

In procedural terms, the Court deals mainly with issues of defence rights in the form of access to the file. It confirms the appropriateness of summaries of confidential submissions and dismisses any right on access to file before the Statement of Objections. The various conclusions all strike a reasonable balance between the different interests at stake. It is to be welcomed that the Court stresses again the fact that the lawmaker when establishing a deadline driven system of merger control necessarily established a balance between speed and extensive use of defence rights.

Overall the CFI's judgement in GE/Honeywell will be of significant importance for the further development of merger control in Europe. On balance, it is neither particularly Commission-friendly nor Commission-critical, given the balance between the confirmed and dismissed elements in the decision. It is true that the Court approaches the Commission's analysis in a different mode in the different pillars of the judgement. But if the Commission takes up the CFI's guidance on what needs to be done to establish a convincing conglomerate case, the judgement does not stand in the way of challenging serious competitive concerns in appropriate cases in the future.

Matthias Pflanz^{*)}

Economic analysis and judicial review: The CFI on GE/Honeywell

The GE/Honeywell merger prohibition decision raised a wealth of important issues about the economic analysis of mergers – particularly those of a non-horizontal nature. The CFI's judgement on the appeal against this prohibition was keenly anticipated, particularly for its findings on these issues. This article considers how the CFI dealt with evidence and arguments in relation to the questions of dominance and vertical and conglomerate effects.

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^{*)} The author is a Vice President at CRA International in London and acted as an economic adviser to General Electric throughout the administrative procedure in GE/Honeywell and the subsequent proceedings before the Court of First Instance. The views expressed in this article are entirely personal.

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I. Introduction

Deep in December 2005, the European Court of First Instance (CFI) published its judgement on General Electric’s appeal against the European Commission’s prohibition decision in the GE/Honeywell merger case.¹⁾ A first glance at the Judgement’s key conclusions suggested that the CFI’s offering was in keeping with the spirit of the season: both sides could find something in the Judgement to give them festive cheer. The Commission saw its decision ultimately upheld, while GE won a victory on the most controversial substantive elements of the Commission’s reasoning, namely the claimed non-horizontal (vertical and conglomerate) effects of the merger. But on closer examination, how does the Judgement stand up as a piece of jurisprudence to guide future competition policy practice in Europe? In this article, I attempt a partial answer, from an economic perspective, to this question.

1. Background

The Commission’s Decision in July 2001 had aroused a level of worldwide debate and controversy that extended well beyond the community of competition policy practitioners, and was probably unprecedented among EU merger control decisions.²⁾ Not all of this controversy reflected a sober assessment of the Decision from a competition policy perspective, but there was certainly a significant amount of informed debate at the time about the legitimacy and implications of the substantive grounds for the Commission’s prohibition, some of it commenting on the difference in approach between US and EU regulators.³⁾ Much of this debate focussed on the observation

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- 1) CFI judgement of 14th December 2005 in Case T-210/01 – General Electric Company v. Commission (hereafter referred to as “the Judgement”), concerning an application for annulment of Commission decision 2004/134/EC of 3rd July 2001 in Case COMP/M.2220 – General Electric/Honeywell (“the Decision”).
 - 2) See, for example *B.M. Carney*, *Loggerheads*: Mario Monti, Central Planner, Wall Street Journal Europe, 6th July 2001 (among many other commentaries in the general news media).
 - 3) See, for example, *W. Kolasky*, *Conglomerate Mergers and Range Effects: It’s a Long Way from Chicago to Brussels, 2001*, Remarks before the George Mason University Symposium, available at <http://www.usdoj.gov/atr/public/speeches/9536.pdf>; *D. Platt Majoras*, *GE-Honeywell: the U.S. decision, 2001*, Remarks before the Antitrust Law Section State Bar of Georgia, available at <http://www.usdoj.gov/atr/public/speeches/9893.htm>; *G. Drauz*, *Unbundling GE/Honeywell: the Assessment of Conglomerate Mergers under EC Competition Law*, (2002) 25 *Fordham International Law Journal*; *D. Patterson/C. Shapiro*, *Trans-Atlantic Divergences in GE/Honeywell: Causes and Lessons*, (2001) 16 (1) *Antitrust*.

that the intended GE/Honeywell merger was primarily conglomerate in nature. While some issues about horizontal overlaps were raised in the Commission's administrative procedure, the most important arguments concerned the effect of the combination of GE's aircraft engine business and its financial capabilities with Honeywell's position as a manufacturer of other aircraft components – avionics and “non-avionics”.⁴⁾ Consequently, the most keenly anticipated aspect of the Judgement was probably what the CFI would have to say about the Commission's non-horizontal theories.

In view of this focus on non-horizontal effects during the administrative procedure, it is ironic that the CFI ultimately chose to uphold the Commission's prohibition decision on the basis of predicted horizontal effects, which had (with few exceptions) received only limited attention on either side. This article is not concerned with those aspects of the Decision the Judgement, which is not to say that they do not raise some interesting and controversial issues in their own right.⁵⁾ Nor do I comment on the CFI's conclusions on GE's procedural pleas, or on other issues that are primarily questions of law. Instead, my focus is on the CFI's treatment of vertical and conglomerate merger effects, as well as on aspects of its discussion of the Commission's finding that GE held a dominant position in the supply of engines for large commercial aircraft (LCA).⁶⁾

2. Economics and the CFI's standard of review

One further preliminary comment is in order – and here I stray briefly onto the lawyers' turf. The comment regards the proper scope of the CFI's review, and what this means for a critique of the CFI's conclusions on issues of economic substance. It seems uncontroversial to say that the CFI's role in a case such as the present is one of judicial review of a decision taken by the Commission, and certainly not to decide the case afresh.⁷⁾ In particular, it appears well established that the CFI is “. . . restricted to verifying that the facts relied on are accurate and that there has been no manifest error of assessment.”⁸⁾ Similarly well established is the related principle that the Commission enjoys a margin of discretion, especially with respect to “assessments of an economic nature”⁹⁾ and that the CFI consequently must not “substitute its own economic assessment for that of the Commission”.¹⁰⁾

Against this background, it would of course be unreasonable to criticise the CFI for failing to do what the law prevents it from doing – i.e. re-deciding the case – and none of my comments should be read as implying such a criticism. But equally, it is clear on a careful review of this very

4) Avionics comprise a range of electronic equipment used for the control of an aircraft, navigation, communication and assessment of flying conditions. Non-avionics products comprise various electrical, mechanical and hydraulic components used on an aircraft, including for electric power generation and distribution, lighting, wheels and brakes, etc.

5) For a discussion of these, and other, issues in the judgement, see *W. Kolasky*, GE/Honeywell: Narrowing, but not closing, the Gap, (2006) 20 (2) Antitrust.

6) The decision was also contested by Honeywell, in separate proceedings before the CFI. The CFI issued a judgement in that case on the same date as the judgement, also declining to annul the decision: CFI judgement of 14th December 2005 in Case T-209/01 – Honeywell International v. Commission. This article does not address the CFI's judgement in the Honeywell case.

7) See, for example, *B. Vesterdorf*, Standard of Proof in Merger Cases, (2005) 1 European Competition Journal.

8) Judgement, para. 60, referring to Joined Cases C-68/94 and C-30/95 – France and others v. Commission (Kali & Salz), [1998] ECR I-1375 and the European Court of Justice (ECJ) judgement in Case C-12/03 P – Commission v. Tetra Laval, [2005] ECR I-987.

9) Kali & Salz, para. 223, cited in *Vesterdorf*, Standard of Proof in Merger Cases, (2005) 1 European Competition Journal; also judgement, para. 60.

10) Case T-342/00 – Petrolescence and SG 2R v. Commission, [2003] ECR II-1161, para. 101, cited in *Vesterdorf*, Standard of Proof in Merger Cases, (2005) 1 European Competition Journal.

detailed and extensive Judgement that the line between an independent substantive assessment and a judicial review of another body's assessment is inherently blurred. Certainly, the CFI reaches numerous conclusions of its own, regarding what is a tenable economic argument, what economic inferences should be drawn from particular pieces of evidence, and so on. In other words, it seems that the CFI has often de facto made its own assessments of an economic nature on the basis of the primary facts, even if only for the purpose of assessing whether the Commission's assessments were reasonable or subject to "manifest error". In practice, this is almost certainly unavoidable if the CFI is to fulfil its remit to "... establish whether the evidence relied on is factually accurate, reliable and consistent but also whether that evidence contains all the information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it".¹¹⁾

The notion that there can be such a thing as an entirely detached review of the Commission's analysis in the administrative procedure, without requiring the CFI occasionally (or indeed frequently) to take an independent view on the nuts and bolts of the economic argument, therefore seems illusory.¹²⁾ This is probably particularly so in instances where the CFI ultimately endorses the Commission's analysis, because, by definition, in these cases the CFI will not find obvious errors at an early stage of the argument which might obviate the need to engage with the full facts and reasoning. What all of this ultimately means is that the CFI itself gets directly involved in many of the important substantive controversies, and therefore reaches conclusions that can legitimately be assessed not only on legal grounds, but also from an economic perspective.

3. The key economic controversies

The proceedings before the CFI in *General Electric v. Commission* revolved primarily around the legitimacy of various controversial substantive economic theories of competitive harm, and to a lesser extent around more conventional, but nevertheless controversial, economic interpretations of evidence.¹³⁾ The following were the principal broad areas of substantive controversy before the CFI:

- the finding that GE held a dominant position (pre-merger), most importantly in the market for LCA engines, but also in the market for engines for large regional jets (LRJs);
- the prediction that there would be a creation or strengthening of dominance on the various relevant markets for avionics/non-avionics products and for LCA engines, arising from conglomerate effects – notably product bundling (engines plus avionics/non-avionics), and the impact that GE's leasing subsidiary GECAS and GE's financial strength were predicted to have on competition in these markets;
- the prediction that there would be a strengthening of GE's dominance on the market for LCA engines as a result of likely vertical foreclosure stemming from GE's acquisition of control over Honeywell's supply of engine starters (a component in the production of LCA engines);
- the finding that there were horizontal overlaps between the parties, leading to a prospective reduction of competition, in relation to three markets – engines for LRJs, engines for corporate jets, and small marine gas turbines.

11) Tetra Laval (ECJ), para. 39, cited at Judgement, para. 63.

12) Other commentators have expressed a similar view, e.g. *M. Nicholson/S. Cardell/B. McKenna*, *The Scope of Review of Merger Decisions under Community Law*, (2005) 1 *European Competition Journal*.

13) GE also contested the decision on the basis of a number of procedural complaints, which I do not consider in this article.

The CFI rejected the conclusions of the Decision, on the grounds that the Commission had committed a manifest error of assessment, in relation to its three theories of non-horizontal effects (bundling, GECAS/financial strength, vertical foreclosure). It upheld the Decision on all other substantive issues, and also on the procedural points raised by GE. As a result, the CFI concluded that the Decision could not be annulled, as the three findings of competitive harm arising from horizontal effects would each have sufficed to support a prohibition.¹⁴⁾

II. Assessment of Dominance

1. Introduction

The Commission's assessment of the GE/Honeywell merger was conducted under the "old" (1990) EC Merger Regulation (ECMR), with its substantive test of "creation or strengthening of a dominant position" as the criterion for approval or prohibition of a transaction. Consequently, the Commission's assessment of pre-merger dominance played an important formal role in the context of the application of the substantive test, in a way that would not necessarily apply under the revised (2004) ECMR with its "substantial impediment to effective competition" test. But irrespective of the formal role of a finding of dominance, the substantive assessment of pre-merger competitive conditions on the affected markets will of course continue to play an important role under the new merger regulation. Moreover, in the GE/Honeywell case, the question of pre-merger dominance was of particular relevance also in view of the Commission's reliance on theories of harm that could at least in part be affected by whether the merged entity possessed substantial market power that could be "leveraged" as part of an anti-competitive strategy of foreclosure. While the CFI's views on the ultimate formal conclusion regarding pre-merger dominance in the GE/Honeywell case has limited bearing on merger control going forward, the reasoning adopted by the CFI is certainly of significant interest. And of course the CFI's views on what constitutes evidence of dominance are in any event relevant in the context of the continued application of Art. 82 EC by the Commission and by member state authorities and courts.¹⁵⁾

The Commission's assessment of GE's pre-merger dominance in the market for LCA engines¹⁶⁾ rested on two major elements:

- structural (market share) analysis; and
- analysis of the particular competitive advantages GE was said to have by virtue of its financial strength (particularly through its GE Capital subsidiary) and integration into purchasing of aircraft (via its GECAS subsidiary).

This assessment was supplemented by consideration of the positions of GE's principal competitors on the LCA engine market and of the extent to which buyer power could constrain domi-

14) Judgement, para. 42 – 48 and 732 – 734. The CFI also rejected GE's arguments to the effect that the Commission was wrong to refuse to accept the various commitments GE had offered in order to remedy the horizontal competition concerns.

15) In this regard, it is particularly interesting to note that the CFI sets out a two-part test for the assessment of conglomerate and vertical effects, the second part of which is a requirement of a demonstration that any claimed anti-competitive practices will impair competition (i.e. create or strengthen a dominant position) "in the relatively near future" (Judgement, para. 327 and 405 – see the discussion of vertical and conglomerate effects, below). This second limb is reminiscent of the "effects-based" assessment under Art. 82 EC that is proposed in the Commission's recent Art. 82 EC discussion paper (European Commission, DG Competition discussion paper on the application of Art. 82 of the Treaty to exclusionary abuses, 2005, available at: <http://ec.europa.eu/comm/competition/antitrust/others/discpaper2005.pdf>).

16) Some issues also arose in relation to (pre-merger) dominance on the market for LRJ engines, but these are not considered in this article.

nance. My discussion will focus on the second of the above major elements – the analysis of the effect of financial strength and integration into aircraft purchasing. However, the CFI’s discussion of the structural analysis in the Decision certainly merits some comment, and I begin by briefly considering this issue.

2. Market share: measurement and interpretation

The Commission concluded that GE had a leading and growing share in the market for LCA engines, on the basis of two principal measures of market share (see below for further discussion of these measures):

- under the Commission’s first measure (installed base), GE was found to have a share of 52.5 %, while its main competitors Pratt & Whitney (P&W) and Rolls-Royce (RR) had 26.5 % and 21 % respectively;¹⁷⁾ and
- under the Commission’s second main measure (order backlog), GE had a share of 65 %, while P&W and RR had 16 % and 19 % respectively.¹⁸⁾

The Commission also concluded that GE’s share of the installed base had grown over the previous 5 years.¹⁹⁾

The CFI upheld the Commission’s analysis of market share in the market for LCA engines, in the context of its assessment of GE’s pre-merger dominance in that market. It supported its views by reference to the case law of the European courts, where market shares have been used to justify findings – or indeed presumptions – of dominance.²⁰⁾ The fact that the CFI endorsed a structural (i.e. market share) analysis as part of an assessment of dominance, and found that the Commission was right in principle to place significant weight on what it saw as high and growing market shares, is not particularly surprising. But behind the superficially orthodox approach of CFI and Commission on this issue lie a number of genuine and difficult controversies. Three questions in particular are worth highlighting.

