

CURRICULUM VITAE

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Summary

Dr Hans W. Friederiszick is a Director and founder of E.CA Economics. Dr Friederiszick has more than 20 years of experience advising clients across the competition economics field, i.e. mergers, cartels, abuse of a dominant position and State aid cases, and has led teams of economists engaged in international antitrust investigations. He has been retained as an economic expert in the German, UK and other European courts and has been named in Global Competition Review's (GCR) Who's Who as one of the field's leading competition economists. According to WWL's 2022 client survey Dr Friederiszick "is an exceptional competition economist" and, according to the same survey, "his in-depth knowledge and experience in the field is impressive". In 2023, he is again listed as one of the "Thought Leaders Global Elite". Dr Friederiszick was part of the first Chief Economist Team of DG COMP (2003 to 2006).

Leading casework includes the multi-billion-euro merger between Holcim and Lafarge as well as EDEKA's closely watched acquisition of rival Kaiser's Tengelmann in Germany (which was resolved through ministerial approval). Dr Friederiszick has provided support to Telefónica in the Vodafone/ Unity Media Merger and to Remondis on the takeover attempt of Duales System Deutschland. Most recently he supported EG Group in its acquisition of OMV's gasoline stations in Southern Germany and Kronospan in its attempted take-over of Pfleiderer East (particle board). He has additionally received widespread recognition for his private litigation work in cases addressing the synthetic rubber, the air cargo and credit card sectors (plaintiff side), as well as the smart-card chip, fast-moving consumer goods sectors and soft timber (defendant side). He won a large-scale framework contract supporting the European

Commission, where he worked as a consortium leader on the EC fitness check of various state aid guidelines. In digital markets he did advisory work for Amazon (Audible), Asics (online sales), Deutsche Kreditwirtschaft (online payment system), HSR (hotel booking), eBay, PayPal and most recently Apple (Article 19a1 proceedings).

Dr Friederiszick is a Research Fellow at ESMT Berlin. He has published widely and is a regular speaker at international antitrust conferences. Recent publications address the economic analysis in European competition law (NOMOS Kommentar, Europäisches Wettbewerbsrecht, forthcoming 2023), reverse privatization in waste collection (Review of Industrial Organization, 2022) and cartel litigation activity (Journal of Antitrust Enforcement, 2021).

Relevant experience – Competition policy enforcement

Merger cases

- Kronospan/ Pleiderer East (2022): Support to Kronospan in an attempted take-over of Pfleiderer's particleboard plants in Poland. Pre-notification, Phase I and Phase II support at the European Commission, DG COMP. Presentations at two hearings during Phase II.
- EG Group/ OMV (2021/ 2022): Support to the merging parties concerning the sale of around 285 OMV gasoline stations in Southern Germany. In-depth analysis of geographic market definition (catchment area analyses).
- **REAL/Redos** (retail grocery, 2020): Support to the merging parties concerning the sale of around 280 REAL stores in Germany. In-depth analysis of geographic market definition in retail grocery markets. Several presentations to the German competition authority.
- **Vertical merger in poultry breeding (2019):** Feasibility study and pre-notification support in the poultry breeding industry for the merging parties. Analysis of potential input and customer foreclosure. German Competition Authority.
- Vodafone/Liberty (cable network, 2019): Support to Telefónica (complainant) in a merger proceeding. Assessment of unilateral (closest competitor analysis; UPP) and coordinated effects. Assessment of incentives to innovate and to invest in new infrastructure. Remedy proposal. EU proceedings.
- Remondis and DSD (plastic waste collection, 2019): Assessment of horizontal and vertical competitive effects on behalf of the merging parties. Remondis is active on all levels of the value chain of the recycling business, i.e. collecting, sorting and processing as well as recycling of water. DSD ("Duales System Deutschland") is a client of Remondis at different points of the value chain. Analysis and simulation of the plausibility of vertical theories of harm. Remedy proposal. German Competition Authority.
- EnBW/MVV (waste incineration, 2017): Relevant market definition for the acquiring party in the waste incineration sector in Germany. Application of UPP analysis in the context of bidder markets and minority shareholding. Analysis of related markets such as electricity. German Competition Authority.
- AirBerlin/TUI joint venture (holiday tour operators/ air carriers, 2017): Analysis of vertical theories of harm, i.e. likelihood of input foreclosure in downstream markets of tour operators. Horizontal competition concerns were addressed by conducting a margin concentration analysis. Pre-notification support. EU proceedings.

- Cement industry in South Africa, Zimbabwe, Kenya and Tanzania (2017): Economic antitrust risk assessment for the parties.
- Owens Corning/Ahlstrom (manufacturing industry, 2016): Merger in the market of wet-made glass fibre nonwovens. Market definition and competitive impact assessment for the companies involved. Analysis of supply-side substitution and margins. German proceedings
- Good Mills acquisition of household flour brands flour (2015): Analysis of substitution between brands and private label products for the merging parties. German Competition Authority.
- EDEKA/Kaiser's Tengelmann (food retailing, 2015): Merger of two large retail grocery store chains in Germany. Analysis of geographic market definition (chains of substitution), market shares, econometric estimation of price-concentration relationship, survey design and evaluation (SSNIP, diversion ratio), critical loss analysis and input to the legal submissions. German proceedings.
- Good Mills/Pfalzmühle Mannheim (durum wheat, 2014): Acquisition of a durum wheat mill Customer switching analysis for merging parties. German Competition Authority.
- Holcim/Lafarge merger (cement industry, 2014): Global transaction bringing together two of the leading grey cement manufacturers in the word. Representation of the parties in the European proceedings; notification support, detailed overlap analyses (Isochrones) and remedy proposal. Coordination with US teams and instructions to teams in other jurisdictions. EU proceedings.
- Holcim/Cemex West merger (cement industry, 2013): Assessment of competitive effects in the markets for grey cement in Germany, Belgium and the Netherlands. Isochrone analyses, margin concentration analysis, coordinated effects analyses for the parties. EU proceedings
- Merger feasibility study in the European fat industry (2013): Assessment of the relevant geographic market and the likelihood of competitive effects of a proposed merger in the consumer goods industry. In-depth analysis of delivery radius, over-capacities, customer switching and an estimation of the maximum price increase post-merger. For the acquiring party.
- Merger case in the insulation industry (2013): Geographic market definition. For Knauf Isolations. German proceedings.
- Potential merger case in the waste collecting industry (2011): Market definition and effects analysis in order to assess the potential for future merger cases in the industry.
- Merger in the Eastern European cement industry (2010): Advice to Holcim concerning the take-over of several Slovak grey cement plants. The analysis focussed on market definition. A critical loss analysis was carried out. Testimony for the Hungarian, Slovak and Czech competition authorities.
- Proposed merger in the printing machine industry (2009): Economic analysis of product and geographic market definition for the merging parties. Econometric analysis of the parties' internal pricing data, as well as the analysis of publicly available information on international trade volumes. German proceedings.
- GN/Phonak merger (hearing aids, 2008): Advise to GN Store in response to the prohibition decision of the proposed merger with Phonak by the German competition authority. Written testimony on the application of coordinated effects analysis in the industry and presentation to the higher regional court. In 2009, the highest German court confirmed our assessment and overturned the prohibition decision by the national competition authority (with L.-H. Röller and A. Stephan).
- Google/Yahoo (online advertisement market, 2008): Analysis of the competitive relationship between various search engines based on a comprehensive data set provided by AC Nielsen on behalf of a complainant. The report analyses both sides of the online advertisement market for sponsored text links: viewer's reach and overlap of various search engines for several European countries as well

