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The significance of economic evidence in competition cases

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Peter Freeman, Chairman of the Competition Commission (CC), spoke at this year's Beesley lecture series on 15 October 2009. The full text of the speech follows.

Starting from the simple proposition 'that economic evidence is very significant in most competition cases', the speech looks at its history and context; and discusses its significance in relation to policy, the analytical framework, and the treatment of evidence. International convergence has been enabled by and enabled further consensus on the use of economics in competition analysis. Economics helps to formulate policy and provides a 'route map' to assess a particular case. But arguably its most important function lies in dealing with the vast array of factual information which today is at the heart of any competition analysis.

The speech examines how the CC deals with economic evidence in the context of increasingly sophisticated case analysis, using independent groups of members supported by expert professional staff. The Chairman examines the benefits and disadvantages of quantitative techniques which are necessary and prevalent but which can provide uncertainty or misleading results unless their limitations and strengths are properly understood.

The speech considers the different institutional models (administrative, judicial) and examines their relative merits in the assessment of evidence and in the decision-making process. No system is ideal to deal with the challenges of assessing the significance of voluminous information under a fair process within a reasonable time but the CC's process does as well as, if not better than, any other.

¹The assistance of Ingrid Nitsche, Tom Farrell and Alison Oldale in the preparation of this lecture is gratefully acknowledged but the responsibility for the content is entirely mine. Any views expressed are mine alone and may not be those of the CC.

Introduction

I approach this topic with a mixture of respect and trepidation. Respect because after nearly 40 years' experience of competition law, I readily acknowledge that it is a subject that is entirely empty without the economic theory and practice that explains how competition works and what it is meant to achieve; and trepidation because as my low level of knowledge and understanding has increased slowly, the sophistication and complexity of the subject has increased more quickly, leaving one rather in the position of running down the railway platform trying to catch the train that is already accelerating away from the station.

Moving target or not, the topic is central to the debate about how we should conduct competition cases and how reliable and sound are our judgements. It is also fundamental to the institutional structure of the competition regime. If economics is central to competition assessment, the institutions that make these assessments must be able to handle the evidence that is involved.

I could of course put the simple proposition that economic evidence is very significant in most competition cases and stop there. I leave it to you to judge whether the remainder of this lecture adds anything to that simple, and slightly obvious, point.

I propose to approach this subject in the following way.

First it is necessary to look at the history and context. There is an almost smug consensus that competition assessment now is firmly based on sound economics. It certainly was not always so, and could, I suppose, cease to be so.

Then I think we need to examine the importance of economics for competition, in relation to policy, analytical framework, and the treatment of evidence.

After that we need to look at how it all works in practice, to look at how different bodies, but particularly the CC, look at economic evidence and to see how economic evidence can be obtained, presented and considered in a case environment, particularly as the techniques become more sophisticated. We need to explore the difficulties and problems that the use of this evidence creates, in particular setting the right balance between the need to conduct a thorough assessment and getting a timely decision. We need to examine some of the risks to proper enforcement as well as the benefits.

We will then turn to institutional aspects and examine the relative merits of different bodies in the assessment of evidence and the making of decisions.

Finally, we may draw some conclusions on how far we have come and how far we may still have to go.

How we got here

The development of competition assessment is sometimes caricatured as a journey from a form-based approach to an effects-based approach. The implication is that law (ie form) has ceded pride of place to economics (effects) and that a rules-based approach has been replaced by a case-by-case assessment of economic effects. Before we take a brief look at how that fits the US, EU and UK experience, we should express perhaps a little scepticism about the caricature.

First of all, there can be economics-based rules as well as law-based rules. For example, it is common to most competition systems that cartel agreements between competitors are bad and should be outlawed. This is based in part on a distrust of secret conspiracies but

also on the lesson from economics that generally such agreements harm consumers.² I will return to this point.

Second, no system is going to be entirely rules-based or entirely effects-based. Much more likely is a system of individual case assessment within an overall general framework. The question at issue is one of emphasis and balance. Again I will come back to this.

Third, and I hope my economist friends will forgive me for saying this, but if indeed the current consensus is 'an effects-based approach, grounded in solid economics'³ then whilst this has been brought about principally by the efforts of economists, some of the credit must also go to the lawyers, particularly the judges, who have enabled this consensus to have proper legal force.

The US experience

The evolution of US antitrust law and the significance of economics in it has been well documented by Professors Kovacic and Shapiro.⁴ In 1925 an economist's work was first cited in an antitrust decision.⁵ After the Depression and World War II an active antitrust enforcement policy emerged, based on industrial organization theories which became markedly interventionist. This led eventually to a reaction by the so-called Chicago School, led by Professors Bork and Posner, developing the ideas of Aaron Director, according to which antitrust interventions should be restricted to those instances (principally horizontal cartels and mergers) where consumer welfare was likely to be enhanced. The mere fact of a restriction or an exclusion was not enough—its effects had to be assessed. The Supreme Court ruling in *GTE Sylvania* (1978)⁶ that vertical restraints were not automatically (per se) illegal but were subject instead to individual analysis (rule of reason) was a major milestone.

The current position is sometimes described as 'Post Chicago Synthesis'⁷ with a consensus that competition or antitrust should be based on effects-based interventions to promote consumer welfare. But this consensus has not produced doctrinal harmony. The recent change of official stance in the USA on the vexed issue of monopolization⁸ shows that agreement that economic effects are what matter does not answer all questions of policy. And one should never underestimate the role of prior beliefs in the formation of policy positions, particularly by non-politicians.

The EU experience

In the EU, competition 'law' began with the Treaties of Paris (1951) and Rome (1957) when this US debate was already beginning. The EEC's competition rules were more or less a dead letter for the first five years but from 1962 were driven forward by the European Commission, strongly encouraged by the European Court of Justice (ECJ), with the objective of promoting the creation of a single market, as well as improving competition.

As a result EU competition law developed in a somewhat centralized and to some extent formalized way. The emphasis on the internal market objective meant that export

⁷Kovacic and Shapiro, p16.

