Brandts, J., & Potters, J. (2018). Experimental industrial organization. In L. Corchon, & M. Marini (Eds.), *Handbook of Game Theory and Industrial Organization, Vol II* (Vol. II., 453-474). Cheltenham: Edward Elgar Publishing Ltd. (with Brandts, J.).

**Prüfer, J.**

Data science for institutional and organizational economics. In: C. Ménard, & M. M. Shirley (Eds.), *A Research Agenda for New Institutional Economics* (pp. 248-259). Cheltenham: Edward Elgar Publishers. (with Prüfer, P.)

**Renneboog, L.**

Is corporate social responsibility and agency problem? In S. Boubaker, D. Cummings, & D. K. Nguyen (Eds.), *Research Handbook of Finance and Sustainability* (54-71). Cheltenham: Edgar Elger Publishing. (with Liang, H.)

The routledge companion to management buyouts. In M. Wright, D. Siegel, K. Amess, & N. Bacon (Eds.), *The Routledge Companion to Management Buyouts* (1st Edition ed., 99-146). Abingdon, Oxfordshire: Routledge Publishers. (with Vansteenkiste, C.).

**Vermeulen, E.**

Business and regulatory responses to artificial intelligence: Dynamic regulation, innovation ecosystems and the strategic management of disruptive technology. In M. Corrales, M. Fenwick, & N. Forgó (Eds.), *Robotocs, AI and the future of law* (81-103). (Perspectives in Law, Business and Innovation). Singapore: Springer. (with Fenwick, M. & Corrales, M.)

Capital markets union: Why “venture capital” is not the answer to Europe’s innovation challenge. In D. Busch, E. Avgouleas, & G. Ferrarini (Eds.), *Capital markets union in Europe* (193-207). Oxford University Press.

New metrics for corporate governance: Shifting strategies in an aging IPO market. In J. N. Gordon, & W-G. Ringe (Eds.), *The Oxford handbook of corporate law and governance* (1 ed.). Oxford: Oxford University Press.

Regulation tomorrow: Strategies for regulating new technologies. In T. Kono, M. Hiscock, & A. Reich (Eds.), *Transnational commercial and consumer law ; Current trends in international business law* (pp. 153-174). (Perspectives in Law, Business and Innovation). Singapore: Springer. (with Fenwick, M. & Kaal W.)

The digital future of corporate governance. In ICGN (*International Corporate Governance Network*) Yearbook 2018. (with Fenwick, M.).

## Academic publications – Reports

**Bijlmakers, L.**

*Corporate social responsibility, human rights, and the law*. London: Routledge.

**Hancher, L.**

State aid and the energy sector. *Hart Publishers*, 588.

**Marhold, A.**

Energy in international trade: Concepts, regulation and changing markets. In: *Cambridge Univ Press*.

## Academic publications – Others

**Kanevskaia, O.**

Codex alimentarius commission procedural manual: Twenty fifth edition. In: *Common Market Law Review*, 55, (4) 1298-1300.

Review of the book Private regulation and the internal market. Sports, legal services, and standard setting in EU Economic Law, Mislav Mataja, 2016, *Common Market Law Review*, 55(4), 1298-1300.

**Lafarre, A.**

Blockchain and smart contracting for the shareholder community. Web publication/site, Harvard Law School Forum on Corporate Governance and Financial Regulation (with van der Elst, C.).

Blockchain technology for corporate governance and shareholder activism. Web publication/site, Harvard Law School Forum on Corporate Governance and Financial Regulation (with van der Elst, C.).

Shareholder sustainability activism in the Netherlands. Web publication/site, Oxford Business Law Blog.

**Mc Cahery, J.**

Financial institutions and outsourcing: How is the risk managed. Web publication/site: Oxford Business Law Blog (with de Roode A.).

**Pusceddu, P.**

Review of the book Equity, trusts and commerce, P. Davies and J. Penner, 2017. *Trusts & trustees*, 24, 7, 719-721.

Review of the book International trust laws - 2nd edition, P. Panico, 2017. *Trust & trustees*, 24, (3), 302-305.