- as the advertisers' switching behaviour for Germany. The alliance did not materialise. US and EU proceedings.
- Google/DoubleClick merger (2007): Support to a complainant. The assessment provides an overview of the economics of online advertising markets, investigates the different technological and commercial models for providing ad-server functionality, and presents a competitive assessment of the transaction. Significant issues are raised related to the potential anticompetitive effects of the merger, and empirical questions are posed which need addressing in order to assess these effects further. European Commission.
- European Directories/Truvo (yellow print pages, 2008): Re-assessment of competitive effects after the Netherlands Competition Authority issued a statement of objections regarding the proposed merger of the only two suppliers of yellow print pages. The analysis focussed on competition from online media and the market's two-sidedness. The merger was cleared. Dutch proceedings.
- Oracle/Sun merger (2009): Assessment of the potential horizontal and vertical effects of the Oracle-Sun Microsystems merger. A white paper was submitted to the European Commission with a detailed description of possible theories of harm. In the second stage of the merger analysis, an empirical analysis of database usage was carried out. The merger has gone to Phase II in both the US and EU.
- Microsoft/Contentguard merger (2005): Assessment of the likelihood of anticompetitive effects of the merger as part of the EC Commission's case team. Assessment of the patent position of the merging markets. The merger was withdrawn.
- Inco/Falconbridge (2005): Assessment of the potential anticompetitive effects of a merger in the nickel and cobalt industry as part of the EC Commission's case team. The merger was approved with remedies.
- **GE/Honeywell (2004):** Testimony for the EC reassessing the theory of harm and empirical evidence put forward by the Commission. Support of L.-H. Röller for and participated at the hearing in front of the European Court of Justice.

Abuse cases

- 19a1 proceedings Apple: Support for Apple in relation to the investigation of the BKartA whether Apple has paramount significance for competition across markets.
- Abuse of a dominant position (excessive pricing) in the nuclear energy industry: Analyses of the price negotiations between two leading plant operators regarding the price of productions licences for nuclear energy in the context of the nuclear phase out in Germany.
- Abuse of dominance in the market for genetically modified corn seed: Assessment of anticompetitive effects for a claimant. Market definition and theory of harm analysis in European and US markets.
- Damages assessment in the accommodation and hotel business: Analysis of possible damages due to best price clauses from hotel booking platforms on the behalf of a large German hotel booking platform.
- Abuse of a dominant position in the railway sector: Advice to an incumbent railway operator in the context of a predatory pricing claim. Implementation of "As Efficient Competitor Test", analysis of suction effects and assessment of potential efficiencies due to yield management. National Proceedings.
- Antitrust case in the transport sector: Advise concerning allegations of an anticompetitive agreement. EU administrative proceedings.

- Market definition for cancer drugs: Market definition analysis as an input to dominance test for cancer drugs. German proceedings.
- Assessment of exclusionary conduct in the German gambling industry (FLUXX): Expert testimony on the damages related to refusal-to-deal allegations by state owned lottery firms vis-à-vis private gambling brokers. German Proceedings.
- Economic effects of credit card rules in the ATM segment: Analysis focused on the distortion effects of "Honour-All-Cards" rules (HAC) and no-discrimination clauses on competition as well as investment in the ATM segment. Examination of the likelihood of HAC rules hampering market entry of credit card systems in Europe. On behalf of an ATM provider. German proceedings.
- Study on buyer power and the outcome of bilateral negotiations in the grocery retailing industry: The competition authority investigated whether a large retailer had abused its dominant position visà-vis dependent suppliers. The study assessed the empirical relationship between the dependency measure proposed by the agency and the outcome of bilateral negotiations between the retailer and various suppliers. The investigation involved hypothesis testing as well as regression analysis.
- Relevant product market definition in the audio books sector: Assessment of substitution patterns for different distribution channels of audio books (physical vs. digital). Critical loss analysis to define the relevant product market for digital audiobooks. German proceedings.
- Abuse of a dominant position in the market for medical information systems: Development of a
 method to analyse excessive prices in a two-sided market. For Galenica AG (Defendant). Swiss
 proceedings.
- Assessment of conditional rebates in TV advertisement markets: Analysis of conditional rebates
 applying the tests proposed in the EC staff paper on Art.102 TFEU. Quantification of the differences
 between rebate schemes for different customer groups and their potential suction effect. Customers
 switching analysis.
- Abuse of a dominant position in financial data industry: General advice and economic arguments (e.g. efficiencies) in the EU proceedings regarding the 2009 investigation of Thomson Reuter's potential abuse of its dominant position in financial data by its RIC code licensing restrictions.
- Abuse of a dominant position in the gas wholesale market: Assessment of the potential anticompetitive effects of a long-term contract for a natural gas wholesaler. International arbitration
- Abuse of a dominant position in the natural gas industry: Economic assessment on behalf of the plaintiff. Austrian proceedings.
- Advised plaintiff regarding anticompetitive foreclosure in the aviation industry: Support, jointly with a transatlantic team, to a spare parts supplier which accused the dominant firm of impeding its market entry by foreclosing certain inputs and also certain customers.
- Market definition for payment systems: Online survey to assess substitution patterns between alternative payment systems. For PayPal. German proceedings.
- Market definition of online trading platforms: Distribution of online questionnaires to more than 2,000 sellers and buyers in a two-sided market context. Determination of price elasticities as well as cross-participation elasticities for both sides. Application of a critical loss analysis considering both elasticities to define the relevant product market. For eBay. German Proceedings.
- Support of a complainant regarding Google's alleged abuse of a dominant position: Development of an economically robust theory of harm regarding the alleged discrimination in Google's organic search in favour of its own vertical search engines. In the empirical part of the project, search results for the

main general search engines were collected on a variety of keywords to compare the placement of different competitors within the first page of search results. The EC Commission initiated a sector inquiry into this industry in response and later fined Google for self-preferencing.

- Abuse of a dominant position in a medical device market: Advise to Synthes AG, a leading manufacturer of medical devices, in the context of a potential investigation of the German Federal Cartel Office. German proceedings.
- Assessment concerning compatibility of an envisaged purchasing agreement with Article 101 TFEU: Assistance to a client in its self-assessment concerning the compatibility of an envisaged purchasing agreement with Article 101 TFEU.
- Pass-through analysis of CO2 certificates in the German electricity sector for RWE. Based on theoretical grounds and on a detailed assessment of the contractual specificities, pass-through was economically justified and not considered an indicator of single or joint dominance. The case was finally settled.
- AstraZeneca abuse of a dominant position case: Support to the case team on an appropriate methodology to delineate markets in a regulated industry. Assessment of the econometric studies provided by the defendant. Participation and rebuttal of the studies at the hearing.
- **Collecting societies/ CISAC:** Re-assessment of the economic studies put forward by the parties, support to the case team regarding data collection and participation at the hearing.

Cartel and information exchange cases – private litigation

- Market for soft timber (bundled marketing): Support to the federal states Hesse, Rhineland-Palatinate and Thuringia, defendant side, private litigation, German proceedings.
- **Cosmetics and body care:** Defence support to Beiersdorf AG, several cases, German court proceedings, private litigation.
- **Polyurethane industry (foam for furniture):** Testimony on behalf of the defendant, German court proceedings, private litigation.
- Visa/ Mastercard interchange fees: Pass on analysis. Assessment of tourist test in the credit card markets. On behalf of a group of high street retailers (private litigation); UK Court proceeding.
- Financial market manipulation of the USD LIBOR: Damages estimation in relation to financial market manipulation. Assessment of various empirical methods to identify short-term or mid-term manipulation of various interest rates. Evaluating damages for individual asset portfolios.
- **Financial market manipulation of the USD LIBOR:** Support to a plaintiff; liability report, UK proceedings.
- Smart card chip cartel: Support to Infineon AG, market definition and effects analysis, defendant side, private litigation, UK proceedings.
- **Air cargo transportation:** Damage estimation on behalf of a group of international freight forwarders. Multijurisdictional proceedings.
- Gas isolated switchgear cartel: Overcharge and pass-on analysis for various plaintiffs, German court proceedings.
- Confectionary manufacturers (FMCG): Overcharge and pass-on analysis for Haribo and Nestlé, defendant side, private litigation, German court proceedings.