- What is a meaningful measure of relative competitive success in a market such as that for aircraft engines, where orders are large and infrequent (“lumpy”)?
- How should joint ventures be treated?
- How can the engine supplier’s competitive success be distinguished from the aircraft manufacturer’s success?

2.1 What is a meaningful measure of competitive success in a market where orders are lumpy?

The market for aircraft engines has many of the hallmarks of a classic “bidding market” – in particular, individual negotiation and relatively infrequent high-value orders. GE argued that this, and other specific features of the market, meant only limited weight could be placed on any conventional market share measures for a competitive assessment. The Commission, by contrast, relied on market shares as the foundation of its dominance analysis. However, it adopted two relatively unconventional long-term measures as its principal basis for share calculations – the installed base of engines on aircraft currently in production (i.e. engines currently in service), and

17) Decision, para. 71.

18) Decision, para. 78.

19) Decision, para. 74 – 75.

20) Judgement, para. 115.

the order backlog of engines on the same aircraft (i.e. engines that had been ordered but not yet delivered). This meant that in principle every engine that had ever been sold and was still in use (or not yet delivered) contributed to one of the two principal market share measures (with the exception of engines on aircraft models whose production had been discontinued, or which were not yet in service). These measures reflected an amalgamation of competitive success over a period of many years, or indeed decades, in view of the long lives of commercial aircraft and engines. The Commission argued that the “lumpy” nature of sales in aircraft engine markets meant that a long-term measure was appropriate. On the other hand, it excluded one potential forward-looking indicator of success, in the form of sales of engines on the newest aircraft models (those not yet in service).²¹⁾

The Commission justified its preferred market share measures on the basis of two industry-specific factors, both of which were controversial and both of which could (if indeed relevant) have been accounted for more directly and accurately in other ways.

Aftermarket revenues: According to the Commission, engine manufacturers rely heavily on internal cash flows generated from aftermarket services (spare parts, maintenance and repair, etc.) to fund future engine development. The installed base plus order backlog was said to measure the extent of future aftermarket revenues (aircraft no longer in production were excluded on the grounds that they made less contribution to future aftermarket revenues).²²⁾ In fact, the Commission’s market share measures would have been at best a very crude indicator of expected aftermarket revenues. The Commission’s treatment of the CFMI joint venture (see below) was also inconsistent with the aftermarket revenue approach.

Commonality: The Commission argued that an important element in airlines’ engine choices was a desire to maximise commonality – i.e. the extent to which the same engine (or engine family) is used throughout the fleet, allowing efficiencies in areas like servicing and spare parts. On this basis, the Commission concluded that “engine suppliers expect to increase their market penetration more or less proportionately to their current degree of incumbency within an airline”.²³⁾ But not only was there no empirical support for the latter statement (indeed, the available data suggested that there was no such link);²⁴⁾ but, if correct, its implications for the competitive analysis would have been quite different from those drawn by the Commission.²⁵⁾ More generally, the factual basis for the Commission’s commonality theory was extremely controversial: while it was common ground that commonality can be one factor that an airline takes into account,

21) This approach differed from that taken in relation to LRJ engines, where shares on aircraft not yet in service were important as GE’s engines were used almost exclusively on platforms that had not yet entered service; Decision, para. 19 – 29 and 88 – 89; see also Judgement, para. 164, for the CFI’s view on the difference in the Commission’s approaches. In relation to LCA engines, the CFI found that the inclusion of aircraft not yet in service made a relatively small difference to the backlog shares, and hence that the failure to include the newest aircraft models did not affect the Commission’s basic conclusions (Judgement, para. 166 – 167).

22) Decision, para. 42 and 79 – 82.

23) Decision, para. 41.

24) The lack of empirical link is not surprising: GE pointed out that commonality between different engine families is limited, so that an engine supplier’s overall market share says little about the likelihood that the same supplier will be chosen for the airline’s next purchase (this depends on the type of aircraft, and hence engine family, that is being considered), even if commonality was an important factor for each individual engine decision.

25) If the incumbency/commonality theory was correct, it would have suggested that competition occurs primarily for incumbency within an airline, and that follow-on sales to an already “locked-in” airline have little significance for the competitive assessment – i.e. it would have required an assessment of market sharers that differentiated between “new” opportunities and “follow-on” sales. The Commission did not attempt this kind of analysis.

the responses to the Commission's own market investigation contradicted the notion that engine commonality was generally a decisive factor in engine choices.²⁶⁾

2.2 How should joint ventures be treated?

GE's activities in the LCA engine market are carried out largely through an entity called CFMI, a 50:50 joint venture between GE and Snecma (the latter company is not otherwise active in producing LCA engines). While GE also has an independent engine programme, involving the development and manufacturing of engines for the larger aircraft within the LCA category, a significant majority of the overall LCA engine share attributed to GE by the Commission is derived from CFMI sales: according to GE, CFMI accounted for 52 % and GE itself for only 9 % of the total order backlog in 2000.²⁷⁾ The Commission, supported by the CFI, allocated 100 % of CFMI's sales to GE. It took a similar approach to IAE, a JV involving P&W and RR together with partners not independently active in supplying LCA engines, where the sales were attributed evenly to those two parents who were independent engine suppliers (RR and P&W).²⁸⁾ The Commission's rationale for this approach was that it would be misleading to attribute a market share to parties who do not compete independently in the market.

To some extent the Commission's argument is not unreasonable, in as much as it may indeed have been misleading to base an analysis solely on market shares which imply that Snecma is an important competitor to GE, which is not the case. On the other hand, there are also obvious problems in attributing the entirety of a JV's share to one parent – for example, one common justification for using market shares to indicate the competitive structure of a market is that they indicate the players' respective incentives for competitive behaviour, given their relative existing financial flows obtained from the market.²⁹⁾ More specifically, the aftermarket revenue justification for the Commission's preferred measures of market share (see above) is plainly inconsistent with allocating all of CFMI's share to GE, since only 50 % of the profits from the JV accrue to GE – the CFI agreed with GE on this point, although it did not consider it to invalidate the Commission's approach in general.³⁰⁾ And to the extent that the Commission's dominance assessment was used as the basis for a bundling theory which centred on the incentive to discount engine prices in order to sell ex-Honeywell products (see below), it is clearly incorrect to treat Snecma (which would not have benefited from the sales of GE/Honeywell products other than CFMI engines) as being essentially indistinguishable from GE. The CFI also agreed with this point, although it considered that it could be accounted for separately from the dominance assessment.³¹⁾

26) One element in explaining whether or not an airline is concerned at all about commonality depends on whether they conduct maintenance and repair in-house, or whether it is done by a third party (in which case commonality becomes largely irrelevant). See also para. 159 of the Judgement, where the CFI concludes that it cannot be inferred from the responses to the market investigation that commonality has no bearing on engine choices: this is of course not the issue – the question is whether commonality is sufficiently important to warrant use of a market share measure justified largely by reference to it (and, if so, whether installed base and order backlog provide a good measure of the strength of any commonality effects).

27) Judgement, para. 128 (while this yields a total of 61 % for GE + CFMI, slightly less than the Commission's figure of 65 % as set out above, it was not disputed that CFMI accounts for the large majority of the combined GE/CFMI sales).

28) In addition to RR and P&W, participants in IAE are MTU Aero Engines and Japanese Aero Engines.

29) Legal commentators have also noted the conflict between the Commission's approach in the present case and its treatment of joint control in other contexts: see *G. Weidenbach/H. Leupold, Das GE/Honeywell-Urteil des EuG – Spannende Rechtsfragen im Überfluss*, (2006) 4 Europäisches Wirtschafts- und Steuerrecht.

30) Judgement, para. 136 and 146.

31) Judgement, para. 147.

2.3 How can the engine supplier's success be distinguished from the aircraft manufacturer's?

The commercial success of a particular engine model generally depends on the qualities and actions both of the engine manufacturer itself, and of any aircraft manufacturer (or "airframer"³²⁾) offering the engine in question on its aircraft. In other words, the engine's ultimate success depends on both the ability of the *engine manufacturer* to persuade an aircraft manufacturer to offer that engine model on a particular aircraft platform and to persuade airlines to choose their engine (to the extent that an alternative engine is available on the same platform); and the ability of the *airframer* to persuade airlines to buy the platform (i.e. aircraft model) on which the particular engine is available.

Most LCA platforms are offered to buyers with a choice of engines ("multi-source"), but in some cases, airframers choose to make available only a single engine model for a particular platform (exclusive or "sole-source" platforms). The most important example of this sole-sourcing approach in the LCA segment is the Boeing 737, which is the best-selling aircraft platform of all time. Since its commercial debut in 1968, the B737 has always been offered with only a single engine model available. The engines for the first generation of the B737 were supplied exclusively by P&W, while the second and third generations have been powered exclusively by CFMI engines.³³ Consequently, the substantial volume of CFMI sales deriving from the B737 (fully attributed to GE in the Commission's methodology) stems to a large degree from CFMI's success in the historic competitions to power two successive generations of the platform: of the 65 % share of backlog attributed by the Commission to GE/CFMI, around one-third (21 percentage points) derived from the B737.³⁴ The Commission justified the inclusion of the B737 (and other sole-source models) principally by reference to its aftermarket revenue and commonality arguments, and the CFI agreed that this was a reasonable approach, noting that: "... if the Commission had excluded the bid won by the applicant, which represented the biggest commercial success on the market in question, that could undoubtedly have distorted its analysis".³⁵

But conversely, the inclusion of the B737 undoubtedly distorts the analysis of the relative success of the various suppliers in their current or recent contests against rival suppliers. In particular, the sales of engines on B737s say nothing about the ability of RR and P&W to compete against GE on the majority of LCA platforms where there is an engine choice. At best, they therefore provide information on only one aspect of the (historical) competitive landscape in the relevant market.

2.4 Conclusion on market shares

As already mentioned, it cannot be considered particularly surprising that the CFI endorsed the Commission's specific analysis of market shares, and also more generally the importance of market shares in yielding conclusions about dominance. But while not surprising, the importance accorded to market share measures as indicators of dominance in a market that plainly has important "bidding market" features is not entirely satisfactory either. More specifically, this case high-

32) For LCAs, there are currently two airframers: Airbus and Boeing. In other segments (e.g. regional jets), a number of other players are active.

33) P&W took a strategic decision in the early 1980s to focus on providing an engine for the larger (but ultimately commercially unsuccessful) B757 platform (on the assumption that point-to-point travel would dominate the hub-and-spoke model, thus necessitating larger aircraft for direct journeys), instead of developing a competitive engine for the second-generation B737 in 1984 (see decision, para. 160).

34) See *D. Platt Majoras* (footnote 3).

35) Decision, para. 178.

lights some of the difficulties in relying too heavily on market shares, and in particular on individual measures of market share that may be subject to important weaknesses. The present case illustrates that there are situations where there is no obvious “correct” measure of market share and where different reasonable approaches can lead to rather different conclusions: the JV issue and the influence of aircraft platform success (i.e. the B737 issue) are good examples of problems without simple, mechanical solutions. In such a situation, the only sensible approach is to look at all the available evidence and come to a balanced view of its implications.

In this context, it is cause for concern that the Commission did not at least consider the implications of the obvious alternatives – e.g. GE’s share based on attribution of only 50 % of CFMI’s sales, the share on platforms other than the B737 (or on multi-source platforms more generally),³⁶⁾ or other more forward-looking measures of share (e.g. the share on aircraft models not yet in service). This is not to suggest that any one of these measures is the obvious “correct” measure of share, but merely that they provide important additional information in reaching a balanced view of structural factors. A legitimate question to ask is whether the CFI can really have satisfied itself that the rather limited market share evidence considered by Commission “contains all the information which must be taken into account in order to assess a complex situation”.³⁷⁾

At the same time, it has to be acknowledged that in certain types of market, there are limits on the informative value of even the best measures of market share as a guide to the competitive reality of the market. This is not the same as contending that if a market satisfies certain criteria that qualify it as a “bidding market”, then market shares are automatically without any informative value whatsoever: this rather extreme view is not one that is supported by mainstream economic thinking,³⁸⁾ and the CFI was right to note that observed features such as the stability of market shares or clear trends in shares cannot necessarily be dismissed solely by appeal to “bidding markets”.³⁹⁾ But by the same token, this is not a basis for effectively proceeding as though market shares always have equally significant informative value, irrespective of market circumstances.

This leads to another important concern with regard to the CFI’s use of the existing jurisprudence relating to dominance. The cited case law related to different markets and different measures of market share.⁴⁰⁾ Even leaving aside the substantive criticisms that could be levied at some of the older EC jurisprudence on dominance on which the CFI relied, it is not at all clear that findings on market shares taken from one case have any necessary bearing on the proper interpretation of market shares that reflect an entirely different set of circumstances in a different case – particularly in a case in which the Commission has itself explicitly argued for the use of an unconventional measure of market share by reference to industry-specific features.

36) As set out below (in the context of the “statistical” evidence relating to the Commission’s GECAS theories), it turned out that the Commission had indeed looked at shares on multi-source platforms, albeit in a different context and without stating in the Decision the net change shown by these shares (see Decision, para. 138) – namely a fall in the GE/CFMI share of orders over a period prior to the Decision.

37) Tetra Laval (ECJ), para. 39, cited at Judgement, para. 63.

38) For a critique of excessively simplistic “bidding market” arguments, see *P. Klemperer, Bidding Markets, 2005*, UK Competition Commission occasional paper, available at: http://www.competition-commission.org.uk/our_role/analysis/bidding_markets.pdf.

39) Judgement, para. 150 – 151, although the CFI focussed on only one aspect of the argument, namely that short-term market shares can be unreliable when there are few contests in a given period – there are other important reasons why shares in “bidding markets” do not necessarily give the same information about competitive strength or incentives as they might do, for example, in consumer goods markets.

40) Judgement, para. 115, which refers to Case 85/76 – Hoffmann-La Roche v. Commission, [1979], ECR 461; Case T-221/95 – Endemol v. Commission, [1999] ECR II-1299 and Case C-62/86 – AKZO v. Commission, [1991] ECR I-3359.

In conclusion, the CFI's treatment of market shares in the context of dominance in the present case, while orthodox and based on a thorough review of the Decision, does little to advance the kind of more nuanced approach to dominance that the Commission itself is today increasingly advocating.⁴¹⁾

3. Financial strength and vertical integration (GECAS)

The second major element of the Commission's (and CFI's) analysis of GE's pre-existing dominance was the assessment of factors related to GE's financial strength and integration into aircraft financing. The analysis concerned itself particularly with GE's financial services subsidiary GE Capital and GE Capital's aircraft leasing subsidiary GECAS (GE Capital Aviation Services). This part of the analysis was arguably less conventional (at least to the extent that it was not able to draw on existing case law) than the view taken of market shares, and required the CFI to undertake a certain amount of substantive analysis of its own in reviewing the Commission's assessment. The issues raised in this context are complex, and some are of a kind that could have important implications for assessments of dominance more generally if they were to be regarded as a precedent in an Art. 82 EC context.

