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IN THE COMPETITION APPEAL TRIBUNAL

Case Nos.: 1284/5/7/18 (T)
1290/5/7/18 (T)

Salisbury Square House
8 Salisbury Square
London EC4Y 8AP

7 February 2023

Before:

THE HONOURABLE MR JUSTICE MICHAEL GREEN
(Chair)
SIR IAIN MCMILLAN CBE FRSE DL
DEREK RIDYARD

Sitting as a Tribunal in England and Wales

BETWEEN:

ROYAL MAIL GROUP LIMITED

Claimant

-and-

(1) DAF TRUCKS LIMITED
(2) DAF TRUCKS N.V.
(3) DAF TRUCKS DEUTSCHLAND GMBH
(4) PACCAR INC
(5) PACCAR FINANCIAL PLC
(6) LEYLAND TRUCKS LIMITED

Defendants

AND BETWEEN:

(1) BT GROUP PLC
(2) BRITISH TELECOMMUNICATIONS PLC
(3) BT FLEET LIMITED

Claimants

-and-

(1) DAF TRUCKS LIMITED
(2) DAF TRUCKS N.V.

(3) DAF TRUCKS DEUTSCHLAND GMBH
(4) PACCAR INC

Defendants

Heard at Salisbury Square House on 3 May to 30 June 2022

JUDGMENT (NON-CONFIDENTIAL VERSION)

APPEARANCES

Mr Tim Ward KC, Mr Ben Lask and Ms Cliodhna Kelleher (instructed by Bryan Cave Leighton Paisner LLP) appeared on behalf of the Claimants.

Mr Daniel Beard KC, Ms Daisy Mackersie and Mr James Bourke (instructed by Travers Smith LLP) appeared on behalf of the Defendants.

Note: Excisions in this Judgment (marked "[✂]") relate to commercially confidential information: Schedule 4, paragraph 1 to the Enterprise Act 2002.

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A. INTRODUCTION

1. By its decision of 19 July 2016 in *Case AT.39824 – Trucks* ("**Settlement Decision**") the European Commission ("**Commission**") determined that five truck manufacturers, DAF, MAN, Daimler, Iveco and Volvo/Renault ("**Addressees**" or "**Cartelists**")[1] had carried out a single and continuous infringement of Article 101 of the Treaty on the Functioning of the European Union ("**TFEU**") and Article 53 of the Agreement on the European Economic Area ("**EEA Agreement**") between 1997 and 2011 ("**Infringement**" or "**Cartel**")[2]. As stated in recital 2 of the Settlement Decision:

> "The infringement consisted of collusive arrangements on pricing and gross price increases in the EEA for medium and heavy trucks; and the timing and passing on of costs for the introduction of emission technologies for medium and heavy trucks[3] required by EURO 3 to 6 standards. The infringement covered the entire EEA and lasted from 17 January 1997 until 18 January 2011."

2. This is the trial of follow-on claims brought by Royal Mail Group Limited ("**Royal Mail**") and three companies in the BT Group ("**BT**") (together referred to as the "**Claimants**") against companies in the DAF Group ("**DAF**"). It is the first of many such claims arising out of the Infringement to go to trial in the UK. The Claimants purchased or leased large volumes of trucks from DAF during the Infringement period and they claim that the prices and lease payments that they paid for those trucks were higher than they would have been without the Infringement (the "**Overcharge**"). The Claimants claim damages in respect of the Overcharge together with other consequential losses.

3. The Infringement constitutes a breach of statutory duty, giving rise to a cause of action in tort.[4] If the Claimants can prove actionable harm or damage caused by the Infringement, then they are entitled to damages that will place them, so far as possible, in the position they would have been in had the Infringement not been committed. This trial is therefore concerned only with issues of causation and quantum of damage, including any relevant mitigation of damage by the Claimants.

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[1] We have used the corporate names of the groups to which they each belong.
[2] Scania, another truck manufacturer, was pursued by the Commission but did not adopt the settlement procedure. By a decision of 27 September 2017, the Commission found that Scania was part of the Cartel and this has been upheld by the EU General Court. See [17] below.
[3] Medium trucks weigh between 6 and 16 tonnes; Heavy trucks weigh more than 16 tonnes.
[4] The right to pursue such claims based on the Settlement Decision following Brexit was preserved by the Competition (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019/93), para. 14(2) of Sch 4.

4. In signing up to the Settlement Decision, the Addressees, including DAF, admitted the Infringement. The Settlement Decision was adopted in accordance with the settlement procedure laid down by Article 10(a) of Regulation (EC) No 773/2004 whereby an admission by the Addressees can be rewarded with a 10% reduction in the fines levied by the Commission for the Infringement. Furthermore, as this was an infringement "*by object*", rather than "*by effect*", the Settlement Decision says nothing about the effect of the Infringement on prices. The Claimants have to prove both causation and quantum and they sought principally to do so by expert econometric evidence based on the data relating to trucks sold by DAF in the UK before, during and after the Infringement period.

5. All of the Defendants are part of a single economic unit that constitutes an undertaking for the purposes of EU Competition law. They will be referred to collectively as "**DAF**". DAF Trucks Limited ("**DAF UK**") is a company incorporated in England and Wales and is in the business of marketing and selling trucks in the UK. DAF Trucks N.V. ("**DAF NV**") is a Dutch company engaged in the manufacture of trucks for sale across Europe including the UK. DAF NV is the parent of DAF UK, DAF Trucks Deutschland GmbH ("**DAF Germany**") and Leyland Trucks Limited, a company incorporated in England and Wales and in the business of designing and manufacturing trucks in the UK. PACCAR Inc ("**PACCAR**") incorporated in Delaware, USA, is the ultimate parent company of the whole Group.

6. DAF's position is that the Infringement caused no loss to these Claimants. That is based both on its econometric analysis but also on its expert's so-called theory of harm that concluded that it was "*implausible*" that the Infringement could have had any effect on the prices paid by the Claimants. DAF also runs some further defences that it says mitigates the Overcharge if it was indeed suffered by the Claimants. The main such defence is that any Overcharge was passed on by each Claimant to its customers in the form of higher prices. There are further arguments as to a reduction in the Overcharge that will be explored in detail below.

7. The trial lasted 25 days, within the time allotted. Approximately 6 days were spent on factual witnesses; 12 days on expert evidence, including "*hot-tubbing*" of the experts on some issues; and 7 days on oral submissions, both opening and closing. Despite some last minute adjustments due to Covid and the like, the parties and their legal teams managed the trial very effectively so that it was completed on time. We are very grateful to them for that and

to the Counsel teams as set out above for their excellent submissions, both written and oral, which have greatly assisted us. We have largely worked from electronic documents managed by Opus 2, which has also been very effective, particularly bearing in mind the scale of the expert evidence and the written closing submissions, the latter exceeding 1,000 pages overall.

8. We do however wish to sound a note of caution in relation to the expert evidence. We received thousands of pages of detailed experts' reports on all of the issues before us. There were central, important issues on the Overcharge and Supply Pass On where the size of the reports could be justified. But there were other subsidiary issues, such as Complements and Loss of Volume, where we considered that there was disproportionate time and money spent on complicated analyses that were less justified. Not only does this increase the overall costs of these proceedings but also it is highly burdensome on the Tribunal, and we would urge parties in other similar cases to exercise some restraint and sense of proportion in the preparation of their expert evidence.

B. BROAD OUTLINE OF THE ISSUES

9. There are many issues for us to decide. Most of them are based on the expert evidence. There are also issues of law.

10. The main issues are as follows:

   (1) **Causation** – did the Infringement cause the Claimants to suffer loss by way of the Overcharge?

   (2) **The Theory of Harm** – both sides' experts have opined on whether it is "*plausible*" that the Infringement caused loss to the Claimants, DAF's expert maintaining that it was not "*plausible*".

   (3) **The Overcharge** – if loss was caused, what is the quantum of it? Apart from whether it is appropriate to examine separate "before-during" and "during-after" Infringement models (the Claimants' preferred approach) or "before-during-after" and "during-after" models (DAF's approach), there are three main areas of disagreement between the experts in relation to their respective regression models, each of which considerably affects the estimated Overcharge:

      (i) **The Exchange Rates** – whether the models should be run in Pounds or Euros and what should be the applicable rate;

      (ii) **The Global Financial Crisis** between 2008 and 2010 – whether this was such a shock that it needs to be controlled for separately from other demand controls; and

      (iii) **The Emissions Standards** – whether the additional margin achieved on new emission standard trucks was down to the Infringement or other factors, such as willingness to pay.

   (4) **The Value of Commerce** – this is the amount to which the Overcharge percentage is to be applied, and there is a difference between Royal Mail only and DAF as to whether certain truck bodies should be included in that figure.

(5) **Complements** – if there was an Overcharge, DAF contends that the price of bodies and trailers, which are manufactured by third-parties, would have decreased and the savings that the Claimants thereby achieved should be offset against the Overcharge; the Claimants deny any such effect of the Overcharge;

(6) **Resale Pass On** – this concerns used trucks sold on by the Claimants; DAF contends that if the price of their new trucks increased as a result of the Overcharge, then the price of used trucks sold by the Claimants would also increase, and that benefit should be offset against the Overcharge.

(7) **Supply Pass On** – if there was an Overcharge, DAF contends that the Claimants mitigated their loss by passing it on to their customers by increases to the prices they charged for their own products such as postage stamps or telephone line rentals; the Claimants deny that there was any such pass on as a matter of law and/or fact.

(8) **Loss of Volume** – Royal Mail contends that, if there was supply pass-on, then they suffered a loss of volume in their downstream market sales for which they should be compensated.

(9) **Financing Losses** – in addition to the Overcharge, Royal Mail claims damages for the cost of financing the Overcharge and there was detailed expert evidence on this issue; the main area of disagreement is whether the weighted average cost of capital ("**WACC**") is the best measure of converting historic losses to current values or whether alternatively there should be interest based on the cost of debt and the foregone returns on short term investments. DAF contends that any such interest charges should be calculated on a simple basis, whereas Royal Mail argues that interest charges should be compounded. BT, by contrast, claims simple interest pursuant to s.35A of the Senior Courts Act 1981.

(10) **Taxation** – it is common ground that the claims have to be adjusted for the effects of taxation and the parties' respective tax experts were agreed on nearly all issues. The main outstanding issue was dependent on whether the WACC was adopted as the appropriate measure for Royal Mail's financing losses.

11. We will deal with all these issues largely in the order set out above. Before we do so, it is important to establish the context and some more of the background, in particular by reference to the Settlement Decision and its impact on the issues that we have to decide.

C. THE SETTLEMENT DECISION

12. At the heart of these claims and the foundation of DAF's liability is the Settlement Decision. The Settlement Decision itself describes the settlement procedure and how the Addressees came to admit the Infringement.

13. The investigation by the Commission was triggered by an application for immunity by MAN, one of the Addressees, on 20 September 2010. On 17 December 2010, MAN was granted conditional immunity from fines by the Commission. There followed dawn raids by the Commission on the other Addressees between 18 and 21 January 2011. Shortly thereafter, all except DAF made applications for leniency. (Settlement Decision recitals (31) to (35))

14. On 20 November 2014, the Commission initiated proceedings pursuant to Article 11(6) of Regulation (EC) No 1/2003 against the Addressees and adopted a Statement of Objections. At the request of the Addressees, the case was thereafter continued under the settlement procedure, the Addressees having been given access to the complete Commission file. At meetings between the Addressees and the Commission, indications were given as to the proposed fines that the Commission was minded to impose. The Addressees, in making their formal requests to settle under Article 10a(2) of Regulation (EC) No 773/2004, are required, amongst a number of matters, to include: "*an acknowledgement in clear and unequivocal terms of the Addressees' liability for the infringement summarily described as regards its object, the main facts, their legal qualification, including its role and the duration of its participation in the infringement in accordance with the results of the settlement discussions*". (Settlement Decision recitals (37) – (43))

15. For the Commission, it is much quicker and more efficient for it to settle cartel cases in this way. And there are significant benefits to the Addressees to admit liability and agree the settlement procedure. There is the 10% reduction in the fines, which for DAF alone meant a saving of €83 million. It also saves them the time and expense of a more extensive investigation and possible appeal. But perhaps of greatest significance for the purposes of these proceedings is the brevity of the Settlement Decision. This was highlighted by Rose LJ (as she then was) in *AB Volvo (Publ) and Ors v Ryder Ltd and Ors* [2020] EWCA Civ 1475 at [83], where the Court of Appeal was dealing with the nature of the Settlement Decision:

> "There are already many advantages for a settling addressee as compared with the addressee of a contested decision facing a follow-on damages claim, in addition to the reduction in the fine and the savings in their own legal costs and management time. The brevity of the decision in many cases creates an obstacle for future damages claimants because there is less detail about the infringement and much less information about the effects of the cartel on prices. Although cartel cases are always 'object' infringement cases so that the Commission does not need to establish effect for the purposes of infringement, there is often useful material in a contested decision about the effect of the cartel in the context of justifying the amount of the fine. One of the factors relevant to the size of the fine is the gravity of the infringement, including whether or not the infringement has been implemented. Because the addressees to a settlement decision have already indicated that they will accept the level of fine proposed, the decision does not include anything about implementation."

16. The total of the fines imposed on the Addressees under the Settlement Decision was over €2.9 billion. That does not include MAN's fine of €1.2 billion which was reduced to zero under the leniency programme, MAN having first disclosed the existence of the Cartel to the Commission. The fines for Daimler, Volvo/Renault and Iveco were also reduced pursuant to their leniency applications. But DAF only received the 10% reduction which resulted in a fine of some €753 million. These are obviously very substantial fines reflecting the gravity of the Infringement. They were the highest aggregate fines imposed by the Commission in respect of a particular cartel. DAF's fine is the third highest fine on an individual undertaking in a cartel case, after Daimler and Scania.

17. As referred to above, Scania was pursued by the Commission but it did not adopt the settlement procedure. In a decision of 27 September 2017, the Commission found that Scania had, through its participation in the same cartel, infringed Article 101 TFEU and Article 53 EEA Agreement. This decision was subsequently upheld by the EU General Court on 2 February 2022 in T-799/17 *Scania AB v Commission* ("***Scania***").

18. As will be seen, the Settlement Decision, while containing admissions of serious wrongdoing and collusive behaviour, is drafted in rather general terms. Furthermore, as it is an infringement "*by object*", there are no findings as to the implementation and effect of such behaviour. The Claimants have complained about the information asymmetry that therefore pertains in this case which has been exacerbated by DAF's decision not to call any evidence from anyone who knew about and participated in the Cartel. We are therefore in the dark as to how the information obtained by DAF from its competitors through the Cartel was actually used by DAF and whether it had an effect on the prices charged to DAF's customers. DAF's position is that there was no effect on the prices charged to the Claimants but has not provided any explanation as to why DAF participated in the Cartel for some 14

years if it was not getting any real benefit from doing so. DAF based its arguments largely on economic theory as to why the Infringement was very unlikely to have had any effect, although there were also some empirical analyses that DAF claimed supported that conclusion.

19. It is unfortunate that there is no evidence from within DAF as to how the information was used but we will have to base our decision on the evidence adduced before us, including in particular the Settlement Decision itself to which DAF agreed.

D. THE INFRINGEMENT

(a) Main aspects of the collusion

20. The Infringement consisted principally of the exchange of commercially sensitive information between the Cartelists. It also included agreements between them particularly about the timing and passing on of costs in relation to the introduction of new trucks that complied with European emission standards legislation.

21. The distinction between gross list prices and net or transaction prices is important. Gross list prices were set centrally by the Cartelists and from September 2002, DAF's gross prices were harmonised across the EEA (the other Cartelists harmonised their gross prices across the EEA but starting at different times). The gross list prices were for all types of medium and heavy truck models and included all their factory-fitted options. These gross list prices were inputted into computer-based truck configurators which enabled gross prices to be calculated for every type of possible truck configuration. Those configurators were shared amongst some of the Cartelists enabling them to compare their competitors' gross prices.

22. Net or transaction prices are those that were actually agreed with customers after negotiation. These are obviously the relevant prices for the purpose of testing whether there was an Overcharge. Those prices were generally not shared amongst the Cartelists and DAF relies quite heavily on this in saying that there was no real connection between gross list prices and net transaction prices and therefore that the exchange of information as to increases in gross list prices could not have led to an actual increase in net transaction prices. One of its main factual witnesses responsible for negotiating with customers in the UK seemed to contradict DAF's position on this and this is dealt with below. For now, it is important to note that the Settlement Decision referred expressly to the link between gross list prices and net prices.

23. The Settlement Decision describes a serious and pervasive Infringement that, as Mr Tim Ward KC for the Claimants was fond of reminding us, continued for some 14 years and was only stopped by the Commission's intervention. In broad outline it found that the Cartelists behaved as follows:

(1) They exchanged gross price lists and other information on gross prices, all of which was commercially sensitive and not publicly available. This included the sharing of the computer-based configurators. (Settlement Decision recitals (46), (48), (55));

(2) They regularly informed each other of their planned gross prices increases and, in some cases, agreed those increases or sought to harmonise their price lists more generally. This was in a context where the Trucks sector was already characterised by a *"high degree of transparency"*, such that one of the remaining uncertainties for the Cartelists was *"the future market behaviour of competing truck producers and in particular their respective intentions with regard to changes to the gross prices and gross price lists".* (Settlement Decision recitals (29), (30), (51), (55));

(3) They discussed and exchanged information regarding net prices and net price increases, including using the introduction of the Euro currency to reduce customer rebates. (Settlement Decision recitals (51), (53), (55), (56));

(4) They coordinated on the timing, and passing on of costs, for the introduction of new technologies required by successive Euro emission standards. This included information exchanges and agreements on the additional charges to be applied to the price of trucks containing those technologies. (Settlement Decision recitals (50) – (52), (54), (59)); and

(5) They frequently exchanged a wide range of other commercially sensitive information on matters such as order intake, stock, delivery times, market forecasts and other technical information. (Settlement Decision recitals (51), (55), (57), (81)).

24. Mr Ward KC also referred to other types of information that was exchanged in the course of the Infringement, including in relation to warranties, labour rates, manuals, spare parts, safety systems and the like. However, there was little support for this from the Settlement Decision itself or the underlying evidence and, in any event, such exchanges as there were in these respects were very limited and it is difficult to see that they could have contributed to any effect on the prices. But it is fair to state that the scope of the collusion between the Cartelists was very wide indeed.

(b) Gross list prices and net prices

25. The core aspects of the Infringement for our purposes were the exchanges of gross list prices and the agreements in relation to the introduction of new technology trucks that were compliant with EURO 3 to 6 emissions standards. The Claimants rely on certain recitals in the Settlement Decision that address how the Infringement might have had the effect of distorting prices. At recital (27) the Commission explained how pricing generally worked in the truck sector:

> "(27) The pricing mechanism in the truck sector follows generally the same steps for all of the Addressees. Like in many other industries, pricing starts generally from an initial gross list price set by the Headquarters. Then transfer prices are set for the import of trucks into different markets via wholly owned or independent distributor companies. Furthermore there are prices to be paid by dealers operating in national markets and the final net customer prices. These final net customer prices are negotiated by the dealers or by the manufacturers where they sell directly to dealers or to fleet customers. The final net customer prices will reflect substantial rebates on the initial gross list price. Not all steps are always followed, as manufacturers also sell directly to dealers or to fleet customers." (emphasis added)

26. As referred to above, the Commission found that "*the truck sector is characterised by a high degree of transparency*", through access to public registries and industry associations but that there was uncertainty as to the future intentions of competitors as to changes to gross list prices. At recital (47), the Commission found that the exchanges of information removed that uncertainty and led to an understanding of competitors' net prices:

> "(47) In most cases, gross price information for truck components was not publicly available and information that was publicly available was not as detailed and accurate as the information exchanged between, amongst others, the Addressees. By exchanging current gross prices and gross price lists, combined with other information gathered through market intelligence, the Addressees were better able to calculate their competitors' approximate current net prices – depending on the quality of the market intelligence at their disposal." (emphasis added)

27. At recital (48), the Commission referred to the extra transparency derived from the exchange of configurators and at recitals (58) and (75) how that affected their pricing strategies:

> "(58) The exchanges, at least, put the Addressees in a position to take account of the information exchanged for their internal planning process and the planning of future gross price increases for the coming calendar year. Furthermore the information may have influenced the price positioning of some of the Addressees' new products."

> "(75) By exchanging EEA-wide applicable gross price lists, the Addressees were in a better position to understand from the price increase information exchanged by the German Subsidiaries, each other's European price strategy, than they would have

> been solely on the basis of the market intelligence at their disposal." (emphases added)

28. These recitals formed an important plank of the Claimants' arguments on causation and their expert's theory of harm. They also seemed to have not wholly been accepted by DAF in its pleadings leading to an argument by the Claimants that it would be an abuse of process for DAF to resile from parts of the Settlement Decision that it had agreed to. This is dealt with below.

(c) Aims of the collusion

29. The Commission found that the different elements of the Infringement had a single anti-competitive aim which remained the same throughout its duration. At recital (71), it said:

> "(71) …The single anti-competitive economic aim of the collusion between the Addressees was to coordinate each other's gross pricing behaviour and the introduction of certain emission standards in order to remove uncertainty regarding the behaviour of the respective Addressees and ultimately the reaction of customers on the market. The collusive practices followed a single economic aim, namely the distortion of independent price setting and the normal movement of prices for Trucks in the EEA."

And at recital (81):

> "(81) The anti-competitive behaviour described in paragraphs (49) to (60) above has the object of restricting competition in the EEA-wide market. The conduct is characterised by the coordination between Addressees, which were competitors, of gross prices, directly and through the exchange of planned gross price increases, the limitation and the timing of the introduction of technology complying with new emission standards and sharing other commercially sensitive information such as their order intake and delivery times. Price being one of the main instruments of competition, the various arrangements and mechanisms adopted by the Addressees were ultimately aimed at restricting price competition within the meaning of Article 101(1) of the TFEU and Article 53(1) of the EEA Agreement."

(d) Infringement "by object"

30. The collusion in which DAF participated was found and admitted to be a restriction of competition "*by object*". At recital (82), the Commission stated:

> "(82) It is settled case-law that for the purposes of Article 101 of the TFEU and Article 53 of the EEA Agreement there is no need to take into account the actual effects of an agreement when it has as its object the prevention, restriction or distortion of competition within the internal market and/or EEA, as applicable. Consequently, in the present case it is not necessary to show actual anti-competitive effects as the anticompetitive object of the conduct in question is proved."

31. Article 101(1) TFEU prohibits:

> "…all agreements between undertakings, decisions by undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market…" (emphasis added)

32. The words "*object or effect*" are disjunctive and are alternative requirements for a finding of an Infringement. This was explained by Advocate-General Kokott in her Opinion in *T Mobile Netherlands BV* Case C-8/08 at [42] and [43]:

> "42. … an anti-competitive object and anti-competitive effects constitute not cumulative but alternative conditions under which the prohibition established in Article 81(1) EC [Article 101(1) TFEU] is triggered. Putting it another way, regardless of their effects, concerted practices are prohibited if they pursue an anti-competitive purpose. No account need be taken of the actual effects of a concerted practice, if the object of that practice is to prevent, restrict or distort competition within the common market. Such a practice is prohibited even in the absence of anti-competitive effects on the market.
>
> 43. The prohibition of a practice simply by reason of its anti-competitive object is justified by the fact that certain forms of collusion between undertakings can be regarded, by their very nature, as being injurious to the proper functioning of normal competition. The per se prohibition of such practices recognised as having harmful consequences for society creates legal certainty and allows all market participants to adapt their conduct accordingly. Moreover, it sensibly conserves resources of competition authorities and the justice system."

33. Mr Ward KC submitted that the reason why it is enough for the Commission to find an object restriction is because it is considered so likely to have anti-competitive effects that such effects do not need to be proved. He referred to what the General Court said in *Scania* at [311]:

> "311…it is established that certain collusive behaviour, such as that leading to horizontal price-fixing by cartels, may be considered so likely to have negative effects, in particular on the price, quantity or quality of the goods and services, that it may be considered redundant, for the purposes of applying Article 101(1) TFEU, to prove that they have actual effects on the market. Experience shows that such behaviour leads to falls in production and price increases, resulting in poor allocation of resources to the detriment, in particular, of consumers…"

He also pointed out that the well-known *Oxera* study review of empirical research on cartel effects found that 93% of cartels have effects in the form of an overcharge. DAF's expert, Professor Damien Neven, said that that study had a clear bias towards cartels that had effects, although he did not support this with any evidence.

34. Be that as it may, it is necessary for the Claimants to prove that the Infringement had an effect in the UK and in particular on the prices paid by the Claimants. Given the Commission's findings in recitals (71) and (81), set out above, as to the Infringement having a single anti-competitive aim of distorting independent price setting throughout its duration, the Cartel would have failed in its aims if there was no such effect in the UK or on the Claimants, although it could be said that there may have been effects elsewhere.

(e) Nature of the collusion

35. The means by which the Infringement was carried out over the 14-year period included competitor meetings as well as frequent exchanges of information by email and telephone, both multilateral and bilateral. It appears from the Settlement Decision that for the first part of the Infringement period, between 1997 and 2004, the collusion was between the Addressees' Headquarters, which in the case of DAF, meant DAF NV. From 2002, because of the introduction of the Euro and the introduction of pan-European price lists, the means for exchanging information on gross list prices shifted to the Addressees' German subsidiaries, although for a time the Headquarters continued with their collusive contacts (Settlement Decision recital (54)). This shift, which later became even more formalised and systematic over time, was relied upon by DAF, and in particular its expert, as indicating that the collusion became further removed from the UK. That however depends on how the information was used within the DAF Group, something about which we have little evidence. The Settlement Decision states that the information on future gross price increases was forwarded by the German Subsidiaries to their Headquarters (Settlement Decision recital (56)).

36. Some examples of the collusion through the German subsidiaries are given in recital (59):

> "(59) The following examples illustrate the nature of the discussions in which representatives of the German-Level took part. At the end of 2004, an employee of DAF Trucks Deutschland GmbH sent an email to, amongst others, the representatives of the German Subsidiaries requesting that they communicate their planned gross price increases for 2005. The summarized and compiled price increase information was sent back to all of the participants, including all of the Addressees, a few days later containing information on intended gross price increases. The Addressees attended a meeting between 4 and 5 July 2005 in Munich which was attended by both non-senior Headquarter-Level representatives and employees of the German Subsidiaries. It appears from the evidence that common activities and meetings were scheduled. In addition special sessions were also foreseen involving the non-senior representatives of the Headquarters and separate meetings involving the representatives of the German Subsidiaries. During one of

> these latter sessions the participants, including all of the Addressees, exchanged information about their planned future gross price increases for 2005 and 2006 as well as the additional cost of complying with the EURO 4 emissions standards. Further meetings involving representatives of the German-Subsidiaries continued the discussions on price increases and the price increases for Euro 4 and Euro 5 standards include the meetings held on 12 April 2006 as well as on 12 and 13 March 2008."

37. The Claimants were provided with access to the Commission file which contained documents that formed the basis for the Commission's findings in the Settlement Decision. They are not allowed to see either the leniency material or DAF's settlement submissions which are protected from disclosure and cannot be referred to. They have pleaded many examples of the collusion derived from those documents and it is certainly true to say that the collusive contacts between the Cartelists were frequent and numerous. This was summarised in recital (73):

> "(73) The evidence available shows that the conduct described above constituted an on-going process and did not consist of isolated or sporadic occurrences. The contacts between the Addressees were of a continuous nature, with numerous regular contacts (face-to-face meetings, phone calls and email exchanges). The different elements of the infringement were in pursuit of a common anti-competitive object as described above, which remained the same throughout the entire period of the infringement. The existence of a single and continuous infringement is also supported by the fact that the anticompetitive conduct followed a similar pattern throughout the entire period of the infringement."

38. All the unlawful exchanges and agreements between the Cartelists were carried out for the same purpose, namely restricting price competition in the whole of the EEA. For this to have been sustained in such a concerted manner by all the Cartelists for 14 years without any of them leaving, and taking very considerable risks in the process, it would be most unlikely to think that they were not each receiving substantial benefits for continuing with it for so long. Whether these Claimants suffered an Overcharge will have to be tested by reference to the economic evidence but it is fair to say at this stage that DAF must have expected the Infringement to have had some beneficial effects on the profitability of its business.

E. CLAIMANTS' ARGUMENT ON ABUSE OF PROCESS

39. In opening the Claimants' case, Mr Ward KC submitted that DAF's failure fully to admit the facts contained in, principally, recitals (27) and (47) of the Settlement Decision constituted an abuse of process. That submission was maintained in closing but by then the points had rather been overtaken by the evidence that we had heard.

40. The argument is based on the CAT's judgment in *Royal Mail Group Ltd and Ors v DAF Trucks Ltd & Ors* [2020] CAT 7 **("*Binding Recitals Judgment*"),** which was upheld on appeal – see *AB Volvo (Publ) and Ors v Ryder Ltd and Ors* [2020] EWCA Civ 1475. In the *Binding Recitals Judgment*, the CAT held that those recitals in the Settlement Decision that provide the essential basis or necessary support for Article 1 of the Settlement Decision, or are necessary to understand the scope of Article 1, are binding in these proceedings pursuant to Article 16 of Council Regulation (EC) No 1/2003. In [148] of the *Binding Recitals Judgment*, the CAT specified the recitals in the Settlement Decision that DAF was bound by in these proceedings and that included recital (47). Following the *Binding Recitals Judgment*, DAF has expressly admitted those recitals in its Defence.[5]

41. The CAT went further in the *Binding Recitals Judgment* to set out how the principles of abuse of process might apply where DAF denied or did not admit facts set out in a recital of the Settlement Decision that was not otherwise binding. It also provided for certain gateways that could be used by DAF should it have wished to deny a particular fact. In [141], the CAT said as follows:

> "141. In our judgment, having regard to the considerations discussed above, the following principles should apply in the particular circumstances of the present proceedings:
>
> (1) It is an abuse of process for a defendant simply to deny or not admit facts set out in a recital relied upon by a claimant.
>
> (2) Where the claimants do not object, it is not an abuse for a defendant to put forward a case or evidence inconsistent with a recital.
>
> (3) Where a defendant seeks to put forward a contrary position to a finding in the Decision on the basis that it does not accurately reflect the underlying document referred to, whether that be a contemporaneous document or a statement in a settlement submission, it will not be an abuse for a defendant

[5] See [5(aa)] of the RRRRAD.

to do so. If necessary, the Tribunal would have to decide whether there is indeed an inconsistency.

(4) Where a defendant relies on new evidence which it could not reasonably have had access to at the time of the proceedings before the Commission, it is not an abuse if it seeks to advance facts inconsistent with a recital.

(5) Where a claimant pleads facts or allegations that are more detailed than, additional to or different from the facts set out in a recital, it will not be an abuse for a defendant to plead a response in appropriate terms and detail to such facts and allegations, provided that in substance its response does not amount to a denial of a recital that is not otherwise justified by (2), (3) or (4) above.

(6) In circumstances not covered by (2)-(5), it is for the defendant seeking to put forward a positive case contrary to a finding in a recital to set out the reasons why it should be able to do so in that particular instance, and then for the Tribunal to decide."

42. DAF is therefore able to contest a recital that is not otherwise binding by way of a positive case where one of the specified gateways applies, but the CAT made clear that it was for DAF in the first instance to justify its departure from the relevant recital and if necessary to make an application to the CAT to do so (see [144]). DAF has neither sought nor been granted permission to do so in these proceedings.

43. The basis for the CAT's and the Court of Appeal's conclusions was the nature of the settlement procedure and the common law doctrine of abuse of process. The CAT said at [131]:

> "it would bring the administration of justice into disrepute and/or be unfair to the claimants if the defendants are able simply to deny the facts which the Decision records them as having admitted, or to "not admit" those facts in their defences to these claims and thus require the claimants to prove them."

And Rose LJ (as she then was) in the Court of Appeal said at [107]:

> "As to whether it would be an affront to most people's ideas of justice for the appellants to be allowed to resile from the admissions and to put the claimants to proof of those admitted facts, I agree with the CAT's conclusion that it would."

44. DAF did make extensive admissions of the Claimants' allegations as to the Infringement derived from the Settlement Decision. Thus, in its Defence ([16] to [19]), DAF has admitted the following:

(1) the Infringement followed a single economic aim, namely the distortion of price setting and the normal movement of prices for Trucks in the EEA;

(2) the Infringement was ultimately aimed at restricting price competition;

(3) all of the Cartelists exchanged gross price lists and information on gross prices, as well as other commercially sensitive information such as order intake, stock, delivery times, and other technical information;

(4) most of the Cartelists engaged in the exchange of computer-based Truck configurators; DAF had access to at least three (and possibly four) of its competitors' configurators; the exchange of configurators helped the Cartelists compare their own offers with those of their competitors, which further increased the transparency of the market; and such exchanges also facilitated the calculation of gross prices for each possible Truck configuration;

(5) the Cartelists discussed and informed each other of their respective planned gross price increases, and in some cases agreed those increases;

(6) some of the Cartelists exchanged information on harmonising gross price lists for the EEA during bilateral meetings in 1997 and 1998;

(7) the exchange of gross price lists and information on gross prices could be combined with other information gathered through market intelligence to enable a better calculation of another manufacturer's approximate current net prices than would have been possible otherwise;

(8) such exchanges also placed the Cartelists in a better position to understand each other's European price strategy than on the basis of market intelligence alone, thus putting them in a position to take account of the information exchanged;

(9) the exchange of information on gross prices may have influenced the price position of some of the Cartelists' new products;

(10) the Infringement also included collusion in relation to net prices and net price increases;

(11) the Infringement also included collusion on the timing for the introduction of emission technologies required by EU legislation, and the passing on to customers of the costs of those technologies; for example the Cartelists:

(i) agreed not to offer Euro 3 compliant Trucks before it was compulsory to do so;

(ii) agreed on a range for the additional price for Euro 3 compliant Trucks;

(iii) discussed prices for the technology complying with the Euro 4 and Euro 5 standards;

(iv) agreed not to introduce Euro 4 compliant Trucks until September 2004; and

(v) shared information regarding the surcharges for EEV compliant vehicles;

(12) the Cartelists engaged in the collusion through several layers of competitor meetings and other contacts at both the Headquarters level and the German subsidiary level; DAF further admitted that meetings took place regularly, and that the German subsidiaries reported back to Headquarters to varying degrees; and

(13) Many of the specific examples of collusion which were pleaded by the Claimants in [18(a) to (ff)] were based on the disclosure from the Commission file.

45. As stated above, the two recitals that the Claimants object to DAF's position on are (27) and (47), both dealing with the relationship between gross and net prices. Both recitals have been set out above, but the material sentences are repeated below.

46. Recital (27) relevantly states as follows:

> "The pricing mechanism in the truck sector follows generally the same steps <u>for all of the Addressees</u>. Like in many other industries, <u>pricing starts generally from an initial gross list price set by the Headquarters</u>… <u>The final net customer prices will reflect substantial rebates on the initial gross list price.</u>" (emphasis added)

DAF admitted most of this but in [5(a)] of Appendix A to its Defence it denied that "*pricing for DAF Trucks "generally started from" List Prices*".

47. Mr Beard KC on behalf of DAF relied on the use of the word "*generally*" to say that DAF could be excluded from the process described in recital (27) and followed by the other Addressees if there was evidence that DAF did not in fact start from gross list prices to arrive at the final net prices. However, it is clear that the word "*generally*" does not apply to limit the Addressees who are said to have followed those steps; rather it applies to whether those steps were followed by the Addressees in relation to every transaction. The recital refers to "*all of the Addressees*" and is saying that they all generally started from the gross list prices.

48. In our view it is not open to DAF to allege that it did not start from its gross list prices in pricing transactions as it admitted recital (27) without qualification and there is no new evidence available to it that it could not have relied upon prior to the Settlement Decision. However, it is open to DAF to seek to prove that for these particular transactions with the Claimants it did not follow the general practice. But as this recital is aimed at establishing a link between gross and net prices applicable to all the Addressees, that cannot be denied or resiled from by DAF.

49. Recital (47) takes the point further. It relevantly states:

> "By exchanging current gross prices and gross price lists, combined with other information gathered through market intelligence, the Addressees were better able to calculate their competitors' approximate current net prices – depending on the quality of the market intelligence at their disposal."

This demonstrates the potential value to the Addressees of receiving gross price list information: they are better able to calculate their competitors' net prices and it removes uncertainty in that respect.

50. DAF admitted this as a general proposition but denied that it "*was in fact [...][6] better able to calculate competitors' approximate current net prices, whether on an average basis or as regards Transaction Prices, as a result of any information exchanged*". No reasons for the denial were given, despite DAF having admitted the recital as part of the Settlement

[6] "not" was included but it was accepted by DAF that it should not have been.

Decision and being bound by it according to the *Binding Recitals Judgment*. DAF has not applied under any of the gateways.

51. Mr Beard KC's submissions in relation to this centred on the qualification in relation to "*market intelligence*" and the suggestion that DAF did not in fact have sufficient market intelligence to be able to calculate its competitors' net prices. This, in our view, undermines the point being clearly made in the recital, namely that all the Addressees were better able to calculate each others' net prices because of the exchange of gross list prices and the degree to which each one individually might have been able to do so might have been dependent on the "*quality of the market intelligence at their disposal*".

52. We think that, without evidence as to the market intelligence at DAF's disposal or indeed as to what DAF did use the gross list price information for, DAF is bound to accept that it was better able to calculate its competitors' "*approximate current net prices*" from the exchange of gross list prices. DAF did not secure any exemption for its allegedly different position in the Settlement Decision and cannot rely on any qualification in relation to market information without adducing evidence as to the market information at its disposal.

F. FACTS RELATING TO THE CLAIMANTS

(a) Introduction

53. The Claimants entered into a series of contracts with DAF UK during the course of the Infringement. DAF says that both Claimants were highly sophisticated purchasers of trucks with specialist procurement divisions that put them in a very good position to negotiate low prices with DAF. They were two of the largest purchasers of DAF trucks in the UK. DAF says that this is an important factor to be taken into account in assessing whether the Claimants have suffered any loss on their purchases of trucks.

54. Furthermore, during his opening submissions, Mr Beard KC handed up three timeline diagrams that purported to track the evolution of DAF's contract prices for three truck models that were purchased by the Claimants during certain periods of the Infringement. The diagrams also included some limited examples of the collusion in which DAF was engaged and occasions when there were gross list price increases in an attempt to show that, despite the collusion, the actual contract prices did not increase and in some cases fell. We examine the timelines further below but record here that the Claimants objected strongly to DAF's reliance on this material principally on the basis that the case management of these proceedings assumed that there would be no "*bottom up*" approach to assess whether the Infringement affected the specific contract prices. DAF trucks are bespoke products that are built according to the unique specifications of each customer.

55. There are three series of DAF trucks: the LFs, comprising the smallest and lightest trucks; the medium-sized CFs; and the larger XFs. Within each series, there are numerous models: for example, during the relevant period there were LF 45 trucks (7.5t) and LF 55 trucks (up to 18t). As well as choosing a particular model, the customer may choose either: a "*rigid*" truck, with a fixed chassis to which a "*body*" is mounted; or a "*tractor*" truck, used to tow a trailer. DAF has never manufactured trailers; since late 2007, a small number of bodies have been manufactured and built onto rigid trucks at DAF Leyland.