- Washing detergent market (FMCG): Assessment of damages and pass-on estimation on behalf of the defendant. German court proceeding.
- Roasted coffee industry (FMCG): Estimation of the cartel-related overcharge on behalf of Dallmayr and Tchibo, German court proceedings.
- Flour industry: Overcharge estimation and pass-on analysis on behalf of a defendant. German court proceeding
- **Sleepers** (rail infrastructure): Estimation of damages on behalf of the defendant. Settlement negotiations.
- Window fittings cartel case: Written testimony for the court on behalf of WERU; profitability analysis, overcharge analysis, plaintiff side, German court proceedings.
- **Beer industry (FMCG):** Advice to Bitburger in the context of the allegation of anti-competitive price fixing, private litigation.
- ESBR/ BR (synthetic rubber): Expert report on overcharge and pass-on for a group of leading European tyre manufacturers, plaintiff side, UK court proceedings.
- Agricultural market for pesticides: Private litigation, defendant side, German proceedings
- Cartel in the cement industry of a large South Asian country: Support to two major cement suppliers
- Information exchange in the salmon fishing industry. Empirical estimation of the pass-on rate of cost changes. Norwegian proceedings.

Cartel and information exchange cases – administrative proceedings

- **Styrene cartel case:** Support to Sunpor, buyer cartel, several presentations to the Commission, EU proceedings.
- **Smart card chip cartel:** Support to Infineon AG, market definition and effects analysis, defendant side, EU proceedings.
- Freight Forwarder: Support to Schenker AG in the administrative proceedings at the European Commission.
- Agricultural market for pesticides: Administrative proceedings, defendant side, German proceedings
- **Procurement markets for steel products (automotive industry):** Assessment of theories of harm/risk assessment, defendant side, German proceedings.
- Antitrust risk assessment in the cement sector: Collection and analysis of data submitted by various firms in response to an information request by the EU Commission.
- Cookie industry cartel (FMCG): Support to Bahlsen AG in the German proceedings.
- Roasted coffee industry (FMCG): Support to Tchibo GmbH in the German proceedings.
- **German cement cartel (cement):** Damage calculations for various defendants. Court Expert in front of the OLG Düsseldorf (supporting L.-H.Röller)
- Elevator & escalator cartel case: Assessment of the relevant affected markets affected by the EU elevator and escalator cartel for ThyssenKrupp, defendant side, European Court.
- Industrial tubes EC cartel case: Evaluation of overcharge estimations provided by various experts on the European cartel case on industrial copper tubes. Carrying out sensitivity analyses of the empirical estimations and drafting relevant parts of the decision.

- Industrial tubes EC cartel case (advice to the legal service): Providing expert advice to the EC legal service during the appeal to the Court of First Instance in the industrial tubes case. Rebutting arguments by the opposing economic experts, providing support for the Commission's response to the parties' claims.
- Copper Plumbing tubes EC cartel case: Evaluation of overcharge estimations provided by various experts on the European cartel case on copper plumbing tubes (total fines of €222 million). Carrying out sensitivity analyses of the empirical estimations and drafting relevant parts of the decision.
- Copper Plumbing tubes EC cartel case (advice to the legal service): Providing expert advice to the EC legal service during the appeal to the Court of First Instance in the copper plumbing tubes case. Rebutting arguments by the opposing economic experts, providing support for the Commission's response to the parties' claims.
- Carbonless paper EC cartel case: Advice to the EC legal service during the appeal to the Court of First Instance in the carbonless paper case (€314 million fine). Rebutting arguments by the opposing economic experts, providing support for the Commission's response to the parties' claims.
- Working group on economic criteria for cartel detection: As part of a DG COMP internal working group on economic criteria for cartel detection. Several case studies applying the methodology. Built up a case library on past cartel cases.

Vertical agreements

- Private litigation for selective distribution of luxury products: Quantification of damages report in a private litigation case on behalf of a major producer of luxury hair styling products. The claimed damages were a result of the alleged use of a selective distribution system to restrict online distribution and to enforce retail price maintenance. German court proceedings.
- Selective distribution system for running shoes: Evaluation of all possible economic effects of restricting the use of price comparison websites for retailers in the selective distribution system for running shoes. Testimony at Dusseldorf Appeal Court on behalf of Asics. German proceedings.

State aid

- Framework contract "fitness check": Acting as a consortium leader supporting the European Commission on its fitness check of various State Aid guidelines. Ex-post evaluation of the regional aid framework, the environmental and energy guidelines and the rail cargo guidelines.
- Report on ex post evaluation of State aid measures: Report for the German Ministry for Environment on how to apply the Commissions guidance paper on ex post evaluation for environmental aid cases.
- Reasonable return study in the regional rail market: Assessment of the relative profitability of various European rail companies on behalf of DB Regio AG.
- Reasonable return study in the bus market: Identification of aspects which can determine the level
 of the appropriate return for bus companies receiving public service compensation on behalf of DB
 Regio AG.
- Economic assessment of incentive contracts (SGEI): Economic advice to Deutsche Bahn AG within the EU proceedings regarding the directly-awarded regional passenger transportation contracts.
- Market Economy Investor Test in the aviation industry: Performance of the test to exclude any unfair advantages due to state ownership on behalf of an international air carrier.

- Supporting a complaint regarding R&D&I State aid in the aviation industry: Support to an airplane manufacturer to define a complaint strategy which rests on robust and consistent economic arguments under the new R&D&I Guidelines of the European Commission.
- Application of the Market Economy Investor Test to a larger European airport: Assessment of the compatibility of incentive payments to airlines by a publicly-owned airport with the market economy investor principal. Calculation of a discount factor based on the Weighted Average Cost of Capital for which the costs of own capital using the Capital Asset Pricing Model was estimated.
- **German Landesbanken Cases:** Support of the Commission's case team assessing the robustness of the viability studies put forward by the parties' economic experts.
- Alstom Rescue & Restructuring case: Support of the Commission's case team in assessing the likelihood of anticompetitive effect of potential divestitures and a proposal of competition conform remedies to the Commissioner.
- Preparing the advice of the Chief Economist to the Commissioner: Various State aid case, including terrestrial TV (broadcasting), InvestBX (Risk capital), Mobilcom (R&R)
- Study for DG ECFIN on the effectiveness of State aid: First study which carefully analyses the effectiveness of broader aid schemes, including aid to SME, R&D&I and rail companies.