## Professional publications – Journal articles

**Graef, I.**

Mandated data sharing is a necessity in specific sectors. *Economisch Statistische Berichten*, 103(4763), 298-301 (with Prüfer, J.).

## Professional publications – Reports

**Graef, I.**

Aptoides versus Google and the boundaries of competition law. *Wirtschaft und Wettbewerb*, 68(9), 437.

**Vermeulen, E.**

*Board evaluation: Overview of international practices.* OECD.

## Professional publications – Other

**Lavrijssen, S.**

*Balancing public values during the energy transition: How can German and Dutch DSOs safeguard sustainability.* (1-30) (with Edens, M.).

**Marhold, A.**

Energy dual pricing as a harmful fossil fuel subsidy: What the WTO can do, Web publication/site.

**Prüfer & Sauter, W.**

What standard for excessive pricing in EU law? A discussion of the Pfizer/Flynn v CMA Case. 2 *European Pharmaceutical Law Review*, 215-221 (with Jasper Hoekstra).

**Sauter, W.**

An eye for an eye? Off-label use and misleading information: Hoffmann-La Roche v AGCM. 1 *European Pharmaceutical Law Review*, 100-107 (with Tamara Klimenta).

**Vermeulen, E.**

How smart technologies are transforming life and business. *Global Corporate Venturing*, 2018(June).

Why universities will be disrupted in a digital age. *Global University Venturing*, 2018(March).

## TILEC discussion papers

### DP 2018-001

*Title:* Electricity Network Codes: Good Governance in a Network of Networks

*Author:* Saskia Lavrijssen, Thomas Kohlbacher

### DP 2018-002

*Title:* Cheap Trade Credit and Competition in Downstream Markets

*Author:* Mariassunta Giannetti, Nicolas Serrano-Velarde, and Emanuele Tarantino

### DP 2018-003

*Title:* GATS Basics - Revisiting Some Basic Notions and Concepts of the General Agreement on Trade in Services

*Authors:* Panagiotis Delimatsis

### DP 2018-004

*Title:* Validity of Non-Disclosure Agreements in SEP Licensing

*Authors:* Vikas Kathuria and Jessica C. Lai

### DP 2018-005

*Title:* Preventing Anticompetitive Conduct Directly and Indirectly: Accuracy vs. Predictability

*Authors:* Jan Broulik

### DP 2018-006

*Title:* Institutional Investor Engagement: How to Create a 'Stewardship Culture'

*Authors:* Mark Fenwick, Erik P.M. Vermeulen

### DP 2018-007

*Title:* Perfect and Imperfect Strangers in Social Dilemmas

*Authors:* Riccardo Ghidoni, Blair Llewellyn Cleave, S. Suetens

### DP 2018-008

*Title:* Merit Goods

*Authors:* Peter Cserne, Maxime Desmarais-Tremblay

### DP 2018-009

*Title:* The Energiewende as a Public Value Challenge for German DSOs

*Authors:* Marga Edens

### DP 2018-010

*Title:* Capital Markets Union: Why 'Venture Capital' Is Not the Answer to Europe's Innovation Challenge

*Authors:* Mark Fenwick, Ivona Skultetyova, Erik P.M. Vermeulen

### DP 2018-011

*Title:* Data Science for Institutional and Organizational Economics

*Authors:* Leigh Hancher, Francesco Maria Salerno

### DP 2018-012

*Title:* The Bundling of Foreign Bribery Cases

*Authors:* Branislav Hock

### DP 2018-013

*Title:* Evidence of Selection in a Mandatory Health Insurance Market with Risk Adjustment

*Authors:* Ramsis Croes, Katalin Katona, Misja Mikkers, Victoria Shestalova

### DP 2018-014

*Title:* Consumers' Privacy Choices in the Era of Big Data

*Authors:* Sebastian Dengler, Jens Prüfer

### DP 2018-015

*Title:* Balancing Public Values During the Energy Transition – How Can German and Dutch DSOs Safeguard Sustainability?