56. DAF produces a number of different basic vehicle specifications, sometimes known as "*commercial specifications*", which comprise the chassis, cab, engine, gearbox and axle type, pre-selected by DAF. Commercial specifications vary from country to country, depending on the preferences of customers in that national market. Customers can change

or upgrade these standard options and choose from a very wide range of further options, e.g., braking system, suspension, paint, cab features, wheels and tyres, leading to hundreds of thousands of theoretical configurations. Thus, and this is borne out by the highly detailed and complex configurations for the Claimants' own trucks, the final truck is the result of an intricate configuration process to design a vehicle which meets each specific customer's individual requirements.

57. Truck sales to UK customers were handled by DAF UK. There were three sales channels: dealer sales; fleet sales; and direct sales. Dealers were involved in nearly 95% of UK sales during the Infringement period, comprising dealer and fleet sales. Direct sales in the UK were confined to five customers including the Claimants.

(b) Negotiations with Royal Mail

58. In relation to the procurement of trucks from DAF, the Claimants called one witness each: Mr Simon Giles for Royal Mail; and Mr Russell Peatey for BT. The Claimants approached this part of the case on the basis that the CAT had directed that there should not be specific factual evidence as to the negotiations for each contract because of the difficulties of doing so. Instead, they considered that the CAT required any Overcharge to be determined by expert econometric evidence as to an average Overcharge on all DAF's UK sales. In fairness to the Claimants, some of the trucks affected by the Infringement were purchased some 25 years ago and many of the individuals involved could not be traced and had long since left their employment with the Claimants. What they therefore sought to do was to put before us witnesses who could speak about the issues of truck procurement and supply pass-on in general terms because of their role within each of the Claimants, rather than dealing with specific contracts or negotiations that are the subject-matter of their claims.

59. This approach was criticised by Mr Beard KC who said that the Claimants had failed to engage with an important aspect of the case, namely the actual effect on the Claimants. He maintained that it was necessary to consider the factual evidence to see whether it informs or supports the econometric results as to the existence or level of any Overcharge paid by the Claimants. We deal with this broad point in the section below on DAF's timelines. At this stage we are looking at the evidence that was adduced.

60. Mr Giles joined Royal Mail in 1990 and held various roles until he joined the Procurement team in 2001 as a "*Buyer*" in the team negotiating for the purchase of vehicles, including trucks. He has continued to work within the vehicle Procurement team to the present day and his title since 2007 is "*Procurement Manager Vehicles*". Mr Giles exhibited a range of contractual documentation, on much of which he had no personal knowledge. While part of the Procurement team for 10 of the 14 years of the Infringement and therefore having contemporaneous knowledge and experience of the procurement of vehicles during the relevant time, his evidence was very general and it was clear from his cross-examination that he could remember very little of the detail in relation to the contracts with DAF. He confirmed that he was not involved in the negotiation of any of the contracts between Royal Mail and DAF that are relevant to these proceedings. He may have been involved in a discussion about one amendment to a contract. All in all, Mr Giles's evidence was not particularly helpful.

61. Mr Ray Ashworth, DAF UK's former Managing Director, gave evidence on behalf of DAF in relation to negotiations with Royal Mail and BT. Royal Mail procured their trucks through competitive tender processes. For the Infringement period and covering their claim, Royal Mail purchased trucks from DAF under 12 purchase agreements, some of which were extended or amended. Approximately 68% of the trucks purchased by Royal Mail were LFs; the remainder were CFs.

62. Royal Mail was a very important customer for DAF UK during the Infringement period. It ordered around 300 to 1,000 trucks per year and was DAF's second largest single customer by volume in the UK. Its bright red trucks, driven across all of the UK, gave the DAF brand visibility. As said above, it was one of just five "*direct*" purchasers from DAF UK, meaning that it negotiated directly with DAF without the involvement of a dealer.

63. Royal Mail had an efficient, well-informed large multi-disciplinary Procurement team which negotiated hard to strike the best possible deal when buying trucks. Mr Giles accepted that the tender processes used by Royal Mail involved a great deal of planning and went through a number of stages of negotiation that were designed to get the best outcome, including in relation to price but also other aspects that would affect cost-effectiveness, for Royal Mail. Royal Mail tried to obtain market information and intelligence and used benchmarking to test how the market was working. It had information about large fleets operated by other businesses, and it even obtained one-off vehicles from other manufacturers

to compare. It had information on truck manufacturers' market shares and considered the impact of wider macro-economic conditions. It had information on the new emissions standards technologies being deployed by different manufacturers, including trialling Euro 4 trucks from different manufacturers for fuel efficiency.

64. Royal Mail used the fact that it was an attractive customer for DAF UK both because of the distinctive brand and the high volumes of trucks it purchased. Mr Ashworth said that Royal Mail used the fact that other manufacturers were undercutting DAF on price as leverage to drive down DAF's prices. This is unsurprising, as is the fact that Royal Mail used whatever legitimate tools it had in its armoury to reduce the prices on the trucks that it had to purchase. There is evidence that Royal Mail achieved considerable success in such respect.

65. The contracts that were entered into were generally long term, with an initial term of one or two years but extendable for additional years. The prices were fixed for the first year and there was generally provision for renegotiation at the end of each year. However, the evidence that exists seems to show that DAF was largely unsuccessful in persuading Royal Mail to pay more in following years. These fixed price contracts were beneficial to Royal Mail particularly if the prices did not increase each year. Furthermore, Royal Mail did not commit to purchasing a certain number of trucks and only gave "*indicative volumes*" from which DAF had to price the contract.

66. Mr Ashworth gave evidence that because of the above factors, Royal Mail was able to obtain "*rock bottom prices*" from DAF UK, lower than any other customer, he said. As will be seen, all Royal Mail's contracts required approval from the parent company PACCAR because of the low margins being achieved. The evidence of Mr Habets on behalf of DAF was that DAF's Euro margin on truck sales to Royal Mail between 2004 and 2010 was [✂]%, i.e. negative, although it is unclear what this margin is, in particular the extent to which it includes some overhead costs.

67. However, we would assume that Royal Mail would use everything within its means, leveraging its volumes and brands to obtain the cheapest possible truck prices and to lock those in through long term fixed price contracts. It would have acted in the same way in the counterfactual if there was no Infringement and no putative Overcharge. We do not think that much can be derived from this evidence that it was a hard negotiator but we do think that the prices that it agreed provide a sense-check, particularly to the experts, as to the

likelihood of there being an Overcharge in those prices and as to the extent to which DAF would have been prepared to offer even lower prices in the counterfactual.

(c) Negotiations with BT

68. A similar situation pertains with BT which was just as sophisticated a purchaser of trucks and was also an attractive customer for DAF given its reasonable volumes and brand recognition. Mr Peatey was, at the time of his first witness statement, a Procurement professional for BT. He joined BT in 1992, and then started in the Commercial Vehicle Team in 1994. He joined the Procurement Team in 2006 and held roles as manager and buyer between 2006 and 2012 before becoming a Senior Buyer in July 2014. Mr Peatey acknowledged in his statement that he was not the buyer responsible for the procurement exercises that resulted in orders with DAF for the supply of trucks, but he was part of the broader team and was aware of the procurement exercises that resulted in two of the BT contracts, numbered 658129 and 670321.

69. BT tended to put out a single tender to cover all its truck requirements and during the relevant period, BT purchased most of its truck requirements from DAF. Like Royal Mail, BT was a direct customer of DAF UK throughout most of the Infringement period. There were three general purchase agreements (some of which were extended or amended). Approximately 92% of the trucks purchased by BT were LFs; the remainder were CFs. The specifications of BT trucks were particular to its business needs and significantly more complex than most trucks. BT did not buy bodies or trailers through DAF but contracted with third-party bodybuilders direct.

70. BT also had a highly effective Procurement team which was able to negotiate prices down during the competitive tendering process. Mr Peatey, somewhat surprisingly, said that he personally, for ethical reasons, did not use bids from other manufacturers to persuade suppliers to reduce their prices. We do not see why BT would not use such information to its advantage and BT's own internal procurement guide suggested that this may be an effective technique.

71. The pricing in the BT contracts was subject to annual review. However, on close inspection of the terms of the contracts it appears that the annual reviews could only operate in BT's

favour; in other words that prices could only come down. Mr Peatey accepted this and it is reflected in the timelines. It meant that DAF was tied into the fixed price in the contracts.

72. The average euro margin on sales to BT according to Mr Habets was [✂]% between 2004 and 2010. As we said in relation to Royal Mail, this is of limited probative value but does provide some useful context for the Overcharge assessment.

(d) The Timelines

73. Towards the end of his opening submissions, Mr Beard KC produced for the first time three timeline diagrams that set out graphically the contract prices for three truck models purchased by the Claimants during part of the Infringement period. The three timelines were as follows:

(1) Royal Mail CF 85.380 – June 1997 to December 2006;

(2) Royal Mail LF 45.130 – October 2002 to December 2006; and

(3) BT LF 45.150 – April 1998 to December 2006.

After criticism from the Claimants in closing as to selectivity in truck models and time periods, Mr Beard KC sought to hand up further timelines late into his closing submissions, but this was understandably objected to by the Claimants and he did not press them any further.

74. Mr Beard KC relied on the timelines for two main purposes:

(1) to seek to bolster DAF's case that there was no link between DAF's gross list price increases, that were the product of the Infringement, and the prices that the Claimants paid for their trucks; and

(2) to show that, even if an Overcharge was established on the econometric evidence based on a UK market wide average, the Claimants did not suffer any loss by way of an Overcharge – the so-called "*second bite of the cherry*"

argument – because their contract prices did not increase and in some cases fell during the Infringement period.

75. Mr Lask addressed these arguments on behalf of the Claimants. He said that DAF's "*bottom up*" approach to causation and quantum was misconceived and inappropriate for a number of reasons. In particular he relied on the "***Disclosure Judgment***" issued by the CAT on 15 January 2020 [2020] CAT 3 dealing with the general approach to disclosure in the Trucks actions including this one which he said made clear that a market wide regression analysis should be used to measure the level of any Overcharge rather than an assessment of the specific contractual documentation and negotiation between the Claimants and DAF. Both the experts and the CAT agreed that there was insufficient data to allow for a robust Claimants-specific regression analysis. Mr Lask also submitted that the timelines focused on only the chassis price and for only three models, thereby excluding the effect of options selected by the Claimants, and so not corresponding to any actual truck sale made by DAF and not providing any indication of whether the actual prices paid by the Claimants had increased or not. Furthermore, the timelines could not control for the many other factors that affect prices such as costs, truck characteristics, economic conditions such as exchange rates or demand. This need to control for other influences on prices was central to the rationale for the experts' reliance on econometric analysis for estimating the Overcharge.

76. We will deal with those points below but first we endeavour to describe what the timelines do, on their face, indicate. Mr Lask pointed out that prices increased during the course of many of the contracts as recorded in amendments to those contracts. His further comments on the specific timelines are included below.

77. In relation to Royal Mail CF85.380s – June 1997 to December 2006:

(a) The chassis price for Euro 2 CF85.380s remained the same from 27 March 1998 to March 2001, despite two UK list price increases.

(b) When Royal Mail switched to Euro 3 engines in April 2001 under a new contract the chassis price fell by £344 to £40,653.

(c) Despite a list price increase of 3% for CF models in around May 2002, Royal Mail's chassis prices for Euro 3 CF85.380s fell by 5.7% to £38,325 in August 2002.

(d) There was another list price increase of 4% in April 2003, but the chassis price fell again in August 2003 by 8.5% to £35,050.

(e) This price held constant for more than three years until the end of 2006, despite list price increases of 3% in April 2004, 3% in February 2005, 2.5% in September 2005 and a further 2% in January 2006.

78. In relation to Royal Mail LF45.130 – October 2002 to December 2006:

(a) Despite a 4% list price increase in April 2003, chassis prices for LF45.130s fell by 13.6% to £18,403 in September 2003.

(b) Thereafter the chassis price for the LF45.130s remained constant despite the list price increases specified above between April 2004 and January 2006.

(c) Mr Lask said that during this period of October 2002 to December 2006 Royal Mail ordered 1,414 LF45.130 trucks but that the majority of their orders for LF45.130 trucks, 2,633 orders, during the Infringement period were outside of this period. Furthermore, Royal Mail also ordered 787 other LF45 series trucks with different horsepower ratings during the Infringement period that are not covered by the timelines.

79. In relation to BT LF45.150 – April 1998 to December 2006:

(a) Chassis prices for BT's LF45.150s remained constant between January 1999 and December 2001 notwithstanding a 2% list price increase in March 2000.

(b) In January 2002, BT switched completely to Euro 3 standard trucks and the chassis price decreased by 5.9% to £19,455.

(c) Those prices then remained constant until December 2006, despite apparent list prices increases of more than 14%: 4% in April 2003; 3% in April 2004; 3% in February 2005; 2.5% in September 2005; and a further 2% in January 2006.

(d) Mr Lask said that BT purchased 741 other LF 45 series trucks from DAF with different horsepower ratings during the Infringement period that are not covered by the timelines. Furthermore, BT purchased 528 LF 55 series trucks and 146 CF85 series trucks during the Infringement period but these are not included in the timelines.

80. Mr Lask said that no weight should be placed on these timelines in assessing causation and quantum. We agree that little or no weight can, in the circumstances, be placed on them, not least because they were not properly adduced in evidence or tested in cross-examination. The experts placed no reliance on them and they do not help in determining what prices would have been agreed in the counterfactual.

81. The Disclosure Judgment arose as part of the joint case management by the CAT of the various claims that have been filed against DAF and the other Cartelists in light of the Commission's Settlement Decision. The purpose of the joint case management was to ensure consistency of approach across the claims and avoid some of the problems that arose in MIF litigation in which inconsistent decisions were reached in three separate claims resulting in appeals to the Court of Appeal and Supreme Court.

82. The Disclosure Judgment, under the heading: "*Overarching approach in the Trucks Actions*" stated as follows (emphasis added):

> "40. In light of that, we set out the following broad principles as to the general approach the Tribunal will take that affects disclosure.
>
> (1) The initial burden of proof is on the claimants to satisfy the Tribunal on the balance of probabilities that the Infringement had an effect on prices.
>
> (2) If that hurdle is passed, the Tribunal will seek to arrive at a reasonable estimate of what the effect might have been and what any pass-on (within the relevant legal principles) might have been, again on the balance of probabilities.
>
> (3) A reasonable estimate in this context means an estimate that is arrived at in a proportionate manner. We recognise of course that these are very large damages claims. However, any estimate will still be reached through averages, extrapolations and aggregates. It does not mean that every logical

avenue that might be relevant can be explored, or that all data which is arguably relevant must be provided…;

(4) In reaching that decision, the Tribunal has regard to the principles of effectiveness, that cases should not be unreasonably difficult to bring, and of proportionality as set out in rule 60(2) read with the governing principles in rule 4 and also the Disclosure PD.

(5) …

(6) These actions seek damages for loss on many hundreds of transactions, involving a very large number of vehicles, carried out over an extensive period, and in some of the cases by a very large number of claimants. Further, the Infringement involved contacts and communications between the participants over a 14 year period, with different involvement on the particular occasions. The approach to proof of causation and quantification, both as regards any overcharge and as regards pass-on, will therefore be very different from that which can apply where the claim is for loss on one or two very large transactions concluded following extensive negotiation: cp. *BritNed Development Ltd v ABB AB* [2018] EWHC 2913 (Ch). It is unlikely to be realistic in these cases for the issues to be approached by examining each price charged for each transaction subject to the claim and seeking to ascertain how any antecedent exchange of information or coordination between the OEMs may have influenced that price (whether directly or by reference to a gross price). Similarly, as regards pass-on, it would appear to be disproportionate even if it were possible to consider the resale or disposal of each truck that is subject to the claim. Accordingly, it is important to establish how in practice the issues at trial will be approached, and to do so before and not after vast time, effort and expense is devoted to yet further disclosure.";

41. We would wish to hear submissions on this at the next CMC but our present view is that we doubt that the issues can be approached from the 'bottom up' on the traditional evidential basis of witness statements from the various key employees regarding the numerous contemporary emails, notes of meetings and telephone conversations, and so forth, on which they would then be cross-examined: see in that regard the observations of Rose J (as she then was) in the air freight cartel litigation: *Emerald Supplies Ltd v British Airways PLC* [2015] EWHC 2904 (Ch). Instead, it seems to us that the issues will probably have to be approached by the analysis of large amounts of pricing and market data, using established economic techniques to determine what, if any, was the effect of the infringement on prices and any pass-on through the relevant period. That is not to say that evidence of witnesses of fact would be irrelevant but we anticipate it will be of a more general nature, for example explaining how the OEMs priced their trucks and the nature of the relationship between gross and net prices, the significance of configurators, and so forth. The same approach would apply to the prices charged by the claimants in the context of pass-on. This has significant implications for the nature of the disclosure to be ordered…" (emphasis added)

83. The Tribunal went on to order that the parties in the First Wave proceedings, which included these proceedings, submit short statements setting out their experts' favoured methodology

for quantifying the Overcharge. In the statements that followed, the parties agreed with the Tribunal that an econometric approach was appropriate.

84. DAF's statement stated that it proposed to adduce "*contextual and supporting factual evidence as to why, on DAF's case, an adverse effect on transaction prices was unlikely*". But it went on to explain:

> "2. DAF agrees with the Tribunal that any overcharge cannot sensibly be estimated via a 'bottom up' analysis. Instead, it intends to address the alleged overcharge by carrying out a two-stage analysis: (i) a 'causative mechanism analysis', assessing whether there is a plausible mechanism through which the infringement could in fact have had any effect on competition, and caused higher transaction prices; and (ii) a regression analysis to assess whether there were any such effects, and, if so, to estimate their quantum…
>
> …
>
> 4. …It is imperative that the regression analysis is conducted using data that covers DAF's transactions across the market, rather than specific customers**,** because its statistical precision is linked to the number of observations analysed.
>
> 5. In order to isolate any infringement effect, the regression analysis seeks to control for the influence of relevant factors affecting transaction prices that are unrelated to the infringement. Such controls include DAF's MLO costs (a measure of variable cost), the technical characteristics of the truck, and variables aimed at capturing the evolution of demand and supply conditions…" (emphasis added)

85. This then shaped the factual and witness evidence that was adduced in this case by both parties. Mr Giles for Royal Mail and Mr Peatey for BT gave only general evidence as to how the Claimants went about negotiating and procuring the trucks they needed for their business. They did not give evidence, nor could they, as to the specific contracts and negotiations. Mr Ashworth too, on behalf of DAF, gave general evidence about the negotiations with the Claimants and how deals were approved within DAF.

86. The experts were agreed that only a market-wide regression analysis which controlled for relevant influences on prices other than the Infringement (the "*explanatory*" or "*independent*" variables in their models – see below) was appropriate to measure the Overcharge. A simple pricing analysis of the actual prices paid by the Claimants would have insufficient data to determine the average Overcharge and was unlikely to be informative.

87. Mr Beard KC said that he was not proposing a "*bottom up*" exercise and DAF fully endorsed the need for the econometric analysis. But he said that [41] of the Disclosure Judgment recognised that there was a place for factual evidence and documents and there has been

extensive disclosure by the parties, albeit that the disclosure going back 25 years in relation to negotiations leading to the contracts is necessarily limited. His core submission was that it was implausible to suggest that the prices paid by the Claimants in the counterfactual would have been lower than the actual prices paid because of the extremely low, and sometimes negative, margins that DAF was making on the trucks sold to the Claimants. He was therefore saying that this both supported DAF's expert's conclusion that there was no Overcharge but also provides a sense-check on the Claimants' expert whose conclusion was that there was an average market-wide Overcharge applicable to the Claimants.

88. We do not accept this. As Mr Lask pointed out in his reply submissions, DAF had adduced no evidence that their prices could not have gone lower in the counterfactual. Mr Habets' evidence as to the margins being made on the trucks sold to the Claimants does not prove that prices could not have gone lower and that to keep this valuable business, DAF NV or PACCAR would not have approved lower prices for such purpose.

89. A major problem with the timelines and the factual evidence that DAF seeks to rely on is that they do not show the actual transactions prices paid by the Claimants for each truck. They only refer to the contractual chassis price which will have to have added to it all the different options that the Claimants ordered. Mr Ashworth's evidence was that these could be 20% of the price actually charged to the Claimants. And they do not control for all the factors which DAF recognised were necessary to isolate the effects of the Infringement in the regression analysis. Accordingly, they really tell us very little, if anything, about the effects of the Infringement.

90. Furthermore, the timelines were selective in that they only covered three specific models, two for Royal Mail and one for BT, when both Claimants bought various different models, and were only for certain periods. Mr Lask also suggested that the relevant documentation was incomplete which would hinder any attempt to rely on the factual evidence to understand the prices paid by the Claimants for DAF trucks. Mr Beard KC disagreed on the basis that there was extensive disclosure by both sides in this case and there was no relevant absence of documentation in relation to the timelines that DAF relied upon.

91. We consider that there are problems in this respect. The contract prices for the chassis are what are relied on in the timelines whereas there are examples of invoice prices for actual transactions being different even if purporting to be under the same contract. Clearly there

were amendments made to the contracts that are not fully reflected in the available documentation. Furthermore, there are many contracts, multiple models and a huge number of possible truck configurations, combined with a total volume ordered by the Claimants during the Infringement of nearly 10,000 trucks making it virtually impossible to compare the prices in three timelines with the results of the detailed econometric analysis of UK market-wide data taking into account actual invoice prices with all the various configurations. The notion that there should be a "*second bite of the cherry*" even if an Overcharge is established by the expert evidence seems to us to be somewhat far-fetched, particularly without any evidence that the Infringement worked differently as between large and small buyers.

92. As to whether it assists in relation to a link between gross list price increases and transaction prices with the Claimants, this is contradicted by DAF's own witness, Mr Ashworth, who said that DAF NV used list price increases to pressure DAF UK to achieve higher transaction prices and that this applied to direct customers like the Claimants as much as to customers who purchased from dealers. When asked in re-examination about the relevance of list price increases to fixed price contracts he said this:

> "If there was a fixed price contract, then obviously we were locked into that, but if we had an opportunity to negotiate at the end of the contract, then we would obviously negotiate to improve – to increase the transaction price as much as possible, and we would use whatever tools are in my toolbox to do that".

There are some examples in the evidence of contract prices increasing by amendment on an extension.

93. Mr Ashworth also confirmed that both Royal Mail and BT were among those customers who "*always asked for a list price included in their tender*." There are examples of this in the evidence:

(1) In one of BT's Invitations to Tender, bidders were asked to provide a sales price for each truck model plus a *"% off Retail"*. Mr Ashworth confirmed that *"Retail"* in this context meant list price. DAF's response to this Invitation was not only to quote its list prices, but it also cited a forthcoming increase in those prices as a way of justifying a proposed increase in transaction prices (at this time the list prices were set locally by DAF UK):

> "[Leyland DAF Trucks] will be applying a 2.4% increase to the list price of models and options in August 1998…Although we would like to continue with our current pricing position regrettably today's pressures on costs are proving hard to endure, we are therefore proposing a nett price increase of 2.4% for orders placed after week 1, 1999 and through to week 51, 1999".

(2) Mr Ashworth confirmed that DAF used list price increases as a tool for achieving an increase in the transaction price paid by BT:

> "…that is exactly what I have been saying before. If there is a 2.4% increase in list price, then we would hope to achieve a 2.4% increase in transaction price…if we could, with a fixed price contract but generally in the marketplace".

As explained in more detail below, whilst Mr Ashworth indicated that DAF would hope to achieve a transaction price increase that was equivalent to the list price increase, he explained that, in practice, it typically achieved around half the increase with large or direct customers such as the Claimants.

(3) DAF's response also proposed that, if it was awarded the contract, there should be an annual review of DAF's prices against those of its competitors: *"Model List Prices – Review against the competition"*. It also indicated that *"in the next few months all manufacturers are likely to increase their list prices"*.

(4) As for Royal Mail, in his witness statement, Mr Ashworth could not recall anybody from DAF UK *"referring to the specific list prices of trucks as a means of negotiating a higher sales price"*. In cross-examination, however, he agreed that the documentary evidence showed DAF UK using changes in list price to make its case on transaction prices in the course of negotiations with Royal Mail. For example:

(a) In an email dated 10 April 2001 from Andy Shadwell of DAF UK to Mr Giles concerning an amendment to contract VEH397015, he said: "*Essentially our re alignment of market list prices for our competing products 65 Series and 55 series at 17 tonne has allowed me to review the nett price we had requested for the supply of Vehicle Services 17 tonne requirements. For the contract extension, as discussed, we will hold our nett selling price…*". This suggests that DAF UK were using an increase in list prices to argue that it was giving Royal Mail a good deal by holding the sales price.

(b) In a DAF UK tender response from 2002, both list and net prices were presented to Royal Mail (Consignia) in support of its bid. Mr Ashworth agreed that this was another illustration of list prices being used in the course of negotiating a tender outcome with Royal Mail.

(c) In a DAF UK tender response from 1997 to Royal Mail (Parcelforce), it proposed an annual review of DAF's prices against those of its competitors: *"Model List Prices – Review against the competition"*.

94. The Claimants also refer to the "**IKP**" (see [130] below) and margin targets set by DAF NV and the mandate structure as further demonstrating the link between the exchange of list price information among the Cartelists and the deals agreed between DAF UK and each of the Claimants. DAF NV was involved in the approval of most of the contracts and it placed big demands on DAF UK to secure high prices. This is dealt with further below in the section on DAF's factual evidence.

95. In conclusion then on the timelines, even though they may indicate that a specific gross list price increase did not result in an increased contract chassis price for the selected models and period that they cover, nevertheless there is other evidence that shows that gross list price increases were used to drive up transaction prices, including in relation to the Claimants. For the reasons set out above, we are not going to place much reliance on these timelines.

(e) Other factual witnesses of the Claimants

96. Royal Mail put in witness statements for other witnesses, some of whom were called to give oral evidence. Only Mr Giles gave evidence in relation to Royal Mail's procurement process for the purchase of trucks. The other witnesses gave evidence in relation to the other issues such as Supply Pass-On, Financing Losses and Tax, and their evidence will if necessary be dealt with in the relevant sections below.

97. The witnesses were:

(1) Mr Richard Barnes who gave evidence as to Supply Pass-On and Loss of Volume. Mr Barnes was the Commercial Strategy and Pricing Director at Royal Mail with

responsibility for overall pricing strategy, deployment and customer specific pricing. Since June 2021 he has been the Commercial Transformation Director. He was briefly cross-examined.

(2) Mr Peter Cahill who gave evidence as to Supply Pass-On is the Senior Commercial Business Partner in the finance team at Parcelforce. He was briefly cross-examined.

(3) Mr Michael Jeavons who gave evidence on Supply Pass-On and Financing Losses is the Group Chief Financial Officer of the Royal Mail Group. He too was cross-examined.

(4) Mr Damian Devine who gave evidence on Supply Pass-On (Costing) is the Finance Director for Costing and Efficiency at Royal Mail. He was not called to give oral evidence.

(5) Ms Annessa Lehane who gave evidence on Resale Pass-On is a Fleet Efficiency and Utilisation Manager in Royal Mail's Fleet team. She was not called to give oral evidence.

(6) Ms Helen Bradshaw who gave evidence on Financing Losses is the Transformation Office Director in Royal Mail, although for most of her career at Royal Mail she was involved in and had responsibility for the investments that were considered and made by the business. She was not called to give oral evidence.

(7) Mr Dougal Goldring who gave evidence on Tax is the Tax Director for Royal Mail Group. He was briefly cross-examined.

98. Similarly, BT put in witness statements for witnesses other than Mr Peatey who was the only one to give evidence as to BT's procurement processes for the purchase of trucks. BT's other witnesses were:

(1) Mr Liam Nicholson who gave evidence as to Supply Pass-On (Openreach) is the Director, Charge Controls at Openreach. He was cross-examined.

(2) Mr Richard Budd who gave evidence as to Supply Pass-On (BT Wholesale) is a Senior Regulatory Economist in the Central Economics Function of BT. He was not called to give oral evidence.

(3) Mr Donald Shearer who gave evidence as to Supply Pass-On (Fleet) is a Senior Commercial Finance Manager in the Commercial Finance Section of BT Enterprise, a division of BT. He was not called to give oral evidence.

(4) Ms Paula Carter who gave evidence as to Supply Pass-On (BT Retail) is a Director, Portfolio & Pricing in the BT Consumer division of BT. She was not called to give oral evidence.

(5) Mr Mark Nervais who gave evidence as to Supply Pass-On (BT Global) is a Senior Manager, Network Solutions Deal Optimisation in the BT Global Services division of BT. He was not called to give oral evidence.

(6) Mr Gavin Jones who gave evidence as to Supply Pass-On (BT Wholesale) is a Director, Fixed Wholesale for BT Wholesale. He was not called to give oral evidence.

(7) Ms Anne Curtis who gave evidence as to Supply Pass-On (Supply Chain) was employed within BT between 1985 and 2018 covering various finance roles in relation to Supply Chain which provides warehousing, picking, packing and onward delivery of parts services to BT Engineers and certain BT customers. She was not called to give oral evidence.

(8) Mr Lee Keating who gave evidence as to Supply Pass-On (Supply Chain) is the Senior Finance Manager/Finance Director of Supply Chain and “Pelipod”. He was not called to give oral evidence.

(9) Ms Debra Scattergood who gave evidence as to Resale Pass-On is a Senior Sales Manager in BT Fleet Limited, now called Rivus Fleet Solutions Limited (“**BT Fleet**”). She was not called to give oral evidence.

(10) Mr Steve Pattison who gave evidence as to Resale Pass-On is a Technical Engineer in BT Fleet but between 1999 and 2009 he worked within the Sales Team in BT Fleet as a Vehicle Sales Representative. He was not called to give oral evidence.

99. For the reasons set out above, in particular the approach taken by the CAT in relation to the management of these cases as explained in the *Disclosure Judgment*, the Claimants only called to give evidence those available witnesses who were able to speak to issues of "*a more general nature*" concerning truck procurement and Supply Pass-on. We consider that to have been an understandable and reasonable approach for the Claimants to have taken, particularly in circumstances where it is now 25 years since some of the trucks were purchased during the Infringement period and more than a decade since that period ended. Therefore, the Claimants said that it was not possible to identify individuals who were directly involved in the procurement of trucks from DAF or involved in all of the intricacies of the pricing of the Claimants' products/services, across the entire time period.

100. For Royal Mail, Mr Giles referred during his cross-examination to a number of individuals that were at some point involved in truck procurement but who had not been called to give evidence. Mr Ward KC said that those individuals were either no longer employed by Royal Mail or were not involved in the procurement of trucks that are subject to this claim. They are:

(1) Mr Robert Wheeler who joined Royal Mail in 2009 and continues to be employed by Royal Mail as the Senior Procurement Manager. Mr Giles was taken to certain documents indicating that Mr Wheeler was involved in the tender regarding contract C-0134-2010. However, none of the Trucks purchased under this contract are included in Royal Mail's claim.

(2) Mr Anthony Shaw who was the signatory for several Royal Mail contracts prior to 2007. Mr Giles explained that Mr Shaw used to lead the Vehicle Procurement team before Mr Wheeler but has since retired.

(3) Mr Simon Arnott who, Mr Giles explained, was above Mr Wheeler in Procurement in around 2009. Mr Arnott left Royal Mail in 2011.

(4) Mr Nigel Peat who, Mr Giles explained, used to work at Mr Wheeler's level prior to 2009. Mr Peat left Royal Mail in 2019.

(5) Mr Mick Goodwin who, Mr Giles explained, was a buyer in the procurement team, from around 2004. He left Royal Mail in 2007.

101. Similarly for BT, Mr Peatey acknowledged in his statement that he was not the buyer responsible for the procurement exercises that resulted in orders with DAF for the supply of trucks, but he was part of the broader team and was aware of the procurement exercises resulting in the contracts numbered 658129 and 670321. Under cross-examination, Mr Peatey was taken to a number of documents identifying individuals involved in the procurement of trucks. These individuals are no longer employed by BT or have retired.

(1) Mr Jim Seaton was, as explained by Mr Peatey, a Senior Vehicle Engineer. As explained in BT's Disclosure Statement dated 22 February 2019, Mr Seaton is no longer employed by BT having left the business around 2007 or 2008.

(2) Mr John Youe was Mr Peatey's line manager during the period 2006 to 2010. BT's Disclosure Statement dated 22 February 2019 explained that Mr Youe held the role of Head of Procurement during the period 2002 to 2010 and that Mr Youe was no longer employed by BT, having left the business in 2010.

(3) Mr Robert Whitrow was, as explained by Mr Peatey, the Finance and Commercial Director for BT Fleet and this was during the period 2002 to 2009. It is thought that Mr Whitrow left BT's employment over 8 years ago.

(4) Ms Janet Entwistle was, as explained by Mr Peatey, the Managing Director of BT Fleet. This was during the period July 2002 until 30 September 2010. It is thought that Ms Entwistle left BT's employment over 8 years ago.

(5) Mr Dave Walker was understood by Mr Peatey to have been in a Group Procurement function. Again, it is thought that he left BT's employment over 8 years ago.

G. FACTS RELATING TO DAF

(a) DAF's witnesses

102. DAF called four witnesses, all of whom gave oral evidence and were cross-examined.

(1) Mr Ray Ashworth, as identified above, was DAF's main factual witness, as the person responsible in DAF UK for its relationships and transactions with both Claimants. Mr Ashworth was an impressive witness with a remarkable story, having joined Leyland Trucks Ltd as an apprentice mechanic in 1969 and risen through the ranks to become DAF UK's Managing Director in March 2009. He retired in 2017 having accrued 48 years of continuous service. He said he was unaware of the existence of the cartel and was shocked to find out that it had been going on. He gave evidence frankly and, in our view, completely honestly, sometimes admitting matters that were perhaps contrary to DAF's case. He gave credible explanations as to the sales process and the pricing of trucks sold by DAF UK as well as the approvals process.

(2) Mr Jos Habets is the Operations Director of DAF NV. He was on the Board of DAF NV from 2010. He gave evidence to explain DAF's standard costs measures, how they were used in pricing decisions and how they changed over time. He was also unaware of the existence of the cartel. He gave his evidence confidently and clearly and we were assisted by his evidence.

(3) Mr Eelco Van Veen has a current role as Managing Director for International Fleet Sales, Commercial Services and Component Sales at DAF NV. But he gave evidence on DAF NV's sales approval process, including the mandate structure and on DAF NV's approach towards the pricing of new truck models that complied with the Euro emissions standards. He was able to do so because at the material time he was a Director in the Business Logistics department, which included from

2002/3 Truck Logistics. Part of his function was approving or advising on proposed transactions that came to DAF NV as part of the mandate structure. He reported to the Director of Marketing and Sales at DAF NV (the "**M&S Director**") who, as will become clear, was an important figure for the Claimants' case because they were generally within the Cartel and therefore party to the Infringement (no M&S Director was called to give evidence). Between 2007 and 2013, Mr Van Veen became responsible for DAF's sales in the Netherlands and Scandinavia and held the title of Managing Director at DAF Netherlands. Again, we have no reason not to accept his evidence.

(4) Mr Ron Borsboom is the Executive Director of Product Development at DAF NV. He gave evidence remotely by video link. His evidence was concerned with the new technologies that DAF NV had to develop to comply with the new Euro emissions standards. He was a Board member of DAF NV.

(b) Evidence as to the operation of the Cartel

103. Mr Ward KC criticised DAF's approach to its factual evidence, principally on the basis that DAF had not called any witnesses to explain how the Cartel operated within DAF so that we and the Claimants could properly understand how the confidential information obtained from the Cartelists was used and transmitted within DAF and why DAF participated in the Cartel for so long, taking significant risks in the process of doing so if it was not getting any benefit in terms of higher prices and profits.

104. Mr Beard KC responded to these criticisms by saying that the Claimants had received huge amounts of documentation both from the Commission file and in relation to DAF's price-setting and the mandate structure. And DAF had called the four senior individuals described above who were involved in decision-making, including at Board level, and as to list prices and list price changes, and the introduction of new emissions standards. He submitted that it is the Claimants' own fault if they failed to cross-examine those witnesses properly in relation to these issues.

105. However, Mr Ward KC replied to this by saying that it was not the Claimants' job to fill the gaps in DAF's evidence and that all of DAF's witnesses had denied any knowledge of the Cartel or the unlawful exchange of confidential information.

106. As stated above, the Claimants maintain that the M&S Director was a pivotal figure, providing the crucial link between the Infringement and the setting of prices by DAF. The M&S Directors at the material time, who were also for some of the period directors of DAF UK, were Mr Kerry McDonagh, Mr Edo van den Assem and Mr Fred van Putten. DAF has admitted that these individuals participated in the Infringement. The M&S Director was ultimately responsible for the setting of list prices and for the setting of the cost measure, IKP (explained below) and its related margin targets imposed on the sales teams, including in the UK. Furthermore, the M&S Director was part of the approvals' process in the mandate structure at DAF NV level and was always involved in approving the Royal Mail contracts. The managing director of DAF UK, at one time Mr Ashworth, reported to the M&S Director.

107. Mr Beard KC submitted that, even though no M&S Director was called by DAF, nevertheless the Claimants could have asked Mr Borsboom, Mr Habets and/or Mr van Veen how list prices or new emissions standards pricing and timing were set at Board level and about the involvement and influence of the M&S Director. But he recognised that there was no direct evidence as to how the Infringement operated within DAF and what the individuals who were party to the Infringement were hoping to achieve by being so involved. He said that it was not surprising that DAF had not called the M&S Directors as "*relations between those people and DAF were not necessarily wholly warm after the process that the Commission has gone through with DAF and the settlement process and the penalty that had to be paid.*" Mr Beard KC speculated as to what their motives might have been but said in any event, whatever they were, it does not alter the facts or the data and essentially it is those that will determine whether there was an Overcharge or not, not the subjective intentions and beliefs of those involved in the Infringement.

108. We do not wholly accept that. DAF's expert evidence on the theory of harm is based on speculation as to how the Infringement would have worked within DAF and then draws conclusions on such speculation as to how the Infringement would not have had an effect on prices. We think that any such theory would be more soundly based on what actually happened factually within DAF in terms of how the information was used and how the Infringement managed to continue over such a long period, presumably for the mutual benefit of all the Cartelists.

(c) Evidential presumptions

109. The Claimants rely on two legal presumptions in relation to DAF's evidence or the alleged deficiencies in its evidence: (i) the *Anic*[7] presumption in competition law that undertakings which take part in collusive arrangements "*take account of the information exchanged with their competitors in determining their conduct on that market*"; and (ii) deriving from *Prest v Petrodel Resources Ltd* [2013] UKSC 34 ("***Prest***"), that adverse inferences can be drawn from DAF's failure to adduce evidence as to how the Cartel operated and how DAF used the information received for its benefit.

110. As to the *Anic* presumption, Mr Ward KC claimed that Mr Beard KC had made a significant concession in opening that this presumption could be relied upon. Mr Beard KC had said: "*…in relation to gross list price exchanges, it has never been part of our case that we just ignored them…we accept that in relation to gross list pricing information that these matters were taken into account. We are not saying we ignored the information we received in that regard*."

