# The Economist and the Judge in Conversation: Economic Experts in the Competition Appeal Tribunal

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**Gunnar Niels and Helen Ralston-Smith**[1]

## 1. Introduction: wizards and black boxes

Whether you are a newly qualified associate at a law firm, or an experienced barrister or judge who has worked across various fields of law, the first time you get involved in competition law can feel like entering Middle Earth: vast forests of dense case law, concepts that constantly emerge and erupt like active volcanoes, and deep rivers of principles that originate in far-away continents. And then you discover that this world is inhabited by a strange creature: the economist. You learn that economists have been around in competition law for generations—indeed, at the very beginning it was economists who formalised the notion of 'competition good, monopoly bad'.

The strange creature, and the language that it speaks, takes some getting used to. Lord Bellamy KC, first President of the Competition Appeal Tribunal (CAT), once likened economists to wizards in the Harry Potter stories, with lawyers and judges being the muggles. The Honourable Mr Justice Marcus Smith, the current President, wrote an article entitled 'Lawyers come from Mars, and economists come from Venus'.[2] Nevertheless, over the past decades, lawyers and economists have found ways not just to coexist peacefully, but also to go on adventures together and shape the landscape around them. There are few forums in the world where this cooperation between law and economics occurs as routinely and productively as in the UK, including the CAT, as we will discuss in this article.

Much still needs to be done to extend good practice in the use of economic evidence in courts, including in UK courts. Economists do not always have a favourable reputation, and are the butt of many a joke: the two-handed economist (on the one hand, on the other hand); the economist who dismisses reality because it does not fit the theory; ask two economists and you get three opinions; and so on.[3] That competition law is a complex field is not the

[1] Economists at Oxera. This article is in part based on the final chapter of Niels, G., Jenkins, H. and Kavanagh, J. (2023), *Economics for Competition Lawyers*, third edition, Oxford University Press [forthcoming]. Where we acted as experts in a particular case we mention this explicitly in the article.
[2] Smith, M. (2019), 'Lawyers come from Mars, and economists come from Venus—or is it the other way round? Some thoughts on expert economic evidence in competition cases', *Competition Law Journal*, Vol. 18, No. 1,
[3] We refer you to The Rt Hon. Lord Justice Green's five truisms about economists. Green, N. (2011), 'It's not that complicated really: truisms about economists', *Agenda*, June. Lord Green praised the rigour that mathematics has brought to economics; and the mortis. Yet we also note that a Google search for 'lawyer jokes' still generates ten to fifteen times more results than 'economist jokes'.

fault of economists—as the CAT stated in an early judgment: 'competition law is not an area of law in which there is much scope for absolute concepts or sharp edges'.[4] However, economists can do more to help lawyers and courts navigate the complexities of a case.

This begins with explaining economic theories and concepts clearly. These come primarily from the field of industrial organisation (IO), which is concerned with how markets work, how demand and supply interact, how rival businesses react strategically to each other's actions, and what the effects are on economic welfare (other important fields are behavioural economics and corporate finance). In addition to theories and concepts, economists contribute to competition cases by seeking to measure and quantify things, most commonly through the use of econometrics—the application of statistical techniques to economic problems (usually in the form of regression analysis). Econometrics—which is increasingly complemented by data science—is probably the area in economics that most closely resembles a black box in the eyes of courts and competition lawyers. Even economists sometimes use econometrics without fully understanding the underlying workings of the statistical programs (a bit like Hogwarts students doing magic in the Defence Against the Dark Arts class). At the very least, economic experts should enable courts to peer inside the box, rattle it, and ask critical questions.

Much good practice has developed on how to most effectively use economic experts in court cases, as we discuss in this article. We start with principles developed across the Atlantic in the context of the *Daubert* test for admissibility of expert evidence, many of which are also relevant elsewhere. We then turn to the duty to the court principle, a pillar for the use of experts developed in the UK courts. We also discuss hot tubs, an innovation from Down Under, and the use of court-appointed experts, which is common in mainland Europe. Finally we address a number of themes that have come up in CAT cases in its first two decades of existence: does economic theory always trump business reality? Are economists guilty of ex post rationalisation of business practices? What can economists say about how markets work that business people cannot?

## 2. The *Daubert* principle[5]

US case law has developed the *Daubert* test on the admissibility of scientific evidence, which also applies to economic evidence in antitrust cases. Based on a 1993 Supreme Court ruling—which involved an expert in birth-defect epidemiology—the test has been refined through a number of subsequent judgments and is reflected in Rule 702 of the Federal Rules of Evidence.[6] It is intended to prevent testimony based on untested and unreliable theories. The main criteria of the *Daubert* test are whether: (i) the testimony is based on sufficient facts or data; (ii) the testimony is the product of reliable principles and methods; and (iii) the expert has applied the principles and methods reliably to the facts of the case. Note that admission of the evidence is just the first hurdle; it does not determine what weight the evidence will be given in later stages of the proceedings if accepted. The *Daubert* test has been used to great effect in many antitrust cases in the last twenty-five years. Indeed, quite a

[4] *The Racecourse Association and the British Horseracing Board v OFT* [2005] CAT 29, Judgment of 2 August 2005, at [167].
[5] Not to be confused with the Dilbert principle of management, invented by Scott Adams.
[6] *Daubert v Merrell Dow Pharma Inc* 509 US 579 (1993). For a detailed discussion of the test, see Berger (2000). The Federal Rules of Evidence are updated from time to time and are available on various websites, including: <https://www.rulesofevidence.org>.

few economists have seen their evidence not being admitted under this test—including two Nobel Prize winners,[7] and the author of a leading guide to using economic evidence in antitrust court cases.