Relevant experience - Regulation

Digital Markets

- **19a1 proceedings Apple:** Support for Apple in relation to the investigation of the BKartA whether Apple has paramount significance for competition across markets.
- Uniform online payment system (Xpay/ #DK): Support of the Deutsche Kreditwirtschaft to receive clearance of their collaboration to develop a uniform payment system for all payment channels, in competition to PayPal, VISA and MasterCard; German proceedings.
- Damages assessment in the accommodation and hotel business: Analysis of possible damages due to best price clauses from hotel booking platforms on behalf of a large German hotel booking platform.
- Selective distribution system for running shoes: Evaluation of all possible economic effects of restricting the use of price comparison websites for retailers in the selective distribution system for running shoes. Testimony at Dusseldorf Appeal Court. For Asics. German proceedings.
- Abuse of a dominant position in the market for medical information systems Development of a method to analyse excessive prices in a two-sided market. Defendant. Swiss proceedings.
- Relevant product market definition in the audio books sector: Assessment of substitution patterns for different distribution channels of audio books (physical vs. digital). Critical loss analysis to define the relevant product market for digital audiobooks.
- Market definition of online trading platforms (eBay): Distribution of online questionnaires to more than 2,000 sellers and buyers in a two-sided market context. Determination of price elasticities as well as cross-participation elasticities for both sides. Application of a critical loss analysis considering both elasticities to define the relevant product market
- Market definition for payment systems: Online survey to assess substitution patterns between alternative payment systems. Performance of a comprehensive description of the properties of various

- payment systems. Implementation of a critical loss analysis based on available market information. For PayPal. German proceedings.
- Report on the sustainability of future business models for Deutsche Telekom: In this report, various
 potential business models with a view to sustainability in terms of the ability to accommodate future
 traffic flows, social welfare implications and resulting implications for net neutrality regulation are
 analysed.
- Support of a complainant regarding the Google/DoubleClick merger: The assessment provides an overview of the economics of online advertising markets, investigates the different technological and commercial models for providing ad-server functionality, and presents a competitive assessment of the transaction. Significant issues are raised as to the potential anticompetitive effects of the merger, and empirical questions are posed that have to be addressed in order to further assess these effects. European Commission.

Energy

- Abuse of a dominant position (excessive pricing) in the nuclear energy industry: Analyses of the price negotiations between two leading plant operators regarding the price of productions licences for nuclear energy in the context of the nuclear phase out in Germany.
- Framework contract "fitness check": Ex-post evaluation of the environmental and energy guidelines.
- Gas isolated switchgear cartel: Overcharge and pass-on analysis for various plaintiffs, German court proceedings.
- Abuse of a dominant position in the gas wholesale market: Assessment of the potential anticompetitive effects of a long-term contract for a natural gas wholesaler. International arbitration case.
- Abuse of a dominant position in the natural gas industry: Economic assessment on behalf of the plaintiff. Austrian proceedings.
- Pass-through analysis of CO2 certificates in the German electricity sector for RWE. Based on theoretical grounds and on a detailed assessment of the contractual specificities pass-through was economically justified and not considered an indicator of single or joint dominance. The case was finally settled.

Telecommunications

- Vodafone/ Liberty (cable network, 2019): Support to Telefónica (complainant) in the merger proceedings. Assessment of unilateral (closest competitor analysis; UPP) and coordinated effects. Assessment of incentives to innovate and to invest in new infrastructure. Remedy proposal. EU proceedings.
- Competitive effects of infrastructure cooperation: Swisscom and local utility suppliers' aim to jointly deploy high-speed fibre-based broadband networks, subject to certain agreements. Assessments of the competitive effects of these agreements. It was found that the proposed infrastructure cooperation was likely beneficial for customers for it stimulated investments and did not distort competition.
- Critical review of the EU Regulatory Framework for eCommunications: Comment on the European Commission's review of the framework that regulates the telecommunications industry in Europe,

focussing on the relationship between (de-) regulation and investment in the telecommunications sector.

- Report on the sustainability of future business models for Deutsche Telekom: Analysis of various potential business models with a view to sustainability in terms of the ability to accommodate future traffic flows, social welfare implications and resulting implications for net neutrality regulation.
- Research project for Deutsche Telekom on the relationship between entry regulation and investment in the telecommunications sector: The report analyses the relationship between entry regulation and infrastructure investment in the telecommunications sector, contributing to the ongoing debate on how to reshape the regulatory framework for eCommunications. The empirical analysis is based on a comprehensive data set of investment data covering 180 fixed-line and mobile operators in 25 European countries over 10 years and employs a newly created indicator measuring regulatory intensity in the various countries.
- Empirical study for Swisscom on the effects of regulation on investment in the telecommunication industry: Extension to the previous report by Hans W. Friederiszick, M. Grajek and L.-H. Röller (2006) towards Switzerland and cable companies.

Pharmaceutical and related industries

- Pay-for-delay: Support for Lundbeck in relation to private litigation by Tiefenbacher in relation to pay-for-delay agreements. German proceedings.
- Abuse of dominance in the market for genetically modified corn seed: Assessment of anticompetitive effects in behalf of a claimant. Market definition and theory of harm analysis in European and US markets.
- Assessment of damages arising from the breach of contract in the dental braces market: Estimation of counterfactual profits on behalf of the plaintiff had the non-compete clause not been violated.
- Market definition for cancer drugs: Market definition analysis as an input to dominance test for cancer drugs. German proceedings.
- Abuse of a dominant position in the market for medical information systems: Development of a method to analyse excessive prices in a two-sided market. For Galenica AG (Defendant). Swiss proceedings.
- Over-the-counter vs. prescription: Research project in the pharmaceutical industry on the effect of switches of molecules from prescription to over-the-counter status.
- Abuse of a dominant position in a medical device market: Advise for Synthes AG, a leading
 manufacturer of medical devices, in the context of a potential investigation of the German Federal Cartel
 Office. German proceedings.
- Quantitative and theoretical analysis of the effect of pricing and reimbursement regulation on pharmaceutical innovation for Novartis: The possible consequences that pricing and reimbursement regulation may have on pharmaceutical innovation are analysed first qualitatively and then in the context of a calibrated decision-theoretic model of drug development. Our findings indicate that, in designing optimal regulation, the benefits of more affordable or cost-effective drugs must be traded against the costs of less pharmaceutical innovation, with fewer projects being developed in general and in particular in low-margin therapeutic areas or with little potential of being considered highly innovative by the regulator at the time of the market launch.
- Assessment of tender procedures for generics: Comparison between different countries. For Sandoz.

• AstraZeneca abuse of a dominant position case: Support to the case team on an appropriate methodology to delineate markets in a regulated industry. Assessment of the econometric studies provided by the defendant. Participation and rebuttal of the studies at the hearing.

Transportation

- Abuse of a dominant position in the railway sector: Advice to an incumbent railway operator in the context of a predatory pricing claim. Carrying out of an "As Efficient Competitor Test", analysis of suction effects and assessment of potential efficiencies due to yield management. National Proceedings.
- Antitrust case in the transport sector: Advise on the allegation of an anticompetitive agreement. EU administrative proceedings.
- AirBerlin/ TUI joint venture (holiday tour operators/ air carriers): Analysis of vertical theories of harm, i.e. likelihood of input foreclosure in downstream markets of tour operators. Horizontal competition concerns were addressed by conducting a margin concentration analysis. Pre-notification support. EU proceedings.
- Advised complainant regarding anticompetitive foreclosure in the aviation industry: Support, jointly with a transatlantic team, to a spare parts supplier which accused the dominant firm of impeding its market entry by foreclosing certain inputs and also certain customers.
- Air cargo transportation: Damage estimation for a group of international freight forwarders. Multijurisdictional proceedings.
- Freight Forwarder: Support to Schenker AG in the administrative proceedings at the European Commission.
- Sleepers (rail infrastructure): Estimation of damages for the defendant. Settlement negotiations.
- Reasonable return study in the regional rail market: The study on behalf of DB Regio AG assess the relative profitability of various European rail companies.
- Reasonable return study in the bus market: The study on behalf of DB Regio AG (Sparte Bus) identifies aspects which can determine the level of the appropriate return for bus companies receiving public service compensation.
- Economic assessment of incentive contracts (SGEI): Economic advice to Deutsche Bahn AG within the EU proceedings regarding directly awarded regional passenger transportation contracts.
- Market Economy Investor Test in the aviation industry: Market economy investor test on behalf of an international air carrier to exclude any unfair advantages due to state ownership.
- Supporting a complaint regarding R&D&I State aid in the aviation industry: Support to an airplane manufacturer to define a complaint strategy which rests on robust and consistent economic arguments under the new R&D&I Guidelines of the European Commission.
- Application of the Market Economy Investor Test to a larger European airport: Assessment of the compatibility of incentive payments to airlines by a publicly-owned airport with the market economy investor principle. Calculation of a discount factor based on the Weighted Average Cost of Capital, for which the costs of own capital was estimated using the Capital Asset Pricing Model.
- Research project: Competitive effects of alliances between major European rail companies in longdistance passenger transport. For Deutsche Bahn.