111. However, Mr Beard KC maintained that this had always been their position but that it still did not mean that there was an adverse effect in terms of transaction prices. He referred to the CAT judgment in *Lexon (UK) Limited v Competition and Markets Authority* [2021] CAT 5 at [187(6)]:

> "Subject to proof to the contrary, which the economic operators concerned must adduce, it must be presumed that the undertakings taking part in the concerted action and remaining active on the market take account of the

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[7] From C-49/92 *P Commission v Anic Partecipazioni SpA*.

> information exchanged with their competitors in determining their conduct on that market. Such a concerted practice is caught by Article 101(1) TFEU, without the need to establish the existence of anticompetitive effects on the market."

112. *Lexon* was concerned with whether there was an infringement by object or not, and, as in this case, it was not necessary to prove the effects of the infringement to find that the concerted practice was within Article 101. In a sense it strengthens Mr Ward KC's argument that DAF's conduct was regarded as so likely to have negative effects on its transaction prices that it breached Article 101 without proof of such effects. The fact that DAF admits that it took account of the information when determining its conduct on the market must be part of the relevant matrix of fact in considering whether that conduct influenced transaction prices.

113. In relation to *Prest*, Mr Ward KC submitted that DAF were required to explain why it carried on participating in the Cartel for 14 years if it was not because it was receiving substantial benefits from doing so. He said that the "*obvious inference is that DAF carried on with the cartel for so long precisely because the collusion enabled it to sustain higher prices than would otherwise have been the case.*"

114. In *Prest*, Lord Sumption said, after referring to Lord Diplock's speech in *British Railways Board v Herrington* [1972] AC 877, 930-931 concerning the liability of a railway company for injury suffered by child trespassers on the line, at [44]:

> "The courts have tended to recoil from some of the fiercer parts of this statement, which appear to convert open-ended speculation into findings of fact. There must be a reasonable basis for some hypothesis in the evidence or the inherent probabilities, before a court can draw useful inferences from a party's failure to rebut it. For my part I would adopt, with a modification which I shall come to, the more balanced view expressed by Lord Lowry with the support of the rest of the committee in *R v Inland Revenue Commissioners, Ex p TC Coombs & Co* [1991] 2 AC 283, 300:
>
> > "In our legal system generally, the silence of one party in face of the other party's evidence may convert that evidence into proof in relation to matters which are, or are likely to be, within the knowledge of the silent party and about which that party could be expected to give evidence. Thus, depending on the circumstances, a prima facie case may become a strong or even an overwhelming case. But, if the silent party's failure to give evidence (or to give the necessary evidence) can be

> credibly explained, even if not entirely justified, the effect of his silence in favour of the other party may be reduced or nullified."

115. Mr Beard KC gave an explanation, referred to above, as to why those that participated in the Cartel, such as the M&S Directors, were not called to give evidence. He also speculated in his closing submissions, having not called any evidence in such respect, as to how the information might have been used to beneficial effect within DAF. This included giving more confidence as to DAF's own plans and pricing or that the information might have been useful in better understanding the relative positioning in the market of DAF's products as compared to those of its fellow Cartelists. He said that it is possible that those participating may not have realised that what they were doing was wrong. He accepted that it could have been used to increase transaction prices "*in some markets*", carefully leaving open the possibility that this did not happen in the UK or to the Claimants.

116. We take no account of this speculation and it is an inappropriate way of approaching this issue by DAF. The burden remains on the Claimants to prove causation but where DAF has elected to call no evidence as to how the Cartel was operated by DAF and how it used the information to its advantage it is not open to its Counsel to speculate as to what actually happened. This was highly commercially sensitive information that was disclosed among the Cartelists over a long period of time. The Commission found that this information enabled the Cartelists to be better able to calculate their competitors' approximate net prices. Further, the basis of a finding of an infringement by object is that it is very likely to have had negative effects on transaction prices. Therefore, in our view, this means that, if DAF wished to argue that, because of the way it used the confidential information obtained through the Cartel, there was no effect on prices, it would have had to adduce factual evidence to such effect. In other words, DAF's admissions and the Settlement Decision establish a prima facie case that the Cartel had an adverse effect on transaction prices.

117. That is not to say that DAF is unable to rely on its expert evidence to argue that the data shows that there was no Overcharge paid by these Claimants. But even their expert was unable to explain or come up with a rational economic basis for

DAF's participation in the Cartel over such a long period. While *Prest* does not entitle the Claimants to say that they have therefore proved that DAF's participation in the Cartel led to higher prices it does mean that it is not open to DAF to argue that, as a matter of fact, the information was not used by it to achieve prices that were higher than they would otherwise have been without that information exchange.

(d) Mechanisms for increasing transaction prices

118. Given DAF's silence on these issues, the Claimants put forward a number of what they called plausible mechanisms whereby DAF's participation in the Cartel could have led to increased UK transaction prices. Mr Ward KC submitted that there were three broad ways that DAF could have done this:

(1) Through DAF NV influencing the prices charged by DAF UK;

(2) By "*rigging*" over 90% of the market in which the Claimants purchased their trucks; and/or

(3) Through UK-specific elements of the collusion.

(1) DAF NV's influence on transaction prices

119. Mr Ashworth accepted that DAF NV placed "*big demands on DAF UK to get higher prices*". Mr Ward KC relied on four ways in which he said that DAF NV was able to influence transaction prices agreed with UK customers:

(i) Through setting and increasing gross list prices;

(ii) Through the margin targets which were binding on DAF UK and were set by reference to the IKP "*cost*" measure which was another way that DAF NV could influence DAF UK to charge higher prices;

(iii) Through the mandate structure which required approval up the chain to DAF NV and sometimes PACCAR; and/or

(iv) Through indicating the price premia that it expected DAF UK to achieve on new emission standard trucks.

(i) List prices

120. As has been explained above, the exchange of gross list price information and in particular proposed list price increases formed a major part of the Infringement. Mr Ashworth frankly admitted that, in the case of direct customers, such as the Claimants, a "*very good rule of thumb*" was that DAF UK normally expected to achieve "*about half*" of a list price increase in the form of increased transaction prices. He said this during cross-examination and confirmed it in re-examination when Mr Beard KC sought clarification on this and he explained it further. That was his clear recollection as to the impact of list price increases on transaction prices. Mr Beard KC sought to downplay this evidence in his closing submissions by saying that the data simply did not bear this out and that Mr Ashworth had made an honest mistake in thinking that there was this impact.

121. We think that Mr Ashworth's evidence is significant in this respect and DAF should not be undermining its own witness. Mr Ashworth, the Managing Director of DAF UK, who knew nothing of the Cartel, clearly perceived increases in list prices to be used by DAF to increase transaction prices and that they did actually increase by about 50% of any given list price increase. Mr Beard KC referred to the timelines in this respect but for the reasons set out above we do not think that the timelines really tell us about the effect on transaction prices. Mr Ashworth's evidence is important in showing that list price increases were thought to drive transaction prices up and were also used by the sales teams in their negotiations. It also confirms the findings in the Settlement Decision, particularly recital (47).

122. The relevance of list prices to transaction prices was further explained by Mr Ashworth:

> "A. In terms of if we are negotiating with a customer, then the list price movement that you make is obviously a percentage that I am looking at, so that percentage may have some impact on what you are negotiating with the

customer and the ultimate transaction price – so not the absolutely number but the percentage."

…

"A…if we are looking at how we announced movements in pricing, then we do not go to the market and say, "Customer prices will increase by 2%"; we go to the market and say "List prices are going to increase by 2%". Essentially what we are looking for is a customer price to increase by 2%. The relevance of the actual number which is the list price has no relationship to the transaction price what the customer pays, but the increase is relevant, as I have said."

…

"MR WARD: Mr Ashworth, is not the simple and plain obvious meaning of all of this that DAF NV wanted more money out of the UK and for that reason they wanted a list price increase, and that means the list price increase was expected to drive higher transaction prices? Would you accept that?

A. So I agree that the list price increase would drive or could drive increased transaction prices."

123. The contemporaneous documents also supported this link between list and transaction prices:

(1) In a DAF invoice to Consignia (Royal Mail's former name) dated September 2001, it presented the transaction (*"net"*) price as including a 15% discount off the list price. Mr Ashworth agreed that presenting prices so as to suggest that the customer was receiving a discount off the list price may give the customer a *"warm feeling"*.

(2) In a memo from the M&S Director at DAF NV (Kerry McDonagh, a participant in the Cartel) to the Managing Directors of sales units (such as DAF UK) dated January 2004, a list price increase of 3% for 2004 was announced and it was emphasised that *"this will not be a cosmetic exercise and we expect this list price increase to produce a real increase in nett revenues"*. Mr Ashworth agreed that, according to this document, Mr McDonagh wanted the list price increase to generate net price improvements.

(3) In a memo dated January 2005 from John Kearney of DAF NV to sales units such as DAF UK a forthcoming 3% list price increase was announced and it was explained that *"This price increase is an*

important instrument to achieve DAF's 2005 margin targets. Therefore we need to be able to achieve a significant net effect immediately after February 14th". Mr Ashworth agreed that, according to this document, Mr Kearney anticipated the list price increase to achieve higher margins.

(4) In a project information bulletin issued in December 2005 by Mr Ashworth to *"All Dealer Document Controllers"* and *"All Marketing & Sales Recipients"* he announced that due to *"the continuing increase in the cost of raw materials"*, a 2% European list price increase would be introduced from January 2006. Mr Ashworth agreed that the list price increase announced in this bulletin was aiming to *"achieve an increased transaction price"*.

(5) In an internal Mercedes email from Ian Jones dated May 2008, there was reference to a 4.5% *"exchange rate recovery price increase"* by Mercedes and it discussed how much of that increase was likely to be achieved in increased transaction prices. Mr Jones added that *"...DAF took a 4.5% price increase, including inflation, and advised me privately that they were budgeting on realising 2.4%"*. This (in addition to revealing evidence of the exchange of actual net price intentions between key competitors in the UK market) approximates to Mr Ashworth's evidence as to approximately half of the list price increase being reflected in the transaction prices but also illustrates how the Cartelists were able to gather confidential information about proposed changes in each others' net prices.

(6) In an email exchange in January 2009 between Richard te Velde of DAF NV and Mr Ashworth, Mr te Velde reported that the M&S Director at DAF NV (Ron Bonsen) *"wanted a list price increase for the UK to compensate for the Pounds value against the euro"*. Mr Ashworth's response set out a proposal for a staged list price increase but warned that *"[t]he major risk is that any price increase will simply stop all new orders and challenge customer loyalty"*. Mr Ashworth agreed that this document showed that list price increases *"can impact buyer behaviour"*.

124. Mr Ashworth gave an example during cross-examination of a dealer using an imminent increase in list prices to try to persuade their customer to place an order at the lower price then prevailing. This shows not only that customers were influenced by list price increases but also that such increases would actually translate into transaction prices. That is why there would be an incentive to the customer in that situation to purchase their trucks before the list prices went up. The fact that this sales message might succeed in bringing transactions forward in time and/or incentivise customers to commit to a price that they might otherwise have sought to resist, shows how DAF's messages to the market on list price changes could be expected to harden actual transaction prices.

125. DAF has relied on the fact that it did not set pan-European list prices until September 2002 and that prior to that list prices were set locally. However, we do not think that this assists DAF because of the findings in the Settlement Decision and the evidence in relation to collusion as to the UK involving the M&S Director during the early period. Also, any list price changes would have sent a message to the whole of the EU about planned price changes.

126. The Settlement Decision at recital (61) said that the Infringement "*covered the entire EEA throughout the entire duration of the Infringement.*" And specifically addressing the period prior to introduction of pan-European list prices, recital (51) stated as follows:

> "(51) …Before the introduction of price lists applicable at the pan European (EEA) level (see above at (28), the participants discussed gross price increases, <u>specifying the application within the entire EEA, divided by major markets</u>. During additional bilateral meetings in 1997 and 1998 apart from the regular detailed discussions on future gross price increases, the relevant Addressees exchanged information on harmonising gross price lists for the EEA." (emphasis added)

127. Mr Ward KC also referred to the close association between the M&S Directors and the UK market. Mr McDonagh was the Managing Director of DAF UK in the pre-2002 period. Many meetings between the Cartelists, including the M&S Director, were evidenced in the Commission file where UK pricing was discussed, including in the early period.

128. In any event DAF did not adduce any evidence as to how list prices for the UK were set prior to the pan-European list prices from September 2002. Its pricing statement said that list price setting and list price increases were the responsibility of DAF UK's Marketing Director and Managing Director with input from the management team. Those roles were occupied in the period January 2000 to March 2001 by Mr Tony Pain and Mr McDonagh, both of whom were involved in the Cartel.

129. In short it is fairly clear that list prices and list price increases had an impact on and were likely to influence transaction prices over the whole of the EEA and for the entirety of the Infringement period, as was found in recital (51) of the Settlement Decision.

(ii) Margin targets and IKP

130. Mr Habets explained the "*costs*" metrics used by DAF. There were two measures: "**MLO**" or material, labour and overhead costs; and "**IKP**" (derived from the Dutch "*integrale kostprijs*" or integral cost price) which applied a surcharge to MLO. IKP was not really a costs measure as the surcharge was effectively a discretionary profit margin added to MLO by DAF NV as an incentive to drive higher prices locally.

131. DAF NV set standard MLO costs per component, per plant, on an annual basis. Even though they were estimated prospectively, Mr Habets said that they were very close to DAF's actual costs. DAF NV calculated the MLO margin of a truck sale by deducting the standard MLO costs of the truck from the revenue obtained or anticipated from the sale. Mr Habets said that since 1998 when he started working at DAF NV, standard MLO cost had been used as the reference for margin calculations by the Board and PACCAR. However, MLO was rarely made visible to DAF UK.

132. From 2003, DAF started using its Order Management System ("**OMS**") into which the standard MLO costs were uploaded. Certain costs were not included in DAF's standard MLO costs: (a) "SE&A" which stands for Sales, Engineering (R&D costs) and General & Administrative Expenses; and (b) warranty costs,

which were provisioned for separately. DAF NV would only make a profit overall if these costs were also recovered from positive margins above MLO earned across DAF NV's total truck sales. MLO did also include some elements of overhead costs, so any transaction which failed to cover MLO might still contribute to DAF NV's profits.

133. DAF's IKP measure was derived from MLO costs with an additional surcharge added to it by DAF NV. The surcharge was fixed annually by the Board of DAF NV. MLO costs were usually not disclosed to local sales units as DAF NV did not want the lower costs measure to be used for pricing decisions. Local sales units work on the basis of IKP, and their margin targets for each vehicle class were set by managers such as Mr van Veen by reference to IKP.

134. Mr Habets explained that originally the purpose and calculation of the IKP surcharge was to provide DAF with a margin over MLO cost in order to ensure sales revenues were sufficient to recover SE&A and warranty costs, that were not included in MLO costs. He said that it was designed to be a more complete cost measure including both manufacturing and overhead costs. We are a little sceptical about this as no specific evidence was presented to establish this claim, and it is hard to see how any specific margin over direct costs could be said definitively to achieve breakeven for DAF as a whole. It seems to us that the uplift to MLO was always to provide a profit target and to discourage local sales teams from conceding too much on price. In any event, Mr Habets said that the calculation of IKP changed from around 2003/2004 and there were no longer detailed costs calculations around setting the IKP surcharge. As he said in his witness statement:

> "IKP cost was no longer a reflection of the costs that DAF NV actually incurred: it became an instrument by which DAF NV tried to steer local sales units to negotiate higher transaction prices."

135. Mr Habets went on to explain that the IKP surcharge and IKP target margins (which were separately calculated) became tools of the Marketing and Sales team, led by the M&S Director to stimulate higher transaction prices from the local sales units. Indeed, the IKP surcharge ceased to reflect actual costs and diverged from MLO costs by only being allowed to go one way:

> "I recall that at a certain point, IKP cost could only be increased, because any increase in MLO cost would be reflected in an increase in IKP cost, but if there was a decrease in MLO cost, we would offset it by increasing the IKP Surcharge."

136. Mr Habets expanded upon this in cross-examination:

> "The IKP surcharge was more something which marketing sales decided upon. There was no real content behind it anymore. It was a relic from DAF before the bankruptcy. PACCAR was not interested at all in IKP margins or what we did with them."
>
> …
>
> "…It was a push towards the sales organisation to stimulate them to realise as high a price as possible and we showed them a very high cost price, which at some point was so high they could only realise negative margins."
>
> …
>
> "I think at some point everybody knew that IKP was a hugely inflated number which was far off reality."
>
> …
>
> "…With the takeover of PACCAR, IKP lost its relevance and it was kept within marketing and sales because they wanted to keep the system working as they had it. In the board we never had discussions on that. It was something the way marketing and sales wanted to manage the business and manage the sales subsidiaries."

We do not accept that IKP became less relevant after the PACCAR takeover in 1998 as it was used continuously throughout the relevant period with DAF UK being required to work with it and it was the measure by which authorisation by DAF NV and beyond was triggered. We think that Mr Habets has sought to minimise its importance to price setting as it was a mechanism that could be used by those involved in the Cartel.

137. The use of IKP to drive higher prices is supported by documentary evidence such as a DAF NV memo dated 14 June 2005 in which the pricing for Euro 4 and 5 trucks was discussed, together with the pricing of the other Cartelists:

> "Euro 5 nearly equals the cost of Euro 4. We advise to raise the IKP to an artificial higher level. This will support the nett price and margin target".

138. DAF's witnesses did not describe how the IKP surcharge or related target margins were set. They did however accept that the M&S Director was very

much involved. For example, Mr Habets said that IKP was not considered by the whole Board, only him and the M&S Director. Mr van Veen, who was not a Board member, said that the IKP surcharge was set by the M&S Director and the Director of Finance. As to the margin targets, Mr van Veen said that the M&S Director "*would typically set the overall target margin, probably also by series*".

139. The central involvement of the M&S Director was relied on by Mr Ward KC to submit that this was an obvious route for the deployment of information obtained through the Cartel through to the sales units and into higher transaction prices. However, Mr Beard KC responded by saying that this assumed that the UK sales team understood changes to IKP to indicate a requirement to increase transaction prices whereas Mr Ashworth's unchallenged evidence was that the IKP number itself did not mean very much to them. Mr Beard KC also said that Mr Habets' evidence showed that there was no manipulation of IKP prior to 2003/2004 because it was a measure of actual costs until then. As noted above, however, we would not accept this proposition without there being clearer evidence that this was the case.

140. Nevertheless, it seems fairly clear to us that IKP and the target margins based on it were used as mechanisms by which DAF NV could seek to ensure that sales teams maintained or raised prices. The fact that true costs or MLO were not disclosed to sales teams and indeed were deliberately manipulated to conceal any reduction in MLO costs, suggests that IKP could have been used in this way. In the absence of evidence to the contrary from DAF, we think it is legitimate to take this into account in considering how the information exchanged as part of the Infringement could have translated into higher prices.

(iii) Mandate structure

141. DAF said that the mandate structure was only put in place in October 1998, after the start of the Infringement. (It would be strange not to have had some sort of similar authorisation procedure in place prior to then but DAF did not explain what that was.) The mandate structure was based on IKP and IKP target margins and the extent of the divergence from the target margin triggered the level at

which the transaction had to be approved, whether by DAF NV or PACCAR. It was also structured by reference to volumes and total revenue. Mr van Veen explained it in his witness statement as follows:

> "…transactions falling outside of permitted deviations from the applicable target margins, as well as transactions with a particularly high volume and/or total revenue, have to be escalated up the mandate structure. Under the mandate structure, certain transactions proposed by the sales units, including DAF UK (which operated in one of DAF's largest markets), are therefore reviewed by senior individuals within DAF NV and PACCAR's corporate hierarchy if they fall outside of the sales unit's mandate, and are then approved, re-negotiated or rejected together."

142. Mr Habets also explained it as follows:

> "…IKP is of relevance to DAF's mandate structure, which dictates which level within the PACCAR Group has authority to approve a particular transaction. The mandate structure is based on volume and margin thresholds. If the anticipated margin of a transaction is a certain level below the target margin, then that triggers an escalation to the next approval level. The local sales units' mandates were (and still are) defined using percentage deviations from IKP-based target margins."

143. Mr van Veen described how there would be discussions with the M&S Director when deals had to be approved by DAF NV and where it fell outside their particular mandate "*the M&S Director would always be involved and consulted*". If they thought a better deal could be re-negotiated it would be sent back to the local sales unit. DAF NV was therefore able to influence prices agreed with customers including possibly being able to use information obtained through the Cartel to judge what prices might be achievable and generally to drive them up as high as possible.

144. Mr Beard KC submitted that this could only be done if DAF UK was able to anticipate that DAF NV would be rejecting a certain number of deals such that it would need to try harder to negotiate better prices from its customers. However, Mr van Veen's evidence was that there were only a limited number of transactions that were rejected by DAF NV – a couple a week for the whole of Europe between 2003 and 2007 – and this would have been insufficient for DAF NV to influence prices to any great extent. Mr Beard KC also submitted that there was no evidence that the mandate structure enabled DAF NV or the M&S Director to influence the actual prices paid by the Claimants which were

all pursuant to fixed price contracts and therefore not subject to renegotiation whenever DAF NV wished to increase prices because of information obtained from the other Cartelists.

145. There is considerable factual uncertainty here, particularly as to whether the feedback that DAF NV was able to give to DAF UK via mandate approval decisions was sufficient to affect DAF UK's expectations and conduct across a wider range of pricing decisions. Again, however, that lack of evidence is because DAF has chosen not to provide it and we think that the Claimants are able to argue that the mandate structure was another mechanism which could have been used to encourage the local sales units including DAF UK to push for higher prices. DAF has admitted that the information obtained through the Cartel was used by it and it seems that there are a number of ways that it could have been used to raise prices, even if not all of them were used at the same time or throughout the Infringement period.

(iv) Premia on new emission standards trucks

146. The Claimants maintain that, pursuant to the Cartel, DAF NV specifically influenced the pricing for new emissions standard trucks. It indicated to DAF UK the price increases that it expected DAF UK to achieve on new emission standard trucks. Mr Ashworth explained that, for Euro 4 and Euro 5, DAF NV *"indicated the sales price increase that it thought we needed to get from customers generally"*. There are also a number of indicators suggesting that such price rise expectations related to transaction rather than list price increases. In a memo from DAF NV to the Managing Directors of local sales units dated March 2006, the *"net price step ups"* that it expected them to achieve for Euro 4 and Euro 5 compared to existing Euro 3 models were set out. The memo indicated that the increases had been discussed and approved by the M&S Director, Kerry McDonagh, who Mr Van Veen had explained was ultimately responsible for signing off pricing proposals for emission standard Trucks.

147. The Settlement Decision found there to have been specific collusion over the pricing of new emission standard Trucks (see recitals (50), (51), (52), (54) and (59)). As explained by Mr Borsboom, customers were reluctant to pay for the

extra costs of technologies that were compliant with the strict legislative requirements on emissions standards. Without the Cartel, DAF and the other Cartelists might have encountered difficulties in maintaining their existing margins on the prior models as customers did not want to pay more for compliance with compulsory standards. But with the coordination on timing and passing on of costs, as the Commission found, the Cartelists could mitigate (or even offset completely) the risk of negative margin effects of the new emissions standards.

148. Certain documents showed that, in considering its price increases for successive emission standard Trucks, DAF NV did in fact take account of the information that it had obtained on its competitors' pricing intentions. There were DAF NV memos dated June 2005 and December 2005 which evidenced competitor prices being taken into account in setting DAF's price premia for Euros 4 and 5. And a DAF NV slide deck dated November 2004 entitled "*The road to Euro 4 and 5*" included information on a number of competitors' future net prices for Euros 4 and 5.

149. There is a debate among the experts as to whether the premia were an effect of the Infringement or were because of other enhancements that were added to coincide with the introduction of the new emissions standard trucks that customers were willing to pay for, as opposed to not being prepared to pay for the new emissions technologies. However, it is clear that as a matter of fact and as found in the Settlement Decision, DAF NV sought to add premia to the prices of new emissions standards trucks and it could only do so through influencing the local sales units including DAF UK. The Claimants still need to show that this impacted on the Claimants' prices but at this stage it is sufficient to say that this was also one of the possible routes for doing so.

(2) Rigged market

150. The allegation of there being a rigged market from which the Claimants were buying achieved more prominence at the trial than in the pleadings or written evidence. This was perhaps because of Mr Ashworth's evidence during the course of which he agreed with the Chair that with the benefit of hindsight he

thought that he was "*actually bidding in a rigged market*". Both he and the representatives of the Claimants who were negotiating with DAF knew nothing of the Cartel and thought they were tendering in a competitive market. All that Mr Ashworth was actually saying was that there was a Cartel going on between DAF and its supposed competitors which he can now see would have distorted the market. DAF has admitted the findings in the Settlement Decision that the single economic aim of the collusion was the distortion of independent price setting.

151. We think that there has been some confusion over what Mr Ward KC meant by a rigged market in this context. Mr Beard KC correctly pointed out that there was no clear plea of "*bid-rigging*" between the Cartelists, although the Claimants did plead that the collusion "*caused an overall softening of competition between manufacturers of trucks in the EEA (including the United Kingdom).*" Mr Beard KC said that if the Claimants were saying that all the other manufacturers who were bidding on the Claimants' tenders were offering inflated prices as a result of the Infringement, then the Claimants had a serious evidentiary problem, as they had no evidence in relation to the other manufacturers. Mr Beard KC said that this was a result of the Claimants wanting a trial of just their claims against DAF whereas DAF had wanted to have a far larger trial involving more claimants and all the Cartelists.

152. In any event, Mr Ward KC accepted that the Claimants had not pleaded and had not adduced evidence in support of a case of "*bid-rigging*" in the sense of there being an agreement between the Cartelists as to who should bid for the Claimants' business or as to the prices that should be offered. His point as to a rigged market was to meet the argument from DAF that there could not have been an Overcharge in this case because of the competitive tendering processes that both Royal Mail and BT engaged in for the procurement of their trucks. Mr Ward KC therefore said that the fact that the vast majority of the other manufacturers bidding for the Claimants' contracts were themselves Cartelists who would not have remained in the Cartel for so long unless they were receiving substantial benefits from doing so shows that the Claimants could not actually benefit from a truly competitive tendering process. The Claimants say that it is at least plausible that the Cartel influenced the tender prices and that

the competitive tender process did not eliminate what would otherwise have been the effect of the Cartel, namely an Overcharge.

153. Mr Ward KC relied on a number of factors to support the Claimants' case as to a rigged market in this sense:

(1) DAF's evidence made plain that the prices offered by DAF's competitors were an important factor in price negotiations between DAF UK and the Claimants. For example:

(a) In identifying a starting point for pricing to Royal Mail, the factors that Mr Ashworth said he took into account included "market intelligence (most often gained directly from Royal Mail, although sometimes also from DAF UK's dealers and other customers) on prices for comparable trucks made by other manufacturers".

(b) DAF claimed that during its tender process, Royal Mail used the prices offered by DAF's competitors in an effort to "drive down" DAF's prices, although Mr Giles said he could not recall this happening.

(c) Similarly, DAF claimed BT used its tender process in an effort to "play DAF off against its competitors" (Mr Peatey said he had not done this but he was not involved in any of the actual negotiations for the contracts in issue).

(d) DAF UK offered an annual review of its own prices against its competitors' prices as a means of making its bid more attractive.

(e) Mr Ashworth explained that, at least until 2000, Royal Mail and BT would have had access to the list prices of DAF's competitors through publicly available hard copy lists.

(2) As Mr Ashworth rightly accepted, it is of critical importance that the bidders in a competitive tendering exercise are independent of each other.

(3) However, in this case, the Cartelists accounted for over 90% of the trucks market, even excluding Scania. Thus, the vast majority of DAF's 'rival' manufacturers were themselves involved in the Cartel. And just as DAF had vast amounts of valuable information about its competitors' pricing strategies, those competitors had vast amounts of valuable information about DAF.

(4) The Claimants' tender criteria included factors other than price but the collusion was not limited to price and included a wide range of other commercially sensitive matters such as delivery times. Price was, however, plainly a very important factor, as illustrated by the weightings used by the Claimants of their tender criteria.

(5) The fact that non-Cartelists, who were tiny compared to the Cartelists, occasionally bid in the Claimants' tenders does not indicate that their presence constrained either DAF's bids or those of the other Cartelists. Nor was there any evidence that the Claimants were able to use the bids of non-Cartelists to drive down either DAF's bids or those of the other Cartelists.

(6) Mr Ashworth's evidence was that, because of its tender process, Royal Mail was able to obtain *"rock bottom"* prices from DAF. It is important, however, to be clear what he actually meant by this, i.e. *"the prices we agreed were lower than would have been agreed with any other customer (with one possible exception)"*. However, that evidence cannot assist DAF. Even if, as Mr Ashworth said, the prices obtained by Royal Mail were "*rock bottom*" and low compared to DAF's other customers, that is not a useful comparator. The relevant comparison is between the prices actually paid by Royal Mail and the prices that it would have paid absent the Infringement. As the Claimants' expert, Mr Harvey explained: *"Customers that negotiate more effectively with DAF are*

likely to pay less than other customers. This does not rule out the possibility that they paid more than they would have done in the counterfactual, in which the Infringement did not occur". He further explained that the Infringement may have served to diminish the buyer power of large customers.

154. In our view we can take into account the risk that these were not truly competitive tenders in assessing whether it is plausible or not that the Claimants suffered loss as a result of the Infringement. As to whether there was a rigged market as such, there is no direct evidence that the other Cartelists' prices were higher than they would have been absent the Infringement, although that would be very likely to happen in a tendering process that took place within a cartel. Accordingly, the point provides some limited support perhaps for the Claimants' theory of harm, but it does not help in establishing whether the Claimants did in fact pay an Overcharge for their trucks.

(3) UK specific collusion

155. Mr Ward KC also drew our attention to some of DAF's evidence that DAF UK received and exchanged sensitive competitor information itself, even leaving to one side the pressure it was being put under by DAF NV, through its involvement in the Cartel. He said that the evidence set out above as to the mechanisms by which the Infringement conduct that took place outside the UK could have had an effect on the UK and contracts entered into with the Claimants is sufficient for them to show that it caused the Claimants loss. But he referred to a number of examples from the evidence showing that DAF UK was not totally isolated from the confidential information being exchanged between DAF and its competitors.

156. Example 1: The "Peers Club" meeting at Castle Coombe on 1 December 2003 was attended by Mr Stuart Hunt (one of Mr Ashworth's predecessors as Managing Director of DAF UK). There was a large amount of confidential information exchanged at the meeting, including on prices (without any clear indication as to whether they were gross or net prices). Among other things, DAF indicated to its competitors an intended price increase of 3%.

157. A few days later, Mr Ashworth and others within DAF UK were invited to a meeting with Mr Hunt to discuss *"Stuart's recent Castle Coombe meeting"*. Then in March 2004, a Product Information Bulletin was issued by Mr Ashworth to DAF UK colleagues, announcing a *"list price increase of 3% effective 5th April"* – i.e. precisely the same increase that had been indicated to competitors at the Peers Club meeting in December 2003.

158. Example 2: Another example is an email sent by MAN to DAF UK (and Renault, Iveco, Scania and Volvo) in October 2005, containing precise information on MAN's planned price increase for Euro 4 Trucks:

> "Hi,
>
> I am looking for some information on Euro 4/5.
>
> Basically the price difference between Euro 3 and 4, ours will be between £2,500 and £3,500 increase depending on engine size."

159. The email was forwarded to Mr Hunt and Mr Ashworth by Mr Tony Pain, Marketing Director at DAF UK, who said:

> "An indication of how much MAN will be charging for Euro 4. We have not responded as I don't think it's a good idea to send emails on such things."

160. Mr Ashworth then forwarded the email to various colleagues including Mr Shadwell, the account manager for Royal Mail and BT, with the instruction:

> "For info – please use discretely."

161. Mr Ashworth explained in cross-examination that he had forwarded MAN's pricing information because *"it was information from competitors and therefore I viewed it as being absolutely correct information"*, and because it was relevant to the pricing activities of Mr Shadwell. He assumed the prices quoted in the email were anticipated transaction prices rather than list prices.

162. This is perhaps difficult to reconcile with Mr Ashworth's denial of knowledge of the Cartel but it was never suggested to him that he did have such knowledge. It does show, however, that there was information about competitor prices available to DAF UK which could be used to its advantage in negotiating with the Claimants.

163. Example 3: In March 2009, Mr Ashworth attended a meeting of the Society of Motor Manufacturers and Traders ("**SMMT**") with various representatives of DAF's competitors. A MAN note of the meeting recorded: *"What was more useful than the meeting itself, was the discussion before, during or after…[The Heavy Truck manufacturers] have all received price increases for forward production (MB 3%, DAF 6%, Renault 6.5%, Iveco 5%, Scania 5%) Ian Jones said that we will not find the new transaction price until all stocks are washed through – he estimated between 4,000 and 5,000…"*. Mr Ashworth accepted that this was sensitive information and, in particular, that an increase in DAF's list price would be relevant to the ultimate transaction price.

164. Example 4: In October 2009, a DAF UK colleague, Kevin Lanksford, emailed Mr Ashworth with some *"customer/competitor intelligence regarding pricing for your forthcoming meeting with the senior board"*. The email contained information on the prices being offered by Renault to a truck hire company called Gulliver. Mr Ashworth explained that he would have requested this information for the purposes of a presentation he was due to give to the senior board.

165. Example 5: at two SMMT meetings in 2009, attended by Mr Ashworth and Mr Pain, the Cartelists discussed stocks, market forecasts, and price increases for forward production. It is to be noted that, according to Mr Ashworth's evidence, granular information on registrations and transaction prices was provided daily via the SMMT. He explained, however, that this information *"ceased to exist when the OFT investigation was undertaken"* even though there is no suggestion that information from the SMMT was itself unlawful.

166. These examples do demonstrate that DAF UK itself received sensitive competitor information and disseminated it internally. Mr Ashworth explained that, if market intelligence on competitors' prices was considered to have come from a reliable source, it would be taken into account during negotiations with customers like the Claimants:

> "…I tended to be very focused on what we would achieve and only take information that was given to me from either customers or dealers that was absolutely – I could validate as competitive information. But anything else I

would – my objective was – because obviously I did not know the cost price, which is quite unusual for a managing director, but my objective was to get the maximum volume at the highest revenue for the company. So I was focused entirely on that and, if I was given competitive information, either by the customer or by – which was obviously validated, then I would take that into account, but otherwise I was just there to achieve what I could in the marketplace."

H. GENERAL PRINCIPLES OF LAW

(a) Causation and quantum

167. As briefly explained above the Claimants' cause of action is in tort, more particularly it is treated as a breach of statutory duty. Damages in tort are compensatory such that the Claimants are entitled to be placed in the position they would have been had the tort not been committed – see *Sainsbury's Supermarkets Ltd v Mastercard Incorporated* [2020] UKSC 24 ("***Sainsbury's***") at [194].

168. Therefore, the Claimants must establish: (a) a breach of competition law; and (b) actionable harm or damage caused by that breach. The breach of competition law is established by the findings of the Infringement in the Settlement Decision. But the second part, namely actionable harm or damage, must also be proved by the Claimants, as it is a necessary part of the cause of action which will not accrue until there has been actionable damage. Following Professor Jane Stapleton's influential articles on causation in tort, this is now usually expressed as damage forming the "*gist*" of the tort action. That means that the Claimants must prove that some damage was caused by the Infringement and the test for causation is on a "*but for*" basis. Their recovery is not limited to the "*gist damage*" but they must satisfy the test for causation before there can be consideration of the quantification of their actual loss.

169. In *BritNed Development Ltd v ABB AB and ors* [2018] EWHC 2616 ("***BritNed***"), Marcus Smith J helpfully explained what a claimant has to prove in terms of actionable damage:

> "424. Although it is possible that, in order to make good the cause of action and show actionable damage, a claimant must have to show that he, she or it has sustained some monetary harm by reason of the defendant's breach of statutory duty, it seems to me most unlikely that that should be the case for this cause of action. In other torts, it may not be necessary to show damage of this sort before the cause of action arises…
>
> 425. This point is that it is necessary to be exceedingly careful in framing or defining what constitutes actionable harm…

> 426. Article 101 TFEU prohibits "all agreements between undertakings, decisions by associations of undertakings and concerted practices…which have as their object or effect the prevention, restriction or distortion of competition…". The provision is aimed at preserving or protecting competition and maintaining the consumer benefit of having a competitive market.
>
> 427. When seeking to articulate what constitutes actionable harm, it is necessary to have regard to the object and scope of the statutory duty imposed. In this case, the object and scope of the provision is the preservation and protection of competition from collusive efforts to undermine it. This purpose must inform the "gist" or actual damage that a claimant must show when bringing a private action for damages. More specifically:
>
> (1) Cartel cases do not, by definition, involve a single actor. Cartel cases involve two or more actors, by agreement or concerted practice, acting with the object or effect of preventing, restricting or distorting competition. It is not possible, in cartel cases, to identify the act of a single person that can be tested as being the cause of a claimant's harm. It is the collective failure to compete that is the wrong at which Article 101 TFEU is aimed.
>
> …
>
> (3) What the collusive misconduct of cartelists does is prevent, restrict or distort competition. To require a claimant to show monetary harm in order to found a cause of action is to ignore the purpose of Article 101 TFEU and to impose too great a burden on the claimant. Rather, what the claimant must show, as the "gist" damage, is that the unlawful conduct of the defendant has, on the balance of probabilities, in some way restricted or reduced the level of the claimant's consumer benefit. In other words, that the claimant has suffered as a result of the prevention, restriction or distortion of competition created by the cartel. Such a restriction or reduction of consumer benefit might take the form of an increased price payable, but equally it might take the form of a reduction in the number of suppliers properly participating in a tender process. I regard consumer benefit as a broad concept, and there will be many ways in which conduct infringing Article 101 TFEU will adversely affect it." (emphasis in original)

170. Mr Beard KC submitted that *BritNed* was a very different type of cartel as there was a market-sharing agreement between the cartelists whereby the particular project was allocated to the defendant by the other cartelists. This was explained by Marcus Smith J in [428] and [429] where on the basis of those facts the cause of action was made out. Mr Beard KC said that this should be contrasted with the type of cartel in this case where there is no market-sharing agreement between the Cartelists. Insofar as the Claimants are relying on statements of law

in *BritNed*, Mr Beard KC submitted that this comes close to an allegation of there being a rigged market which the Claimants have admitted they are not seeking to prove. As discussed above, there was a lack of clarity between the parties as to precisely what they meant by "*bid-rigging*".

171. However, Mr Ward KC submitted that the principles set out by Marcus Smith J are pertinent to this case and are of general application to cartel cases. He said that Mr Beard KC was wrong to suggest that, as the Claimants are claiming monetary loss, the actionable damage that they must prove on the balance of probabilities is monetary loss. In *BritNed* the claimant was claiming monetary loss but was still able to establish its cause of action on the balance of probabilities on the basis that there had been a restriction or reduction in "*the level of the claimant's consumer benefit*".