*Authors:* Marga Edens, Saskia Lavrijssen

**DP 2018-016**

*Title:* A Theory of SME Governance Regulation

*Authors:* Marcelo Godke Veiga, Joseph A. McCahery

**DP 2018-017**

*Title:* Two Contexts for Economics in Competition Law

*Authors:* Jan Broulik

**DP 2018-018**

*Title:* Advertising as a Reminder: Evidence from the Dutch State Lottery

*Authors:* Chen He, Tobias J. Klein

**DP 2018-019**

*Title:* The Dilemmas of International Climate Change Negotiations and the Role for Linked Emissions Trading Schemes in the Post 2020

*Authors:* Elena Aydos

**DP 2018-020**

*Title:* Energy and Fossil Fuels as a Topic of WTO Accession Protocols

*Authors:* Anna Marhold, Friedl Weiss

**DP 2018-021**

*Title:* Global Standard-setting 2.0: How the WTO Spotlights ISO and Impacts the Transnational Standard-setting Process

*Authors:* Panagiotis Delimatsis

**DP 2018-022**

*Title:* Are Investors Aware of Ownership Connections?

*Authors:* Luc Renneboog, Edith Ginglinger, Camille Herbert

**DP 2018-023**

*Title:* User Review Portability: Why and How?

*Authors:* Vikas Kathuria, Jessica C. Lai

**DP 2018-024**

*Title:* A Survey of the Hold-up Problem in the Experimental Economics Literature

*Authors:* Yadi Yang

**DP 2018-025**

*Title:* When Disruptive Meets Streamline: International Standardization in Blockchain

*Authors:* Panagiotis Delimatsis

**DP 2018-026**

*Title:* Standardization, Open Source and Innovation: Sketching the Effect of IPR Policies

*Authors:* Martin Husovec

**DP 2018-027**

*Title:* Counterproductive Regulation? The EU's (Mis) adventures in regulating unfair trading practices in food supply chain.

*Authors:* Victoria Daskalova

**DP 2018-028**

*Title:* Using experimental Evidence to Design Optimal Notice and Takedown Process

*Authors:* Lenka Fiala, Martin Husovec

**DP 2018-029**

*Title:* Towards a Holistic Regulatory Approach for the European Data Economy:

Why the Illusive Notion of Non-Personal Data is Counterproductive to Data Innovation

*Authors:* Inge Graef, Raphael Gellert and Martin Husovec

**DP 2018-030**

*Title:* Subsidies and investment promotion reaching new heights in the aviation sector

The US – Tax Incentives dispute

*Authors:* Kristy Buzard, Panagiotis Delimatsis

**DP 2018-031**

*Title:* From Sacchi to Uber: 60 years of Services Liberalization, 10 years of the Services Directive in the EU

*Authors:* Panagiotis Delimatsis

**DP 2018-032**

*Title:* A Reply to David Kennedy

*Authors:* Anna-Alexandra Marhold

**DP 2018-033**

*Title:* Legal Education in a Digital Age: Why ‘Coding for Lawyers’ Matters

*Authors:* Mark Fenwick, Wulf A. Kaal, Erik P.M. Vermeulen

**DP 2018-034**

*Title:* Standardization, Open Source, and Innovation: Sketching the Effect of IPR Policies

*Authors:* Martin Husovec

**DP 2018-035**

*Title:* Why ‘Blockchain’ Will Disrupt Corporate Organizations

*Authors:* Mark Fenwick, Wulf A. Kaal, Erik P.M. Vermeulen

**DP 2018-036**

*Title:* Impulse Purchases, Gun Ownership and Homicides: Evidence from a Firearm Demand Shock

*Authors:* Christoph Koenig, David Schindler

**DP 2018-037**

*Title:* “Debtor protection and business dynamism”

*Authors:* Geralfo Cerqueiro, Maria Fabiana Penas, Robert Seamans

**DP 2018-038**

*Title:* Independence, Regulatory Competences and the Accountability of National Regulatory Authorities in the EU.