²Vickers, *Competition Law and Economics: A mid-Atlantic Viewpoint*. The Burrell Lecture of the Competition Law Association, given in London on 19 March 2007. ECJ Vol 3, No 1, at p4 (Burrell Lecture).

³The phrase used in 2005 by the EU Competition Commissioner Mrs Neelie Kroes, quoted in C Veljanowski, *The Economics of Law* 2nd Ed (2006) IEA p112.

⁴Antitrust policy: a century of economic and legal thinking, Competition Policy Center, University of California, Berkeley Working Paper No CPC 99-09 (1999), (Kovacic and Shapiro).

⁵Maple Flooring Manufacturers' Association v US, 268 US 563 (1925).

⁶Continental Tyre Inc v GTE Sylvania, 433 US 36 (1977).

⁸Statement of Christine Varney, *Vigorous Antitrust Enforcement in this challenging Era*, remarks for the Center for American Progress, May 11 2009.

restrictions, usually in the form of vertical restraints, became a cardinal sin, attracting heavy fines,⁹ and there was much, painful, discussion of the restrictive or beneficial effects of vertical arrangements such as exclusive distribution agreements, trademark or patent licences. Moreover, the reservation of the power to decide on any possible countervailing benefits to the European Commission itself, under the notification and exemption procedure of Regulation 17, tended to put EU law in opposition to that of the member states and position competition law as much as an instrument of EU institutional development as something intended to benefit the EU's consumers.

In bringing about a change from this situation a combination of enlightened administrators and further judicial pressure was decisive. The seeds of a more realistic approach were sown in the reform and renewal of the vertical agreements block exemptions, drawing on early ECJ rulings which had emphasized the need to assess the significance of restrictions by reference to their economic context.¹⁰ The old block exemptions¹¹ had developed into formalistic codes of conduct, with occasionally bizarre results.¹²

The decentralization of EU competition law brought about by Regulation 1/2003,¹³ making the assessment of benefits and restrictions 'self-executing', together with the recognition that much of the internal market-building had been achieved, transformed the nature of EU competition law enforcement, at least in relation to agreements. Just recently, it seems that an attempt by the Court of First Instance (CFI) to read into Article 81 an explicit consumer welfare criterion has been set back by the ECJ, but it is a little early to assess the full significance of this development.¹⁴

Certainly in merger control and Article 82 more was needed. In merger control, the series of hard-hitting CFI judgments in 2001–2002 were a severe shock.¹⁵ These led directly to measures to make the assessment of economic evidence and the application of economic theory in merger cases much more disciplined.

The debate on interpretation and application of Article 82 has further illustrated how the European Commission, or more precisely DG Comp, with the aid of the CFI and ECJ, has sought to move towards an 'effects based approach, grounded in sound economics' in the interest of consumer welfare. Enforcement of Article 82 remains contentious-probably it is the most contentious aspect of EU competition law—but at least the argument has moved on to how the effects of a particular practice should correctly be assessed, rather than whether a particular proscribed act has occurred and as a result a rule has been breached.¹⁶

⁹Johnson & Johnson (Commission Decision 80/1283) OJ [1980] L337/16. Volkswagen (Commission Decision IV/35-733) OJ

^[1998] L124/60. ¹⁰Case 56/65' Société Technique Minière v Maschinenbau Ulm (1966) ECR 235 remains the seminal ruling in this field; see also the later Case C 234/89 *Delimitis v Henninger Bräu AG*, (1991) ÉCR I-935. ¹¹Principally Regulation 67/67/EEC of the Commission of 22 March 1967on the application of Article 85 (3) of the Treaty to

certain categories of exclusive dealing agreements (OJ 057, 25/03/1967 p0849) exempting some categories of distribution

agreement.¹²See for example *Junghans GmbH* (Commission Decision 77/100), OJ L30, 2.2.77, p10 which held that a less restrictive, ie semi-exclusive restriction did not benefit from the block exemption for exclusive agreements. ¹³Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in

Articles 81 and 82 of the Treaty.

¹⁴Joined cases C-501/06P, C-513/06P, C-515/06P and C-519/06P GlaxoSmithKline Services Unlimited v Commission, decision

of 6 October 2009. ¹⁵Case T-310/01, Airtours plc v Commission [2002] ECR II-4071, Case T-80/02, Tetra Laval v Commission, [2002] ECR II-4519, Case T 310/01, *Schneider Electric SA v Commission* [2002] ECR II-4071. ¹⁶Guidance on the European Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive

exclusionary conduct by dominant undertakings, 3 December 2008 (Article 82 guidance); see also Commission Press Release IP/08/1877. See also Implementing an effects-based approach to Art. 82, Luc Peeperkorn and Katja Viertiö, forthcoming in the Competition Policy Newsletter 2009-1.

The UK experience

The UK experience is also instructive. The original competition statute in 1948¹⁷ set up a review body (the predecessor of the present CC) which was very much part of the administrative system of government. There was debate, and some scepticism, about the wisdom of having any economists involved as members.¹⁸ The then Commission deliberated, as it still does, and advised, as it now mostly does not. But the Restrictive Trade Practices Act 1956 which it helped to promote, and which lasted, with some additional strengthening in 1976, for more than 40 years until 1998, was a comprehensive attempt to control cartel agreements by a mixture of law and economics, using both administrative and judicial control.

Under the RTPA (as it was known), agreements were subject to registration on a highly formalistic basis and subsequently put through an administrative effects-type exemption test of 'economic insignificance'. If no exemption was given the agreements were referred to and considered by the Restrictive Practices Court¹⁹ under various public interest 'gateways' which included an economic assessment of the effect on competition. Subsequent enforcement was by proceedings for contempt of court which involved assessing whether the second, offending, agreement was 'to the like effect' as the earlier, prohibited one.²⁰

This is all history now. In 1998 the UK adopted national versions of Articles 81 and 82, to be interpreted according to the principles of EU law and overseen by a specialist competition tribunal. There is therefore in principle harmony between the EU and UK approaches on this part of the law. Merger control provides a less straightforward parallel but again in practice there is harmonization of the substantive analysis, although there are still important differences in procedure.