3.1 The issues: GECAS's aircraft purchases and financial assistance

The Commission's assessment of GE's pre-merger dominance in LCA engines relied to a significant extent on the observation that GE was said to make use of its "financial muscle" to promote the sale of its LCA engines.⁴²⁾ In view of the fact that GE is indisputably a financially very strong corporation on any measure, and incorporated what is in essence a major financial institution in the form of GE Capital, this was regarded as providing GE with an unmatched advantage in the sale of LCA engines. Alongside extensive general discussion of the financial "strength" of GE and the corresponding "weakness" of RR and P&W, two specific factors were identified by the Commission as crucial in promoting GE's interests in the LCA engine market:

- the prospect that GECAS might purchase their aircraft was said to be a strong influence on airframers in selecting GE engines, while GECAS was said also to be able to promote sales of GE engines at the airline level; and
- the ability and willingness of GE to offer financial assistance to airframers and airlines was similarly seen as conferring a decisive advantage in certain engine competitions.

3.2 The GECAS "share shifting" effect: the theory

The theory that GECAS could be used as a lever to influence the decisions of airframers and airlines was an important part of the Commission's Decision: It was applied not only in relation to the analysis of pre-existing dominance (where it was argued to have benefited GE already in relation to engines) but also in relation to the competitive effects of the merger (where it was argued to be a factor that would confer dominance on Honeywell's products post-merger).

41) An interesting footnote to the market share debate is the announcement by RR in early 2005 that it had, for the first time, overtaken GE in terms of annual engine orders, see *K. Done/M. Odell*, Rolls-Royce powers ahead of GE Aircraft, Financial Times of 11th February 2005. While RR's statements seem to be based on treating Snecma as a separate competing entity, this is itself interesting in relation to the CFI's finding that GE's practice of including CFMI's sales in its own shares for the purpose of presentations to the financial community constitutes evidence in favour of the treatment of CFMI and GE as a single entity, see Judgement, para. 139.

42) Similar arguments were made in relation to the market for LRJ engines.

GECAS was created by acquisition in 1993. It engages in two broad types of financing activity: sale and leaseback transactions (also known as financing of “secondary volume”), whereby financing is provided for an aircraft that an airline has already acquired; and operating leases of aircraft purchased on a “speculative” basis, whereby GECAS purchases the aircraft on its own account and subsequently tries to find an airline wishing to lease it. In the first case, GECAS has no influence on the type of aircraft purchased or on the equipment placed on the aircraft, whereas in the second case, GECAS makes all the relevant choices as a customer of the airframers. The Commission’s concerns focussed on the second aspect of GECAS’s activity, i.e. speculative purchasing. The theory of GECAS’s influence had two distinct strands:

- at the airframer level, the fact that GECAS purchases only aircraft with GE (or GE joint venture)⁴³ engines was claimed to give airframers an irresistible incentive to choose GE whenever selecting engines on an exclusive (sole-source) basis, as failure to do so would rule out the possibility of any sales to GECAS; and
- at the airline level, it was argued that GECAS would strategically induce airlines to lease aircraft powered by GE engines, to ensure that these customers would later have an incentive, in order to take advantage of commonality benefits, to purchase additional GE engines (this was described as “seeding”).

The first of these – the airframer-level theory – was based on a submission provided to the Commission by a competitor, including a theoretical economic model (although the Commission did not explicitly refer to this model in its Decision). The second is not based on any well-articulated mechanism, and is not discussed in any detail in the Decision. In neither case was the theory one of classic “vertical” influence, since GECAS is active as a purchaser in a market (purchasing of aircraft) that is not directly vertically adjacent to that in which GE’s engine business is active (supply of engines – i.e. an input into the production of aircraft). Rather, the respective markets in which GE’s engine business is active as a supplier and GECAS is active as a purchaser are separated by one intermediate stage – the manufacturing of aircraft. The suppliers active at this intermediate level – the airframers – are customers of GE’s engine business and suppliers to GECAS.

In both cases, the Commission had to overcome two hurdles in order to present a plausible competition concern.

First, both variants of the theory required GECAS to be able to “shift share” – i.e. to increase GE’s market share. Since GECAS is not an end-user of aircraft, but rather an intermediary that provides financing for the ultimate operators (airlines), the share-shifting theory requires GECAS to have some special ability to influence the choices made by its customers (if this were not the case, the GE-powered aircraft placed on the market by GECAS would simply replace GE-powered aircraft that the same customers would have chosen to buy or lease anyway). The theory was silent as to why GECAS should have this special – and indeed unique – ability. In this context, it is important to note that there was no suggestion at any point that GECAS was in a position to coerce airlines to accept non-preferred engines, i.e. that GECAS might be dominant in some market for aircraft leasing or financing services.⁴⁴ In fact, the Commission did not even attempt to define the relevant market in which GECAS’s leasing activities took place.

Second, even if GECAS was successful in shifting share, its share of purchases of aircraft (and hence engines) was much too small to permit any appreciable direct impact on the market. The

43) For simplicity, I will refer to both GE and GE joint venture (notably CFMI) engines as “GE engines”.

44) And indeed it is not clear what market definition could have yielded such a conclusion – GECAS accounted for around 5 % of all aircraft financing and leasing services.

precise figures were disputed and depended on the basis of measurement, but were generally accepted to be in the range 5 – 10 % for the period since GECAS had become active as a significant speculative purchaser of new aircraft (in 1996).⁴⁵⁾ Even on the most optimistic interpretation of the facts, this could lead to no more than an increase of a few percentage points in GE's market share for engines, in the absence of some reinforcing factor.⁴⁶⁾ The GECAS theories therefore required some special mechanism that would amplify the direct effect in both variants. In the airline-level variant, the amplifying factor was provided by the "seeding" mechanism; while in the second case, it was provided by the incentives supposedly facing an airframer contemplating a sole-source engine choice.

3.2.1 Airline level: "seeding"

In relation to the influence of GECAS on airlines, the Commission's Decision argued that GECAS was much more important than its share of purchases suggested, by virtue of its ability to engage in "seeding". This referred to a claimed practice of placing GE-powered aircraft with airlines (particularly smaller airlines), which would give rise to an incentive for the airline to select GE engines in the future in order to take advantage of commonality benefits.⁴⁷⁾ As noted above, the evidential basis for the Commission's contention that commonality is an important factor in airlines' engine choices across the market as a whole was limited and highly controversial (although the Commission's conclusion on this issue was accepted by the CFI). But even if commonality were accepted as an important driver of engine choices, this factor would apply equally to all engine suppliers, and it would simply mean that competition would be restricted to airlines with no pre-existing commonality-induced preferences (e.g. start-ups or ones purchasing entirely new families of aircraft). The theory therefore requires GECAS to have an unmatched ability to persuade airlines to accept GE engines, contrary to their prior preferences. The Commission did not make clear on what basis it believed GE (through GECAS) would have had any particular advantage in this regard. And even if GECAS was in fact able to shift share, the commonality effect would have had to be strong in order to lead to a significant amplification of the (at most) small direct effect that GECAS's share shifting could have had, given the scale of GECAS's share of purchases. The Decision makes no attempt to quantify the appreciability or otherwise of the seeding effect.

3.2.2 Airframer level: "Archimedean leveraging"

In relation to the airframer level, the Commission's argument was based on an underlying theory of harm provided by a complainant (P&W's parent, UTC), although the theory was not articulated in a great amount of detail in the Decision.⁴⁸⁾ The essence of this theory – described variously

45) This was based on both LCAs and LRJs, where GECAS had placed some large initial orders, as the first leasing company to enter this growing segment.

46) The CFI recognised that at best a sub-set of the aircraft placed by GECAS would represent incremental GE engine sales (as opposed to serving an airline that would have chosen GE engines in any event) – see Judgment, para. 235.

47) Decision, para. 125; cf. Decision, para. 150, which suggests that larger airlines (which conduct in-house maintenance, repair and overhaul) benefit most from commonality.

48) The authors of the theory as submitted to the Commission describe the argument and supporting evidence in a paper published during the course of the CFI proceedings: *R. Reynolds/J. Ordover*, Archimedean Leveraging and the GE/Honeywell Transaction, (2002) 70 Antitrust Law Journal. A contrary view (by an economist acting for GE in the administrative procedure) can be found in *B. Nalebuff/D. Majerus*, Bundling, Tying and Portfolio Effects, Part 2 – Case Studies, (2003) DTI Economics Paper 1, available at: <http://www.dti.gov.uk/files/file14775.pdf?pubpdfload=03%2F612>. For a detailed independent critique of the analysis, see *E. Emch*, GECAS and the GE/Honeywell Merger: A Response to Reynolds and Ordover, (2003) US Department of Justice Economic Analysis Group Discussion Paper EAG 03-13.

as “Archimedean leveraging”⁴⁹⁾ and “instrumental leverage”⁵⁰⁾ – was to explain how the purchase of aircraft by GECAS could significantly influence the engine choices made by airframers, despite the fact that GECAS accounts for only a very modest share of overall purchases in the aircraft markets in question. The starting point for the theory was the observation that, with minimal exceptions, GECAS purchases only aircraft equipped with GE engines. The Commission then argued that this had allowed GE to exercise disproportionate influence over airframers, who recognised GECAS’s supposed ability to “shift share”, and took this into account in their engine choices in those instances where they selected an engine model on a sole-source (i.e. exclusive) basis for an aircraft.⁵¹⁾

Here the Archimedean leverage theory predicted that GECAS would be able to have a substantial “tipping” effect on airframers’ choices: because GE was the only engine manufacturer who was also a significant buyer of aircraft, and because GE (via GECAS) would buy only aircraft powered by a GE engine, any airframer considering awarding a sole-source engine position would have a very strong incentive to consider GE for this position. This once again relied on the implicit assumption that the prospect of having GECAS as a purchaser would give the airframer an expectation of additional sales that it would not otherwise achieve (due to GECAS’s powers of persuasion vis-à-vis airlines). On this basis, it would be extremely difficult for any rival engine manufacturer to compete on price alone – the promise of selling even a small number of additional aircraft would, according to the theory, simply swamp the financial benefit of even a large percentage discount on each engine.

In this way, by setting up an argument that effectively assumes GE (via GECAS) has a unique ability to convince airlines to adopt its engines, and that no purchasers other than GECAS will have strong preferences regarding the choice of engine, the Archimedean leverage theory reaches the conclusion that GE will have a huge advantage every time there is a contest for a sole-source engine supply position. The essence of the theory is not the *size* of GECAS’s advantage (i.e. the number of additional GE-powered aircraft it can “convince” airlines to take), but its *uniqueness* (i.e. the fact that no other player in the market is assumed to have the same kind of ability).

3.3 The GECAS effect: evidence

The CFI’s assessment of the two variants of the GECAS theory did not entail any investigation of the coherence of the arguments or of the plausibility of their premises – in particular, of the assumed unique ability of GECAS to change airlines’ engine choices. Instead, it restricted itself to what it considered to be the factual evidence relevant to assessing whether the effect in question actually existed.

The Commission had supported the GECAS theories in its Decision by means of two types of evidence: (a) a cursory reference to market share figures supposedly showing an increase in GE’s engine share as a result of GECAS’s entry as a significant purchaser of aircraft (i.e. “share shifting”); and (b) internal GE documents and examples of deals involving GECAS, which it interpreted as showing either an airframer-level or airline-level influence on engine choices.

49) This is the term used by the originators of the theory.

50) Decision, para. 406.

51) As noted above, sole-source refers to a situation where airframers choose a single supplier for the engines and airlines have no subsequent choice of engines on that particular aircraft model. This is rare on LCAs (the B737, discussed above, is a notable exception), but is the norm on smaller aircraft (e.g. regional jets).

3.3.1 “Statistical evidence” on market shares

GECAS began purchasing aircraft speculatively in 1996. The Commission’s decision contends that this led to an increase in GE’s market share for LCA engines:

“A comparison of GE’s market position pre-GECAS (from 1988 to 1995) with the post-GECAS situation (1996 to 2000) shows that while GE’s engine sales with leasing companies, including GECAS, increased by over 20 share points (or over 60 %), the direct purchase of GE engines by the airlines only dropped by less than 5 share points (or less than 10 %). The fact that other leasing companies and airlines simply have not compensated for GE’s biased purchases results in a net shift of engine market shares to GE.”⁵²⁾

The flaw in this reasoning is obvious: without knowing what proportion of total engine sales were accounted for by leasing companies and airlines respectively, it is impossible to assess whether GE’s net share has in fact increased – let alone whether there is any causal relation between any such increase and the activities of GECAS. As to the first, a crucial piece of information that is missing from the Commission’s Decision is that airlines have at all relevant times accounted for significantly more sales than leasing companies (although the importance of leasing companies has grown significantly over this period). The result is that the larger percentage increase in GE’s share among leasing companies could well have been outweighed by the smaller percentage drop among airlines (accounting for the majority of sales). And so it turned out to be: although the Decision did not contain the underlying figures used by the Commission to support its argument, it transpired in the course of the proceedings before the CFI that in fact the net effect of the changes described in the above extract was for GE’s combined market share among both airlines and leasing companies to fall.⁵³⁾

While the Decision therefore contained no basis for a conclusion that GECAS had been successful in “shifting share” and hence increasing GE’s engine share, the question of whether there was in fact evidence for such an effect – even if it had not been described in the Decision – continued to be contentious throughout the CFI proceedings. A key controversy concerned the extent to which the purchases made by GECAS were offset by reductions in purchases of GE engines by other buyers in the market, whether other leasing companies or airlines. This proved difficult to settle conclusively on the basis of the data, given that it was necessary to have a view of the counterfactual, i.e. of GE’s likely engine market share in the absence of GECAS. The Commission claimed before the CFI that direct purchases by airlines should be taken as an indication of the counterfactual (on the basis that they were not “tainted” by GECAS’s activities), but for the reasons set out below this is not tenable as an assumption.⁵⁴⁾ The CFI engaged with this issue, but struggled with the logic of the share-shifting argument, as illustrated by the following statement:

“[GE’s] argument that other leasing companies will consciously react to GECAS’s bias in order to promote other engines can only be relevant to the extent that those companies themselves choose the engine equipping the aircraft.”⁵⁵⁾

52) Decision, para. 138.

53) It turned out that the data used by the Commission in this context related only to multi-source aircraft platforms (i.e. where a choice of engines was available).

54) See also *E. Emch*, GECAS and the GE/Honeywell Merger: A Response to Reynolds and Ordovery, (2003) US Department of Justice Economic Analysis Group Discussion Paper EAG 03-13, for an explanation of why it is misleading to use airlines’ direct purchases as a control.

55) Judgement, para. 236.

The Judgement then goes on to note, correctly, that some leasing companies leave the engine selection to be determined by the ultimate customer, but incorrectly deduces that there can be no offsetting of GECAS's "bias" in such cases.