172. We do not see that this debate really assists the Claimants. They claim that they can prove some monetary loss on the balance of probabilities in the form of the Overcharge. We think that Mr Beard KC is correct to say that if the Claimants are submitting that there was some reduction in consumer benefit because there was a rigged market, then that would have to have been alleged and proved. Mr Ward KC accepted that the allegation of a rigged market was only relied upon to counter the suggestion that there were competitive tenders. The point therefore gets the Claimants nowhere and we think that they are required to establish that they suffered monetary harm as a result of the Infringement and they must do so on the balance of probabilities.

173. Once the cause of action has been established in this way, the quantification of damages has to be considered. There is no dispute that damages are to be assessed on a "*broad axe*" basis rather than on the balance of probabilities. As Marcus Smith J said in *BritNed* at [12(6)]:

> "During this quantification exercise, English law moves away from the balance of probabilities. An assessment or quantification of damages involves the taking into account of all manner of risks and possibilities…"

And in *Michael O'Higgins FX Class Representative Ltd v Barclays Bank Plc* [2022] CAT 16 at [172], Marcus Smith J (sitting in the CAT with Mr Paul Lomas and Professor Anthony Neuberger) said.

> "Actionable loss has nothing to do with the quantification of damages. If the necessary elements of the tort are made out, the claimant or claimants have a right to damages, no matter how difficult or recondite the assessment process".

174. The "*broad axe*" principle originated from Lord Shaw's statement in *Watson Laidlaw & Co Ltd v Pott, Cassels & Williamson* [1914] SC (HL) (18) that quantification of damage is to be "*accomplished to a large extent by the exercise of sound imagination and the practice of a broad axe*". This was specifically endorsed by the Supreme Court in *Sainsbury's* [218] for competition claims. And in the trucks case collectively, in *Dawsongroup plc v DAF Trucks NV* [2020] CAT 3 at [40(3)], the CAT referred to the necessary use of averages, extrapolations and aggregates. This "*broad axe*" approach, largely based on expert econometric evidence, is necessary to accommodate the difficulties of proof inherent in the quantification of competition law damages. It is also required by the principle of effectiveness and the overriding objective that cases should be dealt with proportionately (see *Sainsbury's* at [217]).

175. Mr Beard KC referred to the observation of Popplewell J (as he then was) in *Asda Stores Ltd v Mastercard Inc* [2017] EWHC 93 at [307] that the court should *"err on the side of under-compensation"* when using the broad axe or broad brush approach to quantification. However, the Court of Appeal in *BritNed* [2019] EWCA Civ 1840 at [64] – [65] disapproved Popplewell J's observation, and Marcus Smith J's apparent reliance on it and went on to say that "*the aim of the court should always be to give the right amount of compensation, without erring in either direction*."

(b) Mitigation Defences

(i) Basic legal principles

176. If we find that the Claimants have established the existence of the Overcharge and that they have thereby suffered monetary loss, it is necessary to consider the defences put forward by DAF. These are all forms of mitigation of the loss

suffered by the Claimants, whether arising under: the Complements issue in which the Claimants are said to have acquired cheaper truck bodies; or the Resale Pass-On issue in which the Claimants are said to have received more when selling their used trucks than they otherwise would as a result of the Overcharge; or the Supply Pass-On ("**SPO**") issue in which the Claimants are said to have passed on all of the Overcharge to their customers through higher downstream prices. It is principally the latter issue which engages some legal issues that we explore in this section of the judgment.

177. The legal principles in relation to pass-on have been reviewed and explained by the Supreme Court in *Sainsbury's*. These were appeals by the credit card companies, Visa and Mastercard, from the Court of Appeal – [2018] EWCA 1536 (Civ) ("***CA Sainsbury's***") – which heard together three appeals, two from the Commercial Court and one from the CAT. The CAT heard a trial in the case of *Sainsbury's Supermarkets Ltd v Mastercard Incorporated and ors* [2016] CAT 11 ("***CAT Sainsbury's***") and this was the only substantive consideration of SPO. We examine below our interpretation and the effect of these judgments in relation to DAF's claim in this case that both Claimants passed on the Overcharge through increases in their prices of a myriad of their products such as postage stamps and telephone line rental.

178. On the face of it, the notion that the loss suffered by the Claimants because it paid the Overcharge can be reduced or avoided completely as a result of commercial decisions in relation to the pricing of their own products is curious from a legal perspective. The connection between the Overcharge and a decision to increase prices might appear remote. But the Supreme Court seem to have accepted that this could be sufficient as a matter of both legal and factual causation. Mr Beard KC submitted that, as a result of *Sainsbury's*, there is no issue of legal causation and that DAF's expert evidence shows that there was complete pass-on in fact. Mr Ward KC however submitted that, even if DAF can show that there was some pass-on of the increased truck costs (which is denied), that it cannot satisfy the legal test for causation.

179. It is therefore necessary to look at some of the basic legal principles in relation to mitigation of loss and the requisite connection between the upstream and downstream prices for the purposes of proving causation at law.

180. SPO only becomes relevant if the Claimants have proved the Overcharge, which we examine below principally by reference to the expert economic evidence. As explained above, the Claimants' cause of action is for the tort of breach of statutory duty. Damages for breach of statutory duty or tort are compensatory. The Claimants are entitled to damages that will put them in the position they would have been had the tort not been committed – see *Sainsbury's* at [194]. The *prima facie* measure of the Claimants' loss is the Overcharge – see *Sainsbury's* at [198] – [199] – and it is not necessary for them to prove any consequential loss of profit.

181. The Supreme Court clarified some further general principles in relation to pass-on:

(1) It is an aspect of the assessment of damages, rather than a defence strictly so-called; it is a form of mitigation of loss: *"pass-on is an element in the calculation of damages and the normal rule of compensatory damages applies to claims for breach of statutory duty"* – [196];

(2) In relation to national claims for damages for breach of competition law, Member States may lay down procedural rules governing actions which safeguard rights derived from EU law, but those national rules must comply with the principles of equivalence and effectiveness. The principle of effectiveness requires that the rules of domestic law "*do not make it practically impossible or excessively difficult to exercise rights guaranteed by EU law"* - [188];

(3) Claimants suffering from an overcharge are not required to prove that they have suffered an overall loss of profits as a result. If it were otherwise, claimants might face an insurmountable burden in establishing their claims and "*such a domestic rule [...] would very probably offend the principle of effectiveness. It is the duty of the court*

to give full effect to the provisions of Article 101 by enabling the claimant to obtain damages for the loss which has been caused by anti-competitive conduct": [209];

(4) The legal burden is on the defendant to plead and prove that the claimants have mitigated their losses by passing-on the overcharge, although the Supreme Court went on to say that this should not be overstated and there is a "*heavy evidential burden*" on claimants once the defendant has raised the issue of mitigation: [211] and [216].

(ii) Sainsbury's

182. It is important to bear in mind the context of *Sainsbury's.* The case concerned losses sustained by merchants from the payment of the multilateral interchange fee ("**MIF**") that was charged by the cardholder's bank (the "**issuing bank**") to the merchant's bank (the "**acquiring bank**"). The MIF was passed on by the acquiring bank to the merchant as part of the merchant service charge ("**MSC**"). The MIF element of the MSC has been held to have violated Article 101 of TFEU. The merchants' claims were themselves based on the pass-on of the MIF through the MSC from the acquiring bank. However, the issue was of pass-on at the next level of the supply chain, by the merchants to their customers by way of price increases.

183. The Supreme Court in *Sainsbury's* engaged in the issue of pass-on under the heading of "*Issue (iv) - The broad axe issue*". This is because the Court of Appeal had found that the "*broad axe*" principle, which we have explained above as being the relevant approach to quantification in these cases, was not applicable to the defendant's pass-on defence. The issue that the Supreme Court was considering was set out at [176], namely: "*Did the Court of Appeal find, and if so, did it err in law in finding, that a defendant has to prove the exact amount of loss mitigated in order to reduce damages?*" However, there was no appeal from the CAT's original finding that Mastercard had failed to prove that the MIF overcharge had caused Sainsbury's to raise its prices charged to its customers. Accordingly, the Supreme Court's consideration of pass-on was in general terms and did not affect the actual outcome of the only case before it

that had decided that there was no pass-on. As the CAT has said in a recent judgment in the case management of *The Merchant Interchange Fee Umbrella Proceedings* [2022] CAT 31 ("***MIF Umbrella Judgment***")[8], technically the Supreme Court's discussion and analysis of pass-on, while deserving of the utmost respect, is *obiter* and therefore not binding on us. Nevertheless, neither party before us has suggested that the Supreme Court's analysis of pass-on should be departed from and we do not intend to do so. But as the Supreme Court itself recognised, the debate on this subject widened during the course of the hearing before it – see [177].

184. Pass-on of this sort arose substantively for the first time under English law in *CAT Sainsbury's*. The CAT addressed head-on the central difficulty with pass-on which is the risk of under-compensation if the defendant proves pass-on or over-compensation, if it does not. The CAT also referred to the different ways this is looked at from an economic as opposed to legal perspective. It said this at [484]:

> "(4) We have already noted that whilst the notion of passing on a cost is a very familiar one to an economist, an economist is concerned with how an enterprise recovers its costs, whereas a lawyer is concerned with whether a specific claim is or is not well-founded. We consider that the legal definition of a passed on cost differs from that of the economist in two ways:
>
> (i) First, whereas an economist might well define pass-on more widely (i.e. to include cost savings and reduced expenditure), <u>the pass-on defence is only concerned with identifiable increases in prices by a firm to its customers.</u>
> (ii) Secondly, <u>the increase in price must be causally connected with the overcharge, and demonstrably so</u>.
>
> There is danger in presuming pass-on of costs to indirect purchasers (*pace* Article 14 of the Damages Directive), because of the risk that any potential claim becomes either so fragmented or else so impossible to prove that the end-result is that the defendant retains the overcharge in default of a successful claimant or group of claimants. <u>This risk of under-compensation, we consider, to be as great as the risk of overcompensation, and it informs the legal (as opposed to the economic) approach</u>. It would also run counter to the EU principle of effectiveness in cases with an EU law element, as it

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[8] This judgment was issued after the end of the trial but we invited and received helpful written submissions from the parties on it.

would render recovery of compensation "impossible or excessively difficult."

(5) Given these factors, we consider that the pass-on "defence" ought only to succeed where, on the balance of probabilities, the defendant has shown that there exists another class of claimant, downstream of the claimant(s) in the action, to whom the overcharge has been passed on. Unless the defendant (and we stress that the burden is on the defendant) demonstrates the existence of such a class, we consider that a claimant's recovery of the overcharge incurred by it should not be reduced or defeated on this ground." (emphasis added)

185. In CA Sainsbury's, it appears as though the Court of Appeal disagreed with the CAT on the latter point, that a defendant had to identify an indirect purchaser or class of purchaser to whom the overcharge had been passed on. At [338], the Court of Appeal said that, although it was not necessary for the purposes of the appeal to decide the question, this was not an essential condition for establishing pass-on. However, as with the Supreme Court in *Sainsbury's*, the actual issue before the Court of Appeal was a narrow one, namely whether there were inconsistent findings within *CAT Sainsbury's* between Mastercard's failure to prove the pass-on of the MIF and Sainsbury's only being entitled to compound interest on 50% of the MIF on the basis that 50% had been passed on by Sainsbury's to its customers (see [321]). The Court of Appeal rejected that part of Mastercard's appeal but this was unrelated to its consideration of whether Mastercard had to identify a purchaser or class of purchasers to whom the overcharge had been passed and who would be able to claim damages. As stated above, the CAT's finding that there was no pass-on of the MIF by Sainsbury's to its customers was not challenged by Mastercard on appeal.

186. Importantly, the Court of Appeal did not interfere with (indeed it seemed to endorse it – see [340]) the test for causation set out in [484(4)] of *CAT Sainsbury's* that there must be an identifiable increase in prices charged by the merchant and that such increases are "*causally connected with the overcharge, and demonstrably so*." At [332] of *CA Sainsbury's,* there are two references to there needing to be a "*sufficiently close causal connection*" between the overcharge and any increase in the prices charged to customers. This indicates that the connection must be close enough that the particular price and/or the

increase in that price and the persons paying that price (and thereby suffering loss) must be sufficiently identifiable.

187. We think that the Court of Appeal was only deciding that there was no self-standing requirement (i.e. distinct from the requirements in [484(4)]) for a defendant to identify a purchaser or class of purchasers to whom the overcharge had been passed. It left open whether it may be necessary for a defendant to identify such persons so as to demonstrate the requisite causal connection between the overcharge and the price increase. This is apparent from the framing of the question by the Court of Appeal in [338]:

> "There was disagreement between Mr Hoskins and Mr Brealey as to whether the second point at [484] of the CAT's decision – viz that MasterCard was not able to identify any purchaser or class of purchasers of Sainsbury's to whom the overcharge had been passed – is a substantive point of law which must be satisfied in order to establish a pass-on and so distinct from the first point – viz that no identifiable increase in retail price was established. Although it is not necessary to resolve that issue on this appeal, we consider that it is not an essential condition for recovery: it would reflect the kind of policy decision which motivated the US Supreme Court in the *Hanover Shoe*[9] case and is inconsistent with the principle that damages are compensatory rather than punitive…" (emphasis added)

188. The Court of Appeal was clearly and rightly reluctant to stray into areas of policy rather than existing law. As a result, it seems to us that the Court of Appeal has not ruled out the possibility that [484(5)] of *CAT Sainsbury's* was not a separate requirement but was instead part of the overarching legal test for causation in this area. Therefore, in order to establish the requisite causal connection, it may be necessary for a defendant to identify who has suffered the loss from the overcharge in order to prove that the claimant has not actually lost the full extent of the overcharge.

189. We think that some of the problems in this area have been caused by an element of confusion between the economic concept of "*pass-on*" of a business's costs and the legal test for causation in relation to mitigation of loss. While not seeking to define SPO, *CAT Sainsbury's* explored what an economist meant by "*pass-on*" and the cross-examination of Mastercard's expert, Dr Niels, on this

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[9] *United Shoe Machinery Corporation v Hanover Shoe Inc* 392 US 481, which rejected any defence of pass-on as a matter of US Federal law.

was set out at [432]. That cross-examination concluded by the expert saying that a cost is passed on if it is not absorbed by the business and does not reduce its profit margin.

190. *CAT Sainsbury's* attempted to set out the four ways, as the CAT saw it, as to how a business might react to an increase in a specific cost. These four reactions then found their way, in slightly modified form, into the Supreme Court's analysis of pass-on. The CAT said as follows at [434] (repeated at [455]):

> "434. The problem is that it can be very difficult to ascertain whether and, if so, how, a given cost has been passed-on. The manner in which an enterprise might react to an overcharge was something that was explored in opening. When faced with an unavoidable increase in cost, a firm can do one or more of four things:
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> (1) It can make less profit (or incur a loss or, if loss making, a greater loss).
>
> (2) It can cut back on what it spends money on – reducing, for example, its marketing budget; or cutting back on advertising; or deciding not to make a capital investment (like a new factory or machine); or shedding staff.
>
> (3) It can reduce its costs by negotiating with its own suppliers and/or employees to persuade them to accept less in payment for the same services.
>
> (4) It can increase its own prices, and so pass the increased cost on to its purchasers."

The CAT did not discuss which of those would or would not constitute pass-on and/or a relevant mitigation of the loss. But the implication of [435] is that (1) is not pass-on whereas (2), (3) and (4) possibly could be. In that case, only (4) had been pleaded and was in issue.

191. As noted above the Supreme Court in *Sainsbury's* did further analysis of these four scenarios. At [205] to [206] it said as follows:

> "205. In the present appeals, the merchants by paying the overcharge in the MSC to the acquirers have lost funds which they could have used for several purposes. As sophisticated retailers, which obtain their supplies from many suppliers and sell a wide range of goods to many customers, they can respond to the imposition of a cost in a number of ways, as the CAT pointed out in [434] and [455] of its judgment. There are four principal options: (i) a merchant can do nothing in response to the increased cost and thereby suffer a corresponding reduction of profits or an enhanced loss; or (ii) the merchant can respond by

> reducing discretionary expenditure on its business such as by reducing its marketing and advertising budget or restricting its capital expenditure; or (iii) the merchant can seek to reduce its costs by negotiation with its many suppliers; or (iv) the merchant can pass on the costs by increasing the prices which it charges its customers. Which option or combination of options a merchant will adopt will depend on the markets in which it operates and its response may be influenced by whether the cost was one to which it alone was subjected or was one which was shared by its competitors. If the merchant were to adopt only option (i) or (ii) or a combination of them, its loss would be measured by the funds which it paid out on the overcharge because it would have been deprived of those funds for use in its business. Option (iii) might reduce the merchant's loss. Option (iv) also would reduce the merchant's loss except to the extent that it had a "volume effect", if higher prices were to reduce the volume of its sales and thereby have an effect on the merchant's profits.
>
> 206. In our view the merchants are entitled to claim the overcharge on the MSC as the prima facie measure of their loss. But if there is evidence that they have adopted either option (iii) or (iv) or a combination of both to any extent, the compensatory principle mandates the court to take account of their effect and there will be a question of mitigation of loss, to which we now turn."

192. It should be noted that the Supreme Court removed from categories (ii) and (iii) the references to shedding staff or cutting wages, both of which had been included by the CAT in its categories (2) and (3) respectively. Of more importance is the Supreme Court's suggestion that relevant pass-on will only arise in categories (iii) and (iv) (which are not distinguished) but not (ii). There is no dispute that category (i) does not involve any sort of pass-on and the increased cost is just absorbed by the firm which will have a reduced profit (or greater loss).

193. The focus therefore of the Supreme Court's approach is the effect on profit margins of the overcharge. However, the loss itself is measured by reference to the overcharge, not the claimant's loss of profits. There is a slight mismatch in that the loss is the overcharge whereas the mitigation is assessed by reference to whether decisions taken by the claimant in response to the overcharge have served to lessen the initial loss of profit. As noted above, the Supreme Court held that a claimant was not required to prove the effect of the overcharge on its profits, as this might offend the principle of effectiveness, and yet it seems that for pass-on it has to meet a case that it has not taken consequential steps that would have resulted in it suffering lower profits as a result of the overcharge.

194. From an economic point of view, it is hard to see the distinction between categories (ii) and (iii). Both are concerned with input costs and reducing them to account for the increase in another input cost, such as an overcharge. It is perhaps not sensible to look at these categories in the abstract as, in the real world, firms have to make decisions on budgeting and prices in particular environments and there is a danger of ignoring the economic incentives at play and the commercial consequences of cutting other costs. For example, reducing a firm's advertising budget may cause further harm in the form of lost profits on discouraged sales. And suppliers of advertising services are just as much suppliers as the others referred to in category (iii).

195. We are concerned in this case with category (iv), as they were in *Sainsbury's*. There is no dispute that this is a species of pass-on but as the Supreme Court recognised, and is a live issue in this case, such a form of pass-on may result in reduced downstream sales volume and consequent further losses to the Claimants. That is why the decision to increase prices in response to a specific increased cost is not a straightforward one as it will necessarily involve the balancing of a number of considerations, in particular whether profit maximisation is best achieved by passing on the full increase in costs or whether it is better to pass on less or none of the increase to ensure no loss, or a reduced loss, of volume. Businesses have to make these multi-factorial decisions the whole time and the law needs to delineate how close the connection should be for causation to be established.

196. In *Sainsbury's*, the Supreme Court used the language of "*responding*" to the MIF by the various categories, which was appropriate in that case because not only was the MIF well-known and not a secret overcharge but also it was the very charge on credit card use that was said to have been passed on to credit card holders. There is a clear connection between the ultimate consumer using their credit card and the MIF, and the *ad valorem* nature of the MIF meant that it formed a part of the marginal cost of each and every shopping basket purchased by shoppers in Sainsbury's. In the current case, however, the Overcharge was secret and unknown to the Claimants. Hence there was no conscious response to the Overcharge and, although at an abstract level one can envisage that truck costs do form a (small) part of the operating cost of providing

a mail delivery or telephone service, there is only an indirect connection between the trucks bought from DAF and the items bought by the Claimants' customers, such as postage stamps or line rentals.

197. The Supreme Court went on to consider the necessary connection for the purposes of legal causation. It explained that pass-on is a form of mitigation of damage and referred to authorities in contract law which dealt with the different types of mitigation that can be relied upon by a defendant. One form of mitigation is where a claimant has gained additional benefits from the actions it took following the breach of contract and the issue is whether those actions were sufficiently causally connected to the breach of contract or whether the benefits were received as a result of the independent commercial decision of the claimant – see [212] and [213] referring to *Thai Airways International Public Co Ltd v KI Holdings Co Ltd* [2015] EWHC 1250 (Comm), Leggatt J (as he then was) and *Fulton Shipping Inc of Panama v Globalia Business Travel SAU (formely Travelplan SAU) of Spain* [2017] UKSC 43.

198. Another form of mitigation is the failure of a claimant to act reasonably in response to a breach of contract or tortious wrong and the claimant in such circumstances is only able to recover the losses it would have suffered if it had acted reasonably – see [214].

199. But these are not the relevant forms of mitigation that arise from pass-on, as the Supreme Court explained in [215] to [216]:

> "215. We are not concerned in these appeals with additional benefits resulting from a victim's response to a wrong which was an independent commercial decision or with any allegation of a failure to take reasonable commercial steps in response to a loss. The issue of mitigation which arises is whether in fact the merchants have avoided all or part of their losses. In the classic case of British Westinghouse Electric and Manufacturing Co Ltd v Underground Electric Railways Co of London Ltd [1912] AC 673, at 689 Viscount Haldane described the principle that the claimant cannot recover for avoided loss in these terms:
>
> > "[W]hen in the course of his business [the claimant] has taken action <u>arising out of the transaction</u>, which action has diminished

> his loss, the effect in actual diminution of the loss he has suffered may be taken into account …" (Emphasis added)[10]
>
> Here also a question of legal or proximate causation arises as the underlined words show. But the question of legal causation is straightforward in the context of a retail business in which the merchant seeks to recover its costs in its annual or other regular budgeting[11]. The relevant question is a factual question: has the claimant in the course of its business recovered from others the costs of the MSC, including the overcharge contained therein? The merchants, having acted reasonably, are entitled to recover their factual loss. If the court were to conclude on the evidence that the merchant had by reducing the cost of its supplies or by the pass-on of the cost to its customers (options (iii) and (iv) in para 205 above) transferred all or part of its loss to others, its true loss would not be the prima facie measure of the overcharge but a lesser sum.
>
> 216. The legal burden lies on the operators of the schemes to establish that the merchants have recovered the costs incurred in the MSC. But once the defendants have raised the issue of mitigation, in the form of pass-on, there is a heavy evidential burden on the merchants to provide evidence as to how they have dealt with the recovery of their costs in their business. Most of the relevant information about what a merchant actually has done to cover its costs, including the cost of the MSC, will be exclusively in the hands of the merchant itself. The merchant must therefore produce that evidence in order to forestall adverse inferences being taken against it by the court which seeks to apply the compensatory principle."

200. It is clear that the Supreme Court was treating its categories (iii) and (iv) as having the same effect. But having opened the door to claims of pass-on within category (iii), defendants have sought to plead this in general terms in their defences and both the CAT and the Court of Appeal have therefore had cause to consider what the Supreme Court meant in these paragraphs. DAF itself sought to amend its pleadings in this case to allege that the Claimants had mitigated their losses by negotiating lower input costs from its other suppliers. Whether they should be allowed to do so was considered by the CAT at a CMC in March 2021 with judgment delivered on 13 May 2021 - [2021] CAT 10 ("***May 2021 Judgment***").

201. In dismissing the application to amend, the CAT made some important observations about the test for causation in relation to pass-on in the light of *Sainsbury's*. At [35] and [36] of the *May 2021 Judgment*, it said as follows:

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[10] This underlining was by the Supreme Court.
[11] This underlining is ours.

> "35. Accordingly, it seems to us that it cannot be enough for a defendant to plead that a claimant's business input costs as a whole were not increased, or that as part of the claimant business's ordinary financial operations and budgetary control processes its overall expenses were balanced against sales so that profits were not reduced. There must be something more to create a proximate causative link between the overcharge and a reduction in other input costs, so as to constitute mitigation. This can be inferred from the Supreme Court's citation from the *British Westinghouse* case at [215] of its judgment, its emphasis of the underlined words "… [the claimant] has taken action arising out of the transaction", and its comment that "a question of legal or proximate causation arises."
>
> 36. We therefore consider that, for a defendant to be permitted to raise a plea of mitigation in this way in general terms, there must be something more than broad economic or business theory to support a reasonable inference that the claimant would in the particular case have sought to mitigate its loss and that the steps taken by it were triggered by, or at least causally connected to, the overcharge in the direct manner required by the *British Westinghouse* principle".

202. It appears that DAF accepted the need for a causal connection, in argument at the CMC. In [41] the CAT recorded Mr Beard KC's submission:

> "41 … As a matter of law, DAF contends that, in reliance on *Sainsbury's v Visa Europe*, the defence has a realistic prospect of success. It does, however, accept that there must be a causative connection between the overcharge and the costs reduction. As Mr Beard put it in the course of argument: "one does need to have factual evidence that it was the putative rise in prices of the product that is said to be affected, the trucks, that feed into and are causative of, materially causative of … the fall in the prices … that are entered into with other suppliers" and that it is insufficient to allege that all input costs of the business feed into business planning and that businesses recover their costs".

203. The CAT continued to identify the sort of evidence that would be required to satisfy the test for pleading this sort of mitigation:

> "42. In our judgment, before a purely general plea of mitigation through business cost reduction processes can be pleaded, in the way that DAF seek permission to do, there must be something identifiable in the facts of the particular case that gives rise to a prima facie inference that there may well be a direct causative link between the overcharge alleged and the prices paid by the claimant for other supplies that reduced the amount of the loss resulting from the overcharge. What is sufficient to give rise to such an inference will vary from case to case, but it may be found in facts such as a claimant's knowledge of the nature and amount of the overcharge (such that it is inherently likely that a claimant would seek to address it), the gross amount of the overcharge as a proportion of the claimant's relevant expenditure (the higher the proportion, the more likely it is that some step would have been taken to mitigate the impact), the relative ease with which the claimant's

business could be expected to reduce certain input costs or input costs generally, or the fact that other supplies made by the defendant or its associates to the claimant have been renegotiated in years following the increase in the prices alleged to have been caused by the anti-competitive conduct.

43 …What is needed is some plausible factual foundation for the application of the broad economic theory in the way required to satisfy the *British Westinghouse* test that is relied upon, and for there being a causative connection between overcharge and cost cutting." (emphasis added)

204. The issues of knowledge and size of the overcharge were further addressed in [44] to contrast the situation in this case with that in *Sainsbury's*:

"44. In *Sainsbury's*, it was plausible that a merchant facing a transparent service charge of between 2% and 3% of income from the majority of retail sales (almost all sales paid for by credit card or debit card), would have sought to recoup that significant cost by seeking to reduce the costs of supplies and/or passing it on to customers. Here, on the other hand, where the overcharge was not only covert but a tiny fraction of Royal Mail's and BT's expenditure, it is inherently unlikely that it would have been specifically addressed, but rather fed into the overall expenditure of the regulated or unregulated parts of the business. As DAF accepts, that general principle that all costs of all inputs are fed into business planning is insufficient to establish the necessary causative connection for a plea of mitigation of loss." (emphasis added).

205. The Court of Appeal had to consider a similar argument from the defendants in *NTN Corporation & ors v Stellantis NV* [2022] EWCA Civ 16 ("***Stellantis***"). Green LJ approved the CAT's judgment, the *May 2021 Judgment* and also disallowed a proposed category (iii) amendment. He said:

"33. Pulling the strands together, the burden of proof when pleading causation is on the defendant to demonstrate: (a) that there is a legal and proximate, causal, connection between the overcharge and the act of mitigation; and (b), that this connection is "*realistic*" or "*plausible*" (the two phrases being interchangeable) and carries some "*degree of conviction*"; and (c) that the evidence is more than merely "*arguable*". The assessment will be fact and context specific and, to foreshadow a point I refer to later, may depend upon the characteristics of the industry or sector in question. It may be easier to show a pleadable case of mitigation in some circumstances than in others." (emphasis added)

206. As to the relevance of knowledge of the overcharge, Green LJ said at [48]:

"48 … It was plainly relevant that, by the time the Sainsbury's case was heard by the CAT, and by the courts on appeal, the issue of MIF pass-

> on generally had been live in the industry for many years as had the compatibility of the MIF with competition rules. The first EU Commission proceedings in relation to a MIF were in the early 1990s. The CAT had addressed the issue on several prior occasions, including in relation to damages and pass-on defences. It had been aired in the General Court of the EU. There was nothing secret about the imposition of a MIF. It was a transparent, known, charge and it was recognised industry practice that acquiring banks passed it on to retailers in the MSC... All of this was clearly relevant to the burden facing a defendant in this sector seeking to raise a realistic case of mitigation. The MIF was a systemic and troublesome cost that any major retailer would, inevitably, have had to confront. The facts therefore contrast with those of a typical, secret, price fixing cartel."

(iii) The test for legal causation

207. Before *Sainsbury's*, previous judges dealing with this case have shown considerable scepticism as to whether it is possible to establish sufficient causation in relation to SPO. At a CMC in December 2017, Rose J (as she then was), referring to *CAT Sainsbury's* (which was then the latest case to consider this) said:

> "… if the Mastercard decision is correct … unless you're actually selling on the trucks to somebody you can't show pass-on because it's impossible to prove a link between the price of a stamp and the price that was paid for these trucks."

208. At a further CMC in June 2018, Roth J commented as follows:

> "MR JUSTICE ROTH: It is not really classic pass-on at all. It is a rather unusual pass-on, isn't it?
>
> …
>
> MR JUSTICE ROTH: If Royal Mail puts up the price of a postage stamp once every six years by 2p, it would be very odd to say that is a pass-on or it may be a pass-on of the price it pays for trucks.
>
> MR PICKFORD: Well, it all depends on why it has put up its prices.
>
> MR JUSTICE ROTH: I mean, even so, it's not passing through. Everything business always has to, if it has cost increases, has to deal with it in a certain way. If you take the shoe example, if it is not a shoe shop but a department store and it pays more for – it doesn't, you say "Well we look at what you've done with the prices for kitchen equipment or food in your restaurant because it might be a pass-through of the increased price of shoes". That's a very broad view of pass-through. I am sure an economist would say its pass-through, but as a matter of law…
>
> MR PICKFORD: My Lord, we certainly do say that ultimately it is a question of fact that this –

> MR JUSTICE ROTH: No, Mr Pickford, it's a question of law. I mean as a matter of fact a business will absorb its costs. That's exactly the issue that arose in the Sainsbury's case. The question for the court is a matter of what is legal pass-through, not what an economist would say or what the business actually did.
>
> …
>
> …at the moment, I have to say, without having heard argument - and obviously it would depend on that and the authorities - my very provisional view is that the pass-on, as a matter of law, does not stretch beyond the cartelised product or other products that incorporate the cartelised product if it is a component or costs on the transaction involving the cartelised product directly, as in a credit card payment."

209. Both judges seem to have been of the view that the legal test for causation in this area requires there to be a link between the product bought from the cartelist and the product sold by the purchaser. We agree with that point but the question is, in the light of *Sainsbury's*, what sort of link there needs to be.

210. The Supreme Court in [215] relied on *British Westinghouse*, a contract case, and emphasised the words in that judgment "*arising out of the transaction*" to indicate that, for this form of mitigation, there had to be a causal link between the "*transaction*" in that case, or the breach of statutory duty in competition cases, and the action taken to diminish the loss. It is the next sentence that is a little surprising: "*But the question of legal causation is straightforward in the context of a retail business in which the merchant seeks to recover its costs in its annual or other regular budgeting*." What the Supreme Court seems to be saying is that there is no live issue of legal causation in relation to any business where the pass-on is in either category (iii) or (iv). The only issue is a factual one and that is whether the merchant did actually recover its costs by reducing other costs or increasing its prices.

211. Mr Beard KC submitted that the Supreme Court had decided that there is no issue of legal causation. In the *MIF Umbrella Judgment*, the CAT also concluded that the Supreme Court had decided that there was no issue of legal causation where it was shown as a matter of fact that the mitigating conduct had reduced or eliminated the claimant's loss – it even went so far as to say that the Supreme Court regarded this as a "*no-brainer*", a phrase picked up and repeated by Mr Beard KC in DAF's written submissions.

212. But it is important to see what the CAT considered the issue of legal causation to be. That appears to have been whether "*as a matter of legal policy*" (see [50(2)(ii)]) the claimant should be able to continue to claim its losses that it had passed on to its customers. In other words, where factual causation has been proved and the overcharge has been passed on to the claimant's customers, is there any "*policy reason*" why the claimant should be able to continue to claim the overcharge from the defendant. The CAT was seemingly again seeking to avoid making a policy decision along the lines of the US Supreme Court in *Hanover Shoe*. The *MIF Umbrella Judgment* was heavily influenced by the fact that the ultimate customers, the credit card holders in that case, were bringing their own claims in respect of the overcharge that had been allegedly passed on to them. Indeed, the CAT was principally concerned with effective case management of all the claims before it, by both the retailers and their customers against Mastercard, and ensuring that those claimants are not undercompensated for their respective losses or that the defendant does not end up overcompensating them. These are very real problems and any legal analysis needs to take them into account. We think that it is impossible to ignore the impact and implications of a finding that a cost was or was not passed-on to the overall compensation paid by a defendant or whether potential consumer claims are thereby ruled out.

213. Both *Sainsbury's* and the *MIF Umbrella Judgment* are in the same or similar proceedings about the unlawful MIF, which it was known retailers had specifically sought to pass on to their customers. The Supreme Court limited its comment as to legal causation being straightforward to a retailer seeking "*to recover its costs*". Green LJ in *Stellantis* at [77] considered that what the Supreme Court described as "*straightforward*" was causation in relation to the MIF:

> "The facts of the present case contrast with the facts of *Sainsbury's*. There the disputed charge was transparent and retailers had well established strategies for countering it which were known to include all of the methods pleaded in the present case, including off-setting. Mitigation by these strategies was an entrenched and established part of business as usual; the Supreme Court in *Sainsbury's* described the issue of causation in the sector as "*straightforward*"…"

214. It is not just retailers who seek to recover their costs; all businesses seek to do that. Indeed, all businesses seek to maximise their profits and if they can save costs in one area, say by paying their staff less, they would do so irrespective of whether another cost has unavoidably increased. Similarly, they would increase prices if they could do so without losing customers and therefore volume. In a competitive market, where all competing firms face a similar cost increase, it is likely that each firm would pass through a high proportion of that cost increase because it is well established that an increase in the marginal cost of supplying a product is likely to lead to an adjustment to the profit-maximising price of the output in question which will tend to exert upward pressure on the downstream selling price in this scenario. That is probably the situation in the MIF cases.

215. In our view, the sentence in the Supreme Court's judgment has been taken out of context and needs to be read with what came before and after. The Supreme Court, after the quote from *British Westinghouse,* said that there is a "*question of legal or proximate causation*" that arises in relation to pass-on. The rest of the paragraph seeks to explain how that question is resolved. It is not entirely clear what is meant by "*legal causation*" and the Supreme Court does not use the phrase "*factual causation*" by way of contrast. Rather it said that "*the relevant question is a factual question*" and then proceeded to define that factual question and upon which party the legal and evidential burdens lie. What the Supreme Court does not do is set out the legal test for causation. But by delineating the factual question to whether the claimant has in that case "*recovered from others*" the MIF through categories (iii) and (iv) thereby transferring "*all or part of its loss to others*", the Supreme Court has effectively held that that is the legal test of causation.

216. As was said in *Stellantis*, the defendant must demonstrate "*a legal and proximate, causal connection between the overcharge and the act of mitigation*"; or as the CAT said in its *May 2021 Judgment*, there must be a "*direct causative link*" between the Overcharge and, in that category (iii) case, the reduction in the costs of other supplies. It is insufficient, as was admitted by Mr Beard KC at that hearing, merely to allege the Claimants were seeking to recover their costs. We do not therefore think that the Supreme Court was suggesting otherwise in saying that "*legal causation is straightforward*" in that

case. It was still necessary for the defendant to prove a sufficient causal connection on the facts to satisfy the legal test for causation.

217. The difficulty, as identified by the CAT in the *MIF Umbrella Judgment*, is finding a test that enables the court or tribunal to work out who has actually suffered loss as a result of the Overcharge. Unlike the CAT in that case, we are not dealing with any other claims, for example, from the Claimants' customers, and cannot therefore consider what they might have to prove in order to be able to initiate their claims. But we do recognise that the task we face is to decide if the Claimants have truly suffered loss from the imposition of the Overcharge or whether they have avoided some or all of that loss by passing it on to someone else.

218. With the greatest of respect to the Supreme Court, we do not consider that the four categories assist in understanding whether a particular type of pass-on satisfies the legal test for causation. The four categories helpfully demonstrate the different responses that a firm might have to dealing with an overcharge or an increase in one particular input cost. But insofar as the categories are a breakdown of the principal features of a firm's normal budgetary process where costs are sought to be recovered and a profit made, it is hard to see why category (ii) cannot amount to pass-on whereas category (iii) can, as we explained in [194] above.

219. We are concerned with a category (iv) case which appears to be a more recognisable case of pass-on because in this category the cost overcharge has a clear possibility to affect the buyer's incentives when it comes to decide how to set prices for downstream outputs that rely on the input that is subject to the overcharge. But as categories (iii) and (iv) were both dealt with together in the same way in *Sainsbury's*, one would expect the same test to be applicable. Merely because a firm seeks to recover its costs and make a profit cannot be sufficient to prove that the Overcharge has been transferred to its customers.

220. We agree with the CAT in its *May 2021 Judgment* that there are two particular factors, which in our view are applicable to both category (iii) and category (iv)

cases, that are relevant as to whether a causative connection can be established between the Overcharge and an increase in prices. In [42], the CAT referred to:

(1) The Claimants' knowledge of the nature and amount of the Overcharge, such that they would seek to address it; and

(2) The size of the Overcharge as a proportion of the Claimants' relevant expenditure and/or price-cost margin.

In [44] the CAT compared this case with *Sainsbury's* where there was both knowledge of the MIF and it was a significant cost (between 2% and 3% of the majority of retail sales) and held that much more of a causative connection would need to be shown than merely the Overcharge being taken into account in the Claimants' business planning. Both factors were endorsed by the Court of Appeal in *Stellantis* (see [48] quoted above and [75] to [76]).

221. Mr Beard KC submitted that neither knowledge nor size were necessary to prove pass-on. He went further and suggested that, if they were, they may render it impossible for the customers to claim their losses and it would thereby infringe the principle of effectiveness. The *MIF Umbrella Judgment* accepted that there did not need to be a deliberate decision to pass-on in order to found the defence.

222. We agree that these are not necessary requirements. But if they are present then a defendant would be far more likely to be able to prove that the claimant was seeking to address the overcharge by taking the mitigating action that it did.

223. Accordingly, we consider that DAF must prove that there was a direct and proximate causative link between the Overcharge and any increase in prices by the Claimants. That means that there must be something more than reliance on the usual planning and budgetary process, into which the Overcharge was input and at some point prices increased. We think that there is substance to the point made in *CAT Sainsbury's* as to the identification of persons to whom the Overcharge has been passed as being a relevant factor in relation to the strength of the causal connection. The process is more properly one of identifying the

persons who have suffered loss by paying the Overcharge and therefore who should be compensated by the defendant.