Expert evidence in private damages actions (which represent a large proportion of all antitrust cases in the United States) is most likely to be admitted if it falls within one of the three 'common approaches to measuring antitrust damages': the before-and-after approach, a yardstick or benchmark approach, and regression analysis.[8] US courts have accepted the usefulness of regression analysis, and indeed even expect such analysis to be presented in certain cases. In one case it was stated that 'if performed properly multiple regression analysis is a reliable means by which economists may prove antitrust damages'.[9] We return to this topic later.

US courts have also considered the question of how much of an expert the expert needs to be. In one antitrust case involving a clinic's refusal to continue to treat two patients, the plaintiffs' expert had a PhD in economics, but no expertise in competition economics. The court dismissed him:

> The district court's and the plaintiffs' difficulty in describing the relevant market was to a great measure the result of the plaintiffs' reliance on [the expert] as their sole economic analyst/expert. Dr. [expert] is the sole qualified source cited by the plaintiffs supporting their allegation of the Clinic's market power. Yet, Dr. [expert] conceded that he was 'not an expert,' that he had no background in antitrust markets, either geographic or product, and that he had no background in 'primary care' markets. Dr. [expert] further stated that he was not a member of any associations or industrial organization groups which form the bulwark of economists specializing in antitrust law and economics. Where supposed experts have admitted that they are 'not experts,' courts have had little difficulty in excluding their testimony.[10]

The English High Court faced a similar question in an abuse of dominance case where the expert was not an economist, but did have extensive business experience in the industry (local bus services). The court expressed a more nuanced (or perhaps British) view on this than its US counterpart:

> Whilst the concepts required to be investigated in a competition law case are no doubt most easily grasped, explained and opined upon by trained economists, they are concepts drawn from and related to the operation of the markets of the real world; and I regard it as unreal the thought that it is only trained economists with a list of learned articles to their name who have the expertise necessary to understand them and to help the court on their application to a particular case.[11]

Conversely, the question has arisen as to whether experts need to have had experience in the industry in question. In a case involving a horizontal group boycott under Section 1 of the Sherman Act, the court noted that the expert (an accountant) had extensive experience in business valuation, and it was satisfied that while he had no prior experience in the industry concerned (aluminium distribution), he had made substantial efforts to acquaint himself with

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[7] A winner of Nobel Prize in Economics and a winner of the Nobel Memorial Prize in Economic Sciences.

[8] *Conwood Co LP v US Tobacco Co* 290 F 3d 768, 793 (6th Cir. 2002).

[9] *Petruzzi's IGA Supermarkets Inc v Darling-Delaware Co* 998 F 2d 1224, 1238 (3d Cir. 1993).

[10] *Nelson v Monroe Regional Medical Center* 925 F 2d 1555 (7th Cir. 1991). Note that, in Europe at least, there are no industry associations or groups that competition economists are expected to be a member of, and we believe that is not a bad thing.

[11] *Chester City Council and Chester City Transport Limited v Arriva PLC* [2007] EWHC 1373 (Ch), Judgment of 15 June 2007, at [147]. We acted as expert for the defendant.

the industry for the purpose of the case.[12] This seems sensible given that competition economists, like competition lawyers, can effectively work across a wide range of industries, and may not necessarily have specific expertise in the industry in question at the start of a case. In this particular case, the expert's evidence was rejected for another reason: it was not based on any identifiable theory or technique, but rather on his own assumptions and judgement, such that the analysis could not be objectively tested or verified by others (which is another of the *Daubert* criteria).

Experts cannot rely only on their past experience. Under the *Daubert* test they are expected to engage with the details of a case, and ensure that their analysis fits the facts, a point that we return to later. In *Concord Boat*, a rebate case involving boat builders and an engine manufacturer, the appeal court rejected the plaintiff's expert because his Cournot oligopoly model 'did not incorporate all aspects of the economic reality' of the market in question, and 'ignored inconvenient evidence'.[13] The Cournot model itself was not challenged—it is after all a well-accepted model in economic theory—but two experts on the other side criticised the way it had been applied in the case at hand. In another case, concerning price discrimination in phospholipids (fat derivatives), the plaintiff's expert was rejected because his analysis was not based on authoritative industry data or recognised financial data.[14] Instead, it was based on the 'deposition testimony, estimates, feelings and beliefs' of one of the plaintiff's executives. This executive would have been the main beneficiary of the damages claim (and might therefore have been biased). The court also stated that the expert had not made any effort to verify the executive's estimates.