The CFI's logic here is based on a misunderstanding of what GE had argued before the CFI, and of what had been happening in the leasing segment over the relevant time period. First, it is plainly not the case that – in principle – only leasing companies could be relevant in offsetting GECAS's purchases of GE engines. Rather, the period during which GECAS became active as an important buyer of aircraft witnessed a significant increase in the extent to which airlines chose to lease rather than buy an aircraft – i.e. growth in the leasing segment. It also saw growth in GECAS's importance as a speculative purchaser within that segment. Clearly, an airline's decision to lease a GE-powered aircraft from GECAS rather than buy the same aircraft outright would mean an increase in GECAS's aircraft purchases but have no impact on GE's overall share of engines. In reality, this is likely to have been a fairly common scenario.⁵⁶⁾ It is therefore far from obvious that the general trend from buying to leasing aircraft would necessarily have had any appreciable impact on overall engine market shares. To the extent that airline demand for leasing of aircraft with non-GE engines could not be satisfied by GECAS, this would have been reflected in demand for alternative engines from other leasing companies (which, in fact, is what the data showed – an "anti-GE" bias in the orders of other leasing companies). One specific way in which this could have manifested itself is that where rival leasing companies left the choice of engines open when ordering from the airframer, the ultimate airline customer chose a non-GE engine when entering into a leasing arrangement.

So the CFI's reasoning in the above extract is mistaken: there is no need for leasing companies actively to seek to offset GECAS's purchases by their own engine choices. Rather, the demand from airlines facing leasing companies will reflect the airlines' underlying preferences for engines – irrespective of their lease/buy decisions – unless GECAS did in fact prove to have some unique "share-shifting" powers, which cannot be inferred in any simple way from the data. The observed qualitative data patterns – including an increase in GE's engine share among all leasing companies (including GECAS), a decline in GE's engine share among leasing companies other than GECAS, and a decline in GE's engine share among direct purchases by airlines – are all entirely consistent with the hypothesis that GECAS simply managed to convince airlines to lease GE engines instead of buying them directly, against a background of growth in the leasing segment and growth in GECAS's share of this segment.⁵⁷⁾

The question of whether any statistical association between the entrance of GECAS and GE's engine shares could be detected was a complex one. What is clearer is that there was no statistical basis in the Commission's analysis in the CFI proceedings for establishing any causal link between GECAS and GE's share. Clearer still, as set out above, is the fact that the Decision did not contain anything approaching evidence for a GECAS effect – indeed, as I have described, the evidence in the Decision that was presented as suggesting an increase in GE's share as a result of

56) Given that GECAS's focus has been particularly on narrowbody "commodity" aircraft such as the B737, which is always equipped with a GE (or, more accurately, CFMI) engine, it is likely that many customers who leased aircraft from GE simply chose to lease rather than buy exactly the same aircraft, with the same engine choice.

57) *E. Emch*, GECAS and the GE/Honeywell Merger: A Response to Reynolds and Ordovery, (2003) US Department of Justice Economic Analysis Group Discussion Paper EAG 03-13, attempts a more careful econometric analysis of the issue (albeit still based on limited data on potential explanatory factors), and on this basis concludes that GECAS had a very small impact on GE's share (around 1.5 % of the market) – significantly less than that suggested by the Commission or by Reynolds and Ordovery (op. cit.).

GECAS in fact turned out to show the opposite when the Commission provided further detail during the CFI proceedings.

The CFI's Judgement acknowledges that the Commission did not prove its case. It also notes, however, that GE did not establish the negative position – i.e. that GECAS had *no* impact on GE's market share. The CFI therefore concludes "... the Court must conclude that neither of the parties wins the statistical argument considered above. The fact that the Commission's reasoning is not confirmed by the statistical evidence must be taken into account when assessing the validity of its reasoning as a whole. However, account must also be taken of the fact that the applicant's counter-argument that GECAS's activity had no impact on the market is also not established by the figures."⁵⁸⁾

The statistical battle between GE and the Commission was therefore declared by the CFI to have ended in a draw, with neither side winning the point.⁵⁹⁾

3.3.2 Examples and internal documents

In the absence of a clear finding in relation to the "statistical" analysis of the share shifting argument, the CFI considered evidence on specific incidents analysed by the Commission, where GECAS was in some way involved in a commercial opportunity that resulted in success for GE's engines, as well as internal GE documents relating to the same issues. The evidence considered relevant by the CFI in this context comprised the following:

- one instance of a contest at airframer level to supply a sole-source engine (the B777X campaign, which also involved an offer of financing and is discussed further below),⁶⁰⁾
- three extracts from internal GE documents referring to contests to supply airlines in which GECAS seemed to have played a role, and which suggest some link between involvement by GECAS in a deal and the choice of GE engines,⁶¹⁾ and
- one article from Fortune magazine which refers to the fact that GE Capital helped save Continental Airlines from bankruptcy in 1993, after which Continental purchased numerous GE-powered aircraft.⁶²⁾

As regards the role of GECAS in influencing airframers, the evidence relied upon by the CFI therefore consists of the B777X example (discussed further below), in which the role of GECAS was at best ambiguous (the agreement to select GE's engines was reached some time before any binding commitment relating to GECAS's purchase of aircraft was offered). The remaining three examples cited by the CFI involve airline-level deals (as does one unique case – the Continental rescue – in which GE Capital played a role but there is no mention of GECAS). In all cases, the importance of the role (if any) played by GECAS in securing the selection of GE engines is unclear. However, the CFI concluded that the sum of this evidence was sufficient to find that GECAS had in fact contributed to the success of GE's engines, and that GE's internal documents expressed a strategic intent to use GECAS to strengthen GE's position in the LCA engine market.⁶³⁾

58) Judgement, para. 240.

59) It is interesting to note the CFI's view that "account must also be taken" of GE's failure to establish the negative of the Commission's proposition. While the relevance of this finding is a legal rather than an economic question, it is not obvious how it relates to the Commission's burden of proof in the administrative procedure, and the CFI's standard of review (as discussed above, in the Introduction).

60) Judgement, para. 205 et seq.

61) Judgement, para. 221, 222 and 224.

62) Judgement, para. 225 – 227.

63) Judgement, para. 241.

In light of the nature of the arguments this evidence was found to support, this is a rather extraordinary conclusion. The Commission's argument was that GECAS was able to exercise influence that goes far beyond its 5 – 10 % share of aircraft purchases, by means of a number of specific mechanisms. In order for the mechanisms to be effective, they required GECAS to be in a position to exert power over airlines' choices in a way that could not readily be matched or counteracted by other engine suppliers, and they required an effective "amplification" mechanism to overcome the limitations of GECAS's small share. In other words, the Commission's arguments relied both on the *uniqueness* of GECAS's influence at airline level and on the quantitative *applicability* of the resulting impact on market shares. Yet the evidence considered by the Commission and supported by the CFI – i.e. the evidence on a handful of actual incidents of GECAS's exercise of these supposed powers – is simply not capable of establishing either of these points, even if interpreted in a way that most favours the Commission's case.

In other words, even if a causal link between GECAS's involvement and the selection of GE engines could correctly be inferred from this evidence (which is far from clear), that would simply confirm that GECAS was a factor in the contest in question. It is a long way from that observation to the inference that GECAS offers a unique advantage that is capable of influencing the market to an appreciable extent, as the Commission had claimed. Once again, it is difficult to square the CFI's willingness to accept complex theories of competitive influence on the basis of limited evidence with the requirement that it should "... establish whether the evidence relied on is factually accurate, reliable and consistent but also whether that evidence contains all the information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it".⁶⁴⁾

It is interesting to note the CFI's view in this context that the complexity of the claimed economic mechanism at issue is irrelevant if there is direct evidence on its effects: "... [GE's] arguments based on the allegedly unorthodox nature, in terms of economic theory, of the Commission's case cannot prevail over the convincing evidence adduced by the Commission".⁶⁵⁾

3.4 Use of "financial strength" to gain competitive advantage

In addition to the rather specific theory of GECAS's influence, the Commission's Decision also argued more generally that GE's financial strength – particularly in the form of GE Capital's ability to offer financing to airframers – contributed to its dominance in LCA engines. The Decision supported this argument by reference to one particular instance where GE offered a package of terms including financial support (as well as a prospect of future aircraft purchases by GECAS) and subsequently won an exclusive engine position on that aircraft. This example is very interesting, not only because it constitutes virtually the only hard evidence offered in support of the financial strength theory, but also because its assessment by the CFI prompted some interesting, but controversial, observations.

3.4.1 The Boeing 777X campaign

The example in question relates to a campaign in 1999 to supply engines on an exclusive basis for the Boeing 777X, an extended range model that was to be added to the already existing B777 aircraft family.⁶⁶⁾ Previous versions of the B777 family had offered a choice between GE, RR and

64) Tetra Laval (ECJ), para. 39, cited at Judgement, para. 63.

65) Judgement, para. 229; in a similar vein, see also Judgement, para. 243.

66) Judgement, para. 205 – 216.

P&W engines. GE's engine, a variant of the GE90 family, had been relatively unsuccessful on those models, which the Commission attributed to technical inferiority (according to GE, the GE90 was simply not ideally matched to the smaller versions of the B777 family, being a relatively large and heavy engine by comparison to the rivals' offerings). In relation to the B777X, GE offered Boeing a package including financial assistance to Boeing, an engine maintenance commitment to customers, as well as an offer that GECAS would subsequently negotiate with Boeing over the purchase of 10 B777X aircraft, once Boeing had secured a certain number of firm orders from other customers (although no purchase commitment was offered). GE was successful in this campaign and the GE90 was chosen as the exclusive engine for the B777X platform. Some time after Boeing had secured the requisite number of orders from airline customers, GECAS began negotiating with Boeing and eventually placed an order for 10 B777X, as well as taking an option on additional aircraft.

The Commission interpreted this sequence of events as demonstrating that the combination of GE's financial strength (manifested in the offer of financing to airframer customers) and GECAS's activities as an aircraft purchaser had swung the B777X campaign in GE's favour, despite the fact that GE's product (the GE90 engine) was inferior to those of its rivals. The CFI fully endorsed the Commission's position on this point.⁶⁷⁾

3.4.2 The CFI's reasoning

The CFI's assessment of the role of the B777X example is interesting on a number of counts. First, it illustrates again the relatively low evidential burden placed on the Commission by the CFI in relation to the economic interpretation of evidence (cf. the discussion of evidence in relation to GECAS, above). Perhaps even more interesting are the CFI's comments on what this example shows about the nature of competition and its role in a dominance assessment. The CFI took the view that the fact of GE's success in winning a competition as a result of its offer of financing and (the possibility of) aircraft purchases, despite offering a supposedly technically inferior product, is in itself an indication of dominance. The CFI does not go so far as to suggest that the ability to compensate (successfully) for a technical disadvantage by means of offering more favourable commercial terms shows dominance – and indeed, this would have been to misunderstand the essence of competition for differentiated products (i.e. the need for each supplier to offer a package of product features and commercial terms, particularly prices, that overall is more attractive to customers than the packages offered by competitors).

However, the Judgement makes a clear distinction between price discounts and other commercial terms for the purposes of the assessment. In the CFI's view, non-price terms such as the offer of financing or the possibility of future purchases of aircraft are to be regarded as "instruments external to the market" and hence, apparently, in some sense not an element of legitimate competition on the merits – for example: "... a contribution by an engine supplier to the development costs of its customer's platform ... is not the same as the grant of discounts"⁶⁸⁾ and "in a competition which it could well have lost if the quality of the product and the price payable on delivery had been the only relevant criteria, GE was able to take a decision to reverse the outcome by recourse to instruments external to the relevant market"⁶⁹⁾

67) Judgement, para. 216.

68) Judgement, para. 212.

69) Judgement, para. 213.

These statements suggest a misunderstanding of what it means when a customer chooses between products offered under different sets of commercial terms.⁷⁰⁾ In particular, to say that an up-front financial contribution “is not the same as the grant of discounts” misses the point that of course such a contribution is economically precisely equivalent to some level of price discount. When a customer decides on which of two competing and differently structured offers to accept, he will ultimately have to be in a position to make a direct trade-off between price discounts on one hand and up-front payments on the other; otherwise, a decision between the two offers would not be possible. By definition, it will always be possible to find the level of up-front payment that is equivalent to any given level of price discount – it is simply the amount that leaves the customer indifferent between the two offers.

Of course the two alternatives will have different consequences in terms of timing, the distribution of risk and so on, but that does not mean that they are not comparable, and hence that one cannot be substituted by the other. Even if GE were somehow uniquely in a position to offer financing (which is not the case), this would not make it impossible for rivals without this ability to make competitive offers in other ways. And if GE did have a unique ability of this kind – or at least an advantage (e.g. through better or cheaper access to funds) – this would simply represent an efficiency advantage with beneficial effects for the customer, unless it were deployed strategically in order to foreclose competitors (which was not explicitly alleged). Neither the Commission’s nor the CFI’s analysis of this issue considered any of these issues or their consequences for the assessment of dominance, or of the merger more generally.

The second worrying aspect of the CFI’s approach is its readiness to classify certain forms of competitive behaviour as involving “recourse to instruments outside the relevant market”. The suggestion seems to be that normal competition on the merits should involve customer choices based only on the characteristics of the (physical) product and the pricing of that product (assuming a single, well-defined price). There is of course no sound basis for such a view. Once again, while it is possible that strategic behaviour could involve connecting the terms of one transaction to a supplier’s dominant position in another market, there is no basis in either the Commission’s Decision or the CFI’s Judgement for claiming such an effect was at work in the present case (there was no suggestion that GE enjoyed a dominant position in some relevant market involving the provision of finance, the purchase of aircraft, or even the leasing of aircraft). On the basis of the facts of the B777X example as they were presented to the CFI, it is impossible to conclude that it showed anything other than active, multi-dimensional competition.

Even more perplexing is a further, concluding, statement by the CFI in relation to the B777X example: “The various commercial options available to [GE] shelter it to a considerable degree from the effects of the immediate commercial pressure of competition from P&W and Rolls-Royce. It can therefore allow itself to undertake purchasing commitments through GECAS, even to make tangible financial sacrifice in the short term, without, however, suffering any damage as a result.”⁷¹⁾

It is unclear what the CFI may have had in mind in making this statement, particularly in the second sentence in the quoted passage. Offering concessions in order to secure business does

70) At a purely factual level, the suggestion that GE was uniquely in a position to offer financial contributions to Boeing seems to have been incorrect: according to GE (and not challenged by the Commission), all three engine manufacturers offered a package involving financing as part of their proposal to Boeing for the B777X. Also, as noted above, GE maintained that the GE90 was not technically inferior to the rivals’ offerings, but in fact was better suited to the largest version of the B777 (i.e. the B777X) than to the previous, smaller variants.

71) Judgement, para. 214.

indeed involve a sacrifice in some sense (relative to not having to offer those concessions), though it may of course be the most profitable available course of action if the alternative is to lose the sale altogether, and hence involve no net sacrifice relative to the next best option. But that is just the essence of competition, and would not explain the conclusion that such behaviour leads to dominance. What is meant by the reference to the ability to offer such concessions “without . . . suffering any damage” is more intriguing. Perhaps the most obvious interpretation – suggested by the reference to a sacrifice “in the short term” – would be that the CFI was viewing activities such as the provision of financing or the offering of purchasing commitments (assuming for the sake of argument that such commitments were actually given) as part of some sort of longer-term strategic exclusionary behaviour. Such a strategy would indeed have short-run costs but long-run benefits in the form of competitor foreclosure and higher ultimate profits. But yet there is no explicit suggestion in the CFI’s reasoning that it suspected GE of having engaged in exclusionary (e.g. predatory) behaviour.