(iv) Conclusion on the test for legal causation

224. It seems to us that there should be consistency in the legal test for causation in relation to the mitigation defences of pass-on. As stated above there are two other claimed forms of mitigation: Resale Pass-on; and Complements. In relation to Resale Pass-on, which is where the Claimants have sold their used trucks at allegedly higher prices than they would otherwise have done without the Overcharge, no one seems to doubt that, as a matter of law, if used truck prices were higher as a result of the Overcharge, then the Claimants' losses should be reduced accordingly. The dispute here centres on whether such an effect took place and can be measured. But the effect, if there was one, is not caused by any decision on the part of the Claimants; nor did they have any knowledge of the Overcharge at the time they sold their used trucks. This therefore shows that knowledge is not a necessary factor to establish a sufficient causal connection.

225. In our view, the example of Resale Pass-on shows that the legal test for causation can be satisfied in other ways, namely by the very close association between the products in question – new and used trucks – and the Overcharge having a direct effect on the used trucks market. Furthermore, if that effect is proved on the facts and expert evidence, there seems to us to be no reason why the purchasers of those used trucks should not be able to claim against DAF in respect of the impact that the trucks overcharge had on their selling prices.

226. Similarly in relation to Complements, DAF argues that the Claimants' losses were mitigated by the savings from the lower prices for the bodies bought from third party manufacturers. Again, there are serious issues as to whether there was in fact such an effect on the prices of bodies but there is no dispute, it seems, that if there was such an effect that the savings should be offset against the Overcharge. Again, this was not the result of any knowledge on the part of the Claimants or as a result of the negotiations with the bodies' manufacturers. It was, DAF says, an automatic effect of the Overcharge that reduced the demand

for bodies leading to a reduction in their prices. This could be a form of category (iii) defence except that it was not a reaction or decision by the Claimants that caused the reduction in prices, if there was one.

227. Rather, Complements, like Resale Pass-on, shows that the legal test for causation can be satisfied by reference to other factors, such as the very close relationship between the trucks and bodies, which have to be bought together, and the direct effect of the Overcharge. Again, if there is a Complements defence on the facts, the third-party bodies' manufacturers should have a claim against DAF, as they have suffered loss caused directly by the Overcharge.

228. By way of summary on the legal test for causation in relation to a pass-on form of mitigation defence, we respectfully conclude that DAF must prove a direct and proximate causative link between the Overcharge and any increase in prices by the Claimants. It is not enough for DAF to say that all costs, including increases in costs, are fed into the Claimants' or their regulators' business planning and budgetary processes. There must be something more specific than that and there are a number of potentially relevant factors that it can rely on, including:

(1) Knowledge of the Overcharge or the specific increase in the cost in question;

(2) The relative size of the Overcharge against the Claimants' overall costs and revenue;

(3) The relationship or association between what the Overcharge is incurred on and the product whose prices have been increased; and/or

(4) Whether there are identifiable claims by identifiable purchasers from the Claimants in respect of losses caused by the Overcharge.

229. This is not an exhaustive list of factors but they do seem to us to be the most relevant ones to this case. In relation to the last point (4), we think that, even though there are no such claims before us, we need to be mindful of the effect

of our decision in relation to pass-on defences on other claims. The danger that is inherent throughout this process if we decide against any such defences is that the Claimants are overcompensated and the potential other claimants are deprived of their claims. The converse is equally fraught, in that if we allowed some or all of the pass-on defences, DAF may escape paying compensation to all those who suffered loss as a result of the Overcharge.

230. We consider the above factors when dealing with this issue below and particularly in our analysis of the expert evidence. DAF's expert on this subject, Mr Bezant, concluded that Royal Mail passed on between 75% and 139% of the Overcharge and that BT passed on 100% of the Overcharge. The Claimants' expert, Mr Harvey, considered that it was highly unlikely that any pass-on occurred. What the experts were seeking to show was whether the downstream prices charged by the Claimants were higher in the actual world with the Overcharge than they would have been in the counterfactual where there was no Overcharge. But even if that can be shown, it will have to be demonstrated whether there is the necessary proximate and direct causative link required by the legal test for causation, based on the above factors.

I. EXPERT EVIDENCE

(a) Some General Comments on the Expert Evidence

231. The expert evidence dominated the trial and is central to the case. Nevertheless, the volume of such evidence was huge and, in our view, excessive. There were some 48 experts' reports filed in the case running to many thousands of pages. As we said in [8] above, while that sort of scale may be justifiable in relation to the core issues of the Overcharge and Supply Pass-on, it is less so on the relatively less important issues, such as Complements and Loss of Volume, which could only have a minor effect on the quantum and in respect of which a sense of proportion should have prevailed. We are well aware that this is the first of a series of trucks claims where a lot of relevant issues may be decided, so the parties had to cover all their bases, but we still do think that a more measured approach would have been beneficial.

232. The principal experts were in the field of economics and for the respective parties they were: Mr James Harvey of Economic Insight Limited for the Claimants; and Professor Damien Neven of Compass Lexecon for DAF. Both produced reports on: Theory of Harm/Plausibility; the Overcharge; Complements; Resale Pass-On; and Loss of Volume. Mr Harvey additionally dealt with SPO and Leasing issues; whereas DAF had separate experts for these areas, namely: Mr Mark Bezant of FTI Consulting LLP on SPO; and Mr Julian Delamer of Compass Lexecon on Leasing.

233. The separate issues of Financing Losses and Tax were dealt with by: for Royal Mail - Mr John Earwaker of First Economics Limited on Financing Losses and Mr Gordon Singer of Pricewaterhousecoopers LLP on Tax; and for DAF – Mr Delamer on Financing Losses and Mr Paul Pritchard of FTI Consulting LLP on Tax.

234. While some issues were resolved between the parties, all the experts were cross-examined on those matters that remained in dispute. In addition, some of the issues between Mr Harvey and Professor Neven were dealt with by way of "*hot-tubbing*" which we directed at the pre-trial review and involved both experts

giving evidence concurrently and being questioned by us, followed by more limited cross-examination. We felt that this process was beneficial in that it enabled each expert to respond immediately to the other on those issues that we considered to be the most important and contentious. While it did not necessarily lead to any narrowing of the disputed issues, we think that it was an efficient and helpful way to deal with them. The issues on which we heard concurrent evidence in this way were: Overcharge; Value of Commerce; Complements; Resale Pass-on; and Loss of Volume.

235. It is perhaps a flaw in the system but in any event appeared quite marked to us in this case that all the experts, but particularly Mr Harvey and Professor Neven, who opined on a number of different issues, came to conclusions that favoured their clients. In relation to the Overcharge, there are some big and difficult issues in relation to the regression analyses concerning exchange rates, the global financial crisis and emissions standards that significantly affect the outcome of the regression but which seem to us to be difficult and ones on which economics experts could reasonably disagree and on which there may not necessarily be a single correct answer. Many of these issues rest on highly technical choices over the precise specification of the econometric models that the experts employed, the full details of which we could not directly observe. Nevertheless, on all those issues, Mr Harvey and Professor Neven firmly concluded on the side that produced the outcome in favour of their respective clients. Perhaps that is an inevitable consequence of the adversarial process and one should expect a party to have an expert that supported their case. But we consider that there should have been more recognition, on certain issues, of the scope for a range of possible results and of the reasonableness of the other expert's opinion. As they are aware, the experts' primary duty is to assist us in understanding the factors behind their differing conclusions, rather than defending the conclusions which favoured their respective clients' positions. When there are fine and difficult issues for us to decide, it is important that we are able to trust the independence of the experts.

236. While we do have concerns about the manner in which certain issues were dealt with in the expert evidence, both written and oral, we did greatly appreciate and benefit from the effort and work of the experts and their evidence contributed

significantly to our understanding. We will of course decide where the balance of the argument lies on those contentious issues based on the evidence adduced and the credibility of their opinions, tested as they were by cross-examination and the hot-tubbing exercise.

(b) Professor Neven's Independence

237. The Claimants mounted a full-scale attack on the independence of Professor Neven. They had indicated that they intended to do so at the pre-trial review and this was one of the reasons why we decided against there being concurrent evidence on Theories of Harm, so that Mr Ward KC would be able to challenge Professor Neven in cross-examination, principally, so we thought, to undermine the credibility of his theory of harm. As it turned out, Mr Ward KC went further in his closing submissions to suggest that Professor Neven should never have been allowed to give evidence as an expert because his association with DAF goes back to 2013, well before the Settlement Decision, and is extremely widespread as he also appeared to be DAF's chosen expert across many other jurisdictions in the EU. DAF is currently facing some 1700 claims across 19 jurisdictions and it appears that Compass Lexecon, the consulting firm to which Professor Neven is affiliated, is assisting with all of them. It is fairly obvious that he was their favoured economics expert and this seems likely to have been influenced by his opinions on the plausibility of there having been any effect of the Infringement, i.e. his theories of harm.

238. The main challenge concerns the lack of disclosure by Professor Neven of the true extent of his engagement with DAF from 2013 and the information that he has received from DAF, in particular as to the operation of the Cartel and its effects, which is not referred to in any of his reports. In fact that information only became apparent during the cross-examination of Professor Neven at the trial and even after protracted recent correspondence between the parties' solicitors, it still remains unclear what the terms of his original engagement were and what he was then advising on.

239. We are concerned about the lack of candour in this respect. It is particularly important for experts, who have an overriding duty to assist the court or tribunal,

for them not only to be independent but also to be seen to be independent – see *The Ikarian Reefer* [1993] FSR 563, at 565. Full disclosure of potential conflicts or other matters that may affect an expert's independence goes a long way to allaying any concerns that a court or tribunal may have in that respect.

240. Professor Neven's first witness statement in these proceedings dated 14 November 2018 was in relation to a disclosure application. In this witness statement, Professor Neven explained his expertise in competition economics with details of his academic and work history, including his work for the Commission and a selection of the specific cases that he had worked on. He then said that he had been instructed as DAF's economic expert in the proceedings and that he was a member of the team at Compass Lexecon advising DAF. He said nothing about having first been instructed to advise DAF in 2013 (at a time when he had been affiliated with a different consulting firm, CRA). He made the same omission in his Second/First witness statement dated 15 February 2021 and his Third/Second witness statement dated 22 February 2021, both in support of the application for permission to adduce Professor Neven's evidence.[12]

241. The first inkling that was provided of Professor Neven's prior association with DAF was in a footnote to his first report on plausibility dated 12 November 2021, as follows:

> "In addition to my instructions in these proceedings, I have also been instructed on behalf of DAF since 2013 to advise on the Commission's investigation and to provide my expert opinion in respect of other follow-on damages claims in the UK and across Europe arising from the Decision. Nevertheless, the only material that I have relied on in making this report is set out in Annex B."

242. This prompted extensive correspondence between the solicitors. On 22 April 2022, shortly before the trial was due to commence, DAF's solicitors said as follows:

> "As to the Commission's investigation specifically, we understand that Professor Neven was instructed in February 2013 to consider potential economic arguments that might be advanced by the Commission and lines of enquiry that DAF might pursue in order to address them. Subsequently Professor Neven was instructed to consider and give his economic opinion on

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[12] This was the Second witness statement in the Royal Mail proceedings and the First in the BT proceedings which had by then been ordered to be managed and tried together.

> the potential theories of harm and objections put forward by the Commission following its investigation, which he did. DAF and its European counsel (De Brauw Blackstone Westbroek) have been unable to locate a formal letter of instruction. Compass Lexecon has also confirmed that it cannot locate a letter of instruction in relation to this work."

Extraordinarily, no one has been able to find a copy of that letter of instruction from 2013.

243. The letter of 22 April 2022 also enclosed a letter of engagement from Compass Lexecon, signed by Professor Neven and Mr Andreu, to De Brauw dated 30 August 2016. This included the following:

> "Damien Neven and Enrique Andreu ("Expert") will lead this engagement and provide expert consulting services to Client at Client's request. The services to be rendered on this engagement may include providing expert testimony. Expert understands that Client is interested in obtaining Expert's objective and independent analysis in connection with this matter."

The terms and conditions of business enclosed with the letter of engagement stated that Compass Lexecon would "*act with independence and objectivity in conducting the Engagement and, in the event of a conflict between its duties to the Client and its duties to the Court, will hold its duties to the Court paramount.*" Professor Neven confirmed that a team of "*probably 20/25*" persons at Compass Lexecon were working on the various aspects upon which they had been instructed. There was also an addendum dated 9 November 2017 to the engagement letter which drew attention to the rules governing the role of expert witnesses in English court proceedings.

244. Mr Ward KC sought to make something of the fact that Professor Neven was agreeing to provide "*expert consulting services*" as well as expert evidence. Professor Neven was asked about this in cross-examination and explained as follows:

> "… I mean, in terms of substance, the work that I have done since 2016 has been of a constant nature. I have been considering possible theories of harm, I have been considering evidence with respect to the validation or the invalidation of those theories of harm and then of course I have undertaken work in order to assess whether there was indeed an overcharge, not only in the UK but also in other countries."

> "… I do not think I ever saw myself as being a consultant to DAF. I think that, throughout the beginning as a -- I saw myself as an expert economist and I know the consistency of what I have done over time, and the consistency of what I have done over time is to independently look at possible theories of harm and evidence with respect to those theories of harm and of course to look at whether there is evidence of an overcharge..."

245. We do not have any concerns about the role Professor Neven has adopted since being appointed as an expert in these proceedings. We also think it unsurprising that DAF would seek to use the same expert in relation to all similar proceedings based on the Settlement Decision, including across multiple jurisdictions.

246. Where we do have concern is in relation to the early period, the lack of disclosure from that time and the possible effect that this may have had in shaping Professor Neven's evidence, particularly as to his theory of harm.

247. Professor Neven was asked about the original instruction in 2013. He explained that, at that stage, he was given an explanation of DAF's pricing and *"the link or absence of link between list price and transaction prices"*. He also accepted that his role involved considering *"the theory of harm issue that we are also debating today"*. He acknowledged that the role involved "*helping them formulate a defence"*. He said he could not recollect what sort of work product he delivered at that time.

248. As is clear from DAF's solicitors' letter dated 22 April 2022, the next stage was after the issue of the Commission's statement of objections in 2014. Professor Neven agreed that he was still principally considering theories of harm. Clearly there was no basis for doing a detailed econometric analysis of the data at that stage and the main focus would have been on developing a theory of harm, helpful to DAF. Professor Neven said that he had no involvement for some time thereafter, until the Settlement Decision was issued and the various proceedings commenced.

249. It appears that Professor Neven's theories of harm at the time (we do not know what they are but assume they are similar to what he is arguing now) were based on what DAF told him and their "*narrative*" as to there being no anti-competitive effect. He said:

> "they explained to me, I mean, what they thought this – what the Commission had uncovered did not lead to anti-competitive effect, so I heard, you know, from the very beginning why they thought that there was no effect, that the conduct uncovered by the Commission did not lead to anti-competitive effect … this narrative has been constant throughout."

250. Mr Ward KC described the following exchange he had with Professor Neven as being a "*moment*" he would "*never forget*":

> "Q. But you have never asked DAF any questions about why it carried out this cartel –
>
> A. I did.
>
> Q. Oh you did?
>
> A. I did, and actually I have had sort of two answers about, you know, why it took place at all"

Professor Neven then went on to explain that DAF wanted to know its competitors' list prices to test their relative competitiveness.

251. Mr Ward KC said that this was significant because there had never been an explanation from DAF as to why it had participated in the Cartel and Professor Neven had asked the obvious question to which he received some sort of answer. Yet this only emerged for the first time in his oral evidence. In explaining why it was not dealt with in his reports or referred to earlier, Professor Neven said that it was merely "*ex post rationalisation*" and that it was therefore not relevant to his economic analyses and theories of harm. However, insofar as any such "*ex post rationalisation*" influenced the way Professor Neven understood the Cartel to have operated, it could have affected the development of his theories of harm. It is insufficient, in our view, for Professor Neven simply to say that he only relied on the information specifically identified in his reports, when it appears that he has been privy to matters that could have been relevant to the developing theories that he now relies on. Indeed, Professor Neven in his third report on plausibility put forward some purported benefits of the exchange of information that were not higher prices (the information exchange could have led to "*better pricing strategies without leading to systematically higher prices*" is what he said, although he later accepted that he did not think that was credible)

but he did not refer to what DAF had apparently told him were what it considered the benefits to be.

252. There were other matters that came out in his cross-examination that he had discovered from DAF but to which he had not referred in his reports. These included interactions on the data, whether there was any experience by DAF of the Complements effect and the involvement of the German subsidiaries in the Cartel (the latter point was covered in the Settlement Decision). However, we do not think these necessarily had to be disclosed in his reports or that if Mr Harvey had known about this information it would have affected his analysis.

253. Professor Neven is clearly a highly intelligent, experienced and respected economist in this field and we have no doubt that he is fully aware of his duties and responsibilities as an independent expert. He gave a clear, seemingly well prepared, explanation as to how he tries to eliminate confirmation bias or "*cognitive capture*" as he called it. Furthermore, he said that he initially approached the issue of plausibility of effects with some scepticism as to DAF's position but that after looking further into it and particularly when the data and econometrics were analysed, he came to his finalised position on theories of harm. In other words, his opinion has evolved over time.

254. For that reason, it is important to know the chronology and yet he cannot clearly remember and there is no contemporaneous evidence, including the original instruction letter, available. Professor Neven said that he had not asked DAF how it used the information obtained from the Cartel. This is surely potentially relevant to any theory of harm and his lack of curiosity in this respect is troubling. If he had asked DAF that question and had been provided with an answer, that would be relevant information that he would have been bound to disclose. But DAF's strategy has been not to adduce evidence about the internal operation of the Cartel and if Professor Neven had disclosed such information DAF may have been forced to adduce factual evidence in such respect. We are not saying that we disbelieve Professor Neven's evidence that he did not ask these questions; rather that we have the uncomfortable feeling that Professor Neven's approach indicates that he may have become too aligned with his client and insufficiently independent.

255. Mr Ward KC referred to various cases, such as: *Bank of Ireland v Watts Group plc* [2017] EWHC 1667; *EXP v Barker* [2017] EWCA Civ 63; and *Bux v GMC* [2021] EWHC 762 (Admin). However, as Mr Beard KC pointed out those cases are far removed from this case, as there were allegations of serious conflicts of interest, including financial interests in the outcome of the litigation or some personal or other connection with the instructing party. As we have already said, we do not consider there is a conflict of interest and we see no serious concerns with the fact that Professor Neven and/or Compass Lexecon have, and stand to have, an enormous amount of work from DAF by reference to all the trucks cases they are involved with. It is an inevitable consequence of the adversarial trial process involving detailed expert evidence which is critical to the case that the respective experts will be heavily involved with their client for a long period of time. Indeed, it would be wholly inefficient and wasteful of costs to have different experts instructed in cases that are essentially considering the same issues.

256. But there is no getting away from the fact that Professor Neven has been involved in advising DAF for nearly a decade and that from a very early stage he was providing his opinion and advice on potential theories of harm that would assist DAF. This situation provided Professor Neven with insights and access that, as an independent expert, we could reasonably have expected him to use in order to assist us. We examine in detail the theory of harm that he puts forward in his evidence in this case and it is safe to say that his conclusion that it is implausible that there were any effects in the UK and on the Claimants from the Infringement is a surprising one. His theory provides a justification for the conclusion that he draws from the data that there was no Overcharge throughout the period of the Infringement. But we are left with the lingering suspicion that, as was disclosed very late on in these proceedings, he had come up with his theory of harm back in 2013 or 2014 (and certainly well before he had access to detailed empirical data), and that has shaped his approach to the expert evidence he has provided on the central issues in relation to the Overcharge.

257. We do not reject his evidence on that ground; nor were we invited to do so by the Claimants. But we do think that the failure to disclose precisely what he was doing for DAF in the early period undermines his credibility to a certain extent

and means that, when we look at the exercise of judgment by Professor Neven in relation to economic theory, we may have to be cautious about accepting what he says at face value. We do not really think that this will affect our assessment of both Professor Neven's and Mr Harvey's evidence but thought it important that we record our concerns in this respect.

J. THEORY OF HARM

(a) Introduction

258. Both sides' experts sought to underpin their econometric analyses of the Overcharge with an assessment of the plausible theory of harm. As his regression analysis showed there was no Overcharge, Professor Neven's theory of harm was aimed at showing that this was explicable on the basis that it was highly unlikely that there was sufficiently effective coordination among the Cartelists that would enable there to be sustained higher transaction prices in the UK. It is indicative of DAF's approach that Mr Beard KC dealt with the theory of harm arguments after the regression analyses, whereas the Claimants made their submissions the other way round. However, as we know, Professor Neven considered theories of harm from the outset of his instructions in 2013, well before he had embarked on any sort of econometric analysis.

259. Mr Harvey adopted a different approach, merely seeking to establish that his finding of the existence of an Overcharge had a plausible basis in economic theory and the known and admitted facts of this Cartel. Because of the lack of evidence from DAF as to how the Cartel operated and how the confidential information obtained through the Cartel was used by DAF, it would be impossible to determine conclusively as to how the Infringement led to higher transaction prices. So, all Mr Harvey sought to do was explain how it was, at the least, plausible that the Infringement caused an increase in transaction prices. Or, in other words, that the Overcharge he found in the regression model is reasonably attributable to the Infringement rather than to any other factor.

260. There was no dispute that the theory of harm or plausibility analysis was a useful complement to the experts' regressions and empirical testing of the data. Clearly for the purposes of both causation and quantum, the prime focus must be on what the data shows in the econometric analyses. But we agree that it is helpful for the experts' findings on the Overcharge to be supported by a plausible theory of harm.

261. The notion of a plausible theory of harm assumes a relatively low threshold. We accept Mr Harvey's explanation as follows:

> "I emphasise that I do not consider that the Infringement must inevitably have increased transaction prices. Rather the purpose of this exercise is to establish whether there are reasons, from a Theory of Harm perspective, to expect that it may have done." (emphasis added).

262. Professor Neven seems to have agreed that the test is one of plausibility. Indeed, his first report on this subject was entitled "*Analysis of the plausibility of effects resulting from the Infringement*". He argued that an effect on transaction prices was "*implausible*", although his position softened under cross-examination where he said that he was "*not denying that there is a potentially plausible theory of harm*". He went on to say that he thought it "*highly unlikely*" that there was effective coordination to bring about higher prices, but he could not rule it out.

263. Mr Beard KC made quite a play both in his cross-examination of Mr Harvey and in his closing submissions as to whether Mr Harvey was using "*plausible*" interchangeably with "*possible*" and whether he was using "*possible*" to mean the same as "*more likely than not*". But this took the debate nowhere as it was clear that Mr Harvey was not advocating a theory of harm that was more likely than not to be the correct one. He said in his evidence:

> "I have not reached a view on probability of effect, … So when I say "plausible", I mean I have found avenues that I think would work in this context."

264. The Claimants are not obliged to prove their theory of harm on the balance of probabilities. It is one element of their case on the existence of an Overcharge. As Mr Beard KC pointed out, Mr Harvey's conclusions on theory of harm mean that it is at least as likely that there was no adverse effect as that there was one.

265. We think it likely that most people would assume that a Cartel that operated for 14 years, with all the risks that that required the Cartelists to take, must have been regarded as extremely beneficial for the Cartelists in that it successfully raised transaction prices. Professor Neven said that this was what he first thought (presumably back in 2013) and that he was sceptical as to the

"*narrative*" that DAF was putting forward. He said that he then applied the scientific process of falsification to test whether the theory could actually work in practice. Mr Beard KC said that the approach adopted by Professor Neven was far superior to the generalised assertions and untested intuitions that Mr Harvey relied upon.

266. However, the trouble with Professor Neven's approach is that he too makes assumptions as to the form of coordination between the Cartelists, which he concludes could not work, whereas we do not know what the coordination was and how the Cartel actually operated. Professor Neven had the opportunity to ask DAF these questions but chose not to. Accordingly, we are left with what we know of the Infringement from the Settlement Decision and we can see why Mr Harvey relied largely on that for his theory of harm.

(b) Settlement Decision

267. We have referred above to Recitals in the Settlement Decision that describe the main aspects of the collusion that constituted the Infringement and the Cartelists' aims of the collusion. While we do not know the full details of the collusion, it is clear that it was more than just an information exchange on gross list prices and increases and there was a fair amount of infrastructure and organisation between the Cartelists that was maintained throughout the period of the Infringement.

268. The Commission did not need to articulate a coherent theory of harm or even to provide a full description of the mechanics of the Infringement or its effects. An "*object*" infringement is deemed to be so likely to have had anti-competitive effects that it can be declared unlawful without actually examining or proving such effects. The 2009 *Oxera* study carried out for the Commission was much-mentioned during the hearing. It contained a comprehensive review of the empirical economic evidence, focusing on peer-reviewed academic articles and published books that had assessed the economic impact of cartel conduct. It concluded that some 93% of cartel infringements do have adverse effects on prices, and that the median overcharge of cartel infringements on price was around 18%. (We have referred above to Professor Neven's comment that there

was a bias in the cases examined in the *Oxera* study although he did not support that with any evidence.) In our view, the *Oxera* study strongly supports the accepted legal position of there being a high probability that cartel conduct which meets the criteria for an "*object*" infringement had adverse effects.

269. As expressly set out in Recitals (71) and (81) of the Settlement Decision, the specific aim of the Infringement was to:

> "remove uncertainty regarding the behaviour of the respective Addressees and ultimately the reaction of customers on the market."
>
> "Price being one of the main instruments of competition, the various arrangements and mechanisms adopted by the Addressees were ultimately aimed at restricting price competition…"

270. As stated above, this was not a mere information exchange on gross list prices, as Professor Neven and DAF seemed to want to portray it. The Infringement included both agreements and information exchanges. The Cartelists shared a wide range of the most commercially sensitive information, from current prices and future price increases (both gross and net) to details of all models and options sold by them, the passing on of costs, the timing for the introduction of new models, stock levels, market forecasts and delivery times. They did so frequently and through a variety of means, including by the sharing of their configurators.

271. The Commission found that the information exchanged better enabled the Cartelists to calculate each other's approximate net prices and to understand each other's European price strategies. DAF admitted that it used the information that it obtained from the Cartel and that it took it into account in determining its conduct on the market. We described above the various mechanisms by which DAF NV would have been able to use the information obtained by those involved in the Infringement to encourage local sales units to increase their transactions prices, principally through IKP margin targets and the mandate structure.

272. The most significant finding of the Commission is that the Cartel continued for at least 14 years and it was only brought to an end by the intervention of the

Commission following the whistle-blowing of MAN. No Cartelist left during that time and they all took significant legal and financial risks in participating in the Cartel. Together the Cartelists comprised 90% of the trucks market. While DAF admitted this, as it was bound to, it attempted to minimise its significance by ridiculing the Claimants' reliance on it. But of more importance for these purposes is that it seems to us that Professor Neven simply did not engage with the fact that the Cartel continued without breach for so long and he never sought to explain how or whether that should have impacted on his theory that it was implausible that the Cartel had any adverse effect in the UK or on the Claimants. Professor Neven could offer no pro-competitive credible rationale for sophisticated, profit-maximising firms to have stayed within the Cartel for that period of time with all the attendant risks of doing so.

273. In a supplemental report, Professor Neven suggested that the exchange of information on list prices could be useful in *"conveying information on demand or cost"*. This was therefore a possible pro-competitive rationale for the Cartel. However, in his oral evidence, he accepted that this was speculative and in the end conceded that it was not a credible rationale for the Cartel continuing for so long:

> "MR RIDYARD: I think we understand what your argument is on coordination not being, you know, effective, but that does not really answer the question of why -- do you have any explanation of why they exchange information on list prices changes, and your answer is because that would help them to understand -- that is the best way to help them understand demand?
>
> A. I -- look, I mean, I can only offer that as a possible explanation.
>
> MR RIDYARD: But this whole session is about plausibility. Do you think that is a plausible explanation of why they exchange information about future list price increases?
>
> A. Honestly I don't think so.
>
> MR RIDYARD: No.
>
> A. If you ask me, I do not think that information about changes in list prices would be key in order to anticipate demand. I think that, you know, we do not have a lot of evidence in order to show that this was the case and I do not think this was key.
>
> THE CHAIR: So therefore you cannot come up with an explanation for why they would have done this for 14 years?

> A. I can come up with an explanation as to why they exchanged the list prices because I think that, you know, it conveyed some information about the relative competitiveness of competitors across the whole range so this I find an interesting explanation. Now, why you really need to exchange information about your intention with respect to changes in list prices in order to obtain more information about demand, I do not think this is very credible line of reasoning."

(c) Coordinated v unilateral theories of harm

(i) Coordinated effects

274. There are two types of theory of harm: coordinated and unilateral. The economics of cartels generally uses a framework of "*coordination*". This reflects the key economic principle that for a cartel to be effective, the firms involved must *collectively* reduce industry output below the level that would be supplied in a competitive market and thereby raise the market price above the competitive level. Having achieved this outcome, however, it is then individually profitable for each cartel member to increase its output (to sell more at the newly elevated price/profit margins). Since this incentive to "*cheat*" on any understanding applies to all cartel members, the economic theory suggests that cartels are inherently unstable unless some mechanism can be found to achieve effective coordination. This coordination must find a way to persuade each cartel member to resist the temptation to increase its output/reduce its price even though it would be individually profitable to do so (in the short term).

275. As was noted particularly by Professor Neven but is well recognised, a coordination mechanism requires cartel members to satisfy three conditions:

    (1) To agree on the competitive parameter that they will collude upon (e.g. price levels, price increases, capacity, output, customer allocation etc.) – this is normally termed the "*focal point*" for the cartel;

    (2) To be able to monitor the behaviour of other cartel members to assess compliance and detect cheating on the agreement - "*detection*"; and

(3) To identify a credible way to discourage cheating and to encourage those who do cheat to change their behaviour to bring it back in line – a "*punishment*" mechanism.

276. In a perfect cartel, the cartel members would achieve the monopoly price level (which maximises the total available industry profits), and the cartel members would then devise a way to share out these rewards between them. But cartels are never normally that perfect and they do not need to be in order to have an adverse effect on competition or customers and to be profitable for the cartel members. The fact that such infringements are unlawful means that they necessarily have to be organised and conducted under conditions of secrecy and with only partial knowledge among the cartel members.

277. Since there is always an incentive in the short term to cheat, cartels based on coordinated effects theories can generally only work in situations where firms engage in repeated interaction, so that they can obtain feedback and learn from prior occasions and adapt accordingly. This repeated interaction provides an environment that might sustain effective detection and punishment. The task of achieving a cartel outcome through coordination is easier if there are fewer players, greater transparency, less asymmetry in costs and/or market shares and an absence of external competitive shocks or influences that would tend to disrupt cartel stability.

278. The critical factual context for consideration as to whether the coordination had deleterious effects must be the details as to how the unlawful conduct played alongside those other market characteristics. The Settlement Decision paints an incomplete picture and DAF has chosen to provide us with no further evidence as to the ways in which the various meetings and exchanges between the Cartelists operated over the 14 year period covered by the Infringement.

(ii) Unilateral effects

279. A theory of unilateral effects was invoked by Mr Harvey, alongside a perhaps more conventional coordinated effects theory. Unilateral effects theories are far more commonly encountered in horizontal merger cases. That is because, as its

name would suggest, it is concerned with a profit-maximising decision by an individual firm in response to an event in the market and which leads to an increase in prices and/or margins, to the detriment of its customers. This can occur in mergers between competing firms where the competitive constraints that bind the conduct of pre-merger firms are relaxed, leading to an anti-competitive increase in prices. This is deemed a "*unilateral*" effect because it arises directly from the change in market structure caused by the merger and does not rely on any collaboration with other firms that remain in the market.

280. It is unusual to seek to apply a unilateral effects theory to a cartel case, as the Claimants and Mr Harvey do. By its very nature, a cartel involves coordination between two or more parties and would hope to prevent and discourage unilateral action. But Mr Harvey cited an academic paper by Professor Joseph E. Harrington, Jr,[13] entitled *The Anticompetitiveness of Sharing Prices* dated 26 March 2020 and there was much discussion about this at the hearing. Professor Harrington sets out a theoretical model in which the exchange of list price information between competing firms is itself treated as an "*event*" that can trigger a unilateral effect, causing firms to raise their prices. Mr Ward KC referred to some decisions by courts in other European jurisdictions in damages cases arising from the Infringement in which Professor Harrington's model was accepted and said that it should be persuasive in this case too. We discuss this further below.

(d) Commercial rationale for the Infringement

281. Any economic theory of harm must be based on the fact that the Cartelists were acting in the market as rational profit-seeking businesses. Such profit-seeking conduct must also motivate businesses to enter a cartel or pursue related infringements.

282. It is reasonable to assume, and DAF produced no evidence to the contrary in its case, that firms engaged in a cartel are aware that such conduct is unlawful and

[13] At the Department of Business Economics & Public Policy at The Wharton School, University of Pennsylvania.

that the discovery of their conduct will lead to fines and the threat of damages actions. It is also therefore reasonable to assume that these costs and risks are factored into their decisions to engage in such conduct. As profit-maximising firms, they will have calculated that those costs and risks are worth incurring because they are counterbalanced by the prospect of commercial gains, for example from successfully elevating prices and margins above the competitive level. For long-running conduct which encompasses some of Europe's largest and most sophisticated industrial operators and which was supported by a series of secret, high level meetings over multiple years, it does not seem plausible to us that the firms involved could have been ignorant of the risks they were taking. Nor would it have needed to have been so secretive if it was being done to benefit competition by for example reducing the costs associated with risks and uncertainty.

(e) Professor Neven's approach

283. We address Professor Neven's approach before Mr Harvey's, as his is the more extreme position, saying first that there was no plausible theory of harm applicable to this case but later modifying to it being "*highly unlikely*" that any coordination worked effectively. Mr Ward KC, relying on Mr Harvey's reports and evidence, was highly critical of Professor Neven's approach, in particular that he chose to consider and test only a very narrow theory of harm that was not put forward by Mr Harvey or the Commission. In short, the criticism was that Professor Neven set up a theory of harm that had no basis in fact and was bound to fail.

(i) Coordinated effects

284. It is a key feature of Professor Neven's plausibility analysis that he chose to characterise the mechanism by which the Cartel might have worked in a very limited way. He argued that if the *focal point* for the Cartel was an agreement on transaction prices, effects could arise only to the extent that an agreement between the Cartelists on list prices could be made, and then translated to agreed concerted behaviour on actual transaction prices. If there is no link between list and transaction prices, he contended that a cartel that fixed list prices would be

ineffective, since say a 5% increase in list prices across the industry would carry no risk of a corresponding rise in actual customer prices. Customers would be indifferent to a sustained cross-industry increase in list prices if it had no impact on transaction prices.

285. Professor Neven described this as the "*tide that lifts all boats*" theory, whereby a coordination on list prices would translate into effects on transaction prices because of a relationship between the two. In other words, the coordination on list prices indirectly pulled up transaction prices in a systematic way and there was no need for the Cartelists to have reached a common understanding on transaction prices themselves. Professor Neven said that this was wrong and could not work, principally because of the incentive to cheat and for participants to deviate from the agreement and drop their prices to gain market share. Unless there was a *detection* and *punishment* system in place, Professor Neven considered that there was no way round this implementation problem.

286. Professor Neven supported his plausibility, or implausibility, argument with the following empirical analyses:

(1) Evidence showing that there is no reliable relationship between DAF's list and transaction prices in the UK market ("***Price Change Analysis***");

(2) The absence of evidence that the Cartelists actually colluded on transaction prices;

(3) Evidence on the extreme complexity of truck product options (making it hard to keep track of list or transaction prices in a meaningful way);

(4) A "***mystery shopping***" exercise in which he showed that it was not possible to make reliable predictions on transactions prices from announced list price changes;

(5) Evidence on fluctuations in the Cartelists' market shares (emphasising the instability of any supposed collusion); and

(6) Evidence on the number of competing truck manufacturers and the variety of customers, which made coordination more difficult.

287. Before looking at some of the individual elements, we think that even taking them together, they do not provide a strong case on "*implausibility*".

288. As we have explained above, there are good *a priori* reasons for expecting the Cartel to have adverse effects on competition and prices. That is why the law allows the Commission to find an "*object*" infringement and to levy large fines without showing any proof of effect. Therefore, the fact that the Settlement Decision does not address the economic effects of the Infringement is unsurprising and irrelevant.

289. There is no plausible or credible pro-competitive story behind the Cartel, and as set out above, Professor Neven reneged on the tentative arguments that he had previously advanced which might have suggested otherwise.

290. We agree with Mr Ward KC that Professor Neven's critique is something of a straw man. By limiting the possible operation of the Cartel to an agreement on list prices that would take effect specifically through an ability to monitor and fix net prices alone, without considering any of the other context, he chose not to engage with the ways in which exchanges of list price information and intentions might have affected market outcomes. He also adopted an unreasonably narrow view on ways in which the Cartel members might have monitored their rivals' conduct.

291. Closely related to this is that Professor Neven was not able to test the possible impact of some coordinated effects theories due to the limited information available about the Infringement and DAF's use of the information that it obtained from the Cartel. The fact that DAF chose to provide only limited detail of how the information received from the Cartelists was used by it (nor did Professor Neven ask for this information) does not of course mean that it was confined to list prices alone. There could in fact have been a variety of channels through which DAF and the other Cartelists might have checked on adherence to an understanding to raise net prices by a set amount, including evidence on

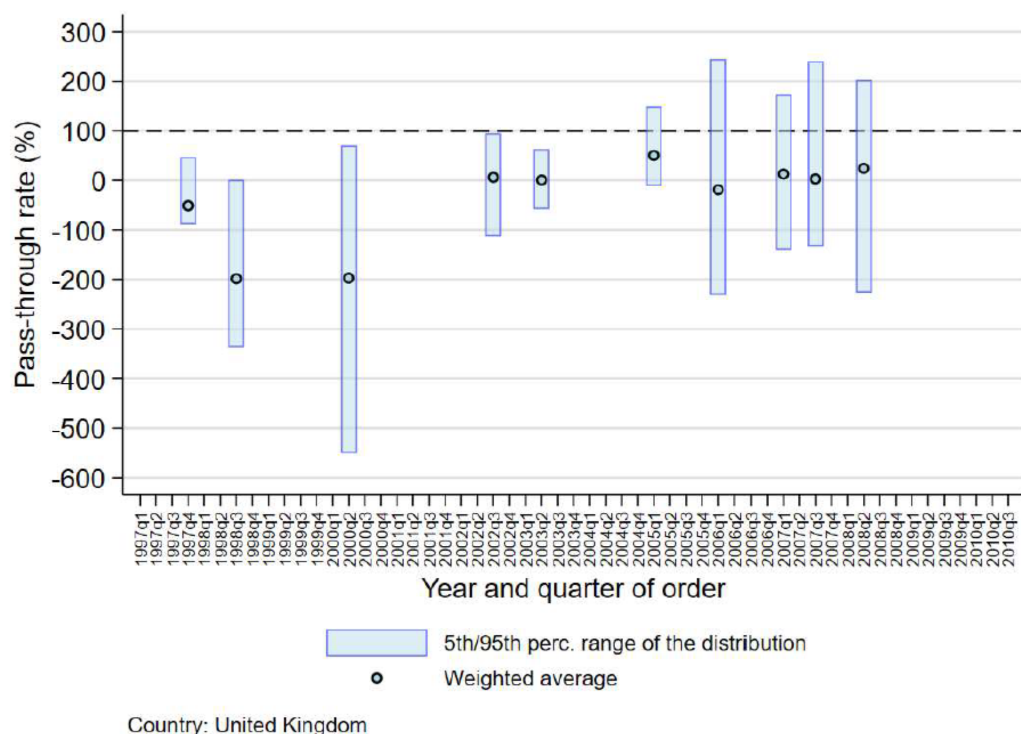
market shares over time. Significant gains in market share by one Cartelist could indicate that the supplier in question was cheating. Alternatively, market feedback on actual competitor transaction prices could have been obtained from customers, for example, through tender negotiations. There was some evidence that unlawful information exchanges did include net price information and that this allowed the Cartelists to be better informed about transaction prices than they would otherwise have been.