One feature of the UK system that remained after 1998 was the administrative system of monopoly investigations, alongside the new legal prohibitions. This again had formalistic aspects, in that it required the formal identification of a 'monopoly situation' followed by an assessment of potential public interest detriment associated with the monopolist's behaviour. The (then) Monopolies and Mergers Commission's (MMC) role was to assess the evidence and form a view on a case-by-case basis. While these judgements were for many years based on a public interest test and did not necessarily involve economic analysis, in practice and with the active involvement of academic economists, including tonight's Chairman among many others, the assessment of competition became increasingly a core consideration. By the time the system was relaunched as the market investigations regime under the 2002 Enterprise Act, and arguably well before, these inquiries were fully fledged assessments of the economic effects of particular situations and practices—as they are today.

One happy family?

So in the USA, UK and EU it seems we have all got there in the end. And competition law has truly gone international. As Cento Veljanovski has observed²¹ in 2006, 'in 1990 very few countries had competition laws; now very few do not: at the last count over 100 countries including India and China'. The internationalization of competition law and its soft harmonization through the work of the OECD and the ICN and UNCTAD has led to a remarkable

 ¹⁷The Monopolies and Restrictive Practices (Inquiry and Control) Act 1948.
 ¹⁸Stephen Wilks *In the Public Interest*, MUP (1999) p93, citing the reference to competition being 'a subject on which economists are apt to hold fanatical views, leading to minority reports'.

The Restrictive Practices Court, like the Competition Appeal Tribunal (CAT) now, consisted of a judge and two 'lav' members. ²⁰See, for example, the *Newspaper Proprietors case* [1986] ICR 44 where no like effect could be shown as the effects of the first agreement had never been established.

¹ The Economics of law Cento Veljanovski, 2nd Ed (2006), IEA p106.

degree of convergence in the overall approach used, and in the role of economics. This is in large part due to the general acceptance of the underlying economic theory of the operation of markets. In John Vickers' words,²² competition economists from different schools and backgrounds, whether from Berkeley or Stanford, Oxford or Toulouse all share a common analytical standpoint.

This convergence is significant but should not be overstated as competition policy worldwide is by no means uniform. First, there are bound to be differences of emphasis in policy. This is a reflexion of different economic conditions, different political complexions and different positions in the electoral cycle. Second, agreement on the economic reasoning that underpins the choice of the relevant analytical framework does not mean there will be agreement on its application to a particular set of facts.

Examples of continuing divergence include the somewhat different approaches taken by the US and the EU authorities on the degree and direction of interventions to control abuse of monopoly.²³ That is not to say there is a clear cut separation of views, and views within each 'camp' as already shown are not uniform, but agreement that there should be an 'effectsbased approach' for example clearly does not resolve the issue. A degree of divergence is also apparent in the role ascribed to efficiencies in merger control analysis with, on the whole, a willingness to ascribe greater significance to them in the USA than in Europe. The point is not that one view is right and the other wrong; but simply that economics can sometimes only provide alternative answers to important questions, answers that are equally coherent, which then require a decision to be made between them.

Nevertheless, the trend towards international consensus on the overall framework and the role of economics is an important backdrop to appreciating the significance of economic evidence. International convergence has both enabled and in turn been enabled by increasing acceptance of the significance of economics in competition analysis.

The importance of economics for competition

In considering the implications of this development let us first of all remind ourselves why the subject of economics is so important to the competition system.

Economics gives us, first, the necessary underpinning for competition policy, second, a proper theoretical basis for why given situations give rise to particular effects and, third, a way of accessing appropriate evidence with which to examine whether those effects occur or may be expected to occur. Let us examine each of these in turn.

1. Policy

At the highest level, competition policy, and the systems for its enforcement, rest on a view derived from economics that it is appropriate to limit the exercise of market power in the interests of economic efficiency and welfare. It can sometimes be hard to find an explicit statement of this policy and its derivation, but is to be found, for example, in the 2001 White Paper preceding the 2002 Enterprise Act.²⁴ Other laws seem to have relied either wholly or partly on other policy objectives besides economic efficiency and welfare. It could be argued, for example, that the Sherman Act itself was directed more towards preferring small rather than big business, that EU competition law was directed more towards market unification

²²Burrell Lecture at p4.

²³Although perhaps decreasingly so, see for example, 'Return of the trustbusters', *The Economist*, 27 August 2009; and see the Article 82 guidance (loc cit). ²⁴ Productivity and Enterprise. A world class competition regime. Cm 5233 (2001).

and that the earlier UK statutes were more about providing a careful balance between narrow competition objectives and the wider public interest.

Nor has this issue gone away. The recent credit crunch, the resulting recession and the measures that have been taken in the financial sector and the wider economy have caused some to question the contribution of markets and market-based policies to economic success and consumer welfare. Although the financial crisis may appear to be more a matter of regulatory failure combined with bad incentives and too much exuberance, financial markets and competitive conditions in them have clearly failed to protect the wider economy from severe risk and damage, leading to searching questions as to how far market-based policies in general can be seen as reliable in the longer as well as shorter term. The role of Government, always present in most market-based systems, has staged something of a 'comeback' and the long-term implications for competition policy are not altogether clear.

As if this was not enough, other policy imperatives, of a social and environmental nature, are increasing the pressure for Government either to intervene in existing markets (as with aspects of transport), create new markets (eg in carbon trading) or abandon markets altogether (as with certain aspects of energy supply).

However, it is also useful to remember that although the operation and resulting benefits of competition are explained by economics, economics is not only about competition—and many of the other policy imperatives now bearing down on competition policy, in fields such as the environment or transport, are also based on economics.

2. Rules and frameworks

At the next level is the use of economics to provide a theoretical framework. Economic reasoning (reasoning about the interactions between companies' actions, market characteristics, and consumer welfare) is well placed to underpin the design of sensible rules, and the identification of the main factual issues that must be proved in order to support a finding in any particular case.

