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The advantages of a multi-disciplinary approach in competition damages

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INTRODUCTION

Competition damages have grown globally and gained momentum on the agenda of policymakers and practitioners. Unlike in the US and Canada, where the litigation practice has a long tradition, in other jurisdictions competition damages have made slow progress over time. They have only recently become a topic of global relevance after the recent regulatory developments across Europe, Asia-Pacific and selected countries in sub-Saharan Africa, namely South Africa. These developments have made antitrust litigation a topic of interest for prospective claimants and defendants, legal and economic competition policy practitioners, as well as policymakers and tribunals.

Some trends have emerged:

- A substantial increase in the number of competition litigation cases brought outside the US, namely in Europe and Asia-Pacific.
- An increasing variety of legal frameworks across countries (that is, different legal rules disciplining competition damages proceedings) and business practices across countries and industries (that is, different business models due to markets specificities, among other things).
- A growing interest for class actions outside North America, and in particular in the UK, Italy, Spain, China, and Australia, among others, which are considering whether to introduce, or have already introduced, opt-in or opt-out class action regimes, for example:
  - the Consumer Rights Act 2015 in the UK;
  - Law No. 244/2008 in Italy;
  - Ley 1/2000, de 7 de enero, de Enjuiciamiento Civil in Spain;
  - Civil Procedure Law 1991 in China;
  - Federal Court of Australia Act 1 1992 in Australia.

As a result, antitrust litigation has grown complex, with high, country-specific risks that are worth analysing in search of customised mitigation solutions. There are many differences across jurisdictions that may be relevant in developing a settlement negotiation strategy or making a case before the relevant tribunals. Understanding the regimes and business practices is key to practitioners that want to navigate the waters of a new, fast-growing competition damages practice, especially in the case of multi-jurisdictional litigation.

This foreword suggests that, in this context, a multi-disciplinary approach, where the parties develop a thorough understanding of the legal, economic, and valuation elements of the case and associated details, would make the civil damages action more effective in assessing the damage suffered by the infringed party and achieving the objectives of competition policy. Thanks to a collegial approach, lawyers can develop a more effective litigation strategy, and economists and valuation specialists can more effectively serve their independent experts' duties to the tribunal. Finally, tribunals can leverage experts' input to reach their decisions on a better-informed basis.

To explain the advantages of adopting a multi-disciplinary approach, this article:

- Describes the role of economic experts in antitrust litigation (*see below, The role of economic experts in pre-trial and trial antitrust litigation*).
- Discusses some examples of topics in antitrust litigation where a multi-disciplinary approach is helpful (*see below, A multi-disciplinary approach to specific competition damages issues: Sainsbury's v Mastercard*).
- Suggests a possible way to structure a multi-disciplinary approach in antitrust litigation (*see below, Structuring a multi-disciplinary approach*).

THE ROLE OF ECONOMIC EXPERTS IN PRE-TRIAL AND TRIAL ANTITRUST LITIGATION

Economic analysis and expert independence

A fundamental element of both the pre-trial and trial phases of damages litigation is the existence of an asymmetry in the quantity and quality of the information held by claimants and defendants. That is, one party is more informed than the other (claimants may have more detailed information than defendants, or vice versa). Asymmetric information can lead to:

- Different perspectives.
- Different approaches to the calculation of damages, and therefore different expectations by the parties in approaching the negotiation stage, with the risk of jeopardising the chances of reaching a settlement agreement.

There is extensive literature on how asymmetric information can affect the chances that parties have to reach a settlement agreement and on the probability to litigate (David Landes and John Gould provided the early contributions to the subject). Later, their approach was expanded by Steven Shavell to study the impact of different allocations of legal costs between the parties. The literature was further extended to include bargaining theory and study the economic outcomes when a fixed amount of settlement is negotiated (that is, Janusz Ordover, Ariel Rubinstein, Ivan P'ng, Stephen Salant and Gregory Rest). Lucian Bebchuck extended the analysis further by providing a bargaining model in which the parties decide their settlement offers. Rosenberg and Shavell also investigated the impact of "nuisance value", defined by the authors as "a suit in which the plaintiff is able to obtain a positive settlement from the defendant even though the defendant knows the claimant's case is sufficiently weak that he would be unwilling or unlikely actually to pursue his case to trial". Jennifer Reinganum and Louis Wilde studied the importance of the allocation of legal costs on the probability to resort to trial.