This section of the Judgement therefore creates a certain amount of confusion as to what the CFI thought was the fundamental nature of the behaviour by GE that was claimed to reinforce its dominance. It is also warrants the same observation made in relation to the GECAS argument, regarding the extremely limited anecdotal evidence relied upon for a finding that a particular practice contributes to dominance across an entire market. Again, this is difficult to reconcile with the CFI’s obligation to consider whether the evidence relied upon by the Commission “contains all the information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it”.⁷²⁾

3.5 Concluding observations on GECAS and financial strength

The relevance – if any – of “financial strength” and related concepts as a criterion in the assessment of dominance (or equivalent) remains a complex and controversial issue.⁷³⁾ From an economic perspective, it is certainly possible in principle that differences in different competitors’ ability to raise funds could have implications for competition (particularly in markets where ongoing major investments are important for competitiveness).⁷⁴⁾ But this certainly does not mean that larger companies (e.g. measured by market capitalisation, or companies with larger cash flows), or even companies with better credit ratings, necessarily have any competitive advantage over those that are “weaker” based on these criteria. Whether apparent differences in “financial strength” matter at all in any given industry is a question that can only be answered on a case-by-case basis, and by reference to the role of financing in determining competition in that market, as well as the nature and extent of any financial asymmetries between competitors in the market.

By contrast, in the GE/Honeywell case, the Commission’s Decision is long on references to GE’s “financial strength”, but short on economically coherent explanations as to how and why that strength might matter.⁷⁵⁾ Moreover, at least as a first assumption, it is certainly reasonable to treat

72) Tetra Laval (ECJ), para. 39, cited at Judgement, para. 63.

73) See for example *D. Platt Majoras* (footnote 3); *C. Bright/J. Schmidt*, Financial Strength in EC Merger Analysis, (2005) 1 European Competition Journal.

74) In economic theory, the assumption of perfect capital markets would mean that asymmetries between competitors are irrelevant in assessing their ability to raise funds for a given project. But in practice, it is clear that capital market imperfections can sometimes have important implications for access to finance.

75) As noted by *C. Bright/J. Schmidt*, Financial Strength in EC Merger Analysis, (2005) 1 European Competition Journal, in the Decision, “Financial strength’, ‘financial might’ and other, similar, phrases were mentioned at least 25 times before the Commission decided that GE had acquired an important competitive advantage in this respect”.

genuine differences in access to funds as a form of efficiency: for example, if one supplier can raise capital more cheaply than another, then this is a cost advantage that is not dissimilar in its consequences to economies of scale in purchasing of other inputs.

The CFI, to its credit, did not simply assume that GE's size gave it an advantage leading to dominance, but instead considered some specific grounds advanced by the Commission in this context. But ultimately the CFI's analysis too failed to ask some basic questions about the source and nature of the claimed advantages stemming from GE Capital and GECAS – for example:

- what exactly do GE's subsidiaries offer that rivals cannot offer – e.g. cheaper/more financing; risk reduction; or convenient packages of products/services (“one-stop shopping” benefits)?
- On a closer analysis, do these factors represent efficiencies – i.e. are they simply more attractive terms that benefit customers, and can be offered sustainably? Or do they stem from market power in other markets (e.g. is GECAS dominant in any leasing market)? Or is there an allegation of exclusionary conduct – e.g. below-cost pricing?
- To what extent can competitors compensate by alternative means – e.g. price discounts? What evidence is there of the ability or inability to compete, based on rivals' performance across the market as a whole? If competitors are unable to compete, again, does this represent superior efficiency or market power/anti-competitive behaviour?

Without considering issues such as these, it is impossible to reach a sound conclusion on the importance of financial strength, range advantages, and other “conglomerate” factors in the context of a dominance assessment. It is particularly relevant for an assessment of dominance – a fortiori in the context of merger control – whether the observed position stems from efficiency or superior products, or from other barriers to rivals' ability to compete that yield no benefits for customers.

The other important conclusion that should flow from a structured analysis of the nature of the claimed advantages is whether in fact the observed evidence points to dominance – or just to the existence of competition. In particular, the fact that a supplier (GE in this case) has won a handful of competitions in which it competed by offering a range of services (and on commercial terms other than price) says nothing about the ability of rivals generally to compete and to constrain the supplier in question. GE argued throughout the administrative procedure and before the CFI that these examples in fact evidenced nothing more than the fact that GE has had to offer significant discounts and comparable benefits in order to prevail in the competitions in question.

Regrettably, the CFI's assessment of GE's pre-merger dominance failed to address these key questions, and comes rather too readily to a conclusion that an apparent competitive advantage – inferred from only a handful of examples – is a factor that contributes to the establishment of a position of dominance.

III. The conglomerate and vertical effects of the merger

The Commission's Decision was notable primarily for the principal grounds on which the merger was ultimately blocked, namely the anticipated conglomerate effects of the transaction. The CFI's view on these parts of the Decision was consequently the most keenly awaited element of the Judgement. These areas were also those where the economic analysis in the Decision was most novel.⁷⁶⁾ Accordingly, this section focuses on the CFI's treatment of the conglomerate effects of

⁷⁶⁾ For a summary of the key arguments in the Decision on conglomerate issues, see *M. Pflanz/C. Caffarra, The economics of GE/Honeywell*, (2002) 23 (3) *European Competition Law Review*.

the merger, and also on the conceptually closely related issue of conventional vertical effects. Three major issues fall under this heading:

- the effect of GECAS and GE Capital on Honeywell's markets;
- bundling (engines plus avionics/non-avionics); and
- vertical foreclosure (involving engine starters).

The CFI, basing itself on the ECJ's judgement in *Tetra Laval*, set out what is effectively a two-part test for the review of any claimed merger effects that relied on the prediction that a certain type of behaviour would be brought about by the merger, and would in turn impair competition: "... the Court must determine whether the Commission has established that the merged entity would not only have the capability to engage in the ... practices described in the contested decision but also, on the basis of convincing evidence, that it would have been likely to engage in those practices after the merger and that, in consequence, a dominant position would have been created or strengthened on one or more of the relevant markets in the relatively near future".⁷⁷⁾ Hence, the two key elements the CFI requires the Commission to establish in such cases, on the basis of "convincing evidence", are:

- (1) the likelihood that the behaviour will occur (which necessarily comprises the ability to engage in the behaviour in question); and
- (2) the impairment of competition (creation or strengthening of a dominant position) in the relatively near future as a consequence of the behaviour.

From an economic perspective, this general approach to assessing predictions of non-horizontal harm arising from a merger makes sense, although there is of course a close link between the first and second limbs: the incentive to engage in a certain form of strategic behaviour (and hence the likelihood that it will occur) depends vitally on the anticipated outcome of such a strategy, e.g. whether it successfully marginalises competitors. One aspect of the first limb of the test is the CFI's conclusion that the assessment of the likelihood that the behaviour will occur should take account of whether the behaviour is likely to be caught by Art. 82 EC, and whether it may consequently be deterred by the prospect of detection and sanctions.⁷⁸⁾

1. The effect of GECAS and GE Capital on Honeywell's markets

As set out in detail above, the Commission's Decision developed an argument to the effect that the role of GECAS as a significant buyer of aircraft had acted to skew the market for aircraft engines in GE's favour, through "share shifting". As also described above, the CFI accepted the Commission's reasoning and evidence on this point, and found that the Commission was justified in concluding that GECAS had in fact had the claimed effect on the market for LCA engines. This finding provided the backdrop for the CFI's evaluation of the Commission's prediction that GECAS would play a similar role in relation to Honeywell's products post-merger to that which it had played in relation to GE's engines pre-merger.

In the Decision, the Commission argued that GECAS would extend its existing "GE-only" purchasing policy (as practised in relation to engines) to Honeywell's avionics and non-avionics products after the merger. Among the wide range of avionics and non-avionics components contained on an aircraft, some are classified by the airframer as "supplier furnished equipment" (SFE), while others are "buyer furnished equipment" (BFE). SFE components are those where the

⁷⁷⁾ Judgement, para. 405 (see also para. 327).

⁷⁸⁾ Judgement, para. 70 – 76.

airframer chooses the supplier of the component and airlines have no further choice in the specification; while BFE products are chosen by the airline from among a number of suppliers whose components have been approved for use on the aircraft in question.⁷⁹⁾ This is analogous to the distinction between sole-source and multi-source engine choices on a particular aircraft model. As for engines, the Commission claimed that GECAS could influence both airframers' and airlines' equipment choices, to a degree that would be disproportionate to GECAS's modest share of aircraft purchases: airframers would be influenced in their choices of SFE products, while airlines would be influenced in their choices of BFE products.

The Commission's GECAS argument, related to post-merger behaviour, focussed principally on the airframer level – i.e. on the theory that GECAS would influence the choice of SFE equipment, and in this way exercise significant influence on the market. The Commission did not claim that “seeding” would occur in relation to products chosen by airlines (i.e. BFE equipment), and while the Decision did contend that Honeywell BFE products would benefit from the activities of GECAS and other GE subsidiaries, it contains no coherent account of how GECAS could affect sales of such products to any significant extent.⁸⁰⁾

At the airframer level, the Commission's arguments about the influence of GECAS on Honeywell's SFE products closely mirrored its arguments in relation to sole-source engine positions. The Commission argued that GECAS would extend its GE-only purchasing policy to the SFE products supplied by Honeywell.⁸¹⁾ This would give airframers a strong incentive to select Honeywell whenever possible, to retain the possibility that GECAS might be a future buyer of their aircraft. According to the Commission, this incentive would be even more powerful than in the case of aircraft engines because buyers (both airframers and airlines) were said to have less of a preference among alternative suppliers of any avionics or non-avionics product than among engine suppliers. Hence, according to the Commission, any underlying preference that an airframer might have had for a competing supplier's avionics product would be far outweighed by the importance of retaining the option of selling to GECAS – hence, the airframers would choose Honeywell wherever possible, even if Honeywell did not offer the best (or best value) product. This effect would be reinforced by the use of GE Capital to offer financing, again to favour the placement of Honeywell SFE products on aircraft. Because SFE product choices have long-term effects – the competition occurs when a new aircraft model, or a fundamentally new generation of a model, is being designed – this effect was predicted to lead to the long-term foreclosure and eventual exit or marginalisation of Honeywell's competitors for SFE avionics and non-avionics.⁸²⁾

Once again, as for engines, the theory relied on the assumption that GECAS (coupled with GE Capital) has a unique ability to influence airframers' choices: if GECAS is the only buyer with any strong preferences between alternative suppliers of the same component, then airframers will tend to choose the supplier favoured by GECAS (i.e. Honeywell) as the single option. As before, a tipping effect is predicted, where the market tips towards GE/Honeywell equipment and rival suppliers are deprived of cash flows and consequently marginalised, particularly in relation to the development of future generations of products.

79) Occasionally, the term “SFE-Option” (“SFE-O”) is used to describe equipment where there is some choice for the aircraft buyer. For the purposes of the competitive assessment, SFE-O can be treated equivalently to BFE products, as it is the aircraft operator (airline) who ultimately chooses the supplier of those products.

80) Decision, para. 405 – 411 (some of which actually discusses SFE equipment, despite falling into the section dealing with BFE/SFE-O products).

81) Decision, para. 342 – 348.

82) Decision, para. 347 – 348.

GE had responded to the airframer-level GECAS theory first by making the points set out above in the context of the application of the theory to pre-existing dominance in aircraft engines – i.e. that the logic of the story is inherently far-fetched and reliant on strong assumptions (especially GECAS’s unique powers), and that the facts do not support the claim that GECAS has already affected the engine market. But even if the basic argument were accepted in relation to engines, GE pointed out that the situation in relation to avionics and non-avionics products is significantly more complicated: there are many such components on any given aircraft model, and Honeywell would not have been in a position to supply all of them. The “GE-only” policy would therefore necessarily have been less absolute for these components than for engines. The Commission responded that it was not literally claiming a “GE/Honeywell-only” policy would apply, but rather that GECAS would tend to favour aircraft with a higher proportion of GE/Honeywell content – all else being equal.

But once this concession is made, the theory that was applied to engines loses much of its clean and simple appeal: the criterion by which GECAS chooses aircraft is no longer an “all or nothing” one, but rather a question of degree. Each avionics/non-avionics components is relatively low value (costing typically in the order of tens of thousands of dollars) as compared with engines (worth many millions of dollars). On the assumption that GECAS is an instrument to further the wider goals of the GE group, is it plausible that GECAS would refuse to buy an aircraft model that is popular with airlines (and hence easy to lease), despite it featuring a GE engine (worth millions of dollars), on the basis that it lacks one or two potentially available Honeywell components worth in the order of a few tens of thousands of dollars? Even within the framework of the “Archimedean leverage” theory, the incentive for airframers to choose Honeywell products every time, no matter how they compared to competing offers, would be severely diluted or indeed disappear altogether once these low-value incremental decisions are introduced: an airframer would recognise that choosing a rival instead of Honeywell for a single component would have virtually no impact on the likelihood of selling to GECAS, and so on for the next component, and for the next. The Decision had not even recognised this problem, and contained no attempt at an answer.

The CFI agreed with GE that the Commission had failed to explain why the “GE-only” strategy would necessarily be applied to avionics and non-avionics in the same way it was claimed to have been done in relation to engines. Starting from the position that the claimed pre-merger effects of GECAS and GE Capital had indeed been established in relation to the engine markets, the CFI nevertheless found that the Commission had not shown that the feared consequences on the avionics/non-avionics markets would materialise. As noted above, the Judgement sets out clearly the requirements that the Commission would have to satisfy in the present context, namely to show a likelihood that the claimed behaviour of GECAS in relation to Honeywell products would occur, and also that it would have created, in the relatively near future, a dominant position for Honeywell.⁸³⁾

The CFI clarified that a demonstration that the claimed behaviour was likely to occur could in principle consist of internal documents evidencing an intention to engage in the practices in question, or an economic assessment showing that it was in the merged entity’s interests to do so. The CFI noted that no documentary evidence existed, and also that the Commission had not attempted to compare the costs of the “GE-only” strategy with the anticipated benefits. Conse-

83) Judgement, para. 327.

quently, the CFI concluded that the Commission was not entitled to assume that the predicted behaviour would occur.⁸⁴⁾

In relation to the Commission's rather more cursory claims regarding the effect of GECAS and GE Capital on BFE products (i.e. at the airline level), the CFI correctly noted that it was not possible to simply transpose the SFE (airframer-level) logic to predict outcomes in a fundamentally different competitive context.⁸⁵⁾ It also noted that the Commission entirely failed to consider the costs and benefits – and hence the incentives – for GE to engage in the actions in question.