In terms of rules, for example, the general prohibition on price fixing or market-sharing agreements between competitors is derived in large measure from economic reasoning that tells us such agreements harm the public good. As a framework, in merger control, economic reasoning explains how a market can be identified, what are the barriers to and possibilities of entry and what other countervailing pressures might limit any market power enjoyed. Overall, economics provides a route map towards assessing the effect of a particular transaction or set of circumstances.

It is just worth noting that using economics to define the framework and rules within which analysis of competition cases takes place in this way carries with it some risks—both of over- and of under-enforcement.

Over-enforcement

There is always a danger that a greater reliance on economics to set the framework of analysis leads to more, and more complex concerns. This is because of the very wide range of outcomes that economic theory says is possible when companies interact. An over-theoretical or exuberant approach based on economic modelling raises the possibility of an increasing range of 'theories of harm' that could have no reliable basis in the realities of the market. In practice this risk has proved less great, partly because of the requirements of due process and fairness, and oversight of the courts but partly also because of the more mature understanding of the strengths and weaknesses of economic analysis by economists themselves.

Under-enforcement

Perhaps the greater risk is the possibility that more use of economics in setting the framework could lead to weaker enforcement. Take, for example, the assessment of coordinated effects in merger control. In the past, competition authorities have felt that coordinated effects from mergers arose in some unspecified, but likely, way when markets were sufficiently concentrated. It is possible to read the CC's own *Lloyds/Abbey* case in 2001 in this way. The CC concluded that the market for personal current accounts was 'vulnerable to tacit collusion in pricing' and that this 'would tend to exacerbate any adverse effects on competition arising from the loss of a significant player'.²⁵ Somewhat similar statements appear in the *Safeway* merger inquiry in 2003 where the CC, having described the conditions necessary for coordinated effects to arise, concluded that the acquisition (of Safeway) 'might be expected, given the conditions facilitating coordinated behaviour, over time to lead to such coordinated behaviour as we describe'.²⁶

Modern economic theories about coordinated effects offer more precise explanations for how coordinated effects might arise, but offer little in the way of operational tests that allow authorities to distinguish between mergers that will lead to coordinated effects, and ones which will not. As a consequence it may be expected that merger decisions based on coordinated effects will be rarer, even if coordinated effects themselves are rather common.

Gathering and evaluating evidence

The final, and most important, reason why economics plays such a prominent role in competition is in the gathering and evaluation of evidence. It has been said that economic analysis in competition cases is all about facts, and the empirical (ie without preconceptions) analysis of them.²⁷ With information technology, we now potentially have at our disposal (at least in some sectors of the economy) a vast array of factual information—sales data, volumes, prices, plans, projections and records. Marshalling these into some form of coherent framework so that they make sense to support or disprove a particular logical proposition is what we mean by assessing the significance of economic evidence; and it is at this 'coal face' level that much of the engagement in competition cases actually takes place. That is what I now want to consider and, at the risk of being parochial, I should like to do this by reference to the CC.

The CC's use of economic evidence

1. The CC as an institution

The CC is, by general admission, a unique institution in this field. Its structure, with a small, permanent Commissioner cadre supplemented by about 40 part-time members, appointed to a particular case in groups of a much smaller number, to conduct an investigation and decide on the outcome, is not replicated elsewhere. Of course the groups work closely with the expert staff team without which they could achieve very little.

It is in the direct exchange with parties under investigation and the deliberative process within the Group that the CC finds its procedural distinctiveness. And it also relishes its independence of view. The fact that it does not choose its cases, combined with the independence of the members, who are appointed for a single eight-year term and paid very

²⁵Lloyds TSB Group plc and Abbey National plc: A report on the proposed merger, July 2001. Paragraph 2.64.

²⁶Safeway plc and Asda group Limited (owned by Wal-Mart Stores Inc); Wm Morrison Supermarkets PLC; J Sainsbury plc; and Tesco plc: A report on the mergers in contemplation, September 2003. Paragraph 1.16.

²⁷P Florian & M Walker, *The correct approach to the use of empirical analysis in competition policy*, ECLR, 2005, 26(6), pp320–327, at p320.

little, means the CC is well placed to assess evidence dispassionately. The mix of lawyers, economists, other professionals and business men and women encourages lively debate. Individuals will tend to adopt certain roles and help to ensure that all sides of an argument are put.²⁸ The so called 'non-expert' members can be particularly good at keeping the 'experts' within the general realm of sanity. Conversely, the idea that a group proceeds at the suit of a vengeful and prejudiced staff team led by theoretical economists to ignore inconvenient evidence provided by the parties is a caricature that I sometimes hear but that I do not recognize. The transparent process and frequent interaction with parties make it unlikely if not impossible as CC groups share much of their thinking with the parties. Nor is it plausible, with hearings, published papers and provisional decisions, that CC groups will not apply their minds fully and fairly to the evidence before them.

This independence and openness makes the CC particularly well placed to handle economic analysis. This is aided by its focus on cases referred to it by other bodies. Whilst the CC has to operate within the accepted analytical orthodoxy and legal framework, it is, in the last resort, free to come to its own view on a given case; and whilst it recognizes the great importance of consistency and predictability, it is in perhaps the best position to make these difficult assessments. Before examining some of the issues that arise in practice let me say a word about the obtaining of evidence.

2. The CC's evidentiary practice

The first point to stress is that the CC is interested in evidence of all kinds-so-called direct or documentary evidence including parties' statements in submissions or at transcribed hearings, strategy and board papers, customer surveys and studies of the market—as well as the other kinds of economic evidence that we are considering. It is the CC's job to test all this evidence, and weigh it in the balance in coming to a decision. There is no hierarchy of evidence-the weight attributed to each item depends on its source, relevance and reliability, all of which are tested by the process.