*Authors:* Prof. Dr. Saskia Lavrijssen

**DP 2018-039**

*Title:* Banks Joining Venture Capital Investments: Portfolio Selection, Strategic Objectives, Performance and Exit

*Authors:* Samuele Martinu, Sofia A. Johan

**DP 2018-040**

*Title:* End-of-Day Price Manipulation and M&A's

*Authors:* Douglas Cumming, Shan Ji, Sofia Johan, Monika Tarsalewska

**DP 2018-041**

*Title:* What should EU competition policy do to address the concerns raised by the Digital Platforms’ market power?

*Authors:* Prof. Damien Geradin

**DP 2018-042**

*Title:* Membership, Governance and Lobbying in Standard Setting Organizations

*Authors:* Maria Larrain, Jens Pruefer

**NON-ENGLISH PUBLICATIONS****Academic publications – Journal articles****Brouwer, E.**

De algoritmische waakhond: Datagedreven mededingingstoezicht. *Tijdschrift voor Toezicht*, 9(2), 57-64 (with Sviták, J.).

**Graef, I.**

Grenzen aan discriminatie als misbruik van machtspositie 19 april 2018: Zaak C-525/16, MEO – Serviços de Comunicações e Multimédia SA/Autoridade da Concorrência. *SEW: Tijdschrift voor Europees en Economisch Recht*, 2018(12), 541-546.

Naar een meer samenhangend mededingings- en gegevensbeschermingstoezicht in datagedreven markten. *Tijdschrift voor Toezicht*, 2018(2-3), 36-46.

**Lafarre, A.**

De evaluatie van de Wet aanpassing enquêterecht. *Tijdschrift Ondernemingsrecht*, 2018(8), 380-390 (with van der Sangen, G., van der Elst, Schippers, B., & van den Bosch, S.).

**Sauter, W.**

Het coherentievereiste in het Unierecht. I SEW Tijdschrift voor Europees en economisch recht, 138-148 (with Jurian Langer).

**Wolswinkel, J.**

Concurrerende verdelingsregimes: Schaarse vergunningen onder Unierecht en nationaal recht na Vlaardingen en Appingedam. *Tijdschrift voor Europees en Economisch Recht*, 66, (7/8), 288-301.  
Schaarse rechten in het omgevingsrecht: Een tegenconclusie voor de rechtsontwikkeling. *Tijdschrift voor Omgevingsrecht*, 2018(3), 109-121.

**Academic publications – Book chapters****Vermeulen, E.**

De “digitale” toekomst van corporate governance. In M. Lückerath-Rovers, B. Bier, H. van Ees, & M. Kaptein (Eds.), *Jaarboek corporate governance 2018-2019* (pp. 157-166). Wolters Kluwer (with Fenwick, M.).

**Professional publications – Journal articles****van Damme, E. & Sauter W.**

Bestaat er zoiets als een onbillijke prijs? Zaak C-177/16 (AKKA/LAA). *Markt en Mededinging*, 21(5), 200-21.

Kan prijsdifferentiatie mededingingsbeperkend zijn? Zaak C-525/16 (MEO). *Markt en Mededinging*, 21(5), 212-218 (with Eric van Damme & Wolfgang Sauter).

**van Damme, E.**

van Damme, E. (2018). Mededinging en de man-vrouw verhouding. *Markt en Mededinging*, 2018(5), 181-183.

**Van Damme, E, Graef, I. & Sauter, W.**

Big data, prijsdiscriminatie en mededinging. 21 *Markt en Mededinging* 2018, 3, 114-123.

**Graef, I. & Sauter, W.**

Machtsmisbruik op basis van big data. 21 *Markt en Mededinging* 2018, (3) 124-134, (with Eric van Damme).

**Hiemstra, L.**

Beroepsgeheim niet meer te vertrouwen? *Tijdschrift voor Financieel Recht*, 2018, 11, (558 – 564)

**Lafarre, A.**

*Doelbereiking en effectiviteit van de wet aanpassing enquêterecht in de praktijk*. Ministerie van Justitie – WODC (with van der Sangen, van der Elst, Schippers, B & van den Bosch, S.).