292. Professor Neven conducted two empirical analyses to test his conclusions on plausibility. These were (a) the *Price Change Analysis*; and (b) the *Mystery Shopping* exercise. Both analyses assumed the specific focal point that Professor Neven chose to consider, without testing its appropriateness.

(a) The *Price Change Analysis*

293. Professor Neven's analysis was summarised in the following graph, which charted the extent to which any given list price change announced by DAF UK was "*passed through*" into a net price change:

Figure 8: Dispersion of the pass-through rate in the UK (infringement period)



294. Mr Beard KC submitted that Professor Neven's analysis showed the weighted average pass through of almost all of DAF's list price changes to transaction prices throughout the period was around zero or negative. It was around 50% on one occasion when there was a general list price increase in Q2 2005. This therefore suggested that during the Infringement period list price increases did not on average lead to transaction price increases.

295. This analysis came in for sustained criticism from Mr Ward KC both in cross-examination and in submissions, most of which we consider to be justified. The *Price Change Analysis* was neither convincing nor definitive. And it suffered from the following substantial defects:

(1) It was based on artificially constructed net prices for a hypothetical naked truck stripped of any extra options; increases could have been found in the transaction prices of those options;

(2) It was limited to DAF's own list and transaction prices, so it said nothing about what DAF could learn of its competitors' transaction prices from the information exchanged on their list prices;

(3) It said nothing, as Professor Neven accepted, about the relationship between list and transaction prices in the counterfactual world without the Infringement;

(4) It did not control for any other factors that might affect the level of transaction prices, such as demand or costs, which Professor Neven also accepted;

(5) It was based on a characterisation of list price changes that seemed to contradict the description provided by Mr Ashworth in his evidence of how DAF's Euro-denominated list price changes were converted into Pound list price changes; and

(6) It was contradicted by DAF's own witness evidence, in particular Mr Ashworth who described several highly plausible links between list

price changes and transaction prices and said that he expected from his years of experience for approximately half of the list price increase to be translated into transaction price increases; Professor Neven acknowledged that his theory was in conflict with DAF's factual evidence yet he refused to reconsider his position.

(b) The *Mystery Shopping* exercise

296. Based on his *Mystery Shopping* exercise, Professor Neven concluded that it would be *"very hard"* for another Cartelist to reliably monitor DAF's transaction prices using information on its list prices and a sample of transaction prices obtained through mystery shopping. However, as Mr Ward KC submitted, the exercise had the following flaws:

(1) It failed to engage with Recital (47) of the Settlement Decision, which found that the list price information exchanged by the Cartelists enhanced their ability to calculate each other's approximate net prices and despite this being admitted by DAF.

(2) As with the *Price Change Analysis*, the exercise only considered a competitor's ability to monitor DAF's transaction prices and it therefore revealed nothing about DAF's ability to monitor its competitors' transaction prices.

(3) The exercise assumed that the hypothetical competitor would have access only to DAF's list prices and a sample of 50 DAF transaction prices. It therefore failed to take account of any of the other commercially sensitive information that the Cartelists shared with one another, or any of the other market intelligence to which they had access.

(4) In any event, as Mr Harvey pointed out, the results of the exercise showed that, despite the margin for error, the hypothetical competitor would in fact be able to predict the average discounts from list prices with a reasonable degree of accuracy.

297. The problems associated with the gap in information on the precise workings of the Infringement, and in particular how DAF used the information it obtained from its competitors, are also relevant here. We do not know whether the Cartelists, e.g. through the exchange of configurator tools, were able to identify systematic patterns in prices or price changes from the mass of diverse price information that the market transaction data provides, and Professor Neven's empirical analyses were unable to explore this possibility.

298. Furthermore, the wider points that Professor Neven made about the implausibility of coordination were also lacking in detail and unconvincing:

(1) He made various claims about the trucks market, that it was relatively unconcentrated, that it was not transparent, that market shares were asymmetric and fluctuated over time, and that the products were complex, in order to show that it would be difficult for there to be effective coordination that raised transaction prices. These aspects of the market were challenged by the Claimants but in any event there have been many cartels that have operated in less promising economic environments and industry structures than this one. None of Professor Neven's market descriptors established a meaningful threshold beyond which one could confidently conclude that coordination would not work.

(2) His statement that the trucks market *"was not transparent"* is directly contrary to the Commission's finding, accepted by DAF, that *"[t]he truck sector is characterised by a high degree of transparency"* with *"one of the remaining uncertainties"* being intentions as to future gross prices (Recitals (29) and (30)).

(3) As to asymmetry in the market, Professor Neven relied on data from 2005 to argue that *"there was a considerable degree of asymmetry in the market shares of truck manufacturers in the UK"*. But as Mr Harvey pointed out: (a) data from across the Cartel period suggested that the level of asymmetry in 2005 was unusual; (b) in any event, market shares at the European level showed a greater level of symmetry; and (c) the

data as a whole was consistent with either firms competing or a state of softened competition.

(4) Professor Neven stated that "*The fluctuations in market shares are hard to reconcile with effective coordination on prices*". However, this lacks rigour because Professor Neven has not identified any benchmark for the degree of variation in market shares that would definitively allow him to reject the hypothesis that the Infringement had *some* anticompetitive effect. Even if such market share fluctuations indicate that the Cartelists could have been more effective in raising prices had the organisation of the Cartel been more disciplined, that does not of course establish that the Infringement had no effect.

(5) Similarly, Professor Neven's statement that it would be "*a challenge*" to organise coordination in a market with six competitors is plainly insufficient to prove that it is "*implausible*". The participants in all cartels face a "*challenge*" arising from the need to counteract each cartelist's short run incentive to cheat on the arrangement, but Professor Neven's partial sight of the workings of the current Cartel precluded him from reaching an informed conclusion as to whether those challenges were insurmountable in this case.

299. We also agree with Mr Ward KC's submission that Professor Neven showed a remarkable lack of curiosity in the way he went about assessing plausibility. He has been considering these matters for and with DAF for nine years, yet he seems to have chosen not to inquire into the most basic of matters. For example, he failed to ask DAF:

(1) how it used the huge amount of information that it received from its competitors in the context of its pricing for UK customers (or at all) – he offered no explanation for why he failed to ask this but accepted that he could have;

(2) about its ability to calculate its competitors' approximate net prices based on information about their list prices combined with market intelligence, given that DAF had admitted Recital (47);

(3) about the nature or extent of the exchanges of other commercially sensitive information in which it was involved (or consider relevant evidence from the Commission file), despite observing in one of his reports that: *"[i]n order to establish a cogent theory of harm based on such exchanges, either on their own or in combination with the other conduct considered by the Commission, it would be necessary to establish that the exchanges were sufficiently frequent and consistent to support an effective coordination. I have not seen evidence which establishes such that that is the case in relation to these further exchanges";*

(4) about the way the Cartel actually worked; and

(5) whether the Cartelists would have been able to assess the success of the Cartel in raising prices through feedback on their own prices and/or other parameters of competition such as customer retention or market share changes.

300. These failures meant that he had to construct a theoretical model as to how he thought the Cartel would have worked. Mr Beard KC said that he was not doing that; rather he was taking the Settlement Decision at its highest and then going further and assuming that there was some coordination on transaction prices. We are not sure what it means to take the Settlement Decision at its highest, as it only included enough detail to establish the Infringement "*by object*" and, because the gaps were not filled by DAF's evidence or Professor Neven's inquiries, he was not in a position to assume how far the Infringement actually extended or operated. We think this is a most unsatisfactory way to approach a theory of harm based on coordinated effects.

301. Where there were relevant facts, such as Mr Ashworth's clear evidence as to the link between list price increases and transaction price increases, Professor

Neven was prepared to dismiss such evidence if it did not fit with his empirical analyses. And this was taken further by Mr Beard KC in his closing submissions when he said that that might have been Mr Ashworth's genuine impression but that it was contradicted by the data, which cannot be under any false impression. We do not find this at all persuasive and we have pointed out the serious flaws in Professor Neven's analysis of the data. It shows that Professor Neven and DAF did not take sufficient steps to ensure that their theoretical and empirical findings could be reconciled with their own factual evidence.

(ii) Unilateral effects

302. Professor Neven was also dismissive of the alternative theory of harm based on unilateral effects put forward by Mr Harvey that relied on the theoretical model of Professor Harrington. He accepted that Professor Harrington's model (the "**Harrington model**") describes a "*theoretical possibility*" but denied that there is any support in economic theory for a presumption that an exchange of information leads to higher prices outside the standard coordinated effects framework. He also criticised Mr Harvey for his lack of precision in using terms such as "*collusion*" to describe these unilateral effects theories and for his failure to spell out how the Harrington model, or perhaps some variant of it, was applicable to the facts of the European truck industry and the Infringement.

303. At the hearing, there were long exchanges between the experts and under cross-examination which highlighted the particular assumptions of the Harrington model and whether they were satisfied in the current case. We did not, however, find these discussions particularly insightful or helpful in deciding this issue, even if they supported a number of Professor Neven's criticisms of the lack of precision in Mr Harvey's evidence. We deal in a little more detail below with the Harrington model in considering Mr Harvey's evidence, but it is important to understand the limited reliance placed on it by Mr Harvey. He stated:

> "I consider that Professor Harrington's model represents *one potential route* through which transaction prices *may have been affected* by the exchange of information on and discussion of list prices. And that this justifies testing for the existence of overcharge using my econometric model." [italics added]

304. Mr Harvey's reliance on the Harrington model is thus extremely weak. He does not claim that the model applies, or even that some other undisclosed variant applies instead, and he does not claim that any real or imagined model of unilateral effects necessarily provides a template that would justify a presumption of harm from the Infringement. It is hard to see how he could have been expected to do so given the incomplete evidence that exists on the way DAF used the unlawfully exchanged information in its commercial decisions. In these circumstances, and despite the vociferous exchanges between the experts on unilateral effects and the Harrington model, we do not see that Professor Neven's concerns dispel the possibility that such conduct might generate an effect on prices that it is worth trying to measure.

(iii) Commercial rationale

305. Professor Neven's evidence did not provide any explanation of the rationale for the Cartel and the Cartelists' participation in it for such a long period. There is a clear tension between his claim that coordination would be inherently unstable and the observed fact that the Cartel with the same Cartelists lasted for 14 years and comprised regular meetings between all the main players. This tension was not properly addressed in Professor Neven's various reports and he was unable, in our view, adequately to deal with questioning on this subject at the hearing.

306. We have already referred above to the risks and potential exposure to financial penalties that the Cartelists faced in participating in the Cartel. However, Professor Neven did not in any way address why the Cartelists would choose to do this if there was no likelihood of a pay-off in terms of higher prices. Since every other aspect of his plausibility analysis is explicitly contingent on the assumption of rational, profit-seeking behaviour, this is a serious deficiency.

307. We have also referred to Professor Neven's withdrawal of his own suggestion that the exchange of pricing information might have had the benign, or pro-competitive, rationale of reducing uncertainty about demand conditions. He accepted that this was not a credible rationale for the Infringement. His preparedness to put this forward is concerning and shows a lack of judgment and perhaps objectivity. The fact that Professor Neven did not even address the

key issue of the longevity of the Infringement further casts doubt on the credibility of his position on this topic.

308. Professor Neven could, with some justification, have argued that cartels are inherently unstable, and that there is no necessary link between attempted and successful coordination. However, crucially, Professor Neven did not just say that the Cartel might have been ineffective – he asserted that it was implausible that it could have been effective. Yet he had no information as to how the Cartel actually worked, including whether there were mechanisms in place to monitor prices and to punish cheating, and he conspicuously failed to make any enquiries of DAF, in all the time he was advising it or acting as its expert, as to how the Cartel worked, both internally within DAF and externally with the other Cartelists. We would have expected an independent expert in such circumstances to have been more curious or more circumspect in his conclusions. And if he specifically decided not to explore these matters, it was incumbent on him to recognise the limitations that this information gap imposed on his ability to draw conclusions. His failure to do so significantly impacts on the credibility of his evidence on plausibility.

309. Coupled with our concerns about Professor Neven's independence as expressed above, we do not accept his extreme conclusions on theory of harm. We think that they are undermined by the approach he has taken and they ignore some fundamental and undeniable facts. We will obviously examine his econometric analyses carefully and in detail below, but the way that he dealt with this issue of the plausibility of effects seems to us potentially to increase the risk that his approach to the econometric evidence may be affected by confirmation bias.

(f) Mr Harvey's approach

310. We now turn to look at Mr Harvey's approach to this aspect and whether we should accept what he says about theory of harm.

311. Mr Harvey's evidence on plausibility focused on keeping all options open, such that he claims to have started his econometric analysis with an open mind as to the possibility of finding a cartel effect. He did not consider it necessary to

specify how the coordination might have worked or even whether coordination in the formal sense of the term is involved at all. In his first Overcharge report (para 2.37), Mr Harvey gave an example that effectively summarised his position:

> "Most importantly, the information exchanged and discussions in relation to list prices may have affected DAF's pricing decisions (without requiring collusion in relation to the price actually paid by customers). If, for example, the information exchanged led DAF or any of the other Truck Manufacturers to expect that the other Truck Manufacturers would charge higher prices than they would otherwise have anticipated, this implies that their assessment of their own profit-maximising price would also have been higher."

312. In his oral evidence, Mr Harvey was unapologetic about the absence of any definitive theory of harm in his analysis. When questioned, he indicated that he leaned more towards a unilateral effects theory as illustrated by the Harrington model, than to classical coordinated effects theories of harm through collusion. Even regarding the Harrington model, Mr Harvey (as we identified above) was at pains to point out that he saw this as little more than an illustration of the way in which the exchange of list price information might lead to a legitimate unilateral effects concern. Hence, Mr Harvey was able to argue that some of the more detailed technical criticism levelled at the Harrington model failed to hit the target.

313. Mr Harvey explained the intuition behind the Harrington model:

> "If price setting is a two-stage process, with list prices first exchanged and then shared before net prices are determined, the fact of exchanging information on list prices can then affect both list and net prices. If manufacturer A knows that they will exchange information on their list prices with manufacturer B, manufacturer A also knows that manufacturer B will have the option to take action to lower its net prices, if it finds that manufacturer A has set a low list price. Anticipating the exchange of information on list prices and the potential for a lowering of its rival's net prices if it sets a low list price, manufacturer A has an incentive to set and share a higher list price."

In his oral evidence, Mr Harvey explained that, whilst the intuition was well established in economic theory, the aim of Professor Harrington's work was to place it within a formal modelled framework.

314. The Harrington model identifies two particular features that need to be present in order for an exchange of list price information to lead to supra-competitive transaction prices:

(1) First, that the firms involved (or more specifically their executives) are sharing prices which may ultimately affect the price that consumers pay but are not necessarily the final prices that will be put before consumers.

(2) Second, that the executives who are sharing prices may be able to influence transaction prices but do not have full control over them.

315. Mr Harvey opined that both features were present in this case:

(1) The Infringement included (although was not confined to) the sharing of list price information, in circumstances where list prices were, as the Commission found, the starting point for transaction prices.

(2) DAF NV was able to influence transaction prices, for example through list price increases, IKP, margin targets and the mandate structure, but transactions were ultimately agreed by the local sales units. Mr Ashworth's evidence demonstrated that this condition was satisfied.

316. Professor Neven and DAF had a number of technical criticisms of the Harrington model. However, Professor Neven accepted that, insofar as the Harrington model applied, a high price equilibrium would be more likely than a low price equilibrium – i.e. the exchange of list price information would be more likely to raise prices than lower them.

317. Mr Harvey explained how he used the Harrington model:

> "Q. So working back to the point I was making earlier, what you cannot say is that you have a theory a bit like Professor Harrington's and this somehow shows that there is an economic theory of harm because he has defined his very strictly and carefully and, if you vary those assumptions, the conclusions do not follow. That is correct, is it not?
>
> A. I do not and have not used this type of literature in that way at all. It is quite normal in economic analysis to rely on mathematical models to understand the factors that would lead to different types of outcomes. They are an abstraction

> from reality and therein lies their limitation. So I do not think that the fact that this is a stylised model and depends on certain assumptions of itself means that it is -- I think, as you are suggesting -- a significant step to use it to inform the theory of harm in this case any more than one might refer to general economic theory in the context of a merger and try and understand what effect that would have on prices."

318. Mr Harvey's approach must therefore be seen in light of the correspondingly weak conclusions he was seeking to justify on this topic. He did not contend that the Infringement definitively had an impact on transaction prices. He simply stated that there appeared to be several mechanisms by which such an impact might arise, and that it was therefore worthwhile analysing the data to assess a possible overcharge. This is a starkly different position from Professor Neven's attempt to show that Cartel effects could be ruled out as implausible before the data are examined. Hence, even to the extent that some of DAF's criticisms of Mr Harvey had validity, it is very hard to see how they could be strong enough to cause serious damage to his position.

(g) Conclusions on plausibility

319. Where does that leave us in relation to a plausible theory of harm? Like the experts, we are hampered by having few details as to how the Cartel actually worked both within and outside of DAF. We do have the Settlement Decision, the findings therein particularly about the aims of the collusion and DAF's admission that it used the information obtained from the Cartel to plan its commercial behaviour and its conduct in the market. We consider it inconceivable that DAF did not expect to raise transaction prices through its participation in the Cartel over such a long period.

320. We find that a plausible theory of coordination might be formed around the ability of the Cartelists to use list price increases as a focal point in the hope or expectation that this would make net prices higher. Such might be allied to the monitoring of market shares and feedback from customers on prices whereby the Cartelists could assess whether competing firms had failed to honour the *agreement* or *understanding* to raise prices. In common with Mr Harvey's approach, we cannot, and do not need to, test or prove this hypothesis fully. But the clues we do have from the regular Cartel member meetings over 14 years,

in which there were several references to net prices among other things, does provide at least a plausible account of how coordinated list price increases might have affected net transaction prices. Within DAF, we also have sufficient evidence to see how mechanisms such as DAF NV's discretion on the setting of the IKP measure and the need for head office approvals for low prices/margins might provide the infrastructure to give local UK effect to a centrally devised and coordinated industry scheme to raise prices.

321. One of the meetings that was referred to often by the parties was at Castle Combe in Wiltshire on 1 December 2003. This was attended by representatives of all the Cartelists and was called a "*Peers Meeting*". The first item discussed in the minutes was in relation to "*Pricing*". Volvo indicated that it was increasing prices by 3% in 2003 and that there would be further increases in 2004 of 3% and 4.5%. DAF told the meeting that it was increasing by 3%. "*The general consensus was that prices would rise, on average next year, between 5&6%*". Then the following was recorded:

> "Horror stories were indicated. Jurgen Knorpp accused Iveco of selling 7.5 tonneers for £15,000 chassis cab. Equally the meeting discovered that both Volvo and Mercedes had recently been selling 4x2 340bhp tractor units for £32,000 to the customer.
>
> The meeting agreed that large operators were completely manipulating Manufacturers and that prices in the UK are far too low. Everybody agreed that prices were lower today than they were 6 years ago."

322. Mr Beard KC interpreted this evidence as showing that the Cartelists were criticising each other for their irresponsibly competitive pricing and that this supported Professor Neven's claims that coordination was inherently unstable and could not work. We do not accept this interpretation. We agree that disagreement and dissent between the Cartelists illustrates the tensions between individual and collective incentives that are a known and inescapable feature of virtually every real-world cartel. But the fact that these disagreements were discussed in an unlawful meeting also reveals evidence that they were monitoring each others' behaviour and were seeking to take collective actions to restore harmony. Hence, the Castle Coombe meeting provides some evidence of monitoring and enforcement of the coordination and perhaps indicates how it was possible for the Cartel to continue, apparently successfully, for so long.

323. There is also the fall-back option, illustrated by the Harrington model, that list price collusion could be effective even without formal coordination, i.e. with no single firm having a unilateral short-term incentive to depart from its pricing conduct. The discussion of this highly theoretical model during the hearing did not provide much enlightenment, though it did not rule out the possibility that some variant of the Harrington model might have some real-world relevance.

324. In all the above, it is critical to be aware that cartel infringements are commonly sketchy and incomplete, precisely because illegality forces them to be clandestine and to operate through a narrow set of "*insiders*" within the cartel member firms. But this does not necessarily mean that that they have no effect on prices. As we have said above, the likely commercial rationale of the Cartel Infringement that had remarkable longevity and such comprehensive coverage across the European trucks industry is that prices could be raised and those benefits were worth the risks and costs of operating an unlawful Cartel.

325. This conclusion on plausibility means that it is entirely valid to explore the experts' attempts to test for such an effect in their econometric analyses (a subject to which we turn below). In doing so, we cannot rule out the possibility that the Infringement was completely ineffective in increasing net prices (something that Mr Harvey accepted was a possible outcome). This creates a risk that the statistical evidence will throw up a "*false positive*" result, i.e. a finding that the Infringement had an impact on price which in reality is no more than a statistical quirk or error. But the position of DAF and its expert, Professor Neven, that this should be seen as the dominant or most likely explanation in the event of a positive overcharge estimate is not a reliable conclusion.

K. OVERCHARGE

326. Both economics experts, Mr Harvey and Professor Neven, relied on statistical models that employed multiple regression techniques. This followed the direction given by the CAT in its Disclosure Judgment (referred to in [82] above) that suggested that the way to approach these issues evidentially would be by: "*the analysis of large amounts of pricing and market data, using established economic techniques to determine what, if any, was the effect of the infringement on prices and any pass-on through the relevant period*."

327. This was one of the issues on which we heard evidence from the experts concurrently and therefore in which we explored with them the topics that seemed most relevant and on which their opinions and results significantly diverged. We will deal with those issues in the following order:

(1) How regression models work;

(2) The use of market-wide data to estimate price effects on the Claimants;

(3) Before-During and During-After model, or Before-During-After model;

(4) Currency exchange rates;

(5) Global financial crisis;

(6) Emissions premia;

(7) Value of commerce; and

(8) Conclusions on Overcharge estimate.

(1) How regression models work

328. A regression model is a commonly adopted statistical technique designed to find a conditional correlation between two variables: the "*dependent*" variable which in this case is the truck price; and "*independent*" or "*explanatory*"

variables, which in this case are a range of observable factors such as truck costs, the strength of demand, the time of year, etc.

329. The output from a regression model is an equation that estimates the relationship between the dependent and independent variables in the form of "*estimation coefficients*". The model also generates numerous other outputs and results that describe the statistical properties of the estimate. For example, it will show the statistical significance of the estimated coefficient (i.e. how confident one can be that there is a measurable correlation between the explanatory and dependent variables) and a measure called the "*r-squared*" which defines how much of the observed variability in the dependent variable is explained by the independent/explanatory variables. Any variation which remains unexplained by the explanatory variables in the regression model comprises the so-called "*error term*".

330. By specifying the variables in a regression model in logarithmic form, the interpretation of the coefficient estimates is transformed to one that can be easily expressed in percentage terms. For example, a cost coefficient estimate of 0.5 means that a 1% increase in costs is associated with a 0.5% increase in price.

331. The essential purpose of the regression models in this case was to produce an estimate of the effect of the Infringement. This is achieved using a so-called "*dummy variable*" as one of the explanatory variables in the regression which takes the value of 1 during the Infringement period and zero at all other times. The coefficient estimate on the Infringement dummy variable should measure whether, having controlled for all other variable factors and possible influences on price, truck prices tended to be higher during the Infringement period than outside it.

332. There is broad consensus that a multiple regression model is the most effective way to assess the relationship between one economic variable and another, and both experts adopted this methodology. The implementation of this methodology and in particular the specification of their regression models involving a very large number of choices gives rise to the contentious issues on which the experts did not agree and which was the subject of debate in their

Reports and during their concurrent evidence session. These choices have considerable effects on the estimation coefficients. We deal with the key disagreements below but they arise from a number of common and well-known difficulties with multiple regression estimation, including:

(a) Data quality: finding a robust and reliable relationship between two or more variables depends on having access to reliable data to feed into the regression model. Where data are poor and/or incomplete, this will affect the reliability of the results in a way that cannot be reliably overcome by the sophistication of the model;

(b) Multicollinearity: where two or more explanatory variables tend to move together (so-called "multicollinearity") it is intuitive that the model will be unable reliably to disentangle their individual influence on the dependent variable. In the current context, this is particularly problematic where changes in an explanatory variable occurred at the same time as the Infringement started or finished; and

(c) Omitted variable bias: where important variables that might explain movements in the dependent variable are omitted from the model, this will obviously affect the quality of the estimate. It will also bias the estimated coefficients of factors that are included in the independent variables depending on the extent to which the omitted variable is correlated with the variables that are included in the model. Positive correlation between omitted and included variables will lead the included variable coefficient to be biased upwards, because the included variable will be credited not only with the influence that it exerts in its own right, but also, and in error, with that of the omitted variable.

333. Mr Beard KC referred to the comment by Marcus Smith J in *Britned* at [299] that: "*regression analyses do not allow analysts to claim a causal connection. There is correlation, from which causation may be inferred, at most.*"

(underlining in original). It is true to say that the estimated coefficients in a regression model can at best measure only the existence of a statistical relationship or correlation, between the dependent and explanatory variables. It cannot in itself say whether that is a causal relationship, and that the variation in the explanatory variable actually exerts an influence that causes the observed changes in the dependent variable. Nevertheless, the experts set up their regression models with explanatory variables that are expected to have a causal influence on truck prices. For example, there are sound reasons in economic theory to expect that higher manufacturing costs will exert a positive *causal* influence on truck prices.

334. The parties disagree on whether there is a causal influence between the existence of the Infringement and truck prices. We have concluded in [168] to [172] above that the Claimants have to establish, on the balance of probabilities, that they suffered some monetary harm as a result of the Infringement in order to prove causation. They seek to do so by reference to Mr Harvey's regression models. But it is only once they have established that monetary harm that the cause of action is complete and the actual extent of the Overcharge can then be quantified on the "*broad axe*" basis.

335. As indicated above, we focus, as did the parties, on the most significant issues that were raised by the experts' chosen methodologies for estimating the economic effect, if any, of the Infringement on truck prices paid by the Claimants. These were:

(a) The risk that the Claimants were possibly atypical DAF customers such that a result that was drawn from the entire population of all UK DAF truck buyers might not apply to the same extent to the Claimants;

(b) Data quality issues, which applied especially in the period prior to the Infringement and up to 2003, when the experts were unable to identify reliable statistical evidence on DAF's manufacturing costs for individual types of truck;

(c) Complications caused by the need to reconcile observations on prices in different currencies, principally truck costs and truck prices;

(d) The global financial crisis ("**GFC**") in late 2008, which caused substantial dislocation/disruption in the trucks market and might have led to changes which undermine the "other things equal" assumptions on which the statistical models are built; and

(e) The price effects associated with new DAF trucks that met new EU emissions standards; this is problematic both because exchange of information on such price premia formed a part of the Infringement and because DAF often incorporated other changes to its products at the same time as these new standards were implemented.

(2) The use of market-wide data to estimate price effects on the Claimants

336. The results presented by the experts analysed all DAF's UK truck sales across the relevant period, and the estimates of the effect of the Infringement on DAF truck prices that their models generated was also an average across all DAF's UK truck sales. Mr Harvey did present some results analysing the observed differences between DAF's dealer sales and its fleet sales, the latter being higher volume per transaction than the former, but these did not feature prominently in the discussions between the experts.

337. The parties and their experts were agreed that, because there were too few observations of truck sales to the Claimants and the sales that did occur were too infrequent, a bespoke measurement of the effect of the Infringement on the Claimants would not be reliable. It was also common ground that it would be inappropriate to seek to compare prices charged to the Claimants without controlling for other factors that might affect those prices. As Professor Neven said:

> "In order to make a meaningful comparison of invoice prices between these periods, determinants of truck prices that are not related to the infringement need to be controlled for"

338. In his Reports, Professor Neven calculated the extent of the Overcharge solely by reference to a market-wide Overcharge analysis. Mr Harvey did undertake a Claimant specific regression analysis as a sensitivity to his Before-During and During-After models but ultimately concluded that his main market wide analysis was more robust given "*the significantly higher number of total data points that is available in DAF's data, compared to the number of RMG and BT purchases.*"

339. In their Overcharge Joint Statement, the experts agreed with the proposition that an analysis based on DAF's UK market wide transaction data was superior compared to a Claimant specific analysis. They confirmed this when giving oral evidence, with Professor Neven accepting that it was sensible to estimate the Overcharge on a market-wide basis and to apply the results to the Claimants.

340. However, DAF sought to backtrack from that position with the introduction of the timelines as a "*second bite of the cherry*". As explained above, Mr Beard KC was arguing that we would first have to be satisfied that there was a general Infringement effect by way of the Overcharge; and second we would also need to be satisfied that any such general effect applied to the Claimants in the same way that it applied to DAF's UK sales in general. Therefore, it was DAF's case that, even if the regression analysis showed that there was an Overcharge, the specific characteristics of the sales to the Claimants were such that the Overcharge could not be assumed to apply to the Claimants.

341. In [73] to [95] above we have largely rejected DAF's case on the timelines and whether it should be entitled to run such an argument. We have also set out above, the particular characteristics of Royal Mail and BT that perhaps distinguish them from other buyers of DAF trucks. Those include: the fact that they were direct customers of DAF, whereas the vast majority of DAF's sales in the UK were through dealers; the sophisticated procurement teams that they both had to negotiate the contracts with DAF; and that they were large and important customers of DAF. Mr Beard KC argued that these factors showed

that the Claimants' prices could not have been affected by the Infringement, even if the regression analysis had shown that other DAF UK prices had been.

342. However, whilst those factors might explain why Royal Mail and, perhaps to a lesser degree, BT might enjoy lower prices than UK truck customers who bought through the dealer channel, they do not provide any convincing reason or evidence for the absence of an Infringement effect. The Claimants had the same characteristics and negotiating process within and outside the Infringement period.

343. The experts did not offer any definitive conclusions as to the possibility of a differential effect of the Infringement as between large and small customers. Professor Neven suggested there might be a "*soft intuition*" which could favour the view that large customers were less affected by a cartel. By contrast, Mr Harvey suggested reasons why the opposite might be true. Significantly, however, neither pursued these views with any conviction.

344. In [66] and [72] above we refer to Mr Habets' evidence in relation to alleged negative margins being earned on DAF's transactions with the Claimants between 2004 and 2010. Mr Beard KC sought to question Mr Harvey's conclusion on the Overcharge by reference to the table of margins, the suggestion being that DAF could not lower its prices any further. However, we consider that this suggestion is misplaced for a number of reasons:

(a) As explained above, it was common ground between the experts that the appropriate way to measure any Overcharge effect on the Claimants was to use the results of the market wide analysis.

(b) Mr Beard KC chose to focus on the margins on transactions by DAF in 2008, which was during the GFC. This therefore overlooked the fact that prior to the GFC, DAF earned positive margins from the Claimants on a number of its transactions. This was as high as [✂]% with BT and [✂]% from Royal Mail in the period 2004 to before the GFC. Mr Harvey explained in detail that

DAF priced differently in the GFC period and it is potentially misleading to focus on this period.

(c) Mr Harvey explained that it is wrong to focus on the existence of negative margins for DAF in order to suggest that margins would not have been more negative in the counterfactual competitive world. The fact that DAF were willing to sell trucks to customers such as Royal Mail and BT at negative margins at that time in the Infringement period indicates that there must have been a rationale for DAF to do so. He put forward two possible rationales:

(i) The sale of trucks at negative margins measured against MLO costs did still make a contribution to DAF's overheads and fixed costs and DAF may, therefore, have been making a pricing decision on a number that was lower than MLO for those transactions. Mr Habets had explained that DAF justified sales at negative MLO margins by reference to (i) "*factory absorption*", meaning the estimated factory overhead costs that would be absorbed by the production of the specified trucks; and (ii) profitability of aftersales.

(ii) The second is that there are other benefits that DAF derives from selling trucks to Royal Mail that cannot be seen through a simple focus on the level of margin earned by DAF on a particular transaction. This is again consistent with DAF's own evidence. Three quotes from Mr Ashworth are on point:

> "Up until around 2009, Royal Mail was DAF UK's second largest single customer by volume in the UK. If we had lost its custom, the impact on DAF UK's business from a turnover perspective would have been massive. Royal Mail was also important to DAF UK from a visibility and marketing perspective, as its 'currant red' DAF branded trucks driving across the UK gave us a high profile. The internal pressure on us to continue to secure Royal Mail's business was tremendous"

> "A customer like Royal Mail was…instrumental to us maintaining our market share in the UK. As such, Royal Mail's business with DAF UK was very much on the radar of those at DAF NV, in the Netherlands, and PACCAR, in the US."
>
> "In conversations that I had with DAF NV and PACCAR, my superiors often referred in a non-specific way to the low margins on the deals with Royal Mail. However, they also recognised the importance to DAF UK of continuing to secure Royal Mail's business, and would sometimes spontaneously ask me for an update about Royal Mail during calls on other subjects."

345. We therefore see no reason why an Overcharge that is found at the general level of DAF's prices to UK truck customers would not apply to the specific sales to the two Claimants, and no convincing evidence was provided to support DAF's contrary view. The mechanism by which such a price increase might arise could be different for large customers, arising more through the bidding process rather than being linked to expectations or signals caused by list price changes, but that does not affect our substantive conclusion. Hence, our conclusion is that any impact of the Infringement that is found at the level of DAF's UK prices as a whole can reasonably be applied to the Claimants' purchases.

(3) Before-During and During-After models or Before-During-After model

(a) Introduction

346. It is standard good practice when assessing cartel impacts to compare the outcomes that arise in the cartel period with those that occur outside of it. In some cases, this can be achieved by comparing price or other outcomes across different geographical territories, but in this case the fact that the Infringement applied across the EU largely closes off this avenue. Hence, the obvious source of non-infringement observations is to look to the periods before and after the dates of the Infringement.

347. Both experts focused entirely on this comparison in their work, though they differed as to the way in which this was done and on the reliance that they placed on the different periods. Mr Harvey used two models: (a) a Before-During ("**B-D**") model of truck prices between 1995 and 2003, the Infringement period

beginning on 17 January 1997; and (b) a During-After ("**D-A**") model of truck prices between 2004 and 2017. Professor Neven also carried out a D-A model for the same period. However, because of problems with the available data for the early period, and although he agreed in principle that a B-D model would be appropriate, he instead used a Before-During-After ("**B-D-A**") model for the period 1995 to 2017. Each party argued that their expert's approach was preferable for various reasons.

(b) Symmetry

348. In the simplest case, a cartel effect is measured by comparing the states of the world with and without the cartel infringement in place. That is what the above models attempt to do. However, this assumes that the cartel influence was either "*on*" or "*off*", and that any increase in price that occurs from the start of the cartel will be mirrored by a symmetric fall in price when the cartel stops. But this symmetry might not actually exist in practice, particularly if the timing of the start of the cartel is in doubt, or if the effectiveness of the infringement changes over time, or indeed if the effects of the cartel might last even beyond the termination of its operation because the cartel agreement puts in place tacit understandings that affect the way competition operates even after the formal infringement has ceased.

349. Mr Harvey was concerned about a possible "*overhang effect*" if the Cartel continued after the Commission's dawn raids in January 2011. The Commission found that the collusion extended to Euro 5 and Euro 6 trucks which continued to be sold by DAF after 18 January 2011. Mr Harvey explained that *"once a market has operated in a particular way for a long time, it may take time for a new competitive norm to be established. So that is a sort of in principle reason as to why, extracting from the data that we have in this case, one might attach more weight to a before/during comparison than during/after comparison*."

350. Mr Harvey went on to explain that the overhang effect could lead to an underestimation of the Overcharge. He said the following:

> "The European Commission acknowledges that "when there is some delay until market conditions return to a non-infringement level, using data from the

> period immediately after the infringement could lead to an underestimation of the effect of the infringement".

> "I note that the Commission's finding that collusion on the pricing and passing on of costs associated with emissions standards extended to Euro 6 Trucks means that caution needs to be applied in interpreting the post-Infringement Period representing a non-cartelised point of comparison. Even though the Infringement ended after 18th January 2011, and Euro 6 Trucks were introduced subsequent to this date, it is possible that the discussions on Euro 6 affected the Truck Manufacturers' future approaches to the pricing of Euro 6 Trucks, for example if collusion led to the establishment of pricing norms that were established in the market in respect of Trucks of a particular standard that did not fully unwind in the immediate post-Infringement Period. If this is the case, then the estimated Overcharge will be understated, as the point of comparison for Truck prices during the Infringement Period will itself be inflated to some extent."

> "The Commission found evidence of collusion in respect of the pricing of Euro 6 Trucks in any case, and so I could not be sure that the pricing of Euro 6 Trucks was fully unaffected by collusion. I note that this raises the possibility that the 'after' period used as a point of comparison in determining the impact of the Infringement on prices does not represent a fully 'clean' point of comparison that is unaffected by the Infringement. If this is the case, it raises the possibility that my during-after analysis provides a conservative estimate of the Overcharge, that potentially understates its overall magnitude."

351. Professor Neven seemed to go further than this, arguing that Mr Harvey's identification of a possible overhang effect was *"highly problematic in my view. This is because if all the transactions in the data are tainted and the post-infringement period cannot be interpreted as a reference period, the during-after analysis cannot be used to estimate the effect of the infringement*.". What Professor Neven was saying was that if there was an overhang effect as Mr Harvey was suggesting, then any D-A analysis would be unable to identify the effect of the Infringement.

352. We do not think that Mr Harvey was going that far. Indeed, both he and Professor Neven put forward and relied upon D-A models. As Mr Harvey explained, the possibility simply meant that any estimation derived from such an analysis would potentially understate the effect of the Cartel. Mr Harvey's view in this regard was consistent with the Commission's: "*Nonetheless, even when there are doubts as to whether or not a certain period before or after the infringement was affected by the infringement, this period could, in principle, still serve as a reference period in order to obtain a safe estimate of the harm*

that will at least have been suffered ("lower-bound" estimate or "minimum damage").[14]

353. Mr Ward KC submitted that the experts' positions on this point provided yet another reason why a B-D analysis that relied on the pre-Cartel period as the comparison rather than the post-Cartel period should be preferred to a B-D-A analysis which relied on both. However, as we discuss below, there are significant problems with the available data for a robust B-D analysis. We therefore think it sensible to have a D-A analysis as well while bearing in mind that there may have been an overhang effect that could lead to an underestimate of the Overcharge.