That experts must do their homework is also a theme that has come up in the UK courts. In one damages action (outside competition law), where economic and business experts analysed the effect of a failed customer relationship management system on the number of pay-TV subscribers, the court stated that:

> It is clear that [the expert] is a person who has a great deal of relevant experience in this field and could provide a valuable opinion on the effect of the [customer relationship management] System on Sky's customers. However, I found that his evidence failed to live up to expectations. It seemed that he had little grasp of the detailed facts and had not properly understood some features which were necessary to make churn predictions for Sky.[15]

What about those two Nobel laureates? One saw his evidence dismissed in a pharmaceutical price discrimination case, first by the district court, on the basis that he had not engaged with the details of the case, and then by the appeals court on different grounds—that his opinion was on an irrelevant matter:

> But what was objectionable about his evidence actually had nothing to do with *Daubert*; it was that the evidence mainly concerned a matter not in issue—that the manufacturers of brand name prescription drugs engage in price discrimination, showing that they have market power. Everyone knows this. The question is whether that market power owes anything to collusion … On that, [expert] had virtually nothing to say. It is irrelevant, therefore, that, as the plaintiffs point out, the district judge erred in excluding [expert]'s testimony on the grounds that he did—that [expert] had not studied the prescription drug industry in depth and had

[12] *Champagne Metals v Ken-Mac Metals Inc* 458 F 3d 1073, 1088 (10th Cir. 2006).
[13] *Concord Boat Corp v Brunswick Corp* 207 F 3d 1039 (8th Cir. 2000).
[14] *Vernon Walden, Inc v Lipoid GmbH and Lipoid USA LLC* (Civ No 01-4826 (DRD)), (D.N.J. 2005).
[15] *BSkyB Limited and Sky Subscribers Services Limited v HP Enterprise Services UK Limited* (*formerly Electronic Data Systems Limited*) *and Electronic Data Systems LLC* (*formerly Electronic Data Systems Corporation*) [2010] EWHC 86 (TCC), Judgment of 26 January 2010, at [288].

> formulated his tentative opinion after working on the case for only 40 hours. His opinion that there is price discrimination in the prescription drug industry is one that an economist of [expert]'s distinction should have been able to reach in even less time.[16]

The other *Daubert* rejection of an economic expert with Nobel Prize credentials was in the certification stage of a consumer class action against Apple in 2022, in relation to supra-competitive commissions charged to App Store developers. The expert had identified a but-for commission rate of 10–12% which he said was based on benchmark analysis. The court was not convinced:

> However, as shown below, no analysis was actually conducted. Rather, the rate was cherry-picked from a few data points, many of which [expert] conveniently dismissed. The Court excludes this opinion as it is arbitrary and not based on any legitimate scientific, economic, or mathematic principle.[17]

## 3. Duty of experts to help the court, talk to each other, and agree to disagree

There are various ways to involve experts in court proceedings, and the rules differ across jurisdictions. Parties can each appoint their own expert, or (less commonly) they can appoint one expert jointly. Courts may themselves appoint an expert. We are supporters of the system of party-appointed experts used in the UK courts. In our own experience, and based on what several judges have said about it, this system can be highly effective in bringing out the best in economic experts—as we explain below. It combines a number of powerful mechanisms that provide the right incentives for experts to do the job properly: (i) a duty on the experts to help the court; (ii) a requirement on the experts to talk to each other and produce a joint statement identifying points of agreement and disagreement; and (iii) the experts having their 'day in court', if the case goes to trial, where they can explain their work and the other party can subject it to robust cross-examination.

Part 35 of the English Civil Procedure Rules and the accompanying Practice Direction determine that experts have a duty to help the court on matters within their expertise.[18] This duty overrides any obligation to the parties from whom experts have received instructions. Experts are expected to provide objective opinions on matters within their expertise, and not to assume the role of an advocate. They have to make it clear when a question falls outside their expertise, and when they are not able to reach a definitive opinion—for example, because they have insufficient information.

In our experience, this duty to help the court in itself provides a strong incentive to carry out the analysis with rigour—and indeed it also provides incentives for the instructing solicitors not to place undue pressure on the expert to toe the party line. Judges tend to dismiss the evidence of an expert who does not appear to want to be helpful to the court—for example, when the expert seems unwilling to comment on a matter from another perspective when asked to do so, or appears to be hiding behind narrow instructions. This can be seen in the quote below, which is from a 1995 judgment that was influential in the development of the

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[16] *In Re Brand Name Prescription Drugs Antitrust Litigation*, 186 F.3d 781 (7th Cir. 1999).
[17] *In Re Apple iPhone Antitrust Litigation*, 11-cv-6714-YGR (N.D. Cal.), Order of 29 March 2022.
[18] These rules are updated from time to time and are available on the Ministry of Justice website: https://www.justice.gov.uk/courts/procedure-rules/civil/rules/part35.

duty to the court principle (the expert evidence here did not relate to economics but to architecture, as the case involved a dispute over the copying of a house design):

> That some witnesses of fact, driven by a desire to achieve a particular outcome to the litigation, feel it necessary to sacrifice truth in pursuit of victory is a fact of life. The court tries to discover it when it happens. But in the case of expert witnesses the court is likely to lower its guard. Of course the court will be aware that a party is likely to choose as its expert someone whose view is most sympathetic to its position. Subject to that caveat, the court is likely to assume that the expert witness is more interested in being honest and right than in ensuring that one side or another wins. An expert should not consider that it is his job to stand shoulder-to-shoulder through thick and thin with the side which is paying his bill.[19]

There have been several judgments in which the UK courts have explicitly stated that they found an economic expert's evidence to be credible, persuasive, and authoritative, and that they felt they could rely on the expert. Equally, courts have indicated where there were some doubts in this respect. This confirms to us that the duty to the court principle works effectively. The following extracts from court judgments illustrate the point. In a case concerning restrictive agreements in gas distribution, the Court of Session in Edinburgh observed:

> It was submitted that Mr [expert] should be regarded as an advocate for Calor's cause, and that his evidence amounted to assertions without any properly researched basis. I demur to both suggestions. I noted the considered and thoughtful way in which Mr [expert] gave his evidence. I am entirely satisfied that he acted throughout as an independent expert offering his opinions to assist the court … His credentials to give expert evidence on this subject are impressive. On the material issues, I accept all of Mr [expert]'s evidence and his conclusions.[20]

In a case concerning most-favoured-nation clauses between price-comparison websites and insurers, the CAT considered all four economic experts—two on each side—to be helpful, and said of one of them:

> In general terms, Ms [expert] was a formidable witness, clearly master of her discipline. It was when she strayed into areas outside her economic expertise that we consider her evidence to have been less helpful. We will explain the nature of these areas of less helpful evidence when we come to them, but we would not want this point to be taken as a criticism of Ms [expert], who we consider was doing her very best to assist the Tribunal. The fact is that Ms [expert] was asked to approach questions by those instructing her in a manner which unduly exposed her into evaluating questions of fact which were the province of the Tribunal.[21]

This comment raises a topic that we discuss further below: can economists provide useful insight on questions of fact?

In the abuse of dominance case related to bus services that we saw before, the High Court expressed some doubt about the expert's independence, and adjusted the weight it gave to his evidence accordingly (unlike US courts, UK courts do not often reject an expert's evidence outright, but rather take *Daubert*-type criteria into account when determining what weight to give to the particular evidence):

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[19] *Cala Homes v Alfred McAlpine Homes East* [1995] EWHC 7 (Ch) [1995] FSR 818, Judgment of 6 July 1995. One of our colleagues acted as expert in this matter.
[20] *Calor Gas v Express Fuels and D Jamieson* [2008] CSOH 13, Judgment of 25 January 2008, at [35].
[21] *BGL Holdings Limited v Competition and Markets Authority*, [2022] CAT 36, Judgment of 8 August 2022, at [66(3)]. We acted as experts for BGL.

> I was satisfied that Mr [expert] was giving his evidence honestly and was doing so in proper recognition of his duties to the court. I recognise, however, that he has been close to the action on the claimants' side of the record, and that there is therefore a risk that his opinion may perhaps have become unconsciously coloured by the claimants' interests. I have come to the conclusion, therefore, that whilst I should reject [the defendant's submission that the expert should be disregarded], I should nevertheless bear this risk in mind in assessing the weight to be given to Mr [expert]'s evidence.[22]

In the recent *Royal Mail and BT v DAF Trucks* judgment, the CAT included a lengthy discussion (seven out of the total 301 pages) about the independence of the defendant's economic expert, which had come under attack.[23] The CAT noted that it had no problem with the fact that the expert had acted for the defendant in many other cases:

> As we have already said, we do not consider there is a conflict of interest and we see no serious concerns with the fact that Professor [expert] and/or [his consulting firm] have, and stand to have, an enormous amount of work from DAF by reference to all the trucks cases they are involved with. It is an inevitable consequence of the adversarial trial process involving detailed expert evidence which is critical to the case that the respective experts will be heavily involved with their client for a long period of time. Indeed, it would be wholly inefficient and wasteful of costs to have different experts instructed in cases that are essentially considering the same issues.[24]

However, the CAT was concerned about the 'lack of candour' about how long the expert had been engaged by the client, and what his original instructions were, long before the start of the CAT proceedings. It considered that the early engagement may have shaped the expert's evidence, and that the failure to disclose precisely what he was doing for DAF in the early period undermined his credibility to a certain extent.

Under the Civil Procedure Rules, the experts from both sides are expected to hold discussions and to produce a joint statement setting out the issues on which they agree and disagree, and the reasons for doing so. This normally also involves the experts sharing their data and calculations, in line with the best-practice principles set out above. Expert discussions usually take place after submission of the expert reports and before the trial, but increasingly they are also encouraged at earlier stages of the case, so that the experts can agree on methodology and assist the legal teams and court with identifying relevant data for disclosure. Together with the duty to the court, the requirement on experts to get together and narrow (minimise) the issues in dispute can be an effective mechanism to help courts understand the economics of the case. Indeed, it could be applied in any type of competition investigation—it would equally be helpful in administrative proceedings if the economists at the competition authority and those advising the parties discussed where they agree and where they do not, and clearly state the reasons why.

In our experience, even if these expert discussions do not always bring the parties' cases closer together, it is helpful if there is agreement on at least some basic principles. The joint expert statement—if put together in a concise and collaborative manner—can be a useful reference document for the parties and the court during a trial. We have seen joint expert statements being introduced in other jurisdictions as well, including the Netherlands. In one, possibly rare, case that we worked on (a confidential international arbitration involving an abuse of dominance allegation in the transport sector), the two experts agreed on all the

[22] *Chester City Council and Chester City Transport Limited v Arriva PLC* [2007] EWHC 1373 (Ch), Judgment of 15 June 2007, at [149].
[23] *Royal Mail and BT v DAF Trucks and others* [2023] CAT 6, Judgment of 7 February 2023.
[24] Ibid., at [255].

economic criteria applicable to the case, and considered that the remaining areas of difference between the two sides were entirely a matter of factual evidence. As a result, there was no longer a need to cross-examine the experts at the hearing. That the mechanism of the expert meeting and joint expert statement can work satisfactorily is also borne out by the following quote from a damages judgment that we mentioned earlier:

> The quantum experts have managed to make very good progress in agreeing figures. This meant that the issues between them were more limited. Both [expert 1 and expert 2] were impressive witnesses and although their approaches on particular issues differed, this was the result of opinion on such matters as validation of costs. I have therefore been able to see clearly what their views are and decide which view I prefer on particular issues.[25]

Finally, in addition to the duty to the court and the requirement to meet with opposing experts, economists face the prospect of cross-examination by a barrister representing the other side, possibly complemented by questions from the court itself. This is the most vigorous form of rattling that the expert's black box can get in court, and provides a further incentive for the party-appointed expert to produce a robust analysis. Cross-examination of experts is increasingly common in many jurisdictions and also in arbitrations, although there are still jurisdictions where—somewhat unsatisfactorily—experts do not routinely get their day in court, which means a missed opportunity for courts to get a better understanding of the economic evidence.

## 4. Expert hot tubs: different shapes and sizes

One method with which the party-appointed experts can be tested is through concurrent evidence in court, now usually referred to as the expert 'hot tub'. This method originated in Australia (where it was also called the expert 'conclave'), and is increasingly common elsewhere. Like real hot tubs, expert hot tubs come in different shapes and sizes, but in essence they are a blend of the expert discussions and cross-examination that we discussed above. The experts appear together in court to exchange views and answer questions from the barristers and the court. As explained by an Australian judge (Rares, 2013):

> In many situations calling for evidence, the 'hot tub' offers the potential for a much more satisfactory experience of expert evidence for all those involved. It enables each expert to concentrate on the real issues between them. The judge or listener can hear all the experts discussing the same issue at the same time to explain each of their points in a discussion with a professional colleague. The technique reduces the chances of the experts, lawyers, and judge, jury, or tribunal misunderstanding what the experts are saying.

In Table 1 we provide our own classification of expert hot tubs, based on our experience in various jurisdictions.

**Table 1 The expert hot tub catalogue: pick your favourite model**

| Model | Description |
|---|---|
| The Judge-in-Charge model | One of the first hot tub models used in the UK, in *Streetmap v Google* (2016).[1] The judge leads the process and asks all the question of the experts (very limited cross-examination by the |

[25] *BSkyB Limited and Sky Subscribers Services Limited v HP Enterprise Services UK Limited* (*formerly Electronic Data Systems Limited*) *and Electronic Data Systems LLC* (*formerly Electronic Data Systems Corporation*) [2010] EWHC 86 (TCC), Judgment of 26 January 2010, at [303].

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| | parties' barristers may be allowed afterwards). This helps the court directly in its deliberations, but requires it to study the expert evidence in detail before the trial. |
| The Continental model | Court-appointed experts have traditionally been used in many European jurisdictions. As court-appointed experts in an abuse of dominance case before the Amsterdam court in 2018, we organised an economist hearing akin to a hot tub, in which both parties' experts could present their analysis, comment on each other's analysis, and answer our questions.[2] This allowed for the economic evidence to be discussed and understood in full by all parties, including the lawyers present. |
| The Improvised Hot Tub | In a patent-licensing case before the English High Court in 2017, the judge notified the parties shortly before the competition economics experts were due to appear that he wanted to ask these experts some questions in a hot tub.[3] They were general questions about the economics of patent licensing that the judge had pondered while listening to the previous factual and expert witnesses, and wished to hear the economists' views on. Following this short (two-hour) hot tub, the full cross-examinations of the experts proceeded as planned. |
| The Hybrid—Standard model | Hybrids seem to be most commonly used at present. The expert evidence starts with a hot tub, with the court leading the questioning. This is followed by cross-examination of each expert, focused on remaining substantive matters (shorter than in cases with cross-examination only, but longer than in the Judge-in-Charge model). This allows for complementarity between the court and both sides' legal teams in picking up the key issues in the expert evidence. |
| The Hybrid—Full-service model | The Standard model can be extended with a range of features. In a cartel trial before the New Zealand High Court in 2011, five economic experts (two on one side, three on the other) shared a hot tub over several days.[4] Each was cross-examined individually, but the barristers doing the cross-examination could ask their own side's experts to comment directly on the responses. The court (assisted by a lay economist) then asked its own questions, first to each expert individually and then concurrently. |

Notes: [1] *Streetmap v Google*, [2016] EWHC 253 (Ch), Judgment of 12 February 2016. We sometimes refer to this hot tub as the 'Peter Roth model', after The Hon. Mr Justice Roth, who was the judge in that case. One of our colleagues acted as expert.[2] Rechtbank Amsterdam, *VBO Makelaar v. Funda en NVM*, Case No. C/13/528337/HA ZA 12-1257, Judgment of 21 March 2018. We acted as court-appointed expert.[3] *Unwired Planet International Ltd v Huawei Technologies Co*. [2017] EWHC 711 (Pat), Judgment of 5 April 2017. We acted as expert.[4] *Commerce Commission v Air New Zealand and others*, CIV-2008-404-008352, Judgment of 24 August 2011. We acted as expert.

We believe that the expert hot tub can be a useful method to test and clarify the economic evidence. This often depends on the ability of the judge to invest, potentially heavily, in the process, which is most important in the 'Judge-in-Charge' model. Where questions and timetables are set out in advance, hot tubs can be a particularly useful way of informing a court as to the economic points that it has identified as the most salient.