Expert-based inputs by economists may play an important role in improving the effectiveness of the negotiation process and that of courts' decisions. Daniel Rubinfeld explained the value of economists' contributions to the pre-trial stage in making incentives converge and improving the chances of settlement. Therefore, he advocated the use of court-appointed economic experts to enhance tribunals' understanding of the key economic issues affecting the damage. Rubinfeld also comments on Oliver Williamson's seminal input on recognising the importance of using economists in competition cases. Indeed, in the case *Barry Wright Corp v ITT Grinnell Corp, 724 F.2d 227 (1st Circuit 1983)*, Williamson provided independent analyses on various economic issues and a description of the methodologies employed to perform the analysis. The robustness of the analysis and the clarity of the explanation favoured the views of the various experts to converge. Lawrence Spitzman examines the role that economists for the defence may play in assisting attorneys in litigation settlement negotiations. Economics offers powerful theoretical insights and empirical investigation tools to deliver substantive analysis in regard to virtually all topics of interest in competition litigation cases (for example, analysis of the relevant economic context; development of the counterfactual; testing of conditions and assumptions; quantification of the overcharge and pass-on analysis).

For further reading on this topic, see box, *References*.

Economists rely on a long-term, well-established applied economics practice for giving evidence in court proceedings. In order to substantiate the damages analysis and ascertain the extent to which a certain overcharge has been passed downstream along the value chain, the analyses performed by antitrust damages economists are evidence-based.

A key concern of using economic experts is that they may have incentives to testify untruthfully. Both parties (that is, claimants and defendants) may have incentives to hire economic experts that are not independent and therefore are willing to perform a biased, non-objective, and partisan economic analysis with the purpose of influencing the decision of the court towards the interests of the party they assist. Courts address this problem in various ways:

- The courts may decide that the economic expert is inadmissible and therefore reject him, especially when the credentials of the expert are not relevant or when the reputation of the expert is such that his independence is doubtful.
- If the economic expert is admitted to the stand, the courts can then disregard the results of the experts' analysis, if the experts fail to make reasonable concessions or if their analysis lacks rigour and is deemed unreliable as a result.

Independence is a key asset for economic experts. It is important to courts and tribunals that have to decide on the case, as the experts' independent input helps the tribunal in reaching an informed view on relevant facts, behaviours, elements, arguments, and reasonable assumptions that may affect the size of the damage. The independent expert must develop a sound position that can withstand scrutiny during cross-examinations. When necessary and appropriate, it is important for economic experts to make concessions, especially when facts, evidence, and relevant points cannot be made on a fully conclusive basis or proven beyond any reasonable doubt (perhaps because proper data is missing or because a specific fact cannot be ascertained). Any doubt that experts' analysis may be biased or factious will affect experts' credibility, no matter how solid their credentials are.

The importance of a multi-disciplinary approach to pre-trial and trial stages is clear when the very nature of lawyers' and economists' contributions is considered. If lawyers ignore the nature of the economic phenomena underlying the infringement and the damage it caused, they are likely to mislead their litigation strategy and instruct economic and valuation experts incorrectly. A multi-disciplinary approach is also beneficial to expert economists too. If they are not aware of the relevant legal aspects of the claim (for example, contractual and regulatory), they may specify implausible assumptions in their damage analysis and achieve results that, while independent, are incorrectly grounded. Therefore, economists and lawyers must work closely from the inception of the action.

Economic experts' credentials and proved independence are key assets of a multi-disciplinary approach to competition litigation, as lawyers can instruct economists to perform independent damages analysis with the purpose of developing substantive arguments to quantify the amount of damage. When robust and evidence-based, independent economic analyses allow lawyers to identify the arguments and evidence on which they can build their negotiation strategy and, in case it fails, their case before the tribunal. A case lacking a sound, evidence-based economic analysis would expose claimants and defendants to a great deal of risk, as their opposing party may easily reject their results as not rigorous and therefore unreliable. This would inevitably reduce the chances to settle with the opposing party and to win the claim in court.

On the input data to the damages analyses

The decision on how much data must be employed in expert analyses involves the resolution of a fundamental trade-off between the quality of the data (which allow a more accurate analysis) and the cost (time and money-wise) to complete the analyses. Striking the optimal balance between accuracy and costs of the analyses is easier when economists are involved early in the pre-trial process, as the economists can shed light on what elements of the analyses may be investigated and what data requirements these elements give rise to. However, at this point, lawyers' input is important to determine, for example, the limitation period (that is, the relevant time span on which the damages analysis must be performed in compliance with the law in charge) or to make sure that the scope of the damages analysis is coherent with the liability identified by the infringement agency. Finally, clients' input is critical in clarifying what information, among that potentially useful to the damages analysis, is available internally to the company (whether claimants or defendants) and what data, instead, has to be collected outside. With the knowledge of all these factors, economists can then make a better-informed decision on how to strike the balance between information requirements and accuracy of the analyses.