In doing this, the CC has tried to get closer to the primary evidence, including numerical data. Recently the CC published its suggested best practice for the submission of economic evidence.²⁹ The purpose is to ensure that the parties' economic evidence can be considered by the CC without disruption or delay and will thus be of greater evidential value. The essence is that submissions should clearly state the results and conclusions as well as setting out the assumptions and methodology used. Submissions should contain a complete description of the analysis. The CC may also request raw and cleaned data to enable it to rerun the parties' analysis and replicate the results. For econometric models, it is also essential that the CC is able to understand their underlying assumptions. The CC may want to test econometric analysis for robustness and will want appropriate evidence for this purpose. These measures are all meant to ensure that the CC has the best evidence available to it.³⁰

3. How the CC uses economics

Turning to how the CC uses economics, the first point is that economics frames the analysis. It is routine at the start of a case for the CC to consider the theories of harm, and the conditions necessary for those theories to hold. This helps it establish the key questions of

²⁸See Dr Diane Coyle's remarks in Neven, Competition Economics and antitrust in Europe, Economic Policy, October 2006, pp741–791, at p788. ²⁹Suggested best practice for submissions of technical economic analysis from parties to the CC, available on:

www.competition-commission.org.uk/rep_pub/corporate_documents/corporate_policies/best_practice.pdf. ³⁰In addition the CC has placed greater emphasis on access to 'unmediated' correspondence, papers and emails, not hesitating to use its power to require the provision of such materials under section 109 of the 2002 Enterprise Act. Recent examples of cases where the CC has done so include Market investigation into payment protection insurance, 29 January 2009. See paragraphs 1.17 & 1.18.

fact, and provides a framework in which to assess the evidence gathered during the course of an inquiry.³¹ Economics can then be used to test the theories of harm to see whether they reflect conditions on the market in question in the light of the facts and to assist in coming to a conclusion. Finally economic analysis is very important in evaluating the results of cases after the event, something that all authorities should take very seriously.³²

4. The CC's economics in practice

The development of economics, particularly as applied to competition, has made available to the CC, and to parties under investigation, increasingly sophisticated quantitative analytical techniques, loosely described as econometrics, which have made a big difference to the way competition cases are handled. This development is not entirely unproblematical. Looking first at the benefits:33

Advantages

(a) More systematic approach

The first benefit of using these analytical techniques is that they can identify relationships in data that are hard to discern from mere inspection. For example, in the retail sector one may see a series of examples of local market entry, which result in some cases in a reduction in prices or revenues at incumbent stores. However, some of these examples may show a large effect, some a small effect and others may not show an effect at all. Although there may be a wealth of useful information, quantitative techniques make it easier to come to some conclusions, by allowing a comprehensive view of the totality of the evidence and a systematic assessment.

Entry analysis of this kind is common in CC investigations involving many local markets where the evidentiary value of large datasets needs to be distilled into something usable from which conclusions can be drawn.³⁴

(b) More robust inferences

These techniques can also be used to generate more robust inferences from data. A quick look at the data might suggest that prices were higher during the period when a cartel operated or after a merger. But there could be confounding factors-perhaps the period overlapped with a period when costs were unusually high. This problem can work in the opposite direction too. It may be that a simple inspection shows that prices did not increase, but on closer inspection the price effect might have been masked because of falling costs. Multiple regression analysis can help check for confounding factors like this.³⁵

³¹An example of this is the Carl Zeiss/Biorad decision (May 2004) which involved the market for advanced optical microscopes and where the CC approached the case using a framework of competition through innovation rather than a standard pricebased analysis.

²²As does the CC; see Review of merger decisions under the Enterprise Act (2009), Evaluation of the Competition Commission's past cases (2008), Ex post evaluation of mergers (2005), Understanding past merger remedies (2008)

all available on www.competition-commission.org.uk/our_role/analysis/evaluation_reports.htm. ³³For a discussion of the advantages and disadvantages of the use of economics in this context see *Modern Industrial* Economics and Competition Policy: Open Problems and Possible Limits, Oliver Budzinski, IME Working Paper 93/09, June

^{2009 (&#}x27;Budzinski'). ³⁴CC report, Somerfield plc/Wm Morrison Supermarket plc: A report on the acquisition by Somerfield plc of 115 stores from Wm *Morrison Supermarkets plc*, 2 September 2005. See Appendix B. ³⁵Although it may be noted that multiple regression analysis itself is an empirical technique that is more than a century old and

probably not, in the sense intended here, 'sophisticated'.

The CC faces this sort of problem in many cases. A recent example was the Video on Demand joint venture known as 'Kangaroo'³⁶ where the CC used this sort of analysis to assess the impact of changes in the range of content by one supplier on their rivals' viewing figures to assist in defining the market.

(c) Balancing

A third benefit is in balancing. Techniques that give estimates of the size of effects can be very useful when conclusions will rest on balancing different factors. This applies in weighing costs against benefits when assessing remedies; similarly, deciding whether a vertical merger will lead to higher or lower prices will involve balancing the effects of any foreclosure of rivals against the impact of any reduction in the price charged between the merging companies.

Balancing of course may not necessarily be between two pieces of 'economic' evidence, but between so-called 'direct' evidence on the one hand and economic evidence on the other. Any decision will involve the careful weighing of all the evidence, of all kinds. An example of this was the *Bucher/Johnson*³⁷ merger in 2005, which involved powered road sweeping equipment. Here the decision turned on the economic assessment of the plausibility of entry by Bucher (the leading Swiss manufacturer) into the UK (where Johnson was a strong player) and the analysis suggested strongly that successful entry was difficult. However, the CC also had to consider clear 'direct' evidence, in Bucher's strategy documents, of its planned UK entry—ie the very move that economic analysis indicated was not feasible. The CC weighed these two conflicting pieces of evidence and decided that what mattered was not the plan but the non-feasibility of its implementation. On this basis, the merger was cleared.