**Lavrijssen, S.**

Onderzoek naar de mogelijke juridische integratie van de Elektriciteits-, Gas- en Warmtewet. *Tijdschrift voor Toezicht*. 2018, 1, 27-35 (with Frits van der Velde, Patrick Köpsel Sanz and George Heusschen).

Een integrale Energiewet, (web publication).

**Professional publications – Others****Wolswinkel, J.**

*ABRvS 12 september 2018, AB 2018/411 (vergunningstop Amsterdam)*, No. ECLI:NL:RVS:2018:2958

*ABRvS 20 september 2017, AB 2018/319 (leerlingenpotentieel De Ozonlaag)*, No. ECLI:NL:RVS:2017:2552 (with Zoontjes, P.)

*ABRvS 21 februari 2018, AB 2018/293 (fietstaxivergunning Amsterdam)*, No. ECLI:NL:RVS:2018:602

*ABRvS 31 januari 2018, AB 2018/412 (ligplaats Amsterdam)*, No. ECLI:NL:RVS:2018:306

*ABRvS 8 november 2017, AB 2018/3 (kansspelvergunning Sportech)*, No. ECLI:NL:RVS:2017:3048.  
(with Stoeper, G.)

*HvJ EU 26 juli 2017, AB 2018/243 (Persidera)*, No. ECLI:EU:C:2017:597

*HvJ EU 26 juli 2017, AB 2018/244 (Europa Way en Persidera)*, No. ECLI:EU:C:2017:593

## APPENDIX C – ACTIVITIES 2018

### TILEC Seminars

A Seminar is devoted to a specific topic within the TILEC research program. It is organized for the benefit of faculty members and other researchers at Tilburg University.

17 January 2018

**Konrad Stahl**, University of Mannheim

*Relational Contracts, Competition and Innovation: Theory and Evidence from German Car Manufacturers*

28 February 2018

**Meredith Fowlie**, Berkeley, University of California

*Measuring and Mitigating Greenhouse Gas Emissions Leakage*

14 March 2018

**Rupprecht Podszun**, University of Düsseldorf

*Economic Evidence before the European Courts After Intel*

18 April 2018

**Tim Simcoe**, Boston University

*Disclosure Rules and Declared Essential Patents*

09 May 2018

**Melissa Scanlan**, Vermont Law School

*Law and Policy for a New Economy: Sustainable, Just, and Democratic*

22 June 2018

**Mark Roberts**, Pennsylvania State University

*Measuring the Return to R&D Using Innovation Surveys*

12 September 2018

**Anja Shortland**, King's College London

*The Role of Insurers in Governing Criminal Markets*

31 October 2018

**Eric Morrison**, Financial Conduct Authority (FCA) and King's College London

*Shareholder Activism*

14 November 2018

**Liad Wagman**, IIT Stuart School of Business

*The Short-Run Effects of GDPR on Technology Venture Investment*

21 November 2018

**Bertin Martens**, Joint Research Centre of the European Commission

*Data market design between technological and regulatory constraints*

*A case study of car data markets*

12 December 2018

**Willem van Boom** and **Jean Pierre Van Der Rest**, Leiden University

*Consumers Beware: Personalized Pricing in Action!*

*How the Framing of a Mandated Personalized Pricing Disclosure Influences Intention to Purchase*

## Workshops and conferences

TILEC organizes larger conferences and workshops, devoted to specific topics open to everyone interested in our research themes and activities. More often than not, those larger events are used to bring together academics, policy-makers and representatives from the business world.