Generally, various sources of information and data can be useful to the analyses including:

- **Publicly available information.** This is a popular source about market structure, market outcomes, economic inefficiency, and so on (from websites, academic studies, regulators' reviews, among others).
- **Private companies' websites.** These may have information on services and products prices, as well as on transactions data and customer preferences.
- **Companies' annual reports.** These may provide detailed accounting information on the level of profit and its main determinants.
- **Commercial and marketing departments.**These may have information on customers' willingness to pay and price sensitivity for the products or services under analysis.
- **Academic studies.** The elasticity of demand to changes in prices is sometimes found in empirical analyses presented in academic studies.
- **Regulators' annual reports.** These usually provide data on market shares.

Therefore, the information that economists can consider for damages analysis is therefore extensive. Bringing together the legal and economic perspectives may be useful also because some economically attractive data might not be available, due to legal restrictions. Conversely, legally accessible data may not be entirely

applicable to the economic phenomena that expert economists are dealing with and may undermine the accuracy of the analysis.

On the communication to tribunals and courts

Lawyers can also benefit from economists' input in deciding how the relevant issues and the results of the economic analyses should be presented to the court, how the experts of the opposing party should be cross-examined, and how the arguments used by the counterparty could be challenged and rebutted. To this purpose, economists consider not only the results of the analyses of the opposing party's expert and the conclusions that these results reach, but also the employed methodological approach, its relevance over alternative possible approaches, and the applicability of the approach to the specifics of the case.

Economic methodologies critically rely on assumptions and hypotheses, which need to be carefully discussed and explained to the court in order to ensure that they apply to the case under examination. Economic experts, finally, explain how the data, assumptions, and methodology employed in the quantification of the damage relate to each other and if they are intrinsically consistent, as well as the level of robustness of the results.

A MULTI-DISCIPLINARY APPROACH TO SPECIFIC COMPETITION DAMAGES ISSUES: SAINSBURY'S V MASTERCARD

Sainsbury's v MasterCard

The Competition Appeal Tribunal (CAT) recently handed down its judgment on the *Sainsbury's v MasterCard* competition damages case (the Decision) (*Sainsbury's Supermarkets Ltd v MasterCard Incorporated and Others [2016] CAT 11, judgment of 14 July 2016*). Sainsbury's had claimed damages arising from agreements and concerted practices that caused a restriction or distortion of competition price fixing (*Chapter 1, Competition Act 1998; Article 101, Treaty on the Functioning of the European Union (TFEU); Article 53, Agreement on the European Economic Area*). In particular, Sainsbury claimed that the defendants levied "...certain fees known as 'Multilateral Interchange Fees' (MIFs), which Sainsbury's was required to pay on credit and debit card transactions under MasterCard's payment scheme for credit and debit cards" (*paragraph 6, Sainsbury's v MasterCard judgment*).

MasterCard operates a card payment scheme defined by four parties:

- Cardholder.
- Issuing banks.
- Acquiring banks.
- Merchants.

After receiving licences from MasterCard to take part in the scheme, issuing banks issue credit or debit cards to the cardholder and acquiring banks engage merchants so that their points of sales are equipped to accept MasterCard's cards.

When a purchase is made at the points of sale of the merchant, the cardholder uses his card to make the payment. Issuing banks collect the full due amount from the cardholder's account (if a debit card was used) or extend credit to the cardholder (if a credit card was used). The issuing bank transfers the transaction amount net of an interchange fee (IF), which is kept by the issuing bank. Such fee can be established by issuing and acquiring banks as a result of a bilateral negotiation or, in the absence of that, be set at the default amount provided in the MasterCard scheme rules (in this case, multi-lateral interchange fee (MIF)). Acquiring banks transfer the amount received to the merchant, net of an amount charged for their services. As a result of this process, the merchant receives an amount for the transaction that is equal to the retail price at which the cardholder bought the product or service from the merchant, net of the merchant service charge (MSC), defined as the sum of the IF (or MIF) and the fee charged by the merchant.