• Research project: Effectiveness of State aid to increase productivity of rail companies: Application of stochastic frontier techniques to assess the impact of subsidies on the output of rail companies. For the European Commission.

Financial sector

- Uniform online payment system (Xpay/ #DK): Support of the Deutsche Kreditwirtschaft to receive clearance of their collaboration to develop a uniform payment system for all payment channels, in competition to PayPal, VISA and MasterCard; German proceedings.
- Visa/ Mastercard interchange fees: Pass on analysis and assessment of tourist test in the credit card markets on behalf of a group of high street retailers (private litigation); UK Court proceeding.
- Financial market manipulation of the USD LIBOR: Damages estimation in relation to financial market manipulation. Assessment of various empirical methods to identify short-term or mid-term manipulation of various interest rates. Evaluating damages for individual asset portfolios.
- **Financial market manipulation of the USD LIBOR:** Support to a plaintiff; liability report, UK proceedings.
- Economic effects of credit card rules in the ATM segment: Analysis focused on the distortion effects of "Honour-All-Cards" rules (HAC) and no-discrimination clauses on competition as well as investment in the ATM segment. Examination of the likelihood of HAC rules hampering market entry of credit card systems in Europe. On behalf of an ATM provider. German proceedings
- Market definition for payment systems: Online survey to assess substitution patterns between alternative payment systems. A comprehensive description of the properties of various payment systems has been carried out. A critical loss analysis has been implemented based on available market information. For PayPal. German proceedings.
- Abuse of a dominant position in financial data industry: In 2009 the EC opened the investigation of Thomson Reuters potential abuse of its dominant position in financial data by its RIC code licensing restrictions. General advice and economic arguments (e.g. efficiencies) in the EU proceedings.
- **German Landesbanken Cases:** Support of the Commission's case team assessing the robustness of the viability studies put forward by the parties' economic experts.

Sector Inquiries

- Waste collection sector inquiry: Support of a major German waste collector.
- Retail grocery sector: Support of a major German retailer in the German retail grocery sector inquiry.
- Gasoline stations in Germany: Empirical analysis of retail gasoline prices in a major German city for an industry association. One of the main conclusions of the study was the presence of Edgeworth-Cycles in the price data. The study also found no empirical evidence for the NCA's findings of collective dominance in the retail gasoline market.
- Outdoor advertising industry: In the context of a sector inquiry by the national competition authority
 into the outdoor advertising industry, an expert opinion was drafted on several business practices in
 this industry.

Professional experience

Since May 2007	Director and Founder of E.CA Economics
Since Oct 2006	Research Fellow, ESMT Berlin
Oct 2006 - Apr 2007	Head of Unit, ESMT Berlin
Oct 2003 - Oct 2006	Member of the Chief Economist Team, DG COMP, European Commission
Jan 2001 - Aug 2003	Managing Director of antitrust consultancy RACR economics
Jan - Mar 1998	Trainee, European Commission DG COMP, Merger Task Force

Academic experience

- Dr.rer.pol. (with distinction), Free University Berlin, Thesis: Competition and Co-Operation of Firms,
 2000
- PhD-programme (with DFG grant), Applied Microeconomics, Free University and Humboldt University Berlin
- Master in Economics (with distinction; Dipl. VWL), Free University Berlin

Referee and teaching activities

Referee

B.E. Journal of Theoretical Economics, B.E. Journal of Economic Analysis & Policy, European Economic
Review, International Review of Law and Economics, Journal of Competition Law and Economics,
Journal of Industry, Competition and Trade, Review of Industrial Organization, Scottish Journal of
Political Economy

Teaching & conference organization

- Competition and Consumer Compliance, executive MBA program, ESMT Berlin, 2016 2019
- E.CA Competition Law and Economics Expert Forum (2012 to 2018), in Brussels and Berlin
- Einblicke in das internationale Wettbewerbsrecht, M&A-Seminar, USW Netzwerk, Cologne, 2008- 2016
- Seminar in Competition Economics for German Judges: dominance cases and efficiencies, Lüneburg 23/24 May, 2014
- Seminar in Competition Economics for German Judges: private litigation, Lüneburg 8/9 March, 2013
- Bringing Technology to the Market. Session on "Boundaries of Growth", ESMT, Berlin, June 2012
- Insights into International Competition Law. Copenhagen Business School, 2 March 2012

- OECD-GVH Regional Centre for Competition in Budapest: Seminar in European Competition Law for National Judges, Budapest on 4-5 February 2011.
- Workshop on "The Forms of Pharmaceutical Regulation and Their Influence on Innovation in the Health System", Novartis, Prague on 13 January 2011.
- Annual Meeting of the Association of Competition Economists (ACE). Conference organiser and panellist, Berlin, 2009.
- Managing Economic Analysis in Competition Law. ESMT, Cologne, 2008.
- The Law and Economics of R&D&I State Aid. Programme director, ESMT & ESTALI, Berlin, 2007.
- The Law and Economics of European State Aid Control. Conference organiser, ESMT & ESTALI, Berlin, 2007.
- Political Economy of Regulation. Programme director, ESMT, Berlin, 2007.
- Competition Policy in EU Energy Markets, lecture for the E.ON summer academy, ESMT, Berlin, 2006.
- Competition Policy in Europe, lecture for the executive MBA programme of HEC Montreal, Brussels, 2006.
- The Economics of State Aid Control, in-house teaching, DG COMP European Commission, Brussels, 2006.
- The State Aid Action Plan and economic assessment of State aid, lecture for Advanced State Aid Seminar and Maastricht Forum on State Aid. European Institute of Public Administration (EIPA), 2006.
- Die aktuelle Reform der EU Beihilfenkontrolle. Lecture held at Rechtssicherer Umgang mit Fördermitteln, IIR, Düsseldorf, 2006.
- Techniken der Marktabgrenzung und deren Vor- und Nachteile, lecture held at Praxis der Wettbewerbsökonomie. BusinessCycle, Vienna, 2005.
- Competition policy in Europe, lecture held at the executive MBA programme of the ESCP-EA, Brussels, 2004.