(c) Data problems

354. The quality of the datasets available from DAF to the experts was very different for the early period, i.e. for a B-D analysis, than for the later period. The change in datasets occurred in 2003/2004, right in the middle of the Infringement period. The two datasets were as follows:

(1) The "AS/400" dataset which covered the period 1995 to 2003, and was used by Mr Harvey for his B-D model and by Professor Neven for his B-D-A model;

(2) The "MI" dataset which covered the period 2004 to 2017, and was used by Mr Harvey for his D-A model and by Professor Neven for both of his B-D-A and D-A models.

355. The main difference between these data sets was that the AS/400 data did not contain any cost information. As a result, the experts were obliged to add in other data on truck costs over this period, but this suffered the drawback that such data were less granular, and hence were unable to differentiate between individual trucks or truck categories, other than providing an average cost for DAF's small, medium and heavy trucks derived from MLO costs information.

[14] See [46] of the European Commission's 2013 paper "Quantifying harm in actions for damages based on the breaches of Article 101 or 102 of the Treaty on the functioning of the European Union" .

This lack of granularity in the earlier period was recognised by both experts as problematic, because data on the actual costs of each truck are an important explanatory factor in any regression that seeks to explain prices.

356. The approaches taken by the experts to deal with this data problem are described below, but, in short, the consequence is that any attempts to explain the determinants of price in the 1994-2004 period are less reliable. Both experts used the AS/400 dataset but each criticised the reliability of the results obtained through the use of the other's chosen models.

(d) Mr Harvey's approach

357. The outcome of Mr Harvey's B-D and D-A models was as follows:

(1) The B-D model using the AS/400 data across the period 1995 to 2003, estimated that the Infringement increased truck prices by 11.6%. Mr Harvey said that this estimate was statistically significant at the 99% level, meaning that the risk that there was no impact of the Infringement on price could be calculated at less than 1%, providing that the model is correctly specified. The B-D model explained some 94% of all variation in truck prices; and

(2) The D-A model using the MI data for the period 2004 to 2017 estimated that truck prices were elevated because of the Infringement by between 6.7% for Euro 3 trucks and 14.7% for Euro 5 EEV trucks, depending on the truck model. Again, Mr Harvey said that these results were statistically significant at the 99% confidence level, subject to the same proviso. The D-A model explained some 97% of all variation in truck prices.

358. Mr Harvey acknowledged that the poor data used in the B-D model were problematic, in particular, because it led to the inability of this model to capture the effect of truck costs on prices in a sufficiently granular manner. This problem was reflected in the estimated coefficients on truck costs in the two models. In the B-D model, the cost coefficient indicated that a 1% increase in

truck costs (as captured by DAF's MLO cost measure) was associated with a 0.34% increase in truck prices; whereas in his D-A model, the same 1% cost increase was linked to a price rise of just over 1%.

359. Professor Neven was concerned about this difference in cost coefficients, saying that it shows "*the poor quality of the aggregate cost data compared to the truck-level cost data*" and that *"…the average cost is really not playing a very significant role in explaining the prices in the before/during model*." However, Mr Harvey sought to address this by including additional truck characteristics controls in a regression using truck level MLO costs. This showed, he said, that those characteristics captured the vast majority of variation in truck level MLO cost and therefore provided a good proxy in the absence of the truck level MLO cost data that was included in the MI dataset.

360. Further, Mr Harvey conducted an empirical test to check whether his B-D analysis was sufficiently robust, despite the lower number of data points. He explained that his B-D model suggested that the true Overcharge estimate lay between 11.3% and 11.9% with 95% certainty. He argued that this demonstrated that the data in the AS/400 data set was sufficient to allow a robust Overcharge analysis for this period.

361. Mr Harvey also tested the robustness of the AS/400 data by using aggregate MLO data in place of truck-level MLO data in the MI dataset for the D-A period, with additional truck characteristics included to capture variation in truck-level MLO costs. The results were materially the same. Mr Harvey explained that this demonstrated that his B-D model was robust and estimated with a high degree of precision.

362. Professor Neven conducted a similar experiment on his D-A model and showed that his results did change. However, his Overcharge estimate came out lower, yielding a significant negative relationship between the Infringement and DAF's prices. This showed, Mr Ward KC submitted, that there was no evidence to suggest that using the aggregate MLO cost data instead of truck level MLO data led to an upward bias in the Overcharge estimates. The experts agreed that the difference in the results between Mr Harvey's and Professor Neven's

sensitivity analysis on this point were likely to have been driven by the different approaches of the experts to other aspects of their modelling, for example, the decision on how to control for the GFC.

363. Professor Neven's other main concern over the use of the AS/400 dataset was that it cannot control for changes in the product mix. The MI dataset enabled changes in price attributable to differences in technical characteristics across trucks to be identified together with the impact of exchange rates. The AS/400 dataset only shows average data and cannot explain differences in prices across trucks. Therefore, if changes in product mix are correlated with the Infringement, it could lead to a conclusion that the Infringement is correlated with a price increase when in fact it results from a change in the product mix that is not captured by the AS/400 data.

364. Professor Neven gave two examples: (a) a higher proportion of trucks were sold after the start of the Infringement with higher degrees of customisation; and (b) an increase in the proportion of trucks that were sold with bodies after the start of the Infringement. However, in relation to the latter, Professor Neven accepted in cross-examination that his concern about bodies was merely "*speculation*". As to the increase in options that Professor Neven had identified, this occurred gradually over the whole period and so also affected his B-D-A analysis. It also could not be shown whether that actually led to an increase in the prices paid by customers.

365. In our view, while it is clear that there are problems around the AS/400 dataset and the consequent lack of granularity on truck level costs, it is necessary to attempt a B-D analysis because of the advantages of comparing prices unaffected by the Infringement. Some caution must therefore be exercised in relying on the results obtained in such an analysis but we are satisfied that with the sensitivities carried out by Mr Harvey, we can draw inferences from such evidence, despite its imperfections.

366. Mr Harvey's B-D model does have the advantage of not being tainted by problems associated with the GFC (as to which see further below) and the use

of separate B-D and D-A models might also capture the possibility that the Infringement effect was not symmetrical.

(e) Professor Neven's approach

367. We now examine whether Professor Neven's B-D-A model is to be preferred. That model knitted together the AS/400 and MI datasets and provided a single estimate of the impact of the Infringement, which Professor Neven found to lie between -0.7% and -0.5%, and not statistically different from zero. His D-A model which, like Mr Harvey's D-A model, was based solely on the MI data in the period 2004 to 2017 estimated Infringement effects between -0.5% and +0.4%, which again was found not to be significantly different from zero.

368. Thus, in both his D-A and B-D-A models, Professor Neven found that whilst the other factors used as explanatory variables in his model - production costs, demand etc., - had predictable and statistically significant effects on the prices that DAF charged for trucks, the Infringement was not associated with any such effect. Professor Neven's two models also both explained around 95% of the observed variability in DAF's UK truck prices.

369. Professor Neven argued that a B-D-A model has the advantage of being able to utilise a larger number of data observations, and, in particular, that combining the AS/400 and MI data in a single model was the best way of using the AS/400 data despite its limitations. He also highlighted that Mr Harvey's B-D model was reliant on identifying Euro 2 truck price changes, since Euro 2 trucks were the only category sold by DAF both before and during the Infringement, and noted that there were fewer than 5,000 observations of Euro 2 truck sales by DAF in the pre-Infringement period, compared with over 42,000 during the Infringement.

370. Mr Ward KC submitted that Professor Neven's B-D-A analysis was inferior to Mr Harvey's B-D analysis for four main reasons:

(1) The B-D-A model did not actually solve any of the limitations in the AS/400 data and combining it with the MI data did not create any new information or improve the granularity of the data for the B-D period.

(2) The B-D-A model was highly sensitive to the way Professor Neven chose to control for the GFC. As will be apparent from our discussion below there was a significant issue between the experts as to whether and how to control for the GFC. The use of a B-D model avoided that modelling choice, confining it to the D-A model that spanned the GFC.

(3) The B-D-A model did not enable adequate identification as to whether the Overcharge was higher at the start of the Cartel or at the end. This is the symmetry problem explained above.

(4) The possibility of an overhang effect is avoided in the B-D model.

371. Mr Beard KC submitted by way of response as follows:

(1) The B-D-A model does improve the overall granularity of the data because it will give priority to the higher quality data. Professor Neven said that the larger set of data (156,000 additional truck observations each with truck-level data) leads to a more accurate costs coefficient which means that the estimation of the effect of the Infringement is more precise.

(2) The B-D-A model is better able to control for the exchange rate because it benefits from a much larger sample variation over the entire period from 1995 to 2017; whereas the B-D model is dominated by the appreciation in the value of the Pound in 1996/97 and does not have the variability of the B-D-A model which would also take into account the depreciation of the Pound at the time of the GFC.

(3) The B-D-A model benefits from two counterfactual periods where there was no Infringement and therefore a large sample of untainted truck transaction prices. There was no evidence to support Mr Harvey's

overhang effect concerns and in any event that would impact his D-A model just as much.

(f) Conclusion

372. We conclude this section by saying that, as we think both experts ultimately realised, there are advantages and disadvantages of the B-D and B-D-A models and it cannot be said that it was wrong for each expert to have used the model that he did. Both accepted that the Before period had to be tested and that therefore meant using the AS/400 data in some way or another. They both recognised the limitations of that data and sought to alleviate this in different ways. It is not surprising to us that each expert has adopted the model that produces a result that is favourable to their client and, in view of the complexity described above, we do not think it is possible or necessary to reach a definitive view on which was the better model to use. The more significant debate is over the three main issues that we deal with below – exchange rate effects, the GFC and emissions premia – all of which had the biggest impact on the experts' estimation of the effects of the Infringement and the size of the Overcharge.

(4) Currency / exchange rates

(a) Introduction

373. As the data used in the experts' regressions contained transaction values that occurred in a number of different currencies, both sides were agreed that the modelling had to be conducted in a single currency. Mr Harvey decided to conduct his analysis in Euros; Professor Neven in Pounds. Both have given detailed reasons and conducted many sensitivities to justify their decision. Their choice as to currency has a very significant effect on the outcome of their modelling. Each expert's choice produced a result that favoured their clients. That is not to say that this is not a difficult issue. In our view, there is not necessarily a definitive correct answer to the challenges raised by currency factors. Some recognition of that may have been helpful from the experts. Instead, they argued that their favoured currency position was obviously correct and that the contrary argument lacked any credibility.

374. The complexity on exchange rates stems from the fact that the relevant transactions took place in the UK and were in Pounds but DAF's costs were largely incurred in other currencies, as are its ultimate performance targets and commercial objectives. In the period from the introduction of the Euro in January 1999, the Euro was the most important foreign currency affecting DAF's business. Before, and during the early part of the Infringement a variety of other national currencies were potentially relevant, but the focus of the expert evidence was on the Pound/Euro exchange rate.

375. Mr Harvey dealt with this problem by converting all Pound transactions into Euros at the current rate, and by using these converted Euro price observations as the dependent variable in his regression models. In contrast, Professor Neven used the Pound prices as the dependent variable, as expressed in the invoices between DAF and the Claimants, but then converted the relevant Euro observations, e.g. on production costs, in his regressions at DAF's "*budget rate*", which comprised essentially an average exchange rate for the prior year. It was explained that DAF's management accounting systems were not sufficiently sophisticated to translate currencies in real time, and so these budget rates were used to guide business decisions on a day-to-day basis.

376. As noted above, the treatment of currency factors in the regression models was a critical issue because of the "*identification*" problem that arises when trying to disentangle exchange rate effects from cartel effects. This was notably the case at the start of the Cartel period, when coincidentally the Pound strengthened against the Euro over the period from 1996 to 1998, from around £1 to €1.20 to more than €1.40. This trend then continued through to 2000 when £1 reached a value in excess of €1.60.

377. The problem that this caused can be illustrated by considering an abstract illustration of how an exchange rate change affects the two experts' approaches to the currency of the dependent variable.

(1) Suppose that a product is sold in Pounds in the UK, but manufactured in the Eurozone in Euros. If the transaction price for this product is £100, and the cost of this product is €80, the profitability of this sale clearly

depends on the £/€ exchange rate. If, for simplicity, we assume that the Pounds and Euros have a 1:1 exchange rate, the €80 cost translates to £80 and so the profit margin is £20 (or €20).

(2) Now suppose that the Pound strengthens against the Euro overnight. If prices and costs remain unchanged in their own currencies, then under Mr Harvey's approach of converting Pounds sales prices into Euros, the £100 price would, when translated into Euros, appear to increase to a level in excess of €100. However, the supplier's Euro costs would remain unchanged and therefore the profitability of the £100 sales price would suddenly be increased.

378. In a regression model, such as Mr Harvey's, that converted all prices into Euros, this means that the stated price for this product would increase after the exchange rate appreciation even though the Euro costs are unchanged. From the supplier's perspective, the UK sale has thus become more profitable. If this exchange rate change happened to coincide with the start of a cartel infringement, then in Mr Harvey's Euro-denominated model, the increase in the Euro price will be picked up as a cartel effect, even if it is attributable to the, possibly unrelated, exchange rate movement.

379. However, when consideration is given to how a competitive market might respond to this exchange rate change, the picture becomes more nuanced. If all suppliers face similar Euro costs, one might expect a competitive response between them as UK sales are now so much more attractive. To sell more of their product in the UK, they will be expected to reduce their Pound prices, and competition between them might continue until the original profit margin is restored to the competitive level that applied prior to the exchange rate change.

380. Professor Neven argued that this feature of Mr Harvey's approach was problematic. He contended that even if all suppliers face Euro costs, inter-brand competition in the trucks market cannot be expected to adjust instantaneously to the exchange rate change. The longer it takes to do so, the greater the risk that Mr Harvey's modelling approach confuses the normal impact of an

exchange rate appreciation with the Infringement, hence making a spurious finding of a cartel effect.

381. How long it actually takes for Pound prices to adjust to exchange rate changes through the competitive process depends on a variety of institutional and competitive factors, but Mr Harvey's effective assumption that the adjustment is instantaneous can be seen as an extreme one. Hence, his approach creates a risk that he has found a cartel effect in the early part of the Cartel period when such did not exist.

382. By contrast, Professor Neven's approach of using DAF's budget exchange rates in his regression model, means that the influence of the exchange rate change on incentives is suppressed for a year. The consequence of using the budget exchange rate in the hypothetical scenario we have used above is that the old £1:€1 exchange rate is still assumed to be the relevant one despite the reality being that the actual exchange rate has changed, as a result of which UK sales have become much more profitable for any Eurozone supplier.

383. Hence, a finding that UK prices remained at £100 in the above illustration would be interpreted by Professor Neven's model as showing no cartel effect over this period. But to the extent that suppliers do observe the higher Euro profitability of UK sales and take actions to respond to the incentives this creates within this 12-month period, and there are several mechanisms that might be used to achieve this, one might expect Pound prices to fall to some extent absent the cartel.

384. One can see how Professor Neven's approach is at risk of interpreting flat Pound prices in the context of this hypothetical as a zero cartel effect even though the cartel might have been highly effective in discouraging the necessary downward adjustment to Pound prices, successfully boosting Euro prices and margins in the cartel period. For example, a successful cartel might in this context operate by discouraging suppliers from cutting their Pound prices in the UK despite the individual commercial incentives to do so.

385. Even if Professor Neven's model had used current exchange rates instead of DAF's budget rate, there would remain a question as to how to interpret a finding that the price for the product in our illustration remained at £100. With current exchange rates, the £100 price would clearly generate a higher profit for any supplier that incurred costs in Euros, but one would then be faced with a choice as to whether that increase in profit could be attributed to the normal windfall in profits that arise in this situation, or to the profit-boosting impact of the Cartel that happened to be implemented at the same time. DAF and Professor Neven criticised Mr Harvey's modelling approach for imposing an extreme solution to this question that would arise only if there was perfect competition between the suppliers concerned, in which case all extra profits are automatically attributed to the cartel. But Professor Neven was not able to offer a definitive account of how quickly any such profit windfall should be dissipated under normal competitive conditions. This is indeed a complex question that does not generate an obvious or simple solution.

386. Viewed this way, the choice between Mr Harvey's and Professor Neven's approaches is one between two imperfect alternatives. Both are capable of reaching a misleading conclusion about cartel effects, but in opposite directions, and we note that the bias in each case happens to assist the experts' respective clients' positions. Importantly, neither approach fully solves the underlying identification problem that arises from the coincidence of the start of the Infringement and an appreciable shift in the exchange rate.

387. We will now look a little more closely at each expert's approach which were debated and explored at length in both their Reports and their oral evidence.

(b) Mr Harvey's conversion into Euros

388. There were coherent reasons put forward by Mr Harvey for conducting his model in Euros. Principally this was because it would align with the way DAF incurred its costs and made its pricing decisions. Performing the regression with costs expressed in the currency in which they were primarily incurred (Euros) and converting truck prices into the currency in which DAF ultimately

converted the associated revenues therefore accorded with the position that DAF faced during the Infringement period.

389. Mr Harvey did consider the alternative of converting prices and costs into Pounds. He decided against this as it did not accord with the fact that DAF incurred most of its costs in Euros and revenues generated in Pounds were converted into Euros. He explained:

> "If the Pound strengthens against the Euro (that is to say, one Pound is worth more Euro than was previously the case), then if costs were converted into Pounds, this would be reflected in the analysis as a reduction in the MLO cost of a Truck even though, in Euro terms, no such reduction had occurred and, in fact, the impact would have been to increase the number of Euro earned per £1 of revenue. Similarly, if the Pound weakens against the Euro, if costs were converted into Pounds this would be reflected as an increase in the MLO cost of a Truck, even though in Euro terms no such increase has occurred".

390. Mr Harvey found support for his approach in DAF's evidence.

(1) Mr Habets had explained in his evidence that:

(a) Prices are considered in Euros using actual exchange rates (not DAF's budget rates) at DAF NV level and PACCAR level for truck sales that required approval. This included more or less all Royal Mail transactions and at least some BT transactions. Mr Ashworth had confirmed that this was the case with all BT transactions in the early part of the claim period and all transactions in the GFC from 2008;

(b) The Trucks Commercial Department and Financial Controllers of DAF NV used a Pound-Euro exchange rate that was set weekly based on the actual Pound-Euro exchange rate for the current week to calculate the anticipated MLO margin of a given deal, including deals that required approval;

(c) For at least part of the Infringement period, DAF NV's Trucks Commercial Department also considered transactions themselves using actual exchange rates.

(2) Mr Ashworth explained:

(a) He took into account the Pound-Euro exchange rate when making pricing decisions *"as UK customers bought in Pounds whereas DAF NV worked in Euro, the exchange rate in force at the time of any tender could have a real impact on the actual revenues received by DAF NV"*;

(b) *"In [the financial crisis] period, the value of the Pound fell sharply against the Euro, and then fluctuated dramatically. As stated above, DAF NV worked in Euro, but trucks were sold in the UK in Pounds, so this caused severe issues. In the period prior to 2008, I had generally been delivering €1.43 for every £1.00 that sold in the UK. After 2008, this fell sharply to almost as low as €1.00 for every £1.00 – a substantial reduction in DAF UK's revenues for accounting purposes. This, and increased costs caused by the fall in the Pound's value, meant that we had to try to achieve higher prices for trucks, against a background of decreased demand"*;

(c) Transactions with relatively low margins had to be considered by DAF NV; as did sales of 25 trucks or more; and all deals during the GFC.

(3) In paragraph 56 of their original guidance note for the examination of the MI data, DAF stated that the Euro is "*the relevant currency considered by DAF [NV] when approving an order",* and recommended converting price and costs information from DAF's single currency into Euros because of this.

(4) DAF's standard MLO costs for all trucks are calculated in Euros. MLO costs underpinned the target margins on which the mandate structure was based.

(5) DAF NV records its profits in Euros.

(6) DAF incurs most of its costs in Euros, even for Trucks produced at its Leyland factory in the UK. On average, over the period 2003 to 2017 which is when granular cost data was available, approximately 73% of DAF's costs for trucks sold in the UK were incurred in Euros. Thus, although local sales teams in the UK were undoubtedly setting prices in Pounds to UK customers, the ultimate interest of DAF was in the Euro revenue it would achieve. As already explained, it used a range of means to control pricing in the UK to achieve the results it wanted. Its objective was to maximise profits that it counted in Euros.

391. DAF said that its internal systems including the OMS system used the budget rate set annually to convert Euro costs into Pounds. DAF UK and Mr Ashworth would therefore see their IKP cost and target margin information in Pounds having been converted using the budget rate. Mr Habets had said that DAF's systems could not cope with a fluctuating exchange rate and the budget rate smooths out changes in the exchange rate. Therefore, as DAF UK was itself approving most of the truck prices in the UK, it was relying on the budget rate for assessing the margin to be earned on each deal. Nevertheless, it is clear that when transactions came to be scrutinised by the boards of DAF NV and PACCAR, they would use current exchange rates when considering whether to approve them.

392. Mr Beard KC's main criticism of Mr Harvey's approach was that it imposed a "*straitjacket*" on the data by assuming that DAF passed on the exchange rate changes into its prices on a weekly basis. This has the result that Mr Harvey cannot distinguish between price changes resulting from the exchange rate or the Infringement. This is the identification problem we have described above.

393. In his oral evidence Professor Neven gave the example of the sharp appreciation of the Pound at the start of the Infringement:

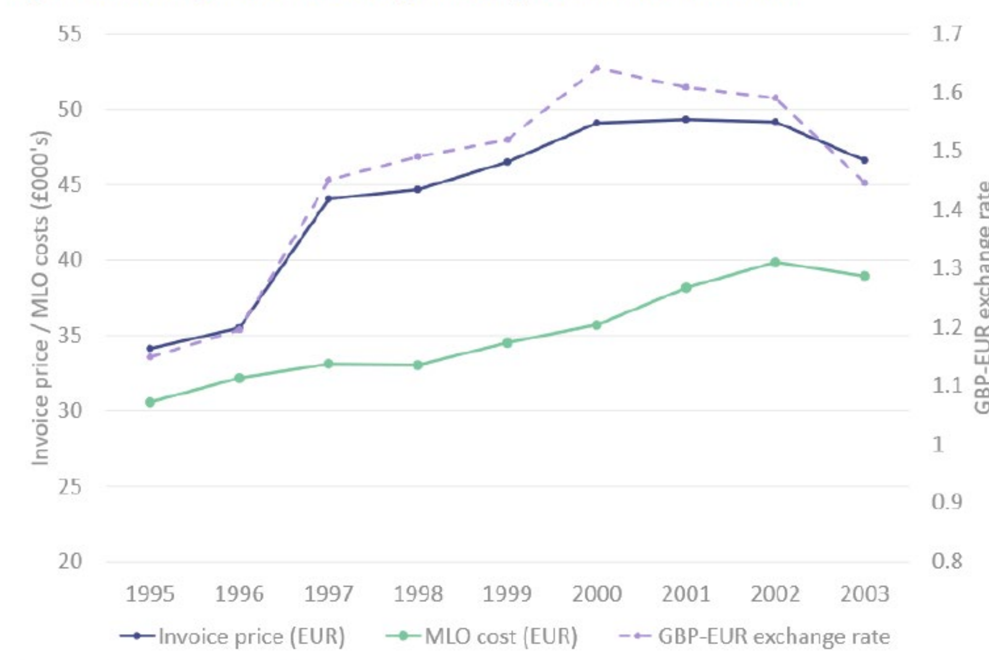
> "… the pound appreciated by about 8%, in a very short period of time. Now, the prices in pound could go down possibly by 4%. What Mr Harvey imposes is that they should go down by 8%, which means that if the prices do not actually go down by the amount that he imposes, this is going to be picked up by the infringement".

394. Mr Harvey argued that his approach did not amount to "*complete and immediate*" pass through of the exchange rate; rather it was "*higher and faster*" pass-through because some of the costs were incurred in Pounds and he was not assuming that the pass-through would occur on a daily basis. He was however assuming that DAF would modify its truck prices in Pounds within a week or so of any exchange rate change. His rationale for that assumption was that all the manufacturers would be impacted by an exchange rate movement in the same way and competition between them would mean that there should not be an impact on their margins.

395. However, there was no evidence in relation to DAF's pricing in response to exchange rate movements. There was also no evidence that this would happen in the counterfactual with competitive interaction. That is why we described Mr Harvey's position above as an extreme one.

396. Mr Harvey did not, and could not, introduce a standalone control variable for the market exchange rate in order to address the identification problem. He said that his model cannot control for the exchange rate because of the correlation between the exchange rate and the Infringement. He therefore accepted that there are difficulties in distinguishing between the exchange rate and the Infringement. Professor Neven agreed that in the context of Mr Harvey's model it would be difficult to disentangle the exchange rate and the Infringement, because of the correlation between these variables. However, he said, correctly, that this is a problem of Mr Harvey's own making.

397. Mr Harvey relied on the below chart to illustrate the identification problem in the B-D period:



398. This shows the prices in Euros at the start of the Infringement and the trend in exchange rates. The appreciation in the Pound coincided with an increase in Euro prices but the Euro costs remained stable. Mr Harvey's model attributed the increase in prices over and above manufacturing costs to the Infringement because without the Infringement he considered that DAF would not have been able to sustain higher margins simply because the Pound had appreciated. Such an increase in margins would have been "*competed away*" in the counterfactual.

399. Mr Beard KC said that this was just speculation on Mr Harvey's part. He also said that there was no evidence and no empirical testing as to whether the appreciation of the Pound was used to increase margins as part of the Infringement. Mr Harvey accepted that there could have been other influences on margins, such as "*demand and changes in truck mix*". Mr Harvey also accepted that there is factual evidence that suggests that DAF did not keep its margins steady, for instance when it was trying to increase market share.

400. We do not think that the chart really assists in the identification problem as it does not address the question of whether the margin gains were due to the exchange rate changes or the Infringement, or if a mixture, how the effects

should be shared. The chart illustrates the problem but it does not provide a solution.

(c) Professor Neven's conversion into Pounds

401. Professor Neven converted the costs incurred by DAF in Euros into Pounds using DAF's budget rate. His constant refrain was: "*I am letting the data determine the amount of its pass-through*". By that he meant that because DAF used the budget rate to convert costs in Euros to Pounds, its own data would determine in his regression by how much and how quickly DAF UK's prices would change in response to movements in the exchange rate. He said:

> "I do not impose a particular relationship… I let the model determine the impact of the exchange rate on the cost incurred in euro expressed in pounds, into prices in pounds, which is the economically sensible, you know, mechanism. The mechanism is that you incur costs in euro, the pound appreciates. In pound terms, your cost is going down. The question is: how much do you pass that on? That is what my model captures."

402. Professor Neven accepted that the use of the budget rate does impose a restriction into the way in which the Euro/Pound exchange rate can affect prices paid for trucks in his main model. It assumes a one year time-lag which is constant for the whole of his B-D-A model and there is no flexibility in his system for taking account of exchange rate changes occurring during the year that might impact on truck prices.

403. As we explain above, the trouble with Professor Neven's approach is that if the prices in Pounds remain flat despite the appreciation of the Pound against the Euro, his model would interpret that as the Infringement having no effect. In reality however DAF would enjoy higher Euro margins as the costs in Euros remain the same while the prices will have risen because of the exchange rate. It is unclear whether that would have happened absent the Infringement because the increased Euro margins might have been competed away.

404. Professor Neven's principal argument was that, by using DAF's actual budget rate, any restrictions on exchange rate adjustment that he imposed were fully consistent with DAF's internal practices. However, Mr Harvey drew attention to the factual evidence that DAF did not always rely solely on budget rates,

especially at the most crucial times, when the lags built in to those budget rates failed to capture the actual changes in costs and UK sales margins.

405. Professor Neven also conducted various sensitivity checks which, he argued, showed that Mr Harvey's Overcharge results collapsed when exchange rate factors were introduced as an additional variable. Mr Harvey disagreed that these sensitivities had any independent force, since they merely illustrated the identification problem between exchange rate and Cartel influences rather than distinguishing their separate impacts.

406. In turn, Mr Harvey also attempted to provide some sensitivity analysis which explored his Overcharge estimates under different rates of exchange rate pass through. This led to some reduction in the Overcharge estimates, but even Mr Harvey's most extreme sensitivity reduced the Overcharge by only some 2%. Professor Neven dismissed these sensitivities as arbitrary and uninformative, and denied that they captured the same exchange rate mechanism as his modelling approach. While that may indicate that Professor Neven's use of the budget rate is not the critical factor here, the key factual question remains open as to how quickly the profits would be passed through in a competitive setting to lower prices. Whilst the debate between the experts did much to highlight this problem, we do not think this issue can be resolved purely on the basis of their econometric models.

(d) Conclusion on exchange rates

407. There was voluminous evidence adduced on this subject including numerous sensitivities and other empirical testing of each of the expert's theories and approach. But it really comes down to the best method of capturing what was actually going on, consistent with the way that DAF operated its business within a context where all of the significant suppliers to the UK market relied substantially or entirely on production costs that were incurred in currencies other than the Pound. The objective is to identify any effect on prices caused by the Infringement and in this context that means how best to remove the effect of exchange rate changes on prices. Whether the conversion is to Pounds or Euros has a highly significant effect on the outcome, which in itself perhaps

indicates that either route is an extreme one and that the correct conclusion is somewhere between those extremes. As we said above there may not be a right way of doing this but we recognise that the experts, in order to perform their regression analyses, had to use one currency for all the variables in the model. In that sense they are both driven to an extreme position.

408. We consider that Mr Harvey's approach has a superficial attraction that reflects DAF's perspective in considering its profits, margins, approvals and decision-making in Euros. But in terms of the identification problem, Mr Harvey's approach to exchange rate changes is probably more problematic than Professor Neven's in this regard. Mr Harvey acknowledged that it is implausible that actual Pound price adjustment in the truck prices negotiated between UK customers and DAF would be instantaneous. Mr Harvey's approach does "*hardwire*" the adjustment from Pounds to Euros prices or, to use the phrase repeatedly used by Mr Beard KC in his critique, it "*imposes a straitjacket*" on price adjustments.

409. Professor Neven's modelling approach has greater flexibility to explore the actual relationship between exchange rate changes and prices in Pounds. However, as we note above, there is no definitive solution to the challenge of how to solve the identification problem caused by simultaneous exchange rate and Infringement events, and it is arguable that Professor Neven's reliance on DAF's budget rates is also a restriction that could mask the way that price competition might work between truck suppliers in a competitive market.

410. Accordingly, we do not say that one approach is right and the other wrong. Instead, we are left with the feeling that the answer is more nuanced than that and that the Infringement effect lies somewhere between the two positions on the basis that neither is truly capable of addressing the problems and difficulties inherent in this situation of having to convert into one currency or another.

(5) Global Financial Crisis

(a) Introduction

411. When demand for a product increases, for example due to an upturn in the economy, one would expect that prices and margins would also increase in normal competitive conditions. Suppliers do not have to chase so hard to make new sales, and they become less concerned about losing sales to fill production schedules because other sales will soon turn up to replace them. The opposite is true when demand falls, such as when there is an industrial recession. That is why both experts' models included a demand effect to control for this non-cartel influence on prices.

412. If the regression models failed to control for the effects that demand shifts had on prices by including appropriate "*demand controls*", the reduction in truck prices that would be observed during the GFC could mask a cartel infringement effect. For example, it is hypothetically feasible that a cartel had been effective, compared to the counterfactual, if it succeeded in holding prices constant during a period when demand fell sharply. So, a model that interpreted flat prices in 2009-11 as a zero cartel effect could be misleading.

413. However, with appropriate demand controls, this problem can be solved. A model that captures demand effects would already anticipate the price-depressing impact of the GFC in these years and the price-inflating effect of the boom in the prior years. Once demand controls are in place, such a model would identify an Infringement effect in 2009-11 if prices were sustained above the depressed price level that would be expected absent the Infringement.

414. The GFC began in 2008 and continued to have an impact even after the end of the Infringement. This only therefore affects the experts' D-A models and Professor Neven's B-D-A model.

415. It is common ground that the GFC had a significant impact on demand. Both experts' models controlled for a variety of factors that might have been expected to influence truck prices, including the effect that demand shifts have on prices.

It is important to control for such effects to be confident that the dummy variables attached to the cartel period properly capture the cartel effect rather than some other event, such as an increase or decrease in demand that has happened at the same time.

416. In relation to the GFC, Professor Neven relied simply on his existing standard demand controls. He considered they were sufficient to capture the effect of the GFC as it was essentially a demand shock. Mr Harvey adopted a radically different approach because of the "*unprecedented*" event of the GFC which he considered could not adequately be dealt with by way of standard demand controls. Instead, Mr Harvey used dummy variables for each of the years 2008, 2009 and 2010 which had the effect of taking those years out of account for the purpose of measuring the Overcharge.

417. The issue for us is whether that was an appropriate way to deal with the GFC, or whether the GFC only affected demand such that the existing demand controls were adequate to capture the effect.

418. The GFC led to a very sharp fall in industrial demand which lasted from late 2008 through to 2011. This period also corresponded, again coincidentally, to the last few years and the end of the Infringement. If the Infringement was exerting an upward influence on truck prices, a fall in prices would be expected, other things being equal, when the Infringement came to an end in 2011. There is, therefore, another identification problem and the risk that a fall in price caused by the GFC could be wrongly attributed to the effect of the end of the Infringement.

419. However, this identification problem might be addressed by the fact that the GFC demand effect started to apply in late 2008, well before the end of the Infringement, providing more than two years' observations to address a GFC effect whilst the status of the Infringement is unchanged.

(b) Mr Harvey's approach

420. Mr Harvey's initial intuition was that the standard demand controls would be sufficient for the GFC effect. It is concerning that this only emerged at the hearing while he was giving evidence on this area. He disclosed for the first time that he originally ran his model with the standard demand controls in place and arrived at an Overcharge estimate of between 1 and 2%. This result was not referred to in his Reports.

421. He then decided that the demand shift during the GFC was so profound that his demand controls were not adequate in these years, so he made an *ad hoc* adjustment to his model to include additional dummy variables in the three GFC years: 2008 to 2010. In effect, this meant that his model gave up on any attempt to measure the effect of the Cartel in this period, since the dummy variables for these years would be equally effective in capturing the GFC and Infringement effects that arose in those years. Mr Harvey said:

> "I think you had a question about what did I do first, and the first approach was indeed to include the whole period, include a control for demand. Having observed this, we also looked at what happened if we removed that period from the estimation. What we found was that, indeed, the overcharge that was estimated, having removed that period, was significantly higher."

422. The adoption of GFC dummy variables in Mr Harvey's model also crucially means that the options to assess a GFC effect separately from the end of the Infringement is eliminated, creating a clear identification problem. Similarly, Mr Harvey's GFC dummy variables also compromise the ability of the model to measure the impact of the sharp fall in the value of the Pound against the Euro in 2008. Professor Neven explained this as follows:

> "… when Mr Harvey is using dummies for 2008, 2009, 2010, he is actually controlling for the financial crisis as well as controlling for the effect of the exchange rate depreciation. In particular, his dummy in 2008 is taking out, I mean, the effect of the depreciation of the pound. So he is not actually disentangling the two effects. He is not actually disentangling the effect of demand from the effect of the exchange rate depreciation."

He also said that Mr Harvey's 2008-2010 year dummies had the effect of: "*killing any estimate of the effect of the exchange rate in 2008 when it [i.e. the significant depreciation of the Pound Sterling] is taking place*".

423. Having implemented this change to his model, Mr Harvey then found a higher Infringement effect of 6-14%, depending on the truck family, and he presented this version as his best estimate of the Overcharge.

424. Professor Neven criticised this *ad hoc* approach because it effectively absorbed all the variability in prices in trucks for these years, in the process degrading the variation in the explanatory variable data that is a vital input to a regression model. Although the absolute number of truck sales involved in this period is modest, he argued that it involved a substantial proportion of all the Euro 5 and 5 EEV trucks sold in the Infringement period, and, since the model relied on like-for-like comparisons with and without the Infringement, this also affected the ability of the D-A model to measure the Overcharge. He argued that the standard demand controls, included in both experts' models, were adopted precisely to capture demand effects, and that the natural assumption is that they should be competent to perform that task even for the GFC years. The fact that demand was unusually low in those years, or that the GFC demand shock was "*unprecedented*" as claimed by Mr Harvey, does not mean that normal methods to assess demand effects should be abandoned.

425. There is obvious appeal to this criticism, and it is inescapable that Mr Harvey's approach does appear to have had the effect of shifting the goalposts *ex post* after his original model using the standard demand controls reached an inconvenient result.

426. DAF and Professor Neven also questioned Mr Harvey's use of single whole calendar year dummies to deal with this issue. Specifically, they highlighted the arbitrariness of this specification, and explored some sensitivities in which even small changes in the months covered by each GFC dummy could have a material effect on the estimates. For example, by ending the 2010 dummy variable at the end of June, Professor Neven found that the Infringement coefficient estimate in his model was reduced from 2.8% to 0.6%. In response, Mr Harvey cited demand data which he felt justified his whole year approach.

427. However, the fact that there are concerns with Mr Harvey's GFC dummy variables does not rule out the possibility that the standard demand controls

might be unreliable in capturing the abnormal effects of the GFC. If there is validity in Mr Harvey's contention that some kind of paradigm shift occurred in pricing behaviour because of the unique features of the GFC, then it could be appropriate to adopt measures which reflect the special status of demand effects in the GFC period. This is an issue that can best be informed by reference to the factual evidence rather than the technical dispute between the experts' views on the specification of their regression models.

428. Mr Beard KC argued that to justify Mr Harvey's approach, he would need to show that the GFC affected pricing conduct through a route other than through its effect on demand, since demand is already controlled for in the econometric model. However, that is an over-simplification. Plainly, the GFC affected DAF's business due to its impact on dramatically reducing the demand for trucks, but the question is whether a measure of demand effects that reliably captures the impact that "*normal*" demand fluctuations have on prices remains reliable when an "*abnormal*" change in demand such as that created by the GFC has to be considered.

(c) DAF's evidence as to pricing in the GFC

429. There is some evidence to indicate support for Mr Harvey's views on this issue. For example, DAF explained that it normally made trucks to order rather than holding large stocks of trucks that it then sold as demand arose. In this context, the working assumption behind price negotiations was that DAF's production facilities were full, and that the "*cost*" of deploying those facilities to supply one particular truck would be the foregone opportunity to use those same facilities to supply a truck to some other customer. However, when demand fell in 2008 and the following period of the GFC, DAF suffered a large number of cancellations of existing orders as well as a severe fall in new orders.

430. Mr Van Veen gave evidence that DAF truck production fell from 200 trucks per day before the GFC to 35-50 trucks per day during the GFC. And Mr Ashworth gave evidence that UK sales "*dropped significantly as a result of the financial crisis…from over 13,000 trucks in 2008 to around 6,000 trucks in 2010*".

431. Visibility reports provide an assessment of time periods when DAF had a significant number of open production slots that needed to be filled. The evidence showed that DAF was paying more attention to visibility information when making pricing decisions during the GFC. Mr Van Veen's evidence was that "*visibility information was particularly relevant [in] unstable situations"* and visibility reports or order board information would not be taken into account when considering proposed transactions at times when production was regular.