Sainsbury's v MasterCard concerns the MIF (that is, the default amount of the IF that applies as per the MasterCard scheme rules in case a bilaterally negotiated IF is not available). The CAT concluded that the MIF had restrictive and distortive effects on competition and that, as such, Sainsbury's was entitled to compensatory damage measured by the difference between the MIF actually paid by Sainsbury's and the amount of the IF had it been bilaterally negotiated by the issuing and acquiring banks. To this purpose, the CAT carried out various activities to:

- Determine the significance of the infringement decision.
- Develop a theory of harm for the specifics of the case.
- Characterise a counterfactual to identify the level of IF that would have arisen but for the infringing conduct.
- Address cost mitigation and pass-on.

It is with regard to these tasks that we discuss how a multi-disciplinary approach is useful.

Significance of past infringement decisions

Lawyers and economists may work together in deciding if past decisions by regulatory and competition authorities may have a significance for the case at hand, and if so to what extent. The relevance of past documents can be assessed in light of the legal and economic elements of the case, as well as of their interdependences.

For example, the regulatory documents include the legal and economic rationales on the basis of which remedies were introduced. From these, it is important to assess if prior regulatory findings are binding on the case at hand and if they should have a role when developing the legal and economic arguments to substantiate the case. The analysis of the relevance of past documents, as well as of their applicability to the case under examination, would greatly benefit from joint work by legal and economic experts.

The theory of harm and the counterfactual

The key to understanding whether an agreement can potentially prevent, restrict, or distort competition and if so, what damage it might have caused to the infringed party is to speculate on what would have happened if the agreement did not exist. One cannot state that an agreement is anti-competitive or has caused a certain damage without knowing what the alternative to the agreement would have been and what effects this would have had. Speculating on what would have happened if the agreement did not exist means developing a counterfactual (that is, a "but-for" world). The development of the counterfactual is critical, as the theory of harm must be developed on the basis of that counterfactual. This is the approach advocated by the European Commission. In its Article 81(3) Guidelines, the Commission states that a "useful framework for making this assessment" is to ask the following question: "Does the agreement restrict actual or potential competition that would have existed without the agreement? If so, the agreement may be caught by Article 81(1)."

In characterising the counterfactual and developing a coherent theory of harm, the benefits of adopting a multi-disciplinary approach are evident, as lawyers and economists together are likely to do a better job in characterising the counterfactual, since what would have happened had the infringement not existed is likely to be a combination of relevant legal and economic factors.

In its judgment, the CAT considered that, without a default MIF and absent any bilateral agreement with acquiring banks, issuing banks would have no legal ground to deduct any amount of money from the amount paid by the cardholder: the IF would therefore be nil. However, this legal argument is complemented by an economic argument to assess whether a zero IF is economically sustainable in a four-party card scheme like MasterCard. To this regard, based on various depositions from the parties and their experts, the CAT accepted the view that the lack of an IF (that is, "free-for-all

arrangement") would make the card system not viable (*paragraph 145, Sainsbury's v Mastercard judgment*).

In addition to the above concerns, the CAT rejected any arrangement resembling "ex-post pricing", where the IF is negotiated and agreed upon after consumers make their purchases. Ex-post pricing would cause the increase of market power for the issuing bank and the potential for its abuse as issuing banks may hold-up acquiring banks. A hold-up may arise because an issuing bank could deny payment to acquiring banks unless the amount of the IF is of its liking. The hold-up would undermine the incentives for the acquiring banks to enter a card scheme, causing in this way a market failure (that is, the collapse of the card scheme).

To characterise the counterfactual, the CAT reckoned that issuing banks had four options to avoid a zero IF. The four options are (*paragraphs 152 to 197, Sainsbury's v Mastercard judgment*):

- Negotiate a bilateral IF.
- Participate to the card scheme without earning any IF.
- Participate to an alternative settlement system (again with the agreement of the acquiring bank).
- Leave the MasterCard scheme and join another card scheme.

The options were identified through arguments relying on legal (for example, contractual) and economic (for example, incentives) elements to ensure that the counterfactual was realistic in terms of economic implications and compliance with the laws and the regulations in charge.

The CAT determined that the reasonable counterfactual would be a situation where issuing banks and acquiring banks bilaterally negotiated an IF (*paragraph 196, Sainsbury's v Mastercard judgment*). The CAT provided that the amount at which a bilaterally negotiated IF would have been set had to be determined on the basis of a pragmatic approach, where merchants would consider being part of the card scheme by looking at the value they would get by participating in the card payment scheme and making their costs as low as possible, while issuing banks would be part of the scheme provided they collected an IF that allowed them to successfully compete in the market for issuing services. This implies that the amount of the IF would have to be large enough to cover relevant costs incurred by issuing banks, be attractive compared to competing services, and not be as high as to displease merchants.