Presentations

- An economic perspective on abuse of economic dependence. Several digital lunch seminars winter 2020.
- Vertical Mergers: Enforcement Developments and Guidelines, CRESSE/ CPI, July 2020 https://www.competitionpolicyinternational.com/schedule-cresse-july-1-2020/
- Preparing for Court: What it Takes to be an Effective Expert Witness. Economists' roundtable. TSE Executive Education seminar to be held in Brussels on February, 2020
- Dealing with the digitalization of economies: should the enforcement rules be changed and how?
 Roundtable Discussion, CRESSE, Rhodes, July 2019
- Change in theories of harm? Effects of digitalization on economic analyses in competition law. 11th
 Speyer Antitrust Law Forum. Speyer, 2019
- Reconciling Ex-Ante and Ex-Post Regulation The concept of vulnerable markets with an application to online food platforms. The Antitrust Enforcement Symposium, Oxford 2019

- 4th Annual BCCP Conference "Regulatory Challenges in Digital Markets: The Rise of Corporate Power", Berlin 2019
- Competition policy in the digital age. GCR Conference, Brussels 2018
- The android decision: which theory for what harm to competition? GCLR, Brussels 2018
- Modernizing competition law in light of digital markets. The German debate. Expert Forum, Berlin 2018
- Foreclosure in platform markets. 13th International Conference on Competition and Regulation (CRESSE), Crete 2018
- America has the internet, we have the things! The German way forward in regulating digital platforms.
 CCP Annual Conference, Norwich, June 2018
- Integration of competition law into the M&A planning process. Schloß Gracht, 2017
- Compliance with Competition and Consumer Policies. EMBA, Berlin 2017.
- The Antitrust Enforcement Symposium 2017, Oxford, June 2017
- DG COMP Workshop on pass-on, Brussels, June 2017
- Geographic Market Definition Analysis & Visualization, Brussels, May 2017
- Conference on State Aid Control: Where Law and Economics Meet, Lexxion, Brussels, September 2016
- Presentation at The Antitrust Enforcement Symposium, Oxford, June 2016
- Presentation on rebates at the "New Frontiers of Antitrust", Concurrences, Paris, June 2016
- EDEKA/ Kaiser's Tengelmann supermarket merger in Germany. 13th ACE Annual Conference, Milan, Italy, 27 November 2015.
- European State Aid Control: Advantage & MEO Test. ERA, Trier, 13 November 2015.
- Competition Policy in Modern Retail Markets. The Antitrust Enforcement Symposium, Oxford, UK, 28 June 2015.
- Quantifying follow-on damages: a case study. BrusselsMatters, Brussels, 23 April 2015.
- Ökonomischer Sachverständigenbeweis nach der EU-Richtlinie, DRF Seminar, Dusseldorf, 3 February 2015.
- Retail Food Sector Inquiry. ACE Annual Conference, Mannheim, 6 December 2014.
- EU-State Aid in the Automotive Industry, Autumn Conference European State Aid Law, EStAI, Vienna 5 December 2014.
- Is economic analysis in 102 cases still relevant. A critical review of the Intel judgement. The Antitrust Enforcement Symposium at Oxford University, 25 June 2014.
- Seminar for Judges, University Lüneburg, 8/9. March 2013 and 23/24 May 2014.
- Patents: Can antitrust authorities contribute to fixing the dysfunctional patent system? New Frontiers of Antitrust, 21 February 2014.
- Standard of Proof for Economic Evidence in Competition Cases. IBC Competition Economics, London, 25 April 2013.
- LIBOR/EURIBOR: Global Litigation Quantification & Evidence. DRRT, Frankfurt, 28 January 2013.

- Economics to Detect Collusion: The Hunt for the Perfect Benchmark. 10th ACE Annual Conference, Paris, 26 October 2012.
- Dominant and Efficient: On the relevance of efficiencies in Article 102 TFEU cases. Presentation at the OECD Roundtable, Paris, 24-25 October 2012.
- Regional Aid Guidelines and Large Investment Projects. Presentation at the 10th Experts' Forum on New Developments in European State Aid Law, Brussels, 8 June 2012.
- The Economics of Public Support to the European Car Industry, panel discussion, SEEK Workshop, Brussels, 3 May 2012.
- Defending Cartels in Regulatory Investigations The Role of Economics Presentation at the IBC Competition Economics 2012, London, 20 March 2012.
- Price cycles in German retail gasoline markets an empirical analysis. Brownbag Seminar, Copenhagen Business School, 1 March 2012.
- Competitive assessment of price cycles in German retail gasoline markets. Presentation at the ACE Annual Conference on 17/18 November 2011 in Bergen, Norway.
- Informationsaustausch. Presentation on the law and economics of information exchange at the Studienvereinigung Kartellrecht in Munich, 18 October 2011.
- Benzinpreise Marktmacht, Preissetzung und Konsequenzen. Panel discussion at the annual conference of the German Competition Authority in Bonn on 6 October 2011.
- Comments on the EU draft Guidance Paper Quantification of harm in damages actions for antitrust infringements, EC workshop. Brussels, 27 October 2011.
- Kooperationen zum Bau neuer Glasfasernetze Wettbewerbsökonomische Beurteilung. Economiesuisse Seminar FTTH Glasfaser, Zurich, 14 June 2011.
- Pros and cons of net neutrality Assessment of a sustainable Internet business model for the near future. ETNO Meeting at the Deutsche Telekom representation in Berlin on 18 March 2011.
- Quantification of Harm to Competition by National Courts and Competition Agencies. OECD Roundtable on the Quantification of Harm, Competition Committee Meeting, Paris, 16 February 2011.
- Pros and cons of net neutrality Assessment of a sustainable Internet business model for the near future. Bruegel, Brussels on 28 January 2011.
- Price Regulation and Incentives to Innovate in the Pharmaceutical Industry. London School of Economics and Political Science: Fourth European Healthcare Policy Deciders Forum, London, 17/18 February 2011.
- Private enforcement: Damage assessment Insights from German cartel cases. European Competition Day, Brussels on 21 October 2010.
- Wie geht es weiter nach der Krise? Argumente für und gegen Fortführung des Temporary Framework State Aid. Euroforum: Beihilfenrecht 2010, Berlin on 23-25 June 2010.
- On the relationship between price regulation and innovation. Competition and Intellectual Property Symposium, Paris on 4 June 2010.
- Measuring competition in regulation and antitrust. Workshop on Effective Competition in Network Industries, Justus-Liebig-University Giessen, 27/28 May 2010.

- Pharmaceutical innovation and pricing regulation. Workshop at the EC DG Enterprise, Brussels on 12 May 2010.
- Quantification of harm in damages actions for antitrust infringements, EC workshop. Brussels, 26
 January 2010.
- Competition between railway operators and low-cost carriers in long-distance passenger transport, Zentrum für Europäische Wirtschaftsforschung: Competition Policy Forum, Mannheim, 3 December 2009.
- The German cement cartel. ACE conference. ESMT, Berlin, 26 November 2009.
- On the difficult relationship between competition policy and public enterprises: What can be learned from recent developments in the field of European state aid control? The Pros and Cons Conference, Competition in/by the Public Sector. Stockholm, 13 November 2009.
- (An-)Reizeffekt: Stärken und Schwächen, Berliner Gesprächskreis zum Europäischen Beihilfenrecht e.V.: 16. Veranstaltung. Berlin, 2 October 2009.
- Legal and economic impact of the state aid measures, IBC Legal conferences, 3rd annual event: Competition Law in the Financial Services Sector. London, 23 June 2009.
- Bates White 6th Annual Conference. Washington, DC, 1/2 June 2009.
- Analysing the perspectives for intramodal competition in the railway industry the case of longdistance passenger transport, Deutsche Bahn Conference, European Parliament. Brussels, 1 April 2009.
- Distinguishing between fundamentally sound banks and those characterized by endogenous problems, Berliner Gesprächskreis zum Europäischen Beihilfenrecht e.V.: Maintaining a level playing field in the financial market's crisis applying the EU State aid rules to measures to stabilize financial markets. Frankfurt, 4 March 2009.
- Google Doubleclick. A plaintiff's perspective. ACE 2008. Budapest, 27 November 2008.
- Die bevorstehende Liberalisierung des Schienenpersonenfernverkehrs wettbewerbsökonomische Szenarien. Dritter Workshop zum Eisenbahnregulierungsrecht. Berlin, 13 October 2008.
- "Wird durch das dritte Eisenbahnpaket Wettbewerb im Personenfernverkehr entstehen?" Symposium "Wettbewerb und Regulierung im Eisenbahnsektor". ESMT, Berlin, 31 January 2008.
- Der "Refined Economic Approach" in der EU Beihilfenkontrolle: Eine Erfolgsstory wenn die Mitgliedstaaten mitziehen. Beihilfen Gesprächskreis. Berlin, 14 December 2007.
- The concept of an aid in liberalized sectors, ESTALI. Brussels, 21 May 2007.
- Der "More Economic Approach" in der Beihilfenkontrolle: Binnen- und Außenperspektiven. Frankfurt,
 20 March 2007.
- Reform des EU-Wettbewerbsrechts und Innovationsförderung. Workshop "Innovationsförderung im Wettbewerb", University of Karlsruhe (TH). 6 February 2007.
- The EU development: From legal certainty to economic uncertainty? Economic analysis in EU competition cases. 2nd ASCOLA conference, Economic Theory and Competition Law, Paris, 8-9 December 2006.
- Market failure and restructuring aid. Can economics deliver on its promises? 10th forum on European State Aid Law, ERA, Trier, 13/14 November 2006.
- Detecting cartels in Europe the role of economics. 25th Conference on Political Economy, Saarbrücken, 12-14 October 2006.