In view of the fact that the Commission had failed to pass the first limb of the test for demonstrating the claimed adverse merger effects – i.e. the likelihood that the behaviour would occur – the CFI did not need to consider the second – i.e. the likelihood that the behaviour would impair competition (create or strengthen dominance under the old ECMR). It noted, nevertheless, that the Commission would have fallen short on this test too, as a result of the very broad-brush, summary nature of its analysis. The Commission did not separately consider the effects of the claimed behaviour by GECAS and GE Capital on a market-by-market basis within the broad SFE and BFE categories of avionics/non-avionics products, nor did it assess differences in GECAS's activities between different types of aircraft that made use of the same avionics/non-avionics components. As a result, the CFI's Judgement makes clear that the Decision would have fallen down independently on the second limb of the test, even if the first had been met satisfactorily.⁸⁶⁾

2. Bundling

The Commission's application of theories of product bundling to predict post-merger harm was probably the single most widely discussed aspect of the Commission's Decision. It was also the theory of harm that received most attention from the Commission, the merging parties and third parties during the administrative proceeding. While the Decision devotes significant space to the topic, it ultimately fails to spell out a coherent and intelligible argument. Not surprisingly, therefore, the CFI found that the Commission had failed to make a case that bundling could be expected to impair competition as a result of the merger. To understand why this was the outcome of the CFI's review, it is worth briefly summarising the history of this part of the argument during the administrative procedure and before the CFI.

2.1 Background

2.1.1 Terminology

As a preliminary, it is useful to define some frequently used terminology. The various arguments and counter-arguments on bundling classified different variants of bundling on two dimensions: the form of the practice (i.e. how a bundle is created); and the rationale for engaging in such behaviour.

Form – pure (commercial or technical) and mixed: the principal distinction here is between pure bundling – whereby the products in question are offered by a supplier only in the form of a package (i.e. if a customer wishes to buy A from the supplier, they must also buy B from the

84) Judgement, para. 337 – 340.

85) Judgement, para. 344.

86) Judgement, para. 363.

same supplier) – and mixed bundling – whereby the products remain available on a stand-alone basis, but where there is an advantage (i.e. a discount) associated with buying all the products from the same supplier. Pure bundling, often also referred to as “tying”,⁸⁷⁾ can be implemented simply as a commercial commitment not to sell individual products (“commercial bundling”) or by means of some technical/physical product integration that makes it impossible to sell one product alone (“technical bundling”).

Rationale – strategic (leveraging) or non-strategic: this terminology was used during the proceedings to distinguish bundling that is motivated by the intention to foreclose or exclude a competitor (“strategic bundling”) from bundling driven by other reasons (e.g. efficiency), and not relying on the prospect of competitor foreclosure as a motivation (“non-strategic bundling”). The term “leveraging” was also used during the CFI procedure to refer to strategic behaviour that makes use of existing market power to reduce competition in another market.

These two dimensions are overlapping – i.e. mixed bundling can be either strategically or non-strategically motivated, and likewise for pure bundling.

2.1.2 Brief history of the bundling arguments

In the administrative procedure, the Commission first articulated a theory of harm based on bundling practices in its Statement of Objections (SO). This set out in some detail the results of an economic model that had been developed on behalf of a complainant (RR), referred to in the CFI’s judgement as the “Choi model”.⁸⁸⁾ The Choi model was a model of non-strategic mixed bundling. It was based on the observation that the merger would combine the supply of complementary products (engines and avionics/non-avionics), sold to the same customers. In these circumstances, economic theory predicts that there may be an incentive to reduce the prices of the products when they are sold together, and to increase the stand-alone prices – in other words to engage in mixed bundling by giving a discount on the bundle relative to the stand-alone prices.

The basic economic reasoning is straightforward: A supplier of a single product will typically set a price at the level where any further price reduction would cost more in terms of lost profit margin on existing (“infra-marginal”) sales than the gain it would bring in terms of sales of additional (“marginal”) units. If the same supplier now also has a complementary product to offer – i.e. one for which demand is positively linked to demand for the first product⁸⁹⁾ – then a small reduction in price will not only increase sales of the first product, but also for the second product. To put the theory in the context of the present case, if GE reduces the price of its engines, this may mean that more aircraft are sold, which in turn also means more demand for the other necessary components of the aircraft (including avionics/non-avionics).⁹⁰⁾ This effect is known as the

87) In the present case, the terms “pure bundling” and “tying” were used synonymously, although in general this is not the case – “tying” refers to a practice of making the purchase of one product conditional on the purchase of another from the same supplier, while “bundling” refers to the practice of charging a single price for a specific bundle of underlying products (i.e. in particular proportions).

88) For descriptions of the analysis by the authors of the model, see: *J. Choi*, A Theory of Mixed Bundling Applied to the GE/Honeywell Merger, (2001) 16 (1) Antitrust; and also: Frontier Economics, Unbundling the Arguments: Economic Issues raised by the proposed GE-Honeywell Merger, (2001) Frontier Economics Bulletin August.

89) Complements are products with the property that a decrease in the price of one product raises demand for the other product, and vice versa (i.e. the products show a negative cross-price elasticity of demand).

90) The assumption that demand for aircraft increases is not necessary for the conclusion that mixed bundling makes sense for a supplier of complements (bundling allows the supplier to capture the benefit of the engine price reduction through increased sales of complementary components won from competitors, even if overall sales of aircraft remain fixed).

“Cournot effect” and is in essence the same as the well-known “double marginalisation” effect that occurs in the context of vertical integration.⁹¹⁾ It does not depend on any exclusionary or otherwise anti-competitive motive – on the contrary, to the extent that it results in price reductions for customers purchasing the bundle, it is an efficiency gain that arises from the ability of the complementary suppliers to coordinate their pricing behaviour.⁹²⁾

The SO’s ultimate theory of competitive harm in relation to mixed bundling was that the Cournot effect would induce bundle discounts on the part of the merged entity, causing rivals to lose profitability as well as market share. In the long run, according to the Commission, rival engine manufacturers as well as avionics/non-avionics manufacturers would be forced to exit or become marginalised (and hence become ineffective as competitive constraints on the merged entity). The Choi model was supported in the SO by a discussion of the quantitative impact of the anticipated discounts on rivals’ profitability and their ability to remain viable in the market on this basis. The SO also briefly referred to other types of bundling, but without any detailed discussion of how and why they would occur.

GE responded to the SO and the Choi model in detail, submitting a number of economists’ reports to critique the Choi-Commission approach at various levels. One of the most fundamental criticisms was that the Cournot effect depends critically on the trade-off between marginal and infra-marginal effects that was described above – i.e. on the trade-off between a loss of profit margins on existing sales and an expansion of units in the form of new sales when prices are reduced. This assumes that the same price applies to all units; if not, there is no loss of profit on the existing ones. In fact, aircraft components, like many other high-value non-consumer goods, are sold by individual negotiation, meaning that the trade-off between marginal and infra-marginal sales may not materialise at all. While the picture is less clear-cut in the case of individual negotiation under uncertainty (uncertainty over the value placed by a customer on the various suppliers’ products affects the analysis in a qualitatively similar way to the requirement to charge the same price for all units⁹³⁾), the ultimate conclusion from this strand of the analysis was that the original results of the Choi model at a minimum significantly overstated the incentive to engage in mixed bundling. Other aspects of the technical economic critique showed that the results were unreliable in other ways. There were further rounds in the debate between economists on both side, but it is fair to say that the reliability and robustness of the original Choi results was called into serious question between the SO and the Decision.⁹⁴⁾

In the course of producing GE’s responses to the SO, and in particular to the Choi model, issues arose relating to access to confidential information that had been provided by the complainants. This affected only the final stage of the Choi argument, namely the quantification of the impact of

91) A vertically integrated supplier will generally set a lower downstream price than a non-integrated downstream supplier (all else equal), because it takes account of the effect of its pricing on the profits of the combined entity; a non-integrated upstream supplier, by contrast, charges a third-party downstream supplier a mark-up on top of its cost, and the downstream supplier in turn charges a mark-up on top of the already marked-up input price (i.e. “double marginalisation”), resulting in lower sales and profits for the vertical chain as a whole.

92) The net effect on market prices and customer welfare depends on the balance between the price reduction to bundle buyers and the price increase to stand-alone component buyers. But as I discuss further in the text, the competitive concern expressed by the Commission was predicated on consideration of the adverse effect that price reductions and loss of market share to the cut-price bundle would have on rivals’ ability to compete.

93) This is because – as with uniform pricing – uncertainty means that the supplier cannot tailor his price to each customer’s precise preferences between competing suppliers’ products.

94) This was further confirmed by the internal report of the economist retained by the Commission to assess the merits of these arguments. The report was provided to GE and the CFI shortly prior to the CFI hearing, and is referred to in the Judgement, specifically in relation to procedural arguments (Judgement, para. 668 – 673).

the bundling on specific competitors' profits. The more fundamental debate about the extent of any incentive to engage in mixed bundling, and also on the likely qualitative impact of the practice on competitors, was not affected by the non-disclosure of certain quantitative aspects of the analysis.

In the Commission's Decision, any explicit reference to the Choi model or its results had been removed. Instead, the Decision merely noted the following: "The various economic analyses have been subject to theoretical controversy, in particular as far as the economic model of mixed bundling, prepared by one of the third parties, is concerned. However, the Commission does not consider the reliance on one or the other model necessary for the conclusion that the packaged deals that the merged entity will be in a position to offer will foreclose competitors from the engine and avionics/non-avionics markets."⁹⁵⁾

Nevertheless, the discussion of mixed bundling that had been in the SO on the basis of the Choi model was largely carried over to the Decision, but without any specific results derived from the model, or any attribution. This discussion formed the centrepiece of the bundling arguments in the Decision.⁹⁶⁾ The principal prediction, as in the SO, was that both GE's and Honeywell's competitors would find their market shares and profitability eroded by the merged entity's bundling, and would eventually be forced to withdraw from the markets for LCA engines and for avionics/non-avionics respectively, creating or strengthening dominant positions for the merged entity as a result. As in the SO, the Decision contained a small number of isolated references to other forms of bundling, including potentially strategic behaviour, but only in the briefest terms and without any attempt at explaining why such practices would ultimately occur.⁹⁷⁾

In the proceedings before the CFI, the Commission then took a rather different tack from that which it had pursued during the administrative procedure. According to the Commission, its Decision had been concerned (primarily) with "leveraging" of market power, rather than with non-strategic mixed bundling.⁹⁸⁾ It also argued that practices such as predatory pricing – which had not been alleged in the Decision – might be expected to result from the merger.⁹⁹⁾ The non-strategic Choi approach was not presented as a key pillar of the Commission's argument.

2.2 Bundling: the CFI's assessment

The CFI noted at the outset that the merged entity's behaviour is a vital ingredient in the Commission's bundling theory – the lack of horizontal overlap in the LCA engines and avionics/non-avionics markets meant that the merger would have no prima facie effect on the markets.¹⁰⁰⁾ The relevant test against which the bundling theory was to be assessed was once again the two-part test set out above, addressing both whether the claimed behaviour would be feasible and likely to

95) Decision, para. 352.

96) Decision, para. 350 – 404.

97) See Decision, para. 351, which states that the sale of complementary products "may take the form of pure bundling" and that "pure bundling may also take the form of technical bundling" – although in neither case is there any specific claim that this would occur as a result of the merger. See also Decision, para. 415, which claims that post-merger GE would be able to make the sale of certain Honeywell products contingent on the purchase of GE engines – i.e. to use various low-value Honeywell products (in relation to which the Commission did not claim that Honeywell is dominant) as a lever to force the sale of high-value engines. This variant of the theory is not developed further in the Decision.

98) See also *G. Drauz*, *Unbundling GE/Honeywell: the Assessment of Conglomerate Mergers under EC Competition Law*, (2002) 25 *Fordham International Law Journal*.

99) The closest the Decision came to predicting predatory pricing was the statement that bundling would lead competitors to exit the market in the short term "insofar as price is below average variable cost", but without attempting to argue that such an outcome would indeed be expected (Decision, para. 398).

100) Judgement, para. 401.

occur; and whether the occurrence of the behaviour would be likely to create or strengthen dominance in the relatively near future.¹⁰¹⁾

As set out above, it is clear from the Decision that no serious attempt was made to argue explicitly that anything other than mixed bundling would take place after the merger, with moreover no suggestion that this would be anything other than non-strategic (i.e. Choi-style bundling). Nevertheless, in view of the Commission's claim to the contrary in the course of the CFI proceedings, and the various references in the Decision to terms that might be associated with other forms of bundling or leveraging, the CFI set out to examine the Commission's case in relation to each of the various potential practices said to have been envisaged: pure (commercial) bundling, technical bundling, non-strategic (Choi) mixed bundling, and strategic mixed bundling. Not surprisingly, where a particular term or form of behaviour was mentioned in only a cursory way in the Decision, the CFI took little time in concluding that the Decision did not make a case in predicting this type of behaviour. In summary, the CFI's conclusions on each of the identified bundling practices were as follows.

Pure (commercial) bundling: the CFI considered both the use of (GE) engines and (Honeywell) avionics/non-avionics products as potential tying goods, in line with the Commission's arguments during the CFI procedure.¹⁰²⁾ The CFI considered the various scenarios in which pure bundling might occur (i.e. regarding the type of product – whether selected by the airframer or airline, and whether engines or avionics/non-avionics – that could be used as tying and tied goods respectively). Its general conclusion was that the Commission had failed to undertake a sufficiently detailed analysis of the degree of market power enjoyed by the merged entity in relation to each of the potentially affected products, and hence could not conclude that such a strategy would be successful.¹⁰³⁾ Moreover, the Commission had not considered the relative costs and benefits of the strategies it predicted. Particularly in relation to the theory that a low-value avionics product could be used to force the sale of multi-million dollar engines that were not the customer's first choice, the CFI rightly considered that this was extremely implausible absent detailed supporting evidence or analysis. Interestingly, the CFI noted (correctly) that the use of GE's engines as a tying good could be effective only if customers had "a marked preference" for these engines – i.e. in economic terms, if GE had substantial market power in relation to these products – and that the Commission had not carried out a specific examination to ascertain for which platforms and products a tying strategy could have been effective.¹⁰⁴⁾ This suggests that the finding of dominance in respect of GE's engines (which the CFI had confirmed) was not in itself regarded as sufficient to establish the required level of market power for a successful tying strategy.¹⁰⁵⁾ Finally, the CFI also found that the Commission should have considered the deterrent effect of Art. 82 EC in relation to pure bundling or tying practices.

101) Judgement, para. 405.

102) Theories of tying typically involve the use of one product in which the tying party has a position of substantial market power (the "tying good") to force sales of another product in which there is more competition, absent the tying practice (the "tied good"). As noted above, there is one reference in the Decision to the possibility of using Honeywell products as tying goods to force the sales of GE engines (Decision, para. 415).

103) Judgement, para. 418 – 420.

104) Judgement, para. 418.

105) This is of course only one possible reading of the extract in question – another (less likely?) view is that the CFI simply failed to appreciate fully the link between the requirement of "a marked preference" for the putative tying good and the assessment of dominance in respect of the same good. Interestingly, the CFI questions even whether a 100 % monopoly position in the tying good can be sufficient for the profitable implementation of pure bundling (Judgement, para. 421 – 423).