This does not mean that the economic assessment will always trump a statement of intent. The plans in *Bucher* were in a sense pro-competitive. Often such plans are predatory, anticompetitive or otherwise exclusionary in nature. I well remember, in a case long ago,³⁸ which tonight's Chairman may also recall, involving the Yorkshire wool scouring industry, the damaging effect (to the parties at least) of a strategic plan setting out the perceived advantages in terms of pricing opportunities of the firm in question acquiring its key competitor.

Disadvantages

Despite these advantages, the adoption of more technical methods for evaluating evidence has been rather hesitant. The reasons for this hesitation must be examined.

(a) Decision makers might not put the right weight on technical evidence

The first problem is that decision makers are not, generally, experts in evaluating complex econometric analyses. Complex economic or econometric evidence can all too often seem like a 'black box' to non-expert observers and, as a result, they may ascribe either too little or too much weight to it. We shall come back to the role of expert decision makers later in this talk.

 ³⁶BBC Worldwide Limited, Channel Four Television Corporation and ITV plc: A report on the anticipated joint venture relating to the video on demand sector, 4 February 2009.
 ³⁷CC Report, Bucher Industries AG and Johnston Sweepers Limited: A report on the acquisition by Bucher Industries AG of

³ CC Report, Bucher Industries AG and Johnston Sweepers Limited: A report on the acquisition by Bucher Industries AG of Johnston Sweepers Limited, September 2005.

³⁸MMC Report, The enterprises of Alan J Lewis and Jarmain & Son Ltd: A report on the acquisition of Jarmain & Son Ltd by enterprises carried on by or under the control of Mr Alan J Lewis, August 1991.

On the one hand, when faced with complex economic evidence, decision makers can be too quick to dismiss or play down evidence in the face of criticism. It is often very easy to criticize complex economic work, in that one can almost always point to some flaw that shows that the analysis falls short of 'perfection'. In face of this, decision makers may be tempted to dismiss an imperfect analysis altogether.

However, just because some analysis falls short of perfection does not necessarily mean that it is of no evidentiary value. For example, it may be that a particular analysis can be criticized in terms of its accuracy. However, it is often possible to evaluate that inaccuracy, for example by providing confidence intervals around an estimate. It may be that an inaccurate answer is sufficient and that the analysis nonetheless provides valuable evidence. Similarly a particular estimate may be criticized because some facet of the methodology introduces bias. However, it is often the case that an estimate is biased in a particular direction; if this is the case it may be known that the estimate is too large, or too small. This may not matter in the context of a particular case. If it is known that the estimate is too large, and yet it is insufficient in size to reach some critical value, then the bias does not invalidate the conclusion that the critical value will not be reached.

On the other hand, decision makers may place too much weight on quantitative analysis. Analysis that provides a number (a predicted price rise, a change in HHI values) can give a spurious sense of certainty and comfort, and take on an undue prominence in cases. Arguably market shares have acquired this unhealthy focus. It may be tempting to take these numbers at face value and use them to support conclusions that they cannot sustain. Decision makers may also have difficulty assessing criticisms of quantitative work, with the result that valid criticisms may not hit their mark, and undue weight may be placed on economic evidence that lacks robustness.

In summary, both errors have a common source. Economic analysis, particularly if incorrectly presented, can sometimes give an illusion of accuracy. When considering the appropriate weight to place on the results of complex economic and econometric evidence, there needs to be a careful assessment of precisely what 'evidence' the analysis provides. The decision maker has to reflect on precisely what facts an analysis can reliably present, and what conclusions that analysis can sustain. It would be wrong to conflate apparent accuracy with robustness. It would also be wrong to conflate inaccuracy with a lack of robustness. As the philosopher said, 'Better an unclear answer to the right question than a clear answer to the wrong question'.

(b) 'Data-rich distortion'

There is then the problem of 'too much data'. The point here is simple. Data quality and availability can lead to bias—sectors that are data rich get more attention than those that are not. It would be unfortunate if competition enforcement defaulted, for example, to cases that only involved electronically captured point-of-sale data. Such a tendency would confine the ability to conduct competition assessments to industrially advanced countries and, within those countries, towards those sectors with a lot of data. It is surely important not to establish a rule requiring the use of sophisticated techniques that cannot generally be applied in the absence of data.

(c) Weight of process and time limits

A more important concern is weight of process. Not only is the sheer volume of evidence of all kinds increasing, but economic analysis itself is becoming more sophisticated, requiring more data and more time to complete it, particularly where econometric techniques are involved. Moreover, the combination of enhanced information technology, applied to ever more data, offers both the authorities and the parties new possibilities of going down paths

of increasing complexity, in the interests of thoroughness and completeness. The question then arises whether a fair procedure can accommodate this without 'collapsing under its own weight', and whether the cost in terms of money and effort for all concerned simply becomes too great.

The risk of the enforcement system collapsing under its own weight is a serious one. As the saying goes, 'the line must be drawn somewhere': of course it must, but where? Well, there is always common sense. We are all—judges, administrators, consultants, advisers and parties—engaged in a tacit conspiracy to operate an administrable system. How we do this is, in the end, a question of rationality, courtesy and respect for different points of view.

But one very powerful practical aid is statutory time limits. The CC operates for the most part under such constraints. Some may privately dream of a world where investigations go on forever, but the nightmare would not be confined to the parties. Instead the practical requirement to fix and comply with a timetable, from which there is no escape, means that there has to be a limit on the amount of evidence and argument that can be considered. Of course there are incentives to play games; at the CC we are not unfamiliar with the practice of submerging us with material towards the end of a long and drawn out procedure. But this is in the nature of the exercise and we take it with our usual air of pained deprecation. The incentive is very strong on us to manage the timetable in the way that the courts are increasingly striving to do. So having fixed time limits may be one way of drawing the line where it needs to be drawn.