Hot tubs are best seen as a complement to cross-examination—as in most of the variants in Table 1—not a substitute. There will always be aspects of the expert evidence that can be picked up more effectively by the opposing legal team (with support from the opposing expert) than by the court, since the latter will necessarily have spent less time going through the evidence before the trial. A potential downside of hot tubs is that they can sometimes

degenerate into debating contests, where skills of persuasion and wit may matter more than substance. The experts risk being seen as mud-slingers, especially where they have already produced a joint statement of points of agreement and disagreement and the hot tub focuses on the latter. In our experience, such risks can be mitigated if the experts behave professionally and engage in the substance, in line with their duty to help the court.

## 5. Court experts, and economists as judges

Jurisdictions such as Canada, Finland, Hong Kong, Ireland, New Zealand, and South Africa also mainly use party-appointed experts, as do international arbitrations. Many of them have adopted elements of the US, UK, and Australian systems. Other jurisdictions often rely on court-appointed experts. These assist courts in making the decision, sometimes sitting alongside the judge in the courtroom. Some specialised courts, such as the CAT and the Competition Tribunal in Canada, even have economists among their 'lay members'. CAT panels often consist of two judges and an economist (one of the founders of our firm was a lay member of the CAT for a number of years).

Do you get more objective outcomes if the expert is appointed by the court rather than the parties? Not necessarily. Courts in Australia have recognised that it is not inherently a bad thing that party-appointed experts do not reach the same conclusion, especially in a field like competition law. As one Australian judge stated: 'The fallacy underlying the one-expert argument lies in the unstated premise that in fields of expert knowledge there is only one answer'.[26] Another noted that it can be useful to have contradictory evidence because the court does not normally choose between the experts, preferring all aspects of one opinion over another, but rather uses their differing views to assist in reaching its own conclusion.[27]

This concurs with our experience as court-appointed experts. In one case, both party-appointed experts had produced high-quality economic analysis but reached different conclusions. These analyses were tested in the Continental hot tub model described in Table 1 above, and formed the basis for the court experts' own analysis and conclusions. In contrast, in another case, neither party had produced economic evidence, so the court experts had to do all the homework themselves. It was only after the court experts produced their report that both parties wheeled out their economists to comment on that report (one side criticising it, the other side agreeing with it). This was less productive than in cases where parties submit their own expert evidence beforehand.

In any event, both systems—party- and court-appointed experts—can work well, provided that they meet the criteria that we mentioned earlier. One is that the evidence gets properly tested. Even court experts should have their analyses tested by the parties and their experts. Likewise, court experts must talk to the party experts, exchange analyses, and seek to narrow the issues. In all, allowing experts to explain their evidence, subjecting them to cross-examination, and requiring the experts on all sides to narrow the issues by identifying points of agreement and disagreement, are all part of the recipe for the successful use of economic expert evidence in court cases.

[26] Downes G., 'Problems with Expert Evidence: Are Single or Court-Appointed Experts the Answer?' (2006) 15 *J Jud Admin* 185, p. 185.
[27] *Ancher, Mortlock Murray & Woolley Pty Ltd v Hooker Homes Pty Ltd* [1971] 2 NSWLR 278, at [286E-F].

## 6. A triumph of theory over commercial reality?

In *RCA and BHB v OFT* (2005), a large group of British racecourses sold media rights collectively to a new venture for interactive TV and internet betting on horseracing.[28] The question arose as to whether this collective selling constituted a restriction of competition under Article 101(1). It would not be if collective selling was objectively necessary for the launch of the new venture. The parties agreed that such a new venture required a 'critical mass' of horseracing content for a successful launch (in the end, the launch never actually happened). However, the OFT found an infringement because it considered that, in a counterfactual without the agreement, the venture could have assembled a critical mass of rights by negotiating individually with each racecourse. The OFT reasoned that separate contracts could have been made conditional on obtaining sufficient rights from other courses. The racecourses, in contrast, claimed that, from a practical point of view, collective selling was the only realistic way to achieve a sale and purchase of the rights. These rights had never been sold before, and interactive betting was a new service at the time. The CAT agreed, and dismissed the theoretical counterfactual put forward by the OFT:

> The suggestion that the acquisition of the necessary critical mass by individual negotiation with up to 37 course owners either could have been done, might have been done, or was ever contemplated as something which could or might have been done, appears to us to represent a triumph of theory over commercial reality and to ignore the evidence of the events leading up to the [agreement].[29]

Another such triumph of theory over commercial reality was encountered in *Enron v EWS* (2009), a damages case following an abuse of dominance finding by the Office of Rail Regulation.[30] The abuse concerned selective and discriminatory pricing practices by rail operator EWS. The question that arose in the damages claim was whether, in the counterfactual, the claimant—Enron Coal Services Limited (ECSL), a competitor to EWS—would have secured a major four-year contract to supply coal to a coal-fired power station (a 'loss of chance' claim). The economic expert for the claimant argued that the operator of the power station, as a rational economic decision-maker, would have been likely to select the claimant's bid in the counterfactual.

However, neither the facts nor the executive at the power company who was responsible for the coal supply contract at the time supported this argument. The executive in question gave various business reasons for why he would probably not have granted the contract to ECSL in any event. The CAT found that the executive gave his evidence 'candidly and in a straightforward manner', and was 'impressed by his overall consistency on key points'.[31] In the end, it placed greater weight on this evidence from the actual decision-maker than on what the economic expert said a hypothetical rational decision-maker would have done.