Technical bundling: the CFI observed that the only type of technical bundling that would be made possible as a result of the merger related to technical integration of GE's engines and Honeywell's avionics/non-avionics products. Integration between engines and avionics/non-avionics components had not occurred in the past, although the Decision noted that there was a development project underway at the time, which was exploring a degree of integration of this kind.¹⁰⁶⁾ However, the Decision had stopped short of making any specific claims about future technical bundling that might be made feasible by the merger. Accordingly, the CFI came to the conclusion that the Decision had not even established the capability of the merged entity to engage in technical bundling in the relatively near future, let alone that it would actually do so.¹⁰⁷⁾

Mixed bundling: the CFI's Judgement distinguishes two strands of argument by the Commission on mixed bundling. First, the Commission argued that the Cournot effect would give the merged entity an incentive to offer discounted bundles (i.e. non-strategic mixed bundling); and second, that the merged entity would have a strategic incentive to offer bundles in order to increase its market power (strategic mixed bundling). As a preliminary to assessing the likelihood of either of these variants, the CFI considered the Commission's claim that there was evidence of past mixed bundling, to which it referred in support of its prediction of such behaviour after the merger. Most of the examples the Commission had put forward related to bundling of avionics and non-avionics products, without including engines, and hence were regarded by the CFI as irrelevant to the prediction of mixed bundling due to the merger. The one example involving engines along with avionics/non-avionics products in fact showed a customer forcing a bundled offer to be unbundled – i.e. it showed the failure of an attempt at mixed bundling. While the CFI accepted that the lack of evidence on mixed bundling involving engines was not in itself evidence against the mixed bundling theory (Honeywell had itself obtained the ability to offer a significant product range, including engines and avionics/non-avionics products, only a relatively short time prior to the GE/Honeywell merger, via another acquisition),¹⁰⁸⁾ it nevertheless had to conclude that the Commission's examples could not provide any support for the likelihood that bundling would occur post-merger. The CFI also noted that in view of the significant differences in value between GE's LCA engines and Honeywell's various smaller engines, any evidence on bundling involving Honeywell engines would in any event be of limited relevance for assessing the likelihood of bundling involving GE engines.

Non-strategic mixed bundling: the CFI began its assessment of the arguments on non-strategic mixed bundling (i.e. Cournot effects, etc.) by observing that the Decision made plain that the Commission was not seeking to rely on the Choi model in support of its case.¹⁰⁹⁾ The central issue was therefore whether the general discussion that remained in the Decision on this issue, after explicit references to the Choi model had been removed, could on its own constitute the required evidence for a prediction of the behaviour in question after the merger. The CFI's answer to this question is a clear "no". In particular, the CFI found that the Commission had made no attempt to analyse the *incentives* to engage in mixed bundling. In view of the controversy on precisely this issue in the administrative procedure, the CFI rightly considered that it was not enough for the Commission to claim that the existence incentive for bundling was simply "a direct and automatic consequence of the economic theory of the

106) This was the "more electric engine" project (Decision, para. 291).

107) Judgement, para. 430.

108) Honeywell had acquired Allied Signal in 1999. See Commission decision of 1st December 1999 in Case COMP/M.1601 – Allied Signal/Honeywell.

109) Judgement, para. 444 – 446.

Cournot effect” that required no further support.¹¹⁰⁾ The CFI also noted that the logic of the Cournot effect would be affected by the fact that a large part of the engine sales attributed to GE are made by CFMI, and that CFMI’s 50 % shareholder Snecma would derive no benefit from any bundle discounts designed to promote sales of GE/Honeywell avionics/non-avionics products. The failure of the Commission to take account of this fact was noted by the CFI as a further flaw in the analysis in the Decision.¹¹¹⁾

Strategic mixed bundling: the CFI took the view that the certain passages in the Decision could be construed as containing references to strategic mixed bundling; i.e. bundling practised by the merged entity “in order to oust its competitors”.¹¹²⁾ Closer examination of the extracts from the decision to which the CFI refers in support of this view shows that the CFI’s interpretation of the decision is rather generous to the Commission, giving it the benefit of the doubt on the basis of its use of vague but conceivably relevant language in the Decision. In any event, the Judgement considers whether the passages in the Decision construed as referring to strategic bundling contain sufficient basis for sustaining such an argument. Not surprisingly, given the lack of any explicit discussion in the Decision of strategic mixed bundling, let alone of the basis for expecting that incentives for such behaviour would arise, the CFI finds that the Commission’s prediction is not supported. Again the CFI identifies internal documents and economic analyses as potential forms of evidence for the kind of behaviour in question, as well as suggesting that the Commission should have taken account of the deterrent effect of Art. 82 EC in the context of a prediction of behaviour designed to foreclose competitors.

2.3 Bundling: conclusion

The CFI looked closely at any possible theory of harm relating to bundling that may have been read into the Decision. The amount of space dedicated in the Judgement to each of the variants reflects their respective roles in the Decision: only the mixed bundling theory, and only without any claim of exclusionary strategic intent, could realistically be regarded as having been developed to anything approaching a viable basis for prohibition in the Commission’s decision. But even for this version, in common with the others, the CFI found that the Commission had fallen at the first hurdle, in failing to explain – let alone prove to the required standard – why the merged entity could indeed be expected to behave in this way. Because the Commission’s arguments on bundling in the decision were generally vague, unclear and unsupported by any analysis of incentives, the CFI’s assessment is unable to offer much in the way of specific guidance as to the requirements for such a theory to be successfully established.

There are of course exceptions to this in the form of interesting comments on specific elements of the argument – for instance the implicit suggestion that a finding of dominance does not necessarily suffice to establish the existence of a sufficient degree of market power to permit successful tying strategies (see above). But overall, through no fault of the CFI, the Judgement’s assessment of bundling adds relatively little to what was already known about the burden on the Commission in relation to the use of bundling as a legitimate theory of harm in merger control.¹¹³⁾

110) Judgement, para. 456.

111) Judgement, para. 457 – 461.

112) Judgement, para. 463.

113) In particular on the basis of the CFI and ECJ judgements in *Tetra Laval*.

3. Vertical foreclosure

3.1 The Commission's vertical foreclosure theory (engine starters)

Alongside its various conglomerate theories of harm, the Commission's Decision also set out a more orthodox vertical foreclosure theory as one of the anticipated effects from the merger.¹¹⁴⁾ The concern related to the combination of Honeywell's production of engine starters – a small but vital component of aircraft engines (accounting for around 0.2 % of the total cost of an engine) – with GE's position in the production of LCA engines. Prior to the merger, there were two major suppliers of starters for LCA engines: Honeywell and Hamilton Sundstrand (HS), a company affiliated to P&W.¹¹⁵⁾ According to the Commission, only Honeywell could be regarded as an independent supplier to the open market, as HS was primarily supplying the requirements of its affiliate P&W.¹¹⁶⁾ After the merger, according to the Commission's argument, Honeywell would have an effective monopoly over the supply to "rival engine manufacturers" (i.e. effectively RR, since P&W has its own supply source), which it would have an incentive to use in order to disadvantage its rival(s) relative to GE's engine business. In short, the claim was that Honeywell could disrupt or delay supply of starters to RR, or raise their price, in order to harm RR's ability to supply engines to its customers, to the ultimate benefit of GE. P&W would have no interest in assisting RR in this regard by beginning to supply it with starters, particularly in view of the low value of these components as compared with the value of an engine (making it, according to the Commission, much more attractive to allow RR to be disadvantaged in the supply of engines than to capture the small profits available from supplying starters to RR).

During the administrative procedure, GE set out a range of factors and evidence that militated against such a strategy being successfully adopted by the merged entity, including low barriers to entry and the existence of alternative suppliers, the fact that HS does in fact supply competing engine manufacturers, the existence of contractual constraints on the ability to disrupt supply, the ability of airframers and airlines to obtain supply of engine starters directly, and the fact that there was no indication that Honeywell had engaged in similar behaviour in the past despite already being in a position where it supplied direct competitors in the small engine segment. The Commission rejected each of those arguments in its Decision. GE had offered a structural remedy (divestment of the Honeywell starter business), but the Commission rejected this too on the grounds that the offered divestment would not have guaranteed that a viable stand-alone business could be created from the divested assets.

3.2 The CFI's findings on vertical foreclosure

The CFI took the Commission's findings of fact and its assessments on economic questions such as the importance of barriers to entry as its starting point, finding that the Commission was entitled to reach those conclusions, not least since GE did not specifically challenge them in its pleadings before the CFI.¹¹⁷⁾ The CFI also noted, correctly, that the assessment of vertical foreclosure theories in a merger control context is closely analogous to the assessment of conglomerate theories: in both cases, the prediction of harm relies on the prediction of anti-competitive behaviour.

114) Decision, para. 419 – 427.

115) Both P&W and HS are owned by the same ultimate parent company, United Technologies Corporation (UTC).

116) In fact, HS was supplying other engine manufacturers at the time of the Decision, but according to the Commission this related only to legacy supply agreements that had been entered into before HS became affiliated with P&W (Decision, para. 421 and footnote 122).

117) Judgement, para. 292.

The CFI affirmed explicitly that the Commission would need to produce “convincing evidence as to the likelihood of that behaviour” in order to make its case on vertical foreclosure – i.e. precisely the same first necessary step in the demonstration of competitive harm as had been set out in relation to conglomerate effects.¹¹⁸⁾ Interestingly, the CFI does not explicitly mention the second limb of that test in the context of vertical foreclosure, although there appears to be no conceivable reason why the impairment of competition as a result of the behaviour in question would not need to be established in a vertical case (I return to this issue below).¹¹⁹⁾ However, the CFI also found that in the present circumstances – based on the rather simplified fact pattern determined by the Commission – the market circumstances were such that an incentive for the merged entity to engage in the claimed behaviour was “clear”.¹²⁰⁾

The CFI reached this conclusion particularly in view of the fact that the value of engine starters is low by comparison with the value of engines, from which it deduced that the trade-off between a loss of engine starter business (if supply to RR were reduced or disrupted) would be far outweighed by any advantage in the engine market. In the CFI’s view, if the incentive to engage in the behaviour is obvious on the basis of the “economic and commercial realities of the particular case”, this could be sufficient for a finding that the claimed behaviour would be likely to occur.¹²¹⁾ Consequently, the Commission had done enough, in the CFI’s view, to conclude legitimately that the merged entity would engage in vertical foreclosure in relation to engine starters in the way the Decision predicted – except to the extent that it might be deterred from doing so by Art. 82 EC.

The CFI noted that the Commission had not claimed that GE/Honeywell would enjoy a dominant position in the supply of starters, but found that the foreclosure strategies described could constitute an abuse of GE’s dominance in relation to LCA engines.¹²²⁾ According to the CFI, the more effective the foreclosure strategies and the clearer the commercial incentive to engage in them, the more obviously they would constitute an abuse under Art. 82 EC.¹²³⁾ The CFI held that the Commission had committed an error of law in failing to assess the deterrent effect of Art. 82 EC, and found that the Commission’s conclusions on engine starters could not stand – for the sole reason that the Commission had failed to account for the effect of Art. 82 EC on the likelihood that the behaviour would materialise.¹²⁴⁾

As I discuss further below, the most striking aspect, in my view, of the CFI’s treatment of vertical effects is the readiness with which it accepts the Commission’s substantive arguments about likely future behaviour. This appears to contrast with the approach taken by the CFI in relation to conglomerate effects.

118) Judgement, para. 327 and 405.

119) Judgement, para. 295.

120) Judgement, para. 299.

121) Judgement, para. 297.

122) This is a peculiarity in the CFI’s analysis: for the Commission’s foreclosure arguments (as endorsed by the CFI) to make any sense, Honeywell must be very clearly dominant over supply of starters to RR (otherwise RR would not be at the merged entity’s mercy to the extent that its entire engine supply business could be disadvantaged to the significant degree predicted). Perhaps the CFI considered that it would be on safer legal ground if its argument on this issue did not rely on a *de novo* assessment of dominance rather than basing itself on a conclusion explicitly reached in the Commission’s Decision.

123) Judgement, para. 309.

124) It is interesting to note that the CFI did not mention the second leg of its substantive test – i.e. establishment of the likelihood that the predicted behaviour would lead to the claimed adverse effects on competition – before moving from the first leg (likelihood that the behaviour would occur) to the Art. 82 EC issue.

4. Conclusion: proving vertical and conglomerate effects

A frequently asked question is what the Judgement in GE, along with that in Tetra Laval, means for the Commission's ability to pursue mergers on non-horizontal (i.e. vertical and conglomerate) grounds. In my view, the answer after GE is, in general terms, just as it was beforehand (after Tetra Laval). In principle, the Commission is entitled to prohibit any merger that meets the test of creating a substantial impediment to effective competition. It is certainly conceivable from an economic perspective that there could be mergers that raise such a risk on vertical or conglomerate grounds, and the CFI has confirmed explicitly that the Commission must prohibit such mergers – provided it can establish the risk to competition to the required evidential standard.¹²⁵⁾ The standard is in practice more demanding than for horizontal mergers and this makes sense from an economic perspective in view of the invariably more remote and speculative mechanisms of harm that are involved in conglomerate and vertical mergers as compared with horizontal ones.¹²⁶⁾

In the case of a horizontal merger, once it has been proved to the requisite standard that an important competitive constraint will be lost (and is unlikely to be replaced, e.g. by entry or changes in the behaviour of competitors), it follows almost immediately that the merged entity will have the incentive and ability to behave in a less competitive way – e.g. to raise prices. In a conglomerate or vertical merger, the only change that is typically obvious and immediate is that it becomes *possible* for certain types of behaviour to occur that were not possible beforehand (e.g. to construct pricing strategies that encompass multiple products that are combined by a merger). The question of *incentives* for the behaviour in question is almost invariably more complex. And even when incentives for strategies such as bundling can be established, the question of the impact of the behaviour on competition remains to be addressed – again, by contrast to the horizontal situation, where the effect on competition is an immediate consequence of the concentration.

The CFI repeatedly affirmed the need to address precisely these separate stages of reasoning, in setting out the general requirements that the Commission must meet in order to prove its case in relation to a conglomerate or vertical merger. In particular, since the theories of harm in such cases are typically based on the prediction of a certain form of post-merger behaviour which is in turn forecast to impair competition at some point, the Commission must demonstrate first that the behaviour in question is likely to occur, and second that it will impair competition (or, under the old ECMR test, create or strengthen a dominant position) within a reasonably short timeframe.¹²⁷⁾

But beyond affirmation of the general principles established in Tetra Laval, the GE Judgement adds little to understanding how high exactly the bar has been set for the Commission to succeed on a conglomerate case. This is not the CFI's fault: it has tried to indicate the kinds of specific evidence that it would regard as suitable for establishing a case.¹²⁸⁾ Rather, the Commission's case on conglomerate effects in the GE/Honeywell Decision was simply not sufficiently well articulated or supported to give the CFI the opportunity to identify specific elements of the case that met at least part of the relevant test. It therefore remains unclear how realistic it is in practice for the Commission to be able to substantiate a case on conglomerate effects, particularly in the absence of unambiguous internal documents evidencing an intent to engage in a certain practice post-merger (which one might expect to be an increasingly rare phenomenon, at least among sophisticated companies with competent competition law advisers).

125) Judgement, para. 65.

126) Judgement, para. 65 – 69 (referring to the ECJ's judgement in Tetra Laval).

127) Judgement, para. 327 and 405.

128) Judgement, para. 333.