- The market economy investor principle Lessons learned from the German Landesbanken cases. 3rd annual conference of the GCLC, Brussels, 2006.
- An economic methodology for initiating ex-officio cartel investigations. ACLE Workshop on Forensic Economics in Competition Law Enforcement, University Amsterdam, 2006.
- The economics of European state aid control. LEAR Conference on Advances in the Economics of Competition law, Rome, 2005.
- Marktdefinition und Marktmacht. Recht und Ökonomie im Europäischen Wettbewerbsrecht, University Freiburg, 2005.
- Die Bedeutung der ökonomischen Analyse im Wettbewerbsrecht. Brüsseler Informationstage, FIW, Brussels, 2004.
- Ökonomie und Recht im Einklang? Die Stärkung des ökonomischen Ansatzes von DG COMP. Kartellrechtsforum, Köln, 2003.
- Evaluation of the effectiveness of state aid as a policy instrument. The Railway Sector IDEA conference, University Toulouse, 2003.
- Trusted Computing Group und Eintrittsbarrieren für den Mittelstand. Symposium organised by the German ministry of economics and labour, Berlin 2003.
- The effectiveness of state aid as policy instrument. Workshop organised by DG ECFIN, Brussels, 2003.
- Committees, communication and careers. EARIE, University Madrid, Spain, 2002.
- Effects of globalization on the German cement industry (in German). Meeting of the executive committee of the BDZ (German cement industry association), Köln, 2002.
- The choice of technology and cooperation between firms. Verein für Socialpolitik, University Magdeburg, 2001.
- Further presentation were hold at the Young Economist Spring Meeting 1999 in Amsterdam, 1998 in Berlin (also part of the referee committee and in charge of funding), 1997 in Munich. WZB, Germany 1999. EARIE 1998 in Copenhagen, Denmark. VfS 1998 in Rostock. University of Dortmund 1997. University of Miscolc, Hungary 1997. Summer School at the Hebrew University in Jerusalem, Israel 1996.

Publications and working papers

Peer reviewed articles

- Demuth, J., Friederiszick, H.W. & Reinhold, S. (2022). Reverse Privatization as a Reaction to the Competitive Environment: Evidence from Solid Waste Collection in Germany. Rev Ind Organ 60, 217-261 (2022).
- Friederiszick, Hans W., L. Gratz and M. Rauber (2021). The impact of EU cartel policy reforms on the timing of settlements in private follow-on damages disputes—an empirical assessment of cases from 2001 to 2015, *Journal of Antitrust Enforcement*, *Volume 9*, *Issue 2*, *July 2021*, *Pages 313-346*.
- Friederiszick, Hans W., E. Głowicka, L. Gratz, S. Lünenbürger and A. Rosenfeld (2018). Ex Post State Aid Evaluation in Environmental Aid, *European State Aid Law Quarterly*, 17 (4): 509 524.

- Friederiszick, Hans W, S. Reinhold and J. Demuth (2016), Rekommunaliserung und Wettbewerb in der Entsorgungswirtschaft Trends, Erklärung und wettbewerbspolitische Implikationen, *NZKart*, 6.
- Friederiszick, Hans W. and E. Głowicka (2016), Competition policy in modern retail markets, *Journal of Antitrust Enforcement*, 4 (1): 42-83.
- Friederiszick, Hans W. and L. Gratz (2015) Hidden Efficiencies on the Relevance of Business Justifications in Abuse of Dominance Cases. *Journal of Competition Law and Economics*, 11 (3): 671-700.
- Friederiszick, Hans W. and N. Tosini (2013): Implications of the State Aid Modernisation for the Assessment of Large Investment Projects. The relevance of screens in the Regional Aid Guidelines. European State Aid Law Quarterly 12 (1): 46 60.
- Friederiszick, H. W. and L.-H. Röller (2010). Quantification of harm in damages actions for antitrust infringements: Insights from German cartel cases. *Journal of Competition Law and Economics* 6(3): 595-618.
- Friederiszick, H. W. and L.-H. Röller (2008). Overcharge estimations in cartel cases: Lessons learned from a recent judgment on the German paper wholesaler cartel. *Global Competition Litigation Review* (1): 1-10.
- Friederiszick, H. W. and L.-H. Röller (2008). Überwälzungen der Opportunitätskosten von CO2-Zertifikaten als Ausbeutungsmissbrauch eine ökonomische Analyse. *Wirtschaft und Wettbewerb* 58(9): 929-940.
- Friederiszick, H. W. and F. P. Maier-Rigaud (2008). Triggering inspections ex officio: Moving beyond a passive EU cartel policy. *Journal of Competition Law and Economics* 4(1): 89-113.
- Friederiszick, H. W. and L.-H. Röller (2007). Using economic analysis to assess R&D&I state aid measures. *Journal of Antitrust Enforcement*, 6(4): 592-604.
- Friederiszick, H. W., and U. Dulleck (2004). Die großen Zwei Wettbewerb im Kreditkartenmarkt? Jahrbücher für Statistik und Nationalökonomie (4): 224.

Chapter in books and conference proceedings

- Friederiszick, Hans W. und R. Aigner. Die Rolle ökonomischer Analysen bei der Durchsetzung europäischen Kartellrechts. Kommentar zum Europäischen Wettbewerbsrecht. In *Nomos*, 3. Edition (forthcoming 2023)
- Friederiszick, Hans W. and M. Merola (2016), Regional state aid control in Europe: A legal and economic assessment, published in Ph. Werner and V. Verouden (eds.), *EU State aid control: Law and Economics*, Kluwer Law International
- Friederiszick, Hans W. (2013), Distortion of Competition under Art 107 1 TFEU. Chapter in *Nomos Beihilfekommentar*.
- Friederiszick, Hans W. (2013), The balancing test under Art 107 3c TFEU. Chapter in *Nomos Beihilfekommentar*.
- Friederiszick, H. W., and J. Kałużny (2009). On the difficult relationship between competition policy and public enterprises: What can be learned from recent developments in the field of European state aid control. In *The pros and cons of competition in/by the public sector*, ed. Dan Sjöblom, 99-135. Sweden: Swedish Competition Authority.