(d) Eroding the ability to prove

Finally, there is a more subtle risk of eroding the ability to prove. Economics-based predictions may either appear spuriously accurate or convincingly prove ambiguity. Moreover, it is easier to discredit an analysis than to produce a positive alternative. If at the same time, more technical evidence is required, then proof to the required standard may become harder to adduce, leading to erosion of the ability to make valid findings. Similarly, because, as we discussed earlier, it may be difficult for non economists to assess how reliable a given piece of economic analysis may be, this may make it harder to meet the standard of proof required and may even lead by an indirect and unintended route to the standard itself being raised. In other words, the task of 'proving' purely on the basis of economic evidence that a particular effect is 'likely' (normally the minimum evidentiary standard) can be difficult and something more—more evidence or more convincing evidence—may be needed.³⁹ If the problem is that of having to present evidence that is inherently more subtle in its message than the proverbial 'smoking-gun' document, then we should perhaps be concerned if authorities are backing off as a result, for fear of defeat on appeal.⁴⁰

Institutional aspects

So these are some of the issues that have arisen in the CC's practice. So far, I have tried to show that it is generally accepted that good competition assessment needs (1) analysis based on a sound economics framework, using a robust and realistic approach to the facts; (2) a willingness to weigh and consider possibly conflicting evidence; and (3) a satisfactory institutional structure to enable such an analysis to take place, including a transparent process and the opportunity to argue and respond.

³⁹On the other hand, there is a saying that 'two turkeys don't make an eagle'.

⁴⁰See, for example, Budzinski, loc cit p25 citing a number of distinguished authors, including Baker and Shapiro 'Re-invigorating Horizontal Merger Enforcement'.

Different institutional models

It is this last aspect that I want to examine further. It is one thing to talk about the nature of the evidence and what it can and cannot establish. But the institutional framework in which these assessments are carried out also affects the use and significance of evidence. I referred briefly to the particular characteristics of the CC in this context but we should perhaps examine the characteristics of the different institutional models that are applied.

An authority like DG Comp, or the Office of Fair Trading (OFT) in this country, applying Articles 81 and 82 or their national equivalents, operates under an administrative model. It investigates, assesses and decides. This is sometimes described pejoratively as 'combining the roles of prosecutor, judge and jury'. A criticism of this model is that it can make engagement on evidence underlying the decision difficult as the authority controls both the evidence and the evidential process. And it is sometimes said that the investigator becomes biased against the defendant. To meet these criticisms quite elaborate procedures have been developed to ensure that there is transparency as to the evidence relied on, a proper opportunity for the parties to reply to it and to offer evidence of their own and a requirement that the reasons and evidence underlying the eventual decision are published.

This can be contrasted with a judicial or court-based model where the authority investigates but does not itself decide. Instead it presents its case before a court in which the party accused can defend itself under conditions of judicial impartiality.⁴¹ Sometimes there is the additional presence of a jury.

At first sight, these two models seem to offer a sharply contrasting approach to the assessment of evidence. In the first model the authority controls the process: in the second it has to take its chance against a possibly well-resourced adversary. But in practice the difference between these two models is less stark. The administrative model may lead to a decision that is challenged in court, so that the way in which the evidence has been assessed can also be considered under impartial conditions. And the legal conditions, particularly the standard of proof, under which evidence is considered by the authority in the administrative model or by the court in judicial court model ought to be similar, in principle at least.

There is also the question of expertise to which we referred. On one view, complex evidence in competition cases is best assessed by an expert body which can understand the nature of the material. By contrast a judge, however forensically skilled, may not be expert in competition economics. Is he or she less or better able, as a result, to assess whether a case has been made out, or more precisely, whether a particular proposition, based on economic or other evidence, has been proved?

The position of bodies like the CFI or the CAT, specialist courts or tribunals, which either are themselves expert or have access to expertise but where generally there is less emphasis on the examination and cross-examination of witnesses, lies somewhere in between—knowledgeable enough to consider the merits of economic evidence and judicial enough to be impartial, and is, if you like, a 'third way'. It is also important to remember that the role the specialist courts play in the EU or UK systems is not quite the same role as that of, say, a US court having to decide between detailed evidential briefs and oral testimony supplemented by argument and cross-examination. Instead the tribunal is fulfilling the very important role of specialist oversight of the activities of other expert bodies,⁴² and this is so to a considerable degree even when the CAT (in the UK context) is conducting a 'merits' appeal of decisions by OFT or sectoral regulators.

⁴¹DJ Neven, *Competition Economics and antitrust in Europe*, Economic Policy, October 2006, pp741–791, at p763 which discusses these alternatives extensively before expressing a mild preference for the court-based approach.
⁴²A role that the CC plays in relation to aspects of sectoral regulators' activities.

Challenges to the administrative model

It is not uncommon, particularly when a particular argument or theory has not been entirely accepted by an authority (such as the CC) which is essentially operating under the administrative model, for there to be calls for the final word to be shifted to the courts.⁴³ This call can take two forms. Either the authority should not be empowered to take final decisions on matters involving economic assessments but instead should have to refer to a court (this call tends to come from those familiar with the way of doing things in the USA); or, if it remains so empowered it should be subject to a system of full appeal 'on the merits', ie so that a judge may substitute his or her own decision (as opposed to 'mere' judicial review).⁴⁴

Problems with the judicial model

Of course, the judicial model has attractions. The significance of an impartial adjudication is very great, indeed the rule of law depends on it. But in a specialized field, where evidence can be difficult to present readily and clearly, the merits of impartial judgment have to be balanced against difficulties in presentation and there is a risk that the adversarial process becomes a 'battle of the experts'. The US courts, often held up as the exemplar here, have not found this matter straightforward, particularly as regards the admission of expert testimony.

The US Rules in evidence, based on Supreme Court decisions, particularly in the *Daubert v Merrell Dow* case,⁴⁵ set out a long list of considerations for trial courts to use. For example:

- Is the expert's technique or theory testable or has it been tested, ie can it be challenged in some objective sense?
- Has the technique or theory been subject to peer review and publication?
- What is the known or potential rate of error of the technique or theory?
- Are there any standards and controls applicable and have they been maintained?
- Has the technique or theory been generally accepted in the scientific community?
- Has the expert adequately accounted for obvious alternative explanations?
- Is the evidence relevant to the actual questions before the court?