The one surprise – and indeed anomaly – in this regard is the CFI's stance on the vertical foreclosure issue (i.e. engine starters). As the CFI rightly noted, the assessment of vertical effects is in principle directly analogous to the assessment of conglomerate effects.¹²⁹⁾ Yet the one element that appears to have prevented the CFI from accepting the Commission's substantive conclusions on this issue was the Commission's failure to take account of the deterrent effects of Art. 82 EC: the CFI fully accepted the conclusion that (absent Art. 82 EC) the combined entity would in fact engage in a crude foreclosure strategy, using its supposed control over the supply of a tiny engine component to effectively drive out one of only two competitors in the much larger LCA engine market.

A moment's reflection should suffice to make clear how inherently implausible this is in the absence of major barriers to entry in the starter market – which the Commission asserted, contrary to GE's case, but never attempted to prove¹³⁰⁾ – and without even a hint that similar strategies had been attempted in the past. Even leaving aside the other practical obstacles to such a strategy, is it really likely that RR, faced with the prospect of supply disruptions in relation to a low-cost, low-technology component, would simply resign itself to exiting the LCA engine market rather than developing any one of a number of strategies for alternative supply sources?¹³¹⁾

This is plainly a key question to address under the second limb of the CFI's conglomerate test – i.e. the likelihood that the behaviour in question would, within a relatively short timescale, lead to a significant detriment to competition. As noted above, the CFI did not even mention the second limb of the test in relation to the vertical foreclosure theory, despite noting the analogy between vertical and conglomerate effects.¹³²⁾ One possible explanation for this is that the CFI did not need to address the second limb of the test, since the Commission had failed to meet the first – the Art. 82 EC question is treated as an element of the first limb (assessing the likelihood that the behaviour in question would occur). But this does contrast with the CFI's assessment of conglomerate effects, where both limbs of the test are addressed explicitly, both in the formulation of the relevant test,¹³³⁾ and in its application to the particular circumstances.¹³⁴⁾

It is difficult to avoid the sense that the CFI was considerably more quick to accept the Commission's conclusions on this strand of the argument than it was in relation to conglomerate effects – i.e. that a *de facto* lower standard was applied to the vertical strand of the argument than to the conglomerate aspects. Perhaps this is explained in part by the fact that the theory of harm was more straightforward, and hence could be more readily and clearly articulated by the Commission, than was the case for the bundling and GECAS theories (both of which undoubtedly suffered from a distinct lack of clarity in their presentation in the Decision). It may also be the case that the CFI's conclusions were influenced by its ability to proceed on the basis of a conveniently simplified fact pattern, having

129) Judgement, para. 295.

130) The Decision contains two sentence claiming high barriers to entry, together with two footnotes (Decision, para. 423 and footnotes 123, 124).

131) It is interesting to note the approach taken by the Commission itself, only a few months after the GE/Honeywell Decision, when it found itself assessing very similar arguments in a distinct case in which GE acquired a leading supplier of certain small but essential engine components. While the facts of the case obviously differed from those of GE/Honeywell, the Commission carried out a rather more detailed assessment of the vertical issues than it had done in relation to engine starters in the Decision, and concluded that factors similar to those raised by GE in relation to engine starters were sufficient to conclude that the transaction would not lead to vertical concerns. The transaction was approved in a first-phase unconditional clearance – see Commission decision of 17th April 2002 in Case COMP/M.2738 – GEES/Unison.

132) Judgement, para. 295.

133) Judgement, para. 327 and 405.

134) Judgement, para. 354 – 363 and 470 – 471 (although the latter passages note merely that there is no need to address the second limb in view of the Commission's failure to establish the first).

accepted the Commission's case on the basic premises of the argument on the grounds that GE did not explicitly challenge these premises during the CFI procedure.¹³⁵⁾ More speculatively, it may also have been attractive to the CFI to be in a position to issue a clear ruling in relation to the role of Art. 82 EC in a conglomerate or vertical assessment (which would not have arisen in quite the same way if the Commission's substantive arguments had been rejected). Whatever the reasons, it would be cause for concern if the CFI's very cursory approach to endorsing the Commission's similarly brief arguments on vertical foreclosure were regarded as a template for the treatment of similar issues in future merger cases, and it would certainly undermine the clear position taken by the CFI elsewhere in relation to the requirements on the Commission in proving conglomerate or vertical effects.

IV. Concluding thoughts

The CFI's ruling on the Commission Decision in GE/Honeywell came over five years after the commencement of the administrative merger control procedure in that case, and over four years after the prohibition of the transaction. Much has changed in EC merger control in that time. There have been a number of high-profile reversals of Commission merger decisions by the European courts, involving what some have seen as an increased intensity of judicial oversight of the Commission's substantive evaluation of notified transactions. There has been significant institutional and procedural change, including the disbanding of the Merger Task Force, the institution of a Chief Economist with a team of economists who are closely involved in complex merger cases, as well as a number of innovations in the system of checks and balances governing the merger control process. There is now a new regulation governing the Commission's merger control procedure, with a changed substantive test for approval or prohibition of transactions, and economics-based guidelines have been issued by the Commission in relation to the assessment of horizontal mergers.¹³⁶⁾ More broadly, DG Competition has made significant progress in a major programme of reform of the approach to substantive assessments under all areas of EC competition law, often described as the "more economic approach".

All of these changes mean that the conclusions of the CFI in relation to GE/Honeywell are to some extent of only historical interest: for instance, the new ECMR means that the assessment of GE's pre-existing dominance yields few conclusions that are directly applicable in relation to today's merger control process; while at least some questions about the standard of proof in conglomerate cases that were open at the time of GE's application for annulment of the Decision were answered by the CFI and ECJ in *Tetra Laval*.

Nevertheless, the GE Judgement is of great interest in a number of respects, particularly in the ways in which it extends the recent line of judgements by the European courts in relation to challenges of merger decisions, and the insights it gives more generally into the thinking of the courts on issues of wide relevance across merger control and other areas of competition policy. I have restricted my analysis of the Judgement to a sub-set of the numerous issues considered by the CFI, but even on this somewhat limited basis a number of high-level observations and conclusions can be offered.

1. The assessment of dominance

For the reasons I have set out in some detail, I have certain reservations about the CFI's approach to the assessment of dominance. To some degree my comments may seem unfair in view of the

135) Judgement, para. 292.

136) European Commission, Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, (2004) Official Journal C 31, 5th February 2004.

(nominally) relatively limited role of the CFI in reviewing the Commission's substantive analysis (see also my comments above in the Introduction). But it is hard to avoid the impression that, at a time when the Commission is actively moving forward in its development of policy and practice towards dominant firms, the CFI's approach is a step backwards, albeit perhaps only a small one. My particular concerns relate to the relatively formal and mechanistic approach of the CFI to issues of market structure analysis and to the assessment of factors that are regarded as strengthening dominance (i.e. in the present case, financial strength and the role of GECAS). In my view, these parts of the Judgement indicate too little reflection on what competition actually entails, and hence what it means to describe a firm as dominant and what kind of evidence could give relevant insights. In relation to financial strength – a poorly articulated and developed concept in competition policy at the best of times – the CFI does little to advance the necessary refinement of the analysis to distinguish between efficiency on one hand and distortion of competition on the other. Of course this is a difficult area conceptually and it would have been unreasonable to expect the CFI to break significant new ground here, but to the extent that the CFI validates some of the less convincing elements of the Commission's case, this does not make for helpful judicial precedent.

Finally, it is sometimes hard to relate the standards of proof applied by the CFI in relation to the dominance assessment to those applied in relation to potential merger effects.¹³⁷⁾ Of course there is an important difference between the assessment of evidence on what has already occurred and evidence on what is expected to happen in the future, and the CFI is absolutely right to note that in order to demonstrate the latter type of claim to the same underlying standard of proof will require rather more and better evidence than is required for the latter.¹³⁸⁾ But proving that a certain state of affairs already exists, and exists for a particular reason, is not necessarily a trivial matter either, particularly if it involves the establishment of a complex chain of causality. To take an example, the CFI's willingness to accept the Commission's conclusion that GE Capital and GECAS had contributed to GE's LCA engine dominance, based on no more than a handful of (often ambiguous) individual anecdotes, and in the absence of any evidence relating to the market as a whole, is hard to square with the requirement to confirm that "the evidence relied on ... contains all the information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it".¹³⁹⁾

2. The assessment of vertical and conglomerate effects

The weakness of the Commission's case on conglomerate effects as set out in the Decision prevented the CFI from doing any more than to dismiss the Commission's case in fairly summary and comprehensive terms. Particularly in the light of the Tetra Laval judgements, it can have come as no surprise that the CFI would find it impossible to uphold these parts of the Decision. As I have already noted, this unfortunately means that the Judgement does not offer a great deal of additional guidance on what it will take for the Commission successfully to defend a conglomerate merger case before the Community courts. To its credit, the CFI has endeavoured to give

137) Although I have not considered the CFI's assessment of horizontal merger effects in this article, I believe a similar apparent divergence exists as between the assessment of conglomerate effects and some aspects of the assessment of the horizontal effects of the merger: for the clearest example of a horizontal effect on which the CFI accepts conclusions drawn by the Commission on the basis of limited and ambiguous evidence, see the treatment of small marine gas turbines (Judgement, para. 585 – 609). See also *W. Kolasky*, GE/Honeywell: Narrowing, but not closing, the Gap, (2006) 20 (2) Antitrust.

138) Judgement, para. 65 – 69.

139) Judgement, para. 63 (referring to the ECJ's judgement in Tetra Laval, at para. 39).

some indications of the type of evidence it would expect to see, perhaps also in an attempt to avoid the inference being drawn from the judgement that it is now *de facto* impossible for the Commission to bring a successful conglomerate merger case. Nevertheless, a review of the GE Judgement leaves the reader with a clear sense of scepticism on the part of the CFI over the general viability of conglomerate theories of harm as a basis for a prohibition under the ECMR.

An anomaly in this regard is the CFI's conclusion on the vertical foreclosure issue. The CFI has rightly confirmed that in principle the approach to vertical issues of this kind is no different from that to conglomerate effects: in both cases, the concern is predicated on a prediction of future behaviour that would in turn lead to an adverse effect on competition. I have speculated on some possible reasons for the apparent divergence in approaches, and perhaps the most obvious explanation remains the relative simplicity and clarity of both the theory of harm and the relevant facts as accepted by the CFI (notwithstanding that this represented a rather simplified version of the facts, given the controversy during the administrative procedure). But this does not, for example, explain why the CFI failed to apply the second limb of its own test to this part of the argument. If the substantive assessment of the Commission's case on vertical foreclosure (absent consideration of the effect of Art. 82 EC) were regarded as a valid precedent in its own right, it could be seen as a rather puzzling exception to the general consistency of the message established by the CFI in both *General Electric* and *Tetra Laval* regarding the assessment of non-horizontal merger effects.

3. Economic evidence

The GE/Honeywell case revolved heavily around competing economic models, economic assessments of evidence, and complex economic reasoning applied to the evaluation of merger effects. How did the economic evidence on both sides fare in the eyes of the CFI?

In one sense, the question is impossible to answer: a substantial volume of explicitly "economic" evidence (in the sense of economists' reports on more or less technical topics) was produced and submitted both in the administrative procedure and before the CFI. In addition, the core arguments and submissions on all sides – Commission, GE and Honeywell, intervening third parties – reflected input from economic advisers. The CFI itself engaged in a significant amount of reasoning of an essentially economic nature in evaluating the parties' arguments, which of course was inevitable in view of the subject matter of the proceedings.

It is not possible to identify any individual piece of explicitly economic evidence that played a pivotal role before the CFI. But on the other hand, it is clear that the absence of an economically coherent and supported argument was one principal factor in the Commission's failure to sustain its case on conglomerate effects. Moreover, the criteria articulated by the CFI for assessing vertical and conglomerate effects, as well as the specific examples of potential supporting evidence identified in this context, leave no doubt that economic evidence – properly applied – is effectively a necessary ingredient for the Commission to succeed in defending a case of this nature before the CFI. It seems equally clear that the countervailing economic evidence submitted by GE during the administrative procedure in response to the Choi model played a key role in bringing about a situation where the Commission could not ultimately sustain its case: in view of the unresolved controversy over the Choi model, the CFI rightly concluded that it could not simply be assumed as a matter of economic common sense that an incentive for bundling would arise from the merger.¹⁴⁰⁾

140) Judgement, para. 456.

A more difficult question to answer is what would have happened if the Commission had chosen to maintain the Choi model (or some variant thereof) in its Decision, having dealt in some way *prima facie* reasonable with the objections raised by GE's economists. In such a situation, the CFI would presumably defer to the Commission to at least some extent, in accordance with the clear precedent confirming the Commission's "margin of assessment with regard to economic matters".¹⁴¹⁾ On the other hand, the Commission would still need to be in a position to provide "convincing evidence" in support of its predictions of future conduct.¹⁴²⁾ There is clearly some potential tension between these two principles, particularly if the margin of assessment is defined in a relatively generous way (as seems to have been *de facto* the case in relation to the CFI's scrutiny of significant portions of the GE/Honeywell decision). It remains to be seen how the CFI would strike the balance in any future instance where the Commission has been able to mount a more clearly articulated and economically supported case. In its GE Judgement, the CFI may have confirmed that the door is not very wide open for conglomerate-type arguments – but it certainly has not locked it.

Abstract

In December 2005, the Court of First Instance (CFI) issued its judgement in General Electric v. Commission, in which it decided on GE's appeal against the European Commission's 2001 prohibition decision in the GE/Honeywell merger case. The Commission's decision had received widespread attention particularly for the non-horizontal (vertical and conglomerate) aspects of its case, and the CFI rejected the Commission's case on those aspects, although upholding the prohibition decision overall. The article considers the economic evidence and reasoning underlying the CFI's conclusions on three important areas of the Commission's decision: the finding of a pre-merger dominant position for GE; the prediction of various conglomerate effects arising from the merger; and the prediction of vertical foreclosure effects from the merger.

In relation to the assessment of dominance, the article notes the CFI's willingness to endorse the Commission's reasoning, both on market share analysis and on the question of whether GE's financial strength and the activities of other GE subsidiaries could have contributed to GE's dominance in aircraft engines. In relation to these issues, the article concludes that the standard of evidence considered acceptable by the CFI was surprisingly low, and that the CFI's analysis of the Commission's case failed to engage with the economic basis for concluding that particular economic actions should be construed as promoting dominance.

In relation to the assessment of conglomerate effects, the article sets out the two principal effects predicted by the Commission: GE's claimed use of its subsidiary GECAS to harm Honeywell's competitors through its purchasing; and the claim that GE would engage in bundling. The CFI rejected both of these predictions and the article concludes that this was entirely to be expected, given the lack of any clearly articulated theory of harm or relevant evidence in the Commission's decision; in this area, the CFI's judgement therefore adds little to what was already known about the requirements on the Commission if it wishes to prove such theories. In relation to the claimed vertical foreclosure effects of the merger, the CFI agreed with much of the Commission's substantive reasoning, but rejected its conclusions on the grounds that it had failed to consider the deterrent effect of Art. 82 EC. Here, the CFI's readiness to accept the substantive argument stands in contrast to the scepticism shown towards the conglomerate arguments.

141) Judgement, para. 60.

142) Judgement, para. 69.