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[28] *The Racecourse Association and the British Horseracing Board v Office of Fair Trading* [2005] CAT 29, Judgment of 2 August 2005.
[29] Ibid., at [170]. We don't know whether this counterfactual was put forward by the OFT's lawyers or economists, or both.
[30] *Enron Coal Services Limited* (*in liquidation*) *v English Welsh & Scottish Railway Limited* [2009] CAT 36, Judgment of 21 December 2009. The authority is still called ORR but this now stands for Office of Rail and Road.
[31] Ibid., at [70(a)].

## 7. Are economists guilty of ex post rationalisation?

Nonetheless, attempts by economic experts to rationalise certain business behaviour should not be dismissed outright every time the business reality is slightly different from the theory. This brings us to another theme that has come up in cases before the CAT. The *Napp* judgment of 2002, its first under the Competition Act 1998, concerned an appeal against an OFT finding of predatory and excessive pricing.[32] The economists acting for Napp were accused of ex post rationalisation of the company's behaviour. In other words, they came up with a justification for the behaviour after the event. The CAT stated that Napp's justification for its behaviour did not flow from its internal documents, but from the work done by its economic advisers:

> Napp does not strike us as a naïve or badly managed company. If its pricing policy had in fact been set by Napp in the way that its economic consultants suggest, we would have expected the company's internal documents to demonstrate that.[33]

What can economists say to this in their defence? We have to go right back to the beginning. Economics emerged in the late eighteenth century. Commerce as we know it has existed for thousands of years. So it is almost inevitable that much of what economists have done is to provide explanations of business behaviour and market mechanisms that have existed for ages. But even ex post, economics can provide new insights into the effects of business practices.

The *Napp* case involved alleged predatory pricing in sustained-release morphine products (used in the treatment of cancer-related pain) in the hospital sector, combined with excessive pricing of the same product in the pharmacy ('community') sector. The economists presented the theory that Napp's pricing policy incorporated a 'follow-on effect'. Which basically meant, setting low prices in the hospital sector in order to enhance subsequent sales in the community sector. The economists had described this effect in a narrow sense, in that more hospital sales would almost mechanistically lead to more community sales. There was no factual evidence that this was actually how Napp set its prices. The CAT stated that the term 'follow-on effect' was not used in the industry but rather 'coined by Napp's advisers for the purposes of this case'.[34] The managing director of Napp admitted that he had first come across the term when reading the papers for this case.

However, apart from the fact that it is not uncommon for pharmaceutical companies to set low prices to hospitals in order to gain more business in the community sector (even if it is not widely referred to as a 'follow-on effect'), is it really the case that economic theories about how companies behave must always be reflected in internal company documents? Consider the insight first provided by Adam Smith in 1776 in *Wealth of Nations*. He explained that if all economic agents pursue their own self-interest, this is actually a good thing for society because it ensures that, in the economy as a whole, the right business decisions and opportunities are taken. This is the famous 'invisible hand' mechanism through which markets work efficiently and make us all better off:

> It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity

[32] *Napp Pharmaceutical Holdings Limited and Subsidiaries v Director General of Fair Trading* [2002] CAT 1, Judgment of 15 January 2002.
[33] Ibid., at [252].
[34] Ibid., at [235–6].

> but to their self-love … He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it … And by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote it.[35]

This eighteenth-century insight still underpins the way economists think about markets today. Applying it to *Napp*, the question of whether internal business documents confirm the theory put forward by the economists is to some extent irrelevant. The fact that business executives are not aware of the economic theory according to which they behave does not mean that the theory should be dismissed. Companies involved in competition proceedings are like the butcher and the baker, seeking their own self-interest (profits), and economists do have things to say about the effects of such behaviour.

## 8. Economic and factual evidence

A more recent question that has come up in CAT cases is about the role of economists in explaining how a market works. Is this not best left to the business people who actually operate in the market? Should it not be the case that commercial reality trumps economic theory. We believe there is a simple answer: economists and business people are complements, not substitutes. To go back to Adam Smith's insight, in a case involving the meat or bread industry, you want the butcher and the baker as factual witnesses to explain how they produce their goods and make their commercial decisions. However, you also want the economic expert to explain the overall market outcomes and welfare effects of those decisions made by individual market participants.

The field of IO is all about understanding how markets work: how demand and supply interact and how rival businesses react strategically to each other's actions. As such, economists are well equipped to gather the relevant information and provide a useful overview of a market.

Indeed, beyond the field of competition litigation, it is commonplace for economists to help regulators, competition authorities and businesses themselves understand market design and functioning. Economic consultancy firms are frequently requested by regulators and corporates alike to undertake market reviews and impact assessments, and to advise on competitive dynamics. As recent regulatory examples, consider the 2022 review of the UK retail energy market provided by an independent consultancy for Ofgem,[36] or the role of an independent consultancy in formulating the FCA's approach to its 2018 Strategic Review of Retail Banking Business Models.[37]

In a competition litigation setting, economists can describe a market and collate relevant facts relatively efficiently. They understand which market characteristics will be key in determining how competition will function and by understanding the mechanisms through which a conduct, market event or regulatory change will ripple through a market, economists

[35] Smith, A. (1776), *An Inquiry into the Nature and Causes of the Wealth of Nations*, Strehan and T. Cadell, Book I, Ch II.
[36] Oxera (2022), 'Review of Ofgem's regulation of the energy supply market' prepared for Ofgem, May.
[37] Financial Conduct Authority (2018), 'Strategic Review of Retail Banking Business Models Progress Report', June, para 2.13.

are also well-placed to identify the relevant metrics to assess and measure the effect. It is not uncommon for economists to cover this in their expert reports, and indeed to assist the court and legal teams at an early stage in identifying relevant information for disclosure.