Mitigation and pass-on

In addressing the issue of pass-on, the CAT covered the issue of cost mitigation. It raised the question of if successful cost mitigation actions by the claimant must be considered in determining the extent to which the overcharge caused by the infringing conduct was passed-on and, if so, to what extent.

The issue here is at the core of the relationship between price and costs. There is a continuous dynamic relationship between price and costs, an interplay that is constantly changing over time in reaction to different market conditions and various impacts prompted by market forces. The key issue is to understand what this relationship looks like for the claimant.

In previous arbitrations proceedings explicitly discussed by the CAT in relation to the analysis of pass-on, it was established that the main principle for the assessment of damages is determining the compensation for the pecuniary loss caused by the infringement. To this, another principle adds that the claimant must mitigate the loss caused by the infringement and cannot claim damages for that portion of the cost that could have been reduced by the mitigation effort. However, in order to be relevant as an off-setting benefit to be taken into account in the assessment of damages, the cost mitigation must bear some relation to the damage suffered by the claimant as a result of the infringement.

Clearly, the characterisation of a "related benefit" is a fact-driven exercise, which can be better completed by bringing together both legal and economic expertise and taking into account their interplays. This implies that *res inter alios acta* must be left out of the scope of cost mitigation. *Res inter alios acta* would be transactions that do not arise as consequence of the infringement and in the ordinary course of business. For example, in *Bradburn v Great Western Rail Co [1874-80] All ER Rep 195*, where the injuries caused by the defendants' negligence could not be reduced by a sum received by the claimant as indemnity from an insurance company.

STRUCTURING A MULTI-DISCIPLINARY APPROACH

In order to describe how a multi-disciplinary approach to antitrust litigation may be structured, consider a situation where an antitrust infringement has been ascertained by an enforcement agency. In this situation, claimants and defendants may consider developing preliminary analyses to gauge the size of the damage and the key legal issues of the claim.

The pre-trial stage can start. Firms that may have suffered damages as a result of the antitrust infringement face a number of critical questions:

- Did they suffer damages as a result of the antitrust infringement?
- If so, are damages sizeable? Is there room to settlement, or is litigation the only sensible way forward?
- Under what conditions should the party offer or accept a settlement?
- Under what conditions, instead, should the opposing party refuse to settle and litigate?
- What are the relevant risks of a litigation, and what elements are key in informing the development of a sensible litigation strategy?

Addressing these questions may require extensive legal and economic analysis (for example, damages can be claimed in the country where the claimant or one of the defendants resides). This offers substantial opportunities and risks for claimants and defendants. Litigation costs, rewards, punitive damages, level of discovery, and speed of legal action may vary substantially across countries. Defendants risk being drawn into litigation in several countries.

To navigate the waters of a competition damage case in jurisdictions where the practice is not yet well established, parties may choose to employ a multi-disciplinary approach where lawyers and independent experts work together to balance risks and rewards. The approach would kick in at the pre-trial stage, as lawyers and experts would tackle relevant aspects from a richer perspective, by ensuring that legal and economic elements (as well as their correlation) are coherently studied. The pre-trial stage can inform the parties if the damage is sizeable, especially relative to expected litigation costs. The parties can decide if they should try engaging the counterparty to the negotiation table.

Well-developed pre-trial legal and economic analyses can inform the negotiation stage and increase the chances to engage the counterparty to negotiate. The case is likely to settle, limiting litigation costs as a result, when expectations of damages by all parties are reasonable and based on plausible assumptions. Developing reasonable expectations of damage early enough in the proceedings, and prior to settlement negotiations, is key in order to increase the chances of settlement.

Generally, a multi-disciplinary approach may be structured around three phases, discussed below:

- Evaluation of the legal action.
- Settlement negotiation.

- Litigation.

Evaluation of the legal action

In this stage, the team of lawyers and economic experts work together to achieve a high-level quantification of the damage suffered by the claimant. This stage does not provide the parties with a sound and reliable estimate of the damage, but has the sole purpose of assessing if the claim is sizeable. The outcome of the analysis is for internal use only.

The parties may consider claiming damages before different tribunals (some jurisdictions allow parties to claim damages before both competition tribunals and civil tribunals), therefore different limitation periods may apply. The preliminary damage estimate would also help identify which tribunal would allow a higher damage claim. On the basis of the results of this phase, the parties and their legal advisers can decide whether to engage the counterparty to negotiation or give up.