Each one of these conditions reflects an issue that has been encountered in practice. It is true that what Damien Neven calls the exposure of arguments to court-based dialectic⁴⁶ can be instructive; but it can also be destructive, with attacks on the credibility of the experts' expertise in order to divert attention from the merits of their evidence.

⁴³Such calls were made at the time of DG Comp's experiences before the CFI in Case T-310/01, *Airtours plc v Commission*, Case T-80/02, *Tetra Laval v Commission*, Case T 310/01, *Schneider Electric SA v Commission*.

 ⁴⁴As indicated, unless the tribunal in those circumstances is willing to test the evidence relied on by the authority and to hear examination and cross-examination of witnesses, the difference between these two approaches can be exaggerated.
 ⁴⁵Daubert v Merrell Dow Pharmaceuticals, Inc, 509 US 579 (1993), quoted in D Wood, Square Pegs in Round Holes: The Interaction between Judges and Economic Evidence, Spring 2009, Vol 5, No 1, pp51–64, which provides an extensive

discussion of this issue. ⁴⁶See DJ Neven, loc cit pp772–776.

An example of how the UK's courts have handled expert testimony on competition economics is the case of *Courage v Crehan*⁴⁷ where the High Court judge accepted the evidence of the company's academic economist and held that the beer-tie in question did not infringe Article 81 EC Treaty. But the Court of Appeal found that the High Court should have followed previous European Commission decisions and should not have carried out its own assessment of the possible foreclosure effects of the agreement in question. The House of Lords (as was) subsequently overturned the Court of Appeal's decision and confirmed that the High Court was right to consider the economic evidence in front of it.

A preference

My view is that none of these models is necessarily preferable to the others. Each has advantages, each has drawbacks. Of the court-based systems, I would express a mild preference for the specialist CAT-like model, which enables the court to develop expertise in the complex subject matter in which it has to adjudicate. But, not surprisingly, I quite like the CC's approach, which is an administrative model but with a faint judicial aura. The CC is admired not only because it brings a real world, deliberative, approach to bear on complex issues but also because it is an expert body including in its groups professors of economics and with expert staff economists in support. The CC's process, involving considerable openness and debate about the respective merits of the evidence is generally reckoned to be as fair a process as any. And its decisions are expressly subject to specialist judicial review which extends to whether the CC correctly considered the evidence it had before it or failed to consider evidence that was material. Specialist judicial review is an important safeguard but it is important, given the CC's expert character, that it is nonetheless left with a sufficient margin of appreciation.

People sometimes accuse us of getting things wrong. No doubt from time to time we do. But it would be a mistake to confuse error with disagreement. As with the penitent who complained that his prayers were never answered, sometimes they are answered, but the answer is 'No!' We cannot have the definition of a good institution being the one that always says 'Yes'.

The CC deliberately follows an inquisitorial rather than an adversarial approach. I do find the way in which adversarial procedure emphasizes disagreement rather than agreement rather disheartening. Courts tend to favour the adversarial approach, and, as we said, in the context of considering economic evidence this was put forward as its principal advantage. In my experience the issues we face are rarely black and white, but instead are relentlessly grey, and in the adversarial exchange the incentive tends to be to accentuate the contrast.

Conclusion

So, where does this all lead? When I began my competition law career in the early 1970s, notifying pharmaceutical licences to what was then DGIV, we dutifully wrote a concluding paragraph in the Form A/B to the effect that 'the full effect of the above mentioned restrictions can only be assessed by reference to the conditions on the relevant market'. I think we meant it, although I am not sure we appreciated what it meant. The full implications only sank in when, much later, it became clear that overtly restrictive agreements, such as vertical exclusive agreements could, in certain circumstances, actually promote competition and efficiency. And whilst those debates were raging in the USA and, a little later, in the EU itself, the significance of economics, and an effects-based approach to competition assess-

⁴⁷*Courage v Crehan* in the High Court (*Bernard Crehan v Inntreprenneur Pub Company Limited and Brewman Group Limited* [2003] EWHC 1510 (Ch), judgment of 26 June 2003; Court of Appeal (*Bernhard Crehan v Inntrepreneur Pub Co CPC* [2004] EWCA 637, judgment of 21 May 2004; House of Lords (*Inntrepreneur Pub Company v Crehan*) [2006] UKHL 38, judgment of 19 July 2006.

ment, became incontrovertible. Which is where we are today. But we still have the challenge of finding the best way to present and deliberate on these often very complex matters. The need to draw the line somewhere—ie for every case to have an end as well as a beginning—involves deciding whether enough evidence has been obtained on which to make a fair and reasonable decision. A suitable means must be provided to ensure that alternatives, however inconvenient, are properly considered. And, above all, this must all be done within a reasonable time.

I have reviewed how we, particularly the CC, try and deal with these challenges. I think the CC handles these matters pretty well, but there is always room for improvement. I do not, however, think there is any case for wholesale transfer of our functions to the judiciary, even to the specialized judiciary, as that simply pushes the same set of questions and challenges up to a higher level. It might be more fruitful to continue to clarify in any given case what it is that the economic evidence shows, what are its limits and what is the scope for agreement and to keep working on procedures to make these things ascertainable and possible within the limits of administrability and a reasonable time frame.

So—how significant has economic evidence become? When I was young, a rather dubious publication called 'Mad Magazine' featured a take-off of the television courtroom attorney Perry Mason, who always appeared for the defence and never lost a case against the District Attorney, Hamilton Burger. The DA had been told by his excited deputy 'Sir, this one we are sure to win—we have a signed confession and the accused shot his victim in public in a baseball stadium in front of 80,000 witnesses'. The DA replied 'I have two questions—when is the trial and who appears for the defence?' 'Saturday night and Perry Mason' was the reply, 'We've lost' said Burger.

Economic evidence and the experts who provide it may still have to deal with the Perry Mason factor, and not only on a Saturday night. But, nevertheless, I expect we shall just carry on, trying to come to fair decisions, based on sound economics, within a proper legal framework. Thank you.

15 October 2009