Moreover, economists often develop areas of expertise in particular sectors and industries that they can usefully draw on in competition litigation. In certain sectors, where value chains are long and complex, products complicated, or commercial relationships between different agents not straightforward, this can be of notable value, not least because, in our experience, business people themselves—while experts in terms of their own activities and direct interactions (like the butcher and the baker)—may not have a comparable broader overview of how different firms within a market interact and what overall market outcomes this produces. Business people may also not have as much time or interest as the diligent economist to seek to thoroughly study and understand the effects of a particular conduct.

Does this mean that there is no reason to question the role of economists in collating factual information, and presenting market overviews in the context of competition litigation? Clearly, this debate has not arisen without reason. It is important that economists are transparent in the facts they have relied on, and do not spring new evidence late in the process. However, our experience is that, generally speaking, the current process where economic experts contribute to a better understanding of market functioning works well.

Commonly, economists set out the factual evidence, as well as their assessment of the market functioning, upfront in their expert report. When interpreting qualitative factual evidence, they apply a logical framework with tractable assumptions, similar to what they do when tackling empirical data. In doing so, it can be relatively easy to identify areas of differences in the factual evidence or assessment of market dynamics between experts. Such differences can then be worked through during the joint statement and/or cross-examination stage and left for the court to take a view.

Turning to effects, the CAT has also recognised the challenge for factual witnesses to be able to accurately depict the impact of specific conducts on market outcomes. An example is *BGL v CMA*, a case previously mentioned, relating to BGL's appeal against the CMA's infringement decision regarding wide MFNs in the distribution of home insurance by its price comparison website, Comparethemarket. The CAT recognised that it would be 'very difficult' for any individual, even if very experienced, to disentangle the effects of the conduct in question, wide MFNs against a not so distinct counterfactual of narrow MFNs.[38] Retail narrow MFNs are agreements by suppliers with online intermediaries, such as price comparison websites, not to offer lower prices for the same products on their online direct sales channels (i.e. own websites). Retail wide MFNs extend this commitment to not discount on any other online intermediary, such as other price comparison websites, as well.

> it is actually very difficult to understand how a person, even very experienced in the industry, could say with any real authority that Commissions and Premiums across portions of the industry were affected by wMFNs, and it is significant that Ms Glasgow did not speak to this point. This is an area where either evidence from those senior persons able to speak to pricing strategy in the market was needed or else quantitative evidence needed to be deployed. Even as to the former, such evidence would be highly dependent on the questions asked, and (importantly) the potential witnesses' understanding or perception of them. That is particularly the case here where nMFNs were prevalent generally in the agreements between price comparison websites and home insurance providers, and the CMA's investigation was focused on wMFNs and not the effect of nMFNs.

[38] *BGL v CMA, para 236(3).*

Evidence from interviews with market participants can be highly informative. However, the use of empirical analysis, in particular econometrics, can provide a more conclusive picture. In our experience, factual evidence and empirical analysis are complements, and it is necessary for an economist to consider both. Factual evidence helps inform as to how companies behave and market dynamics, allowing the subsequent empirical analysis to be firmly rooted in the market facts. Empirical analysis, in particular econometrics, when properly presented, provides a tractable, standardised framework through which a court can make their own interpretation as to the likely market effects.

This was recognised by the CAT in *BGL* v CMA, where the CAT found the absence of economic analysis by the CMA 'prima facie odd and difficult to justify'.[39] In this case, BGL had disapplied the wMFNs shortly after the CMA had opened its investigation, thus there was an opportunity to test for the effects of the wMFNs by exploring how the market responded to the removal, as the CAT put it, 'the makings of a natural experiment'.[40]

> The wMFNs in the wMFN Agreements operated during the Relevant Period, but did not apply thereafter. Since considerable numbers of home insurance products were sold both during and after the Relevant Period, there would appear to be the makings of a natural experiment to understand the effect of the wMFNs in the wMFN Agreements on Premiums and Commissions. Such a "before and after" consideration at least prima facie lends itself to econometric analysis.

## Concluding remarks

As the CAT celebrates its 20th anniversary, it can be proud of its achievements: deciding on many complex competition questions, developing case law, and encouraging the constructive use of economic expert evidence (we note that the English High Court can take its share of the credit, as it also heard many competition law cases over the past two decades). Economists appear regularly in hearings as experts, and indeed the CAT has several economists among its lay members. Good practice on how best to use economists, and economics, in competition cases had developed, and will continue to develop. There are also complex new challenges in competition law where economists can be of assistance: the rise of digital markets, the increased focus on consumer protection and fairness, the growth of collective actions, and climate concerns in 'green agreements', to name but a few. Economists and lawyers have plenty of new places to discover jointly in the wondrous and adventurous world of competition law.

[39] *BGL v CMA, para 238.*
[40] *BGL v CMA, para 238(1).*