Settlement negotiation

There are two phases of this stage:

- Construction of a rigorous damage model.
- Development of the negotiation with the opposing party.

In the first phase, the analysis is deepened and a proper damages model is built. If the tribunal in which to claim the damage has been identified, the lawyers can identify the limitation period. Economists would identify detailed input data for the economic analysis, making sure that the scope of the damages analysis is consistent with the liability ascertained by the infringement agency. The parties would check which input data and other information is available internally to the company and which data has to be collected outside. Lawyers would identify the data that the tribunal should order the opposing party to disclose.

To develop the model, a counterfactual and a consistent theory of harm are developed. The model's hypothesis and assumptions are specified and their plausibility checked from both legal and economic standpoints. The damages model is then used to calculate damages, and sensitivity analyses are carried out to simulate how the amount of damages changes when the model's assumptions and hypothesis are changed. The outcome of this stage is a range of values for the damage suffered by the claimant that can be used to engage the opposing party at the negotiation table. Input by independent economic experts ensures that the negotiation stage is informed by rigorous analysis that can withstand scrutiny by the opposing party, as well as in-court cross-examinations if the claim is not settled.

In the second phase, the details of the damage model and its results are compared to those of the opposing party. Each party reviews the damage model of its opposing party. Changes in hypothesis and assumptions are discussed and different modelling principles tested. This second stage has two possible outcomes:

- The parties are close enough and the claim is settled. Parties save on the costs and avert the risks of litigation.
- The parties are too far apart and no agreement is reached. Litigation cannot be avoided, but most likely the stance of the parties will be closer than what it would have been without any negotiation.

Litigation

For the litigation stage, the parties prepare expert reports and deliver expert testimonies in court. The litigation stage heavily relies on the findings of the analysis developed for the negotiation stage. The analysis may be refined to reflect what has been agreed upon during the negotiation stage with the purpose to streamline the case and focus only on the points where there is no agreement.

A key element of this stage is the communication to the court. A critical challenge for the experts is to communicate the results of complex damages analysis in a simple, clear fashion, as an effective communication will help the tribunal reach a well-informed decision. Tribunals may not reach a decision on the basis of the first reports prepared by the parties and may request the experts to prepare supplemental reports, whose objective is to focus on issues that require further analysis.

A multi-disciplinary approach to competition damages is an effective way to address the manifold legal and economic issues, as well as their interplays, to minimise the risks and costs arising with tardy involvement of relevant expertise, and to help balance risks and rewards.

**The independent opinions expressed in this foreword are those of the authors and do not necessarily reflect those of the other employees or affiliates of the Berkeley Research Group.*

REFERENCES

- Bebchuk, L. 1984. "Litigation and Settlement Under Imperfect Information", *Rand Journal of Economics* 15(3): 404–15.
- Chappatte, P. 2009. "FRAND Commitments - The Case For Antitrust Intervention", *European Competition Journal*, August.
- Nalebuff, B. 1987. "Credible Pre-trial Negotiation", *Rand Journal of Economics* 18:198–210.
- Ordover, J, and Rubinstein, A. 1986. "A Sequential Concession Game with Asymmetric Information", *Quarterly Journal of Economics* 101:879–88.
- Reinganum, J and Wilde, L. 1986. "Settlement, Litigation and the Allocation of
- Litigation Costs", *Rand Journal of Economics* 17:557–66.
- Rosenberg, D, and Shavell, S. 1985. "A Model in Which Suits Are Brought for Their Nuisance Value." *International Review of Law and Economics* 5:3–13.
- Rubinfeld D L. 2010. "On the Pre-trial Use of Economists", *Antitrust Bulletin* 55(3):679–697.
- Salant, S, and Rest, G. 1982. "Litigation of Questioned Settlement Claims: A Bayesian Nash Equilibrium Approach", Rand Corporation Discussion Paper P6809, December.
- Spitzman, L. 1995. "The Defense Economist's Role in Litigation Settlement Negotiations", *Journal of Legal Economics* 5(2)/Fall: 57–65.
- Williamson, O. 1984. "Pre-trial Uses of Economists: On the Use of 'Incentive Logic' to Screen Predation", *Antitrust Bulletin* 29:475–500.

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- Quaglione D. *An introduction to the economic theory and empirical findings on pass-on in private antitrust litigation, BRG White Papers, 2015.*
- Quaglione D. *Wanted: A New Competitive Paradigm, InterMEDIA, Winter 2014/15 Vol 42 Issue 4/5.*