20 March 2018

*TLS / TILEC Farewell event for Pierre Larouche*

Speakers:

**Panos Delimatsis**, Tilburg University, TILEC

**Maarten Pieter Schinkel**, University of Amsterdam

**Jasper Sluijs**, Utrecht University School of Law

**Alexandre de Streel**, Universities of Namur

**Pierre Larouche**, Tilburg University, TILEC

**Randall Lesaffer**, Tilburg University

9 June 2018

*[Expert Workshop] Mapping Flexibilities for Injunctive Relief in Patent Law: What Can the Member States of the European Union and the United States Learn From Each Other?*

Speakers:

**Richard Arnold**

**Peter Blok**

**Alessandro Cogo**

**Colleen Chien**

**Jorge Contreras**

**Graeme Dinwoodie**

**John Golden**

**Thibault Gisclard**

**Klaus Grabinski**

**Willem Hoyng**

**Martin Husovec**

**Matthias Leistner**

**Peter Picht**

**Emmanuel Py**

**Marco Ricolfi**

**Rafał Sikorski**

**Tomasz Targosz**

09 November 2018

*TILEC 15th Anniversary Conference: Legal and Economic Challenges in Competition Policy*

Speakers:

**Renato Gomes**, Toulouse School of Economics

**Paul Heidhues**, Düsseldorf  
**Morten Hviid**, University of East Anglia  
**Pablo Ibanez Colomo**, LSE  
**Marina Lao**, Seton Hall  
**Ioannis Lianos**, UCL  
**Carlo Reggiani**, Manchester  
**Giancarlo Spagnolo**, SITE, Stockholm School of Economics

29 November 2018

*TILEC Competition Policy and Innovation Conference*

Keynote Speakers:

**Philippe Aghion**, College de France  
**Ariel Ezrachi**, Oxford University

Speakers:

**Giulio Federico**, DG Competition  
**Wolfgang Kerber**, Marburg University  
**Gregor Langus**, Compass Lexecon  
**Nicole Robins**, Oxera  
**Giorgio Monti**, European University Institute  
**Pierre Régibeau**, Charles River Associates  
**Michelle Sovinsky**, Mannheim University  
**Emanuele Tarantino**, Mannheim University

## Club Med / Club IO

Club Med (for Club Mededingingsrecht – or competition law, in Dutch) meetings have long been a cornerstone of TILEC’s weekly activities. In 2013, the format of the meetings was changed:

Club Med meetings are now coupled with a so-called Club IO (for Club Industrial Organization) meeting, taking place the following week. In the Club Med, recent legal and policy developments are discussed, including Commission decisions, judgments of the European or US courts, legislative initiatives, and policy guidelines. In the Club IO, these same developments are examined through the lens of economic analysis.

31 January 2018

**Jens Prüfer**, Tilburg University, TILEC  
*A Primer on the Economics of Artificial Intelligence*

28 March 2018

**Jens Prüfer**, Tilburg University, TILEC  
*A Primer on the Economics of Artificial Intelligence*

25 April 2018

**Cédric Argenton**, Tilburg University, TILEC  
*New economic theories of cartelization.*

23 May 2018

**Michela Bonani**, Tilburg University, TILEC  
*Heidi Williams (2017), “How Do Patents Affect Research Investments?” Annual Review of Economics*

05 December 2018

**Eric van Damme**, Tilburg University, TILEC  
*The MEO (price discrimination) and AKKA/LAA (excessive prices) cases*

## Work-in-progress (WIP) meetings

WIP Meetings are internal events where TILEC members present their own work at an early stage, for comments and discussion.

10 January 2018

**Yadi Yang**, Tilburg University, TILEC  
*Delegation in social dilemmas: An experimental study*

24 January 2018

**Jing Li**, Tilburg University, TILEC  
*Platform Economy in Legal Profession: An Empirical Study on Online Legal Service Providers in China*

07 February 2018

**Xiaoyu Wang**, Tilburg University, TILEC*What is Law: comment on Hadfield and Weingast (2012)*

21 February 2018

**Francisco Costa-Cabral**, Tilburg University, TILEC*Innovation in EU competition law: beyond market structure?*

07 March 2018

**Lenka Fiala**, Tilburg University, TILEC and **Martin Husovec**, Tilburg University, TILEC *Using Experimental Evidence to Design Optimal Notice and Takedown Process*

21 March 2018

**Panos Delimatsis**, Tilburg University, TILEC*60 years of Rome, 10 years of the Services Directive: Integration through Judicial Interpretation*