- Friederiszick, H. W. (2009). Economic analysis in EU competition cases. In *Economic theory and competition law*, ed. Josef Drexl, Laurence Idot, Joel Monéger, 3-19. Cheltenham: Edward Elgar.
- Friederiszick, H. W. (2008). Der 'Refined Economic Approach' in der Beihilfenkontrolle: Innen- und Außenansichten. In *Der 'More Economic Approach' in der Beihilfenkontrolle*, Schriften des Vereins für Socialpolitik, ed. P. Oberender, 49-62. Frankfurt am Main: Verein für Socialpolitik.
- Friederiszick, H. W., L.-H. Röller, and, V. Verouden (2008). European state aid control: An economic framework. In *Handbook of antitrust economics*, ed. Paolo Buccirossi, 625-669. Cambridge: MIT Press.
- Friederiszick, H. W. and F. P. Maier-Rigaud (2007). The role of economics in cartel detection in Europe. In *The more economic approach to European competition law*, ed. Stefan Voigt, Max Albert, 179-196. Tübingen: Mohr Siebeck.
- Friederiszick, H. W., L.-H. Röller and J. Delgado (2007). Energy: Choices for Europe. *Bruegel Blueprint Series*.
- Friederiszick, H. W. and L.-H. Röller (2007). Ökonomische Analyse in der EU Wettbewerbspolitik: Ein erstes Resümee. In *Neueste Entwicklungen im europäischen und internationalen Kartellrecht*, ed. Carl Baudenbacher, 203-220. Basel: Helbing Lichtenhahn.
- Friederiszick, H. W., L.-H. Röller, and V. Verouden, (2006). EC state aid control: An economic perspective. In the EC state aid regime: Distortive effects of state aid on competition and trade, ed. Michael Sanchez Rydelski, 145-182. London: Cameron May Press.
- Friederiszick, H. W. (2006). Marktabgrenzung und Marktmacht. In *Recht und Ökonomie im Europäischen Wettbewerbsrecht*, ed. Jürgen Schwarze, 29-40. Frankfurt am Main: Nomos.
- Friederiszick, H. W., and L.-H. Röller (2005). Ökonomische Analyse in der EU Wettbewerbspolitik. In *Neueste Entwicklungen im europäischen und internationalen Kartellrecht*, ed. Carl Baudenbacher, 203-220. Basel: Helbing Lichtenhahn.
- Friederiszick, H. W. (2000). Wettbewerb und Firmenkooperation. Aachen: Shaker Verlag.

Reports, Working and White Papers

- Friederiszick, H., and A. Walckiers (2021). The economics of dependence: A theory of relativity. ESMT Working Paper, No. 21-02.
- Demuth, J., H. Friederiszick, and S. Reinhold (2021). Reverse privatization as a reaction to the competitive environment: Evidence from solid waste collection in Germany. ESMT Working Paper, No. 18-02 (R1).
- Friederiszick, H., L. Gratz, and M. Rauber (2020). The impact of EU cartel policy reforms on the timing of settlements in private follow-on damages disputes: An empirical assessment of cases from 2001 to 2015. ESMT Working Paper, No. 19-03 (R1).
- Friederiszick, Hans W., L. Gratz and M. Rauber (2018). Environmental State aid study for the German ministry on ex-post evaluation. Umweltbundesamt, ISSN 1862-4804, Dessau-Roßlau, May 2018
- Friederiszick, Hans W., J. Demuth and S. Reinhold (2018), Reverse privatization as a reaction to the competitive environment: Evidence from solid waste collection in Germany. ESMT Working Paper 18-02, April 2018

- Friederiszick, Hans W. and E. Fugger (2011). Quantification of harm to competition by national courts and competition agencies. Background note for the OECD Secretariat to the Competition Committee, DAF/COMP(2011)1.
- Friederiszick, H. W., J. Kałużny, S. Kohnz, M. Grajek, and L.-H. Röller (2011). Assessment of a sustainable Internet model for the near future. ESMT White Paper No. WP-11-01 and ESMT Business Brief No. BB-11-01.
- Friederiszick, H. W., N. Tosini, F. de Véricourt, and S. Wakeman (2009). *An economic assessment of the relationship between price regulation and incentives to innovate in the pharmaceutical industry*. ESMT White Paper No. WP-109-03.
- Friederiszick, H. W., Gantumur, T., Jayaraman, R., Röller, L.-H., and Weinmann, J. (2009). *Railway alliances in EC long-distance passenger transport: A competitive assessment post-liberalization 2010*. ESMT White Paper No. WP-109-01.
- Friederiszick, H. W., M. Grajek, and L.-H. Röller (2007). *Analysing the relationship between regulation and investment in the telecom sector*. ESMT White Paper No. WP-108-01.
- Friederiszick, H. W., D. Neven, and L.-H. Röller (2003). *Evaluation of the effectiveness of state aid as a policy instrument*. Report for the European Commission, DG ECFIN 2003.
- Friederiszick, H. W. and L.-H. Röller (2002). Lokale Märkte unter Globalisierungsdruck. Eine industrieökonomische Studie zur deutschen Zementindustrie (on behalf of the German ministry of economics and labor) RACR studie 01.

Others

- Friederiszick, Hans W., S. Kohnz, R. Nitsche (2018). GCR Insight Handbook of Competition Economics 2019 - Germany overview. GCR Insight, 2018 Law Business Research Ltd, ISBN:978-78915-106-0, October 2018
- Friederiszick, Hans W., R. Nitsche, T. van Dijk and V. Verouden (2018). Recent economic applications in EU merger control: UPP and beyond. Getting the Deal Through Merger Control 2019
- Friederiszick, Hans W. and E. Głowicka (2017), Price Comparison Websites and Selective Distribution Systems: An Effects-Based Approach. Published in Complaw-blog, December 2017
- Friederiszick, Hans W. and M. Rauber (2015): A Fleet without a Captain? Taking stock of European antitrust litigation post EU Directive, CPI Antitrust Chronicle, August 2015 (1)
- Friederiszick, Hans W. and S. Kohnz (2015), Angemessene Rendite im Bussektor. Ewiger Streit oder lösbare Aufgabe? Der Nahverkehr. 1-2/2015. S.41-43 und Der Nahverkehr 7-8/2015 S.64
- Friederiszick, Hans W. and E. Glowicka (2014), Resale Price Maintenance: An overview of EU and national case law. Bulletin e-Competitions EU Resale Price Maintenance, Art. N° 62050
- Friederiszick, Hans W. (2013): The damages lie in the details: Why the proposed Directive fails in harmonizing incentives to sue across the European Union, *CPI Antitrust Chronicle*, August 2013 (1)
- Friederiszick, Hans W., D. Beling and R. Nitsche (2011). The Handbook of Competition Economics 2012 Germany (country chapter) In: C. Campbell (Ed.), *The Handbook of Competition Economics 2012*. Nottinghamshire: Encompass Print Solutions.
- Friederiszick, Hans W. (2011). The German Cement Cartel case and the trade-off between accuracy and practicality. *Concurrences* 1: 24-26.

- Friederiszick, H. W. (2010). Anticompetitive behaviour of public enterprises: Lessons to be learned from European state aid control. *Concurrences* (1): Foreword.
- Friederiszick, H. W., R. Nitsche, and L.-H. Röller (2009). Does Europe need subsidized competition for achieving the goal of rapid deployment of broadband networks? Comments on the draft Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks. Submitted to the EC Commission.
- Friederiszick, H. W. and M. Tröge (2006). Applying the market economy investor principle to state owned companies Lessons learned from the German Landesbanken cases. *Competition Policy Newsletter* (1): 105-109.
- Friederiszick, H. W. and L.-H. Röller (2006). Weniger und effektiver Ökonomische Prüfverfahren könnten die EU-Beihilfenkontrolle stärken. WZB Mitteilungen, 111.

Languages

German (native speaker), English (high proficiency)

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