04 April 2018

**Oscar Borgogno**, TILT*On FinTech, data control and competition policy*

11 April 2018

**Sergio Goldbaum**, TILEC visiting Professor*Impact of Decree 8058/2013 on antidumping activity in Brazil and research agenda*

02 May 2018

**Paul Pudschedl**, TILEC*The usage of captive insurance structures by non-financial corporations*

16 May 2018

**Freek van Gils**, Tilburg University, TILEC*Media Manipulation and Electoral Outcomes in the Digital Age*

30 May 2018

**Clemens Fiedler**, Tilburg University, TILEC*Should we Intervene in the Demand of Firms in the Software Market?*

13 June 2018

**Gyula Seres**, TILEC*Bid Rejection and Litigation in Public Procurement: Evidence from Poland*

20 June 2018

**Lapo Filistrucchi**, TILEC*Media bias, Personalization and the Pact of the Nazarene*

27 June 2018

**Moritz Suppliet**, Tilburg University, TILEC*Licensing Agreements and Patent Pools*

05 September 2018

**Ittai Shacham**, Tilburg University, TILEC*Information vs. Regulation: a case study of Israeli television*

19 September 2018

**Jasper Sluijs**, TILEC*Commercial Subsidiaries of Public Entities and the Limits of EU Competition Law*

26 September 2018

**Chayanin Wipusanawan**, Tilburg University, TILEC*Incremental Value Interpretation of FRAND with Complementary Inputs*

03 October 2018

**Brenda Espinoza Apraez**, Tilburg University, TILEC*Exploring regulatory barriers for the use of Data-Driven Innovation in the management of key infrastructures*

10 October 2018

**Can Atik**, Tilburg University, TILEC*How 'Big Data' affects competition law analysis in Online Platforms and Agriculture: does one size fit all?*

17 October 2018

**Evgenia Motchenkova**, TILEC*Penalizing on the Basis of the Severity of the Offence: A Sophisticated Revenue-Based Cartel Penalty*

24 October 2018

**Olia Kanevskaia**, Tilburg University, TILEC*Input and output legitimacy in technological standardization*

07 November 2018

**Clemens Fiedler**, Tilburg University, TILEC*Standards and the common good: how competition fosters cooperation*

28 November 2018

**Piergiuseppe Pusceddu**, Tilburg University, TILEC *Enforcing the FRAND commitment in China***Other activities**

TILEC advertised openings for two postdoc positions on the economics side: a 2-year position on the economics of innovation and a 3-year position on the governance of data-driven markets. Three candidates for each position were selected and were invited to give a job market seminar:

18 January 2018

**Yu-Hsin Liu**, Indiana University*The Impact of Consumer Multi-homing Behavior on Ad Prices: Evidence from an Online Marketplace*

24 January 2018

**Madina Kurmangaliyeva**, EUI*Missing Rich Offenders: Traffic Accidents and the Impartiality of Justice*

30 January 2018

**Gokhan Oz**, University of Pennsylvania*Monetization of Ideas: Estimating Inventors' Gains Under Alternative Patent Enforcement Regimes*

31 January 2018

**Soo Jin Kim**, Michigan State University*Privacy, Information Acquisition, and Market Competition*

05 February 2018

**Eugenie Dugoua**, Columbia University*International Environmental Agreements and Directed Technological Change: Evidence from the Ozone Regime*

06 February 2018

**Marie LeMouel**, DIW Berlin*Managerial knowledge spillovers and firm productivity*

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Design and production:

**Beelenkamp Ontwerpers, Tilburg**

Print:

**Prisma Print, Tilburg**

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What does TILEC's annual report do in this booklet you may wonder? TILT and LTMS a game changer in producing world-class research and education surrounding technology-related societal challenges. In the two parts of this booklet you will witness that 2018 was once again a very successful year for

TILT

LTMS

The fact that you open the annual report this way means you know, or know about, TILC. What does TILT's annual report do in this booklet you may wonder? TILC and TILT have merged into the new Department of Law, Technology, Markets, and Society (LTMS). We aim to make class research and education surrounding technology-related societal challenges a very successful year for

TILEC

LTMS