432. Mr Ashworth gave evidence of the situation in the UK:

(1) He said that there were increased drives for cost savings by customers such as Royal Mail and explained that Royal Mail's drive for cost savings "*continued through to and was particularly evident during, the financial crisis that followed the collapse of Lehman Brothers in 2008.*" Indeed, Mr Ashworth explained that the situation became "*so difficult*" in early 2009 that DAF sought the assistance of its local MP in the UK, Mr Lindsay Hoyle MP to influence the commercial negotiations with Royal Mail.

(2) He referred to the significant volatility in the Pound to Euro exchange rate and said:

> "… the value of the Pound fell sharply against the Euro, and then fluctuated dramatically… DAF NV worked in Euro, but trucks were sold in the UK in Pounds, so this caused severe issues. In the period prior to 2008, I had generally been delivering €1.43 for every £1.00 that sold in the UK. After 2008, this fell sharply to almost as low as €1.00 for every £1.00 – a substantial reduction in DAF UK's revenues for accounting purposes. This, and increased costs caused by the fall in the Pound's value, meant that we had to try to achieve higher prices for trucks, against a background of decreased demand."

(3) He explained that DAF NV had to approve all deals:

> "During the financial crisis after 2008, due to the exchange rate fluctuations, all deals had to be approved by DAF NV. Even as Managing Director of DAF UK, I was not allowed to sign off any deals for a period of time."

Whilst the structure of the mandate system did not change, the consequence was that decisions were being taken by more senior people within the organisation, applying real time exchange rates.

(4) As highlighted above, Mr Ashworth provided important additional evidence at the hearing in respect of the scale and impact of the order cancellations that occurred during the GFC. In particular, he explained that this led to "*lots of trucks*" being manufactured with no one to buy them, which was a "*very unusual*" situation for DAF to be in. Indeed, the issue was so significant that it was discussed at a competitor meeting which Mr Ashworth attended and at which the meeting minutes recorded the following discussion: "*'They openly stated that they are on a mission to liquidate current UK stocks and that they are in "dealer protection and survival mode". DAF and Iveco confirmed openly that they have made funds available and offered dealers financial support*". When asked what this part of the meeting minutes was referring to, Mr Ashworth explained:

> "… at the time, as I have just explained, DAF was a build to order company so we took orders and we built trucks. Prior to the financial crisis what was happening is customers started to cancel vehicles. Another point that was relevant, that prior to the financial crisis orders and -- I think we have seen before -- lead times were becoming excessive, so we had orders which were placed for trucks with extended lead times. So what we were getting was long lead times with confirmed orders that we were planning to build and then suddenly what we had is cancellations at an exponential rate so we ended up building lots of trucks with no homes to go to, hence the reason for stock, which is very unusual in our business -- in DAF's business."

433. Mr Harvey commented on the significance of this evidence when giving evidence himself. Whilst the evidence in DAF's Pricing Statement on order cancellations had been a factor in his decision to use the GFC dummies, Mr Ashworth's oral evidence revealed for the first time "*that production in some cases had already begun or indeed completed for trucks that were then subsequently cancelled*." Previously, all that had been explained by DAF was that customers also cancelled existing orders due to the effects of the financial crisis. Until Mr Ashworth's oral evidence, it had not been explained that such cancellations led to lots of trucks being manufactured with no homes to go to or

that this resulted in DAF holding stock, which was very unusual. Thus, Mr Ashworth's evidence provided additional support for Mr Harvey's contention that the GFC demand effect induced a shift in the way that DAF might have approached its pricing decisions.

434. DAF NV changed its approach during the GFC from focusing on the artificially inflated IKP costs to MLO cost when approving all transactions. We have referred above to Mr Habets' evidence as to the significant drop into negative margins when measured against MLO costs for DAF for each of Royal Mail and BT in the years 2008, 2009 and 2010, which suggests that pricing decisions were not being made by DAF in this period solely in an attempt to recover MLO costs and make a profit. Mr Van Veen explained that:

> "… if DAF had a lot of production slots open in the near future, we would be more likely to accept deals with lower margins because we wanted to fill those slots (lost production slots lead to significant costs for DAF in terms of wasted investment and labour). On the other hand, when production slots were completely filled and DAF had already secured production for a longer period of time (usually a few months out), then we could be more selective and walk away from deals with low margins".

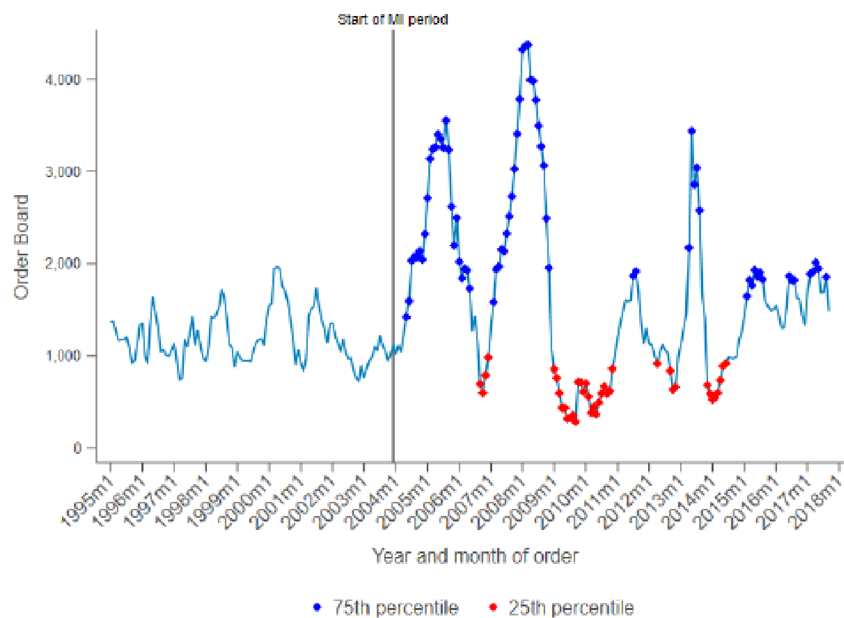
435. From the above evidence, it is not unreasonable to infer that this might have triggered a major shift in the considerations that affected DAF's pricing conduct. DAF said that the evidence does not indicate that the GFC had an impact "*above and beyond demand*" and so the demand controls would adequately deal with the GFC effect. We however do think that there is some justification for Mr Harvey's view that the GFC had a somewhat unique effect on pricing that might not be captured by the standard demand controls.

(d) Professor Neven's approach

436. Professor Neven did seek to address this by proposing various ways to define "*abnormal*" demand, both high and low, and exploring whether some kind of "*non-linear*" relationship between demand and price would capture demand effects better than a simple assumption that a given percentage change in demand would have a consistent percentage impact on price. This is in principle a reasonable and constructive approach to the GFC problem.

437. However, the specific alternative approaches employed by Professor Neven never really identified a satisfactory alternative measure. For example, the approach highlighted by Professor Neven at several points in his oral evidence defined "*abnormal*" demand as arising when demand was in the upper and lower quartiles. This means that demand is considered "*abnormal*" 50% of the time, thus possibly over-identifying the exceptional effects cited by Mr Harvey. This approach of Professor Neven was shown in the following chart:

Figure 4: Distribution of Order Board dummies in the MI period – LF trucks (2003M12-2017M8)



Notes: *This graph focuses on the LF trucks: (i) The blue line plots the monthly Order Board value from January 1995 to September 2017; (ii) The blue dots indicate when, during the MI period, the monthly Order Board takes a value in the 75th percentile of all previous Order Board values starting from January 1995; (iii) The red dots indicate when, during the MI period, the monthly Order Board takes a value in the 25th percentile of all previous Order Board values starting from January 1995.*

Source: *Compass Lexecon analysis based on the CL Dataset.*

438. The wider concern of this approach is as to whether demand levels can really capture the dynamics that might drive changes in pricing policies, and the possible interactions of demand levels and order cancellations. For example, Professor Neven's quartiles approach classified late 2008 as "*high*" demand even though demand was falling rapidly then. Moreover, as noted above, to the extent that rapidly falling demand in 2008/9 also led customers to cancel orders that had previously been made, this focus on demand in any particular period

might understate the dynamics of the impact that the GFC had on DAF's order books and hence, potentially, on its approach to pricing.

(e) Conclusion

439. In summary, we have concerns about Mr Harvey's approach to the GFC problem but understand why he has done that and do not wholly reject it, as DAF invites us to do. Whilst we are unhappy with the way in which Mr Harvey changed his modelling approach only after discovering that the standard approach yielded results that were unhelpful to his client, and with the lack of transparency in the way this was done, and whilst DAF makes valid criticisms of the rather blunt methodology adopted by Mr Harvey of using the dummy variables for the full three years, 2008 to 2010, of the GFC, we consider that the GFC plausibly did have effects on pricing dynamics that would not be well captured by demand controls that work across normal demand fluctuations.

440. Like with the exchange rate debate, there are legitimate arguments on both sides and we do not accept Mr Beard KC's characterisation of Mr Harvey's approach as "*plainly misconceived*". Again, the actual answer may be found somewhere between the opposing positions which is more likely to reflect the true impact of the GFC on DAF's pricing.

(6) Emissions Premia

(a) Introduction

441. Truck manufacturers were required by European legislation to implement significant and expensive emission standard upgrades from before the start of the Infringement. This required the development of trucks with engines and other components that complied with the new standards, alongside noise reduction measures and new safety features.

442. The Settlement Decision included findings that the Infringement included unlawful collusion between the Cartelists on both the date of introduction of new emissions standards compliant trucks, and the price uplift that should apply

to each new standard. The emissions standards collusion was in addition to the more general elements of the Infringement but was pursued with the same aim of reducing competition by removing uncertainty regarding the behaviour of the Cartelists and the reaction of consumers on the market.

443. While these aspects of the Infringement were admitted by DAF, the extent to which such collusion actually affected the timing and price rises associated with each emissions standard were disputed. It was common ground between the experts that the new emissions standards trucks carried a price premium over and above manufacturing costs ("**emissions premia**") which meant that DAF earned an increased margin on these trucks when measured by reference to the previous emissions standards trucks. However, DAF acknowledged that UK customers did not want to pay extra for the required new technologies.

444. The differences between the experts concern their interpretations as to what the emissions premia are attributable. Mr Harvey attributed the emissions premia to the Infringement. Professor Neven attributed them to the extra enhancements that DAF made to the new emissions standards trucks for which customers were willing to pay and which would be expected to arise in normal competitive conditions.

445. The relevant emissions standards were:

(1) Euro 2 which applied prior to the Infringement;

(2) Euro 3 from October 2001;

(3) Euro 4 from October 2006;

(4) Euro 5 from October 2009;

(5) EEV (a voluntary standard) which came into operation between Euro 5 and 6; and

(6) Euro 6 from December 2013 (post-Infringement).

446. It was, however, not possible for the experts to measure the extent of any emissions premia in respect of Euro 2 or 3, because the poor quality of the AS/400 data in this period did not permit truck level cost data, or emissions premia, to be analysed. Hence, the Overcharge losses identified by Mr Harvey covered only the Euro 4, 5 and EEV trucks and were therefore in the D-A period.

447. The amounts at stake here were described by the Claimants as "*small but nonetheless significant*". It amounts to the following approximate amounts:

(1) Euro 4: £1 million for Royal Mail; and £39,000 for BT;

(2) Euro 5: £214,000 for Royal Mail; and £16,000 for BT;

(3) EEV: £186,000 for Royal Mail; and £200,000 for BT

This is less than £2 million in total.

448. Mr Harvey argued that these estimates were conservative since they already allowed DAF to recover all the costs associated with the implementation of each standard. He said that this might, arguably, not be possible in a competitive setting since in isolation these costs produce product changes that harm rather than benefit customers, and they are based on premia over and above prior emissions standards that might themselves have been adversely affected by the Infringement. This is part of the broader problem of the inability of the econometrics to estimate any emissions standards effect that arose during the AS/400 data period.

(b) Evidence of collusion on emissions premia

449. To the extent that the Cartelists coordinated over the date of introduction of a standard, i.e. delaying it beyond the date at which it might have occurred in the counterfactual, it is not obvious why any commercial damage should have been suffered by the Claimants, even if such delay might have had a detrimental effect on the environment and consumers in general. The main significance of

any such coordination on timing might have been to facilitate the implementation of an agreement on price increases.

450. The evidence of attempted coordination on emissions standards price increases was partial, but more explicit than any evidence on general price rise coordination. Some examples are the following:

(1) DAF and the other manufacturers agreed an additional net price charge to be applied to the emissions technology complying with Euro 3 emissions standards. At a competitor meeting dated 6 April 1998 (which is recorded at Recital (52) of the Settlement Decision) the Cartelists agreed to offer Euro 3 compliant trucks with "*additional charge in the bracket of 4500 to 5000 guilders net price for truck over 16 T GVW*" and that "*any additional horsepower should be proposed at its market price (1000 FF per HP in France or equivalent)*". The Cartelists also agreed not to "*push any anticipation of EURO 3*" before it was compulsory to comply with the standard, and further agreed on how it would be marketed, that they would "*communicate on the cost of development and investment of the new technology for EURO 3 without stressing the consumption penalty incurred by EURO 3*".

(2) The Cartelists exchanged information regarding (a) prices, including net prices, for their Euro 4 and 5 compliant Trucks; and (b) technical details regarding Euro 4 and 5 Compliant Trucks and agreed on the additional charge to be applied for the emission technology complying with Euro 4 emission standards. Contemporaneous documentation indicates that in November 2004 the Cartelists had held a "*common objective of constructors of 5000 € net to client all ranges*". In addition, DAF had access to even more granular information about certain of its competitors' pricing aspirations. For example, DAF was aware in October 2005 that MAN intended to introduce a "*price difference between Euro 3 and 4*" of "*£2,500 and £3,500 increase*".

(3) As to the timing for the introduction of new technology complying with Euro emissions standards, the Cartelists agreed: (a) that there would be

no significant pushes to promote Euro 3 before the legal deadline, and that there would be minimal or no vehicle identification and no engine identification; (b) not to sell Euro 4 compliant Trucks before September 2004; and (c) to coordinate over the dates for production of Euro 5 trucks.

(4) In respect of Euro 4 and Euro 5 trucks, Mr Borsboom explained that DAF NV used the same engines to comply with both of these emissions standards. There were two emission control technologies for the manufacturers to choose between: (a) Selective Catalytic Reduction ("**SCR**"); and (ii) Exhaust Gas Recirculation ("**EGR**"). DAF initially explored using EGR but ultimately adopted SCR for its Euro 4 and 5 trucks. It is common ground that the Cartelists discussed the general price positioning of SCR and that at least some of the manufacturers exchanged information on which of the technologies they would be using (this included DAF informing its competitors that it would be using SCR technology).

(5) It is also common ground that the collusion extended to the timing and passing on of costs for Euro 6 trucks despite the fact that Euro 6 trucks were not sold until 2012, after the Infringement had ended by the dawn raids in January 2011.

(6) DAF NV took account of information that it had obtained on its competitors' pricing in setting its own prices for Euro 4 and Euro 5 Trucks. There were two DAF memos that Mr Van Veen was asked about during cross-examination:

(i) One document stated that the cost to DAF of manufacturing the Euro 5 trucks "*nearly equals the cost of Euro 4*". However, rather than set the price for its Euro 5 trucks by reference to this true level of costs, DAF NV chose to "*raise the IKP*" cost of its Euro 5 trucks *"to an artificial higher level*" in order to support "*the net price and margin target*". DAF NV therefore chose to push

the price of Euro 5 trucks up artificially high in order to drive a higher margin target and it did so by using the IKP target.

(ii) The decision to raise DAF's Euro 5 prices in this way was taken by taking into account DAF's competitor list prices for Euro 4 and Euro 5 trucks. Mr Van Veen explained the role of list prices in price setting, saying that DAF would aim to get a price increase of (e.g.,) €4000 net and would "*calculate back*" to a list price, anticipating the likely discount based on past experience, being in this case 36%. Thus, list prices were set in order to achieve transaction prices of the desired level. This is a further link between DAF's list prices and the transaction prices it sought to attain.

(iii) The second document was a DAF slide deck dated 4 November 2004 and dated "*The road to euro 4 November 2004*". Slide 20 confirmed that DAF had obtained information about which of the EGR and SCR technologies DAF's competitors were using. It also showed that DAF had obtained information on the intended future net price increases of its competitors for Euro 4 and 5.

451. There was therefore specific collusion between the Cartelists over the pricing for new emission standard trucks (including trucks containing SCR technology). It is hard to see how coordination on this scale did not result in some material adverse effects on truck buyers arising from successive emissions standards.

(c) DAF's strategy to deal with new emissions standard trucks

452. It was agreed that the Claimants did not gain any commercial benefit from buying trucks that met higher emissions standards during the Infringement period. The situation was different in some other EU countries, notably Germany, where specific road taxes yielded clear commercial advantages to truck operators who met such standards. On the contrary, higher emissions standards in some cases led to higher operating costs for the truck user, for

example, if superior environmental performance was achieved only at some cost in compromised fuel efficiency, and/or if it increased the complexity associated with servicing vehicles. It also involved higher manufacturing costs that would be expected to be passed through in higher truck prices.

453. DAF recognised that it would be problematic to gain customer acceptance for successive new standards of trucks that were both more costly to manufacture, hence higher priced, and less cost-effective for the user. DAF's evidence, principally from Mr Borsboom, was that there had to be a business case for customers to purchase its trucks and there was no emotional attachment to particular trucks. At the time, UK customers were not particularly interested in protecting the environment and they did not want to pay extra for compliance with new emissions standards. They obviously expected DAF to comply with the standards but there was a certain lack of enthusiasm for the new trucks with concerns over reliability, risks associated with new technology, added complexity and an increased total cost of ownership. There was therefore a risk to DAF's margins if prices could not be raised to meet the higher costs.

454. DAF's strategy to address this challenge was to ensure that it simultaneously introduced other product improvements, such as higher engine efficiency, that counteracted the negative impact of higher emissions standards. It might also have added other product improvements such as superior cab comfort features that, whilst they would increase manufacturing cost and price, would also create an additional customer benefit that would, in DAF's estimation, increase the customer's willingness to pay for the new trucks.

455. But DAF was in the Cartel for 14 years during which a number of the new emissions standards came into force and as explained above entered into agreements with the other Cartelists that enabled not only for 100% of its costs to be covered by truck price increases but also to increase its margins on Euro 4, 5 and EEV trucks over that being earned on Euro 3 trucks.

(d) The experts' interpretations of the emissions premia effects

456. As stated above, the experts broadly agreed that, after controlling for all other influences including production costs, DAF's UK truck profit margins were higher as each new emissions standard was introduced. Their disagreement was over the interpretation of this evidence:

(1) Mr Harvey contended that the observed increase in margins was an Infringement effect, noting that this interpretation ties in with the evidence that the Cartelists actually agreed on the emissions premia to be applied to each change in standards.

(2) Professor Neven argued that the increase in margins was a naturally occurring *competitive* phenomenon, because although UK customers gained no benefit from higher emissions standards, the other improvements that DAF introduced at the same time justified the observed increase in price-cost margins. In other words, Professor Neven contended that it would be normal for such improvements to lead to higher margins, i.e. to price increases that exceed the extra costs of these quality gains. DAF and Professor Neven described this as the Willingness to Pay ("**WTP**") effect.

457. On the face of it, Mr Harvey's position here is the more straightforward one. The assumption made by DAF and Professor Neven that higher quality products lead to higher WTP and *therefore* to higher margins, is far from self-evident. In a competitive market setting, this would often not be the case, since effective competition between suppliers would require all of them to strive for better products, and there is no reason why industry margins must rise inexorably just because quality had improved. In itself, the WTP point is empty: any effective cartel or monopoly price outcome involves the supplier exploiting the customer's WTP. Hence, there is at least some validity to the Claimants' criticism that Professor Neven's approach falls into the trap of assuming the problem away.

458. The question is whether in the counterfactual competitive process between truck manufacturers, the implementation of higher emissions standards would have been expected to generate pricing based on constant price-cost margins, as favoured by Mr Harvey's interpretation, or an ever-increasing price-cost margin, as Professor Neven believed.

459. The experts agreed that the obvious way to test these competing hypotheses would be to observe whether new emissions standards introduced outside the Infringement also led to higher margins. However, the experts encountered a problem with identifying untainted observations that would allow the testing of this hypothesis. There was no possibility of doing so on the emissions changes that arose in the pre-Infringement period due to the inability of the AS/400 data (1994-2003) to identify individual truck types.

460. A series of sensitivity and other tests were attempted to address this problem, but they did not shed much light on the issue. Professor Neven ran a sensitivity test in which the various emissions standards fixed effects were removed as explanatory variables, and observed the impact this had on the Overcharge estimate and other parameters. He found that the cost coefficient increased substantially, but that the Overcharge estimate was no higher in this version of his model, and he argued that this result showed that the emissions price effect was not connected to the Cartel. Mr Harvey did not agree with this interpretation, arguing that this version of Professor Neven's model inflicted an omitted variable bias on the results, and the explanatory variables which picked up the influence of the omitted emissions variable would simply be those that happened to be most correlated with the omitted variable. This criticism seemed to have some validity, and we did not find that Professor Neven's test was a convincing rebuttal of the possibility that the observed emission effects were due to the Cartel.

461. Even the introduction of Euro 6 standards in 2012, i.e. post-Infringement, cannot be assumed to be untainted by the infringement, since discussions on the timing and price increases associated with Euro 6 took place prior to the end of the infringement. Moreover, the Claimants argue that the large changes introduced with Euro 6 trucks could not easily be compared with or

benchmarked against the changes that had arisen with the earlier emission standards that came into force during the Infringement period.

(e) Conclusion

462. Overall, we find that the increase in price-cost margins that both experts agreed arose when new emissions standards were introduced, coupled with the admitted and plausible evidence that truck manufacturers did seek to coordinate on the truck price increases that should be associated with these standards, provide a compelling case for the emissions premia to be treated as part of the Overcharge.

(7) Value of Commerce

463. The Value of Commerce ("**VoC**") refers to the Claimants' total expenditure on trucks bought from DAF during the Infringement. If we find an Overcharge to exist, it will be necessary to apply the Overcharge estimated percentage to the VoC which will be the loss suffered by the Claimants, subject to the further defences discussed below.

464. Royal Mail quantifies its VoC as **£260,597,683**[15] on which Mr Harvey has assessed a pre-tax Overcharge of **£29,815,624**. DAF contends that the VoC is lower (see below). The BT VoC is agreed between the parties to be £**44,961,617** which Mr Harvey has assessed as a pre-tax Overcharge of **£4,972,063**.

465. The dispute as to VoC only concerns Royal Mail and it is whether the price included in the VoC should be the price paid by Royal Mail to DAF for the complete truck as per the invoice or whether the price of bodies purchased by Royal Mail should be excluded. DAF says that the bodies should be excluded. In monetary terms the difference is £39,356,431 to the VoC and, on Mr Harvey's assessment, £4,197,657 to the pre-tax Overcharge. There are also some disputes in relation to the VoC of trucks acquired from DAF but subject

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[15] This is exclusive of irrecoverable VAT and additional interest paid to third-party leasing companies.

to leasing, and they include the same issue as to whether the cost of bodies should be excluded or not.

466. There are therefore two questions for us:

(1) Whether bodies were subject to the Overcharge;

(2) If not, whether bodies should be excluded from Royal Mail's VoC.

467. Royal Mail purchased some bodies from DAF as part of the truck bundle. BT did not. When Royal Mail did buy the complete truck from DAF, the invoice was for the complete truck including the body and the full amount was paid to DAF. In other instances, Royal Mail, like BT, did separately source its bodies and paid the third-party manufacturers. As will appear from our discussion of the Complements issue, there is a separate market for bodies and trailers, with approximately 20 manufacturers, none of whom were part of the Cartel.

468. Mr Ward KC's main point is that bodies are within the scope of the Settlement Decision and DAF seemed to have accepted that until August 2021 when it changed its mind and sought to argue that the Infringement was limited to the "*naked truck*" and that bodies should be removed from the VoC.

469. Referring to the Settlement Decision, Mr Ward KC submitted it used the word "*Trucks*" but did not specifically define it. However, it is clear from certain Recitals that the collusion extended to truck options and the exchange of configurators – see Recitals (28), (46), (48) and (56). Mr Ward KC said that the supply of bodies by DAF to customers was a "*factory-fitted option*" and that Mr Ashworth's evidence was that Royal Mail was supplied with the "*complete product*" including bodies and tail-lifts which would be fitted *"onto the truck in our factory.*" Mr Ashworth had explained that DAF sold to Royal Mail a bundle and it came down to what Royal Mail was prepared to pay "*for the whole truck*".

470. Mr Ward KC submitted that the Settlement Decision specifically excluded certain matters from its ambit, such as used trucks (see Recital (5)), but said nothing about bodies or any other part of the truck bundle. DAF did not seek to

exclude bodies from the Settlement Decision which Mr Ward KC said it would have done if it did not intend to agree that bodies were within the scope of the Infringement. Mr Beard KC however responded by saying that the reason they were not excluded from the Settlement Decision was because DAF did not consider that the word "*truck*" included "*body*".

471. Mr Ward KC relied on the Advocate General Medina's Opinion in *Landkries Northeim v Daimler AG* CJEU C-588/20 where she said that if the Commission had intended to exclude certain types of specialised trucks from the Settlement Decision it would have expressly said so. However, we think that that was a somewhat different question as to whether certain types of truck, in that case specialist refuse collection trucks, were excluded rather than whether trucks are extended to mean whole trucks including bodies.

472. Mr Beard KC submitted that there was no evidence that supported Mr Harvey's assumption that Royal Mail negotiated a price for the whole truck bundle and pointed to some evidence that might have suggested that body prices might have been negotiated separately. Furthermore, Mr Ashworth gave unchallenged evidence that DAF UK negotiated with body and tail lift manufacturers and then charged Royal Mail at cost or a very small margin.

473. However, we consider that DAF's failure to provide any evidence as to how the Cartel operated, and particularly in this respect as to how it affected the pricing for the whole truck, including bodies and other options, leaves us in the dark on this question. The most natural approach to take here, given the absence of that evidence is to consider truck bodies equivalently to other extras that were purchased from DAF by Royal Mail. If the Infringement took effect through a mechanism linked to list price changes, there is no convincing evidence for us to reject the possibility of such an effect also applying to truck bodies. Had DAF chosen to share more information on the coordination infrastructure surrounding the Infringement, one might have been able to take an alternative view, but this is not the case. We do think that DAF should be held to what it signed up to in the Settlement Decision and this did not clearly exclude bodies from the scope of the Infringement.

474. As we have decided that bodies sold by DAF to Royal Mail should be included in the VoC, it is not necessary to consider Professor Neven's methodology for removing them, save to say that this was disputed by Royal Mail.

(8) Conclusion on Overcharge

475. Despite the enormous amount of work that went into the expert process on this case, and the vast quantities of data analysed, there are numerous serious gaps and unresolved issues in the analyses which taken together makes it difficult to distil the experts' work on Overcharge into a simple definitive figure. Nor is it feasible to specify an "*ideal*" regression equation, based on the various work of the experts, that could be relied upon to yield the correct answer to the Overcharge question which would navigate successfully between the rival claims and conflicting conclusions reached by the experts. There are too many imperfections in the evidence, and insoluble practical problems, to allow any such approach.

476. That is not to say, however, that the regression analyses carried out by the experts, and the subsequent debates between them in their written and oral evidence, was futile. The process did yield useful insights on the reasons for the experts' different conclusions and enabled us to reach a better-informed view on the critical question of the Overcharge. However, as we have commented above, there were a number of instances where both experts might have been more transparent and realistic in identifying and accepting the existence of some of the limitations of their regression model results, and to have done so in their exchanges prior to the hearing. The tendency of both experts to defend their positions without acknowledging the inherent difficulties in their own approach was disappointing and inconsistent with their primary duty to assist the Tribunal.

477. The first question we need to address was whether, based on a balance of probabilities test, the evidence points to the existence of a cartel Overcharge. We conclude that it does. There are sound *a priori* reasons for expecting that a concerted attempt by all the major European truck suppliers to restrict price competition that persisted over a 14-year period would to some extent have

succeeded in materially affecting transaction prices. Further, whilst there are legitimate criticisms to be levelled at Mr Harvey's estimates of the effect, particularly with regard to the way his analysis approached exchange rate issues, we also consider it is clear that these criticisms do not justify the extreme approach of dismissing all positive Overcharge results.

478. Accordingly we find that the Claimants have established the requisite causation to complete their cause of action.

479. Having reached that conclusion, we then have to place a value on the likely Overcharge. In doing so, we adopt the "*broad axe*" approach in reaching an overall answer rather than seeking to "*score*" the experts point by point across the various aspects of agreement and disagreement between them. To engage in a detailed mathematical exercise of this kind might appear to provide some credibility to the figure we end up with. However, we take the view that it would be an exercise in spurious accuracy to attempt to do so. Several of the imperfections in the experts' regression models do not yield a definitive solution and we believe that no regression model could. As we made clear in the sections above on exchange rates and the GFC, the true value of the Overcharge we believe lies somewhere between the two experts' diametrically opposed positions. In the circumstances, we have no choice but to make a judgment based both on the evidence that was presented in the experts' models, and on a wider appreciation of the factual context and witness evidence.

480. The Overcharge can best be expressed in terms of a percentage of the value of commerce between DAF and each of the two Claimant entities. Overall, the difference between the experts ranged from: Professor Neven's estimate that the Cartel was completely ineffective in raising truck prices, i.e. 0 % Overcharge; and Mr Harvey's claim that the Overcharge was between 6.7% and 14.7%, depending on the time frame and truck types considered. As should be evident from the preceding discussion, we cannot rely on either expert to have provided a fully reliable and unbiased stand-alone estimate of the effect. Both reached conclusions that, whilst they fell within the range of robustly arguable positions, were clearly influenced in favour of the commercial interests of their respective clients.

481. We apply a broad axe judgment on the Overcharge, as the authorities enable us to do. The complication with finding the appropriate percentage is that the emissions premia are expressed as an exact figure from which Mr Harvey calculated a percentage when added to the general Overcharge. So in relation to both Royal Mail and BT, Mr Harvey found an Overcharge of 11.6% on the trucks sold in his B-D model and 6.7% on the trucks sold in his D-A model. For Royal Mail Mr Harvey concluded that there should be added a total of £1,399,899 in respect of emissions premia. This came out at an average Overcharge for the whole period of 9.95%, which was approximately £30 million.

482. For BT, Mr Harvey concluded that there should be added a total of £251,598 in respect of emissions premia. This resulted in an average Overcharge for the relevant period of 11.1% which was just under £5 million. His Overcharge assessments have accordingly just over a 1 percentage point difference between Royal Mail and BT but this difference was predominantly attributable to the fact that BT's truck purchases from DAF were more heavily loaded towards the earlier period when Mr Harvey estimated a higher percentage overcharge.

483. Mr Harvey produced a chart that showed approximately the effect of the two main issues on Overcharge, namely the exchange rate and GFC issues. The exchange rate issue accounts for just less than twice the GFC issue. The experts were broadly agreed on the figure for emissions premia; they disagreed on its interpretation. In that respect, it was more of an all or nothing issue. And in relation to it, we are much more with Mr Harvey.

484. In relation to the exchange rates issue we concluded that, whilst neither expert's approach was right, Professor Neven's position has more merit than that adopted by Mr Harvey; GFC was more evenly split. We therefore consider that a fair and reasonable broad axe view on Overcharge comes out at 5% for both Claimants (ie approximately half of what they are claiming).

485. We have no reason to adjust the profile of this Overcharge between the different years of the Infringement, and indeed to do so would imply a greater precision

to the broad axe approach than we consider is justified, given the substantial imperfections in the data available and the complexity of the task.

486. We will not attempt to calculate the actual figures but will invite the parties to agree the amounts by applying: 5% to the VoC for both Claimants for each relevant year. That is our conclusion on the Overcharge issues.

L. COMPLEMENTS

487. We have referred above in section H to the Complements issue in the context of considering the legal test for causation in relation to DAF's mitigation defences. We concluded that DAF must show that there is a proximate and direct causative link between the Overcharge and, in the case of Complements, a reduced price of bodies and/or trailers. It appears that it is not disputed that, if DAF can prove that the Overcharge caused the price of bodies and/or trailers to fall, the legal test for causation would be satisfied. So the question for us is whether DAF can show, both as a matter of economic principle and in fact, that the Overcharge had that effect and, if so, by how much the Overcharge should be offset by the reductions in prices that the Claimants paid for bodies.

488. We have decided in relation to the VoC issue that the bodies sold by DAF UK to Royal Mail as part of the truck bundle are included within the scope of the Infringement and the Overcharge. For the purposes of the Complements issue, that means that those bodies sold to Royal Mail cannot be included within the calculation of any Complements effect. In relation to Royal Mail, any such Complements effect, if it existed, must be confined to the purchase of tractor units and trailers.

(a) The Economic theory in relation to Complements

489. The experts gave evidence on this issue in concurrent session. The economic principles behind the possible Complements effect were substantially agreed by the experts, and they rest on the following three elements:

(1) Strict Complementarity. Trucks (or more specifically tractor units) and trailers/bodies are "*strict complements*" in economic terms, meaning that every new tractor unit purchase is associated with a corresponding new trailer purchase.

(2) Reduced customer demand for trucks and trailers/bodies. Due to the strict complementarity between trucks and trailers/bodies, customers will be concerned with the total price of the truck plus its associated

trailer/body, rather than the price of either component in isolation. Consequently, if all truck prices were to increase independently of other factors, this will make the purchase of a combined truck and trailer/body more expensive, and hence lead to an expected reduction in demand for both trucks and trailers/bodies. The extent of any such demand effect depends on the overall elasticity of demand for new trucks.

(3) Reduced trailer/body prices. In this scenario, suppliers of trailers/bodies will find that demand for their products falls when the price of trucks increases. In turn, economic theory predicts that this fall in demand will tend to encourage trailer/body suppliers to reduce their prices to some extent. That reaction will offset the increase in truck prices (though it is unlikely to outweigh it), leading to a partial recovery in demand for trucks and trailers/bodies, and a partial compensation to the customer who has paid the higher truck price.

490. The experts agreed that the mechanism described above was founded in sound economic theory, and that in principle this Complements effect could mitigate the loss to the truck buyer from the Overcharge. They also agreed that any concession on the prices charged by trailer/body suppliers would also damage the commercial interests of those suppliers which would consequently have a potential damages claim against the truck suppliers who had engaged in the cartel infringement. However, they disagreed on the practical significance of this effect, and on how it could be assessed, given the limitations of the data (in particular with respect to trailer/body supplier costs and margins) at their disposal.

491. Professor Neven presented an analysis based on a complex simulation model which initially concluded that the Complements effect would allow Royal Mail to recover around 25% of any loss suffered from a trucks Overcharge, and that BT would recover 51% of such loss. After addressing criticisms raised by Mr Harvey, however, those results were later adjusted downwards to 6% and 25% for Royal Mail and BT respectively. In both cases the estimated effect was higher for BT than for Royal Mail, largely because the ratio of the trailer/body to truck prices purchased by BT tended to be higher than for Royal Mail.

492. Mr Harvey took a much simpler empirical approach, based on a graph-based assessment of the trends in published margin data for a number of trailer/body manufacturers over time. He concluded that there was no observable relationship between the Overcharge and these published margins, and hence that no Complements effect could be established. Mr Harvey recognised the limitations of such an exercise and concentrated more on criticising Professor Neven's simulation model, the burden being on DAF to prove the Complements effect.

(b) Professor Neven's simulation approach[16]

493. Professor Neven made clear in both his written and oral evidence that his assessment of the Complements effect was seriously compromised by the gaps in the data available to him, and in particular by the absence of any confidential data on the prices, costs and margins of trailer/body suppliers. This precluded the possibility of estimating an econometric model of the kind used by both experts for the Overcharge analysis.

494. Instead, Professor Neven employed a simulation approach which starts from a purely theoretical model (in effect a series of equations) purporting to describe how suppliers of trucks and trailers/bodies interact in the competitive process. This model is built around a number of assumptions that were imposed by Professor Neven, for example with regard to the existence of different segments of the truck market, and the number of competing truck and trailer/body suppliers. These assumptions are required in order to make this simulation approach tractable.

495. The model is then "*calibrated*" (i.e. its main parameters are adjusted) so as to be consistent with the (very partial) actual information that was available on the market, covering aspects such as: DAF's truck prices and costs; the Claimants' actual purchases of bodies and trailers; and market-wide data on sales of the relevant products. This calibration exercise concentrated on the post-

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[16] DAF called it a "*calibration model*" but they are referring to the same approach.

Infringement period 2013-2015 so as to create a picture of how the industry would be expected to work absent the Infringement.

496. Given the numerous assumptions on which the simulation model relies, and adding in the data points on the available parameters, this approach is then used to identify the range of possible outcomes that are consistent with a competitive equilibrium in the industry. The same approach is then used to compare the equilibrium outcomes that arise once a 1% increase in truck prices is imposed, replicating an Overcharge. This then yields a wide range of possible outcomes, but in each case Professor Neven chose the outcomes that yielded the smallest trailer/body price reduction in response to the elevated truck price, on the basis that this was a conservative approach to estimating the Complements effect.

497. In its closing arguments DAF drew attention to the fact that the results of this exercise were internally consistent. For example, they showed that for truck segments where DAF's margins and market share was low, the Complements effect is relatively strong. It also noted that simulation models of this kind were routinely used and relied upon by the EU Commission in assessing the effects of mergers. Further, DAF argued that despite the data limitations, in view of this conservative approach "*the Tribunal can have confidence that the level identified in Professor Neven's results does not overstate the complements effect*".

498. Mr Ward KC and Mr Harvey were, however, highly critical of this approach, arguing that Professor Neven's analysis "*is simply incapable of proving DAF's case*" because it relies so heavily on arbitrary theoretical assumptions and contains so little evidence on how the market actually operated. Even if Professor Neven had made the best possible use of the limited data available when conducting his simulation exercise, they argued that these limitations precluded any real possibility of this approach yielding sound empirical results on either the existence or the magnitude of any Complements effect.

499. Whilst some of the Claimants' criticisms (for example the contention that the simulation approach was attempting to predict the past rather than the future) appeared somewhat wide of the mark, their essential concern with reliance on

this simulation approach does seem to us to be justified. The fact that the model's results are internally consistent, for example, merely indicates that the simulation exercise has been competently implemented, but it does not provide any independent assurance that the actual level of any simulation results are robust.

500. Further, there was a notable absence of any attempt to sense check many of the key inputs and outputs of the simulation. For example, Professor Neven admitted for the first time while giving oral evidence that he had discussed the Complements effect with DAF personnel, but said: "*I never got a very clear answer about this*". In its closing submissions, DAF drew attention to a comment in Mr Ashworth's written evidence which referred to customers taking account of both truck and trailer/body prices when negotiating with DAF, but these comments provide no support for the key contention that trailer/body prices would fall when truck prices increased. Despite presumably having a wealth of experience of the Complements effect if it existed, DAF adduced no evidence as to whether it has observed that price changes in trucks gives rise to price changes in trailers/bodies. If there was such an effect, DAF would surely have known this and would have needed to factor it in when negotiating with its customers.

501. Similarly, we have serious concerns about the inputs to the model on trailer/body suppliers' margins which was accepted to be a critical part of the analysis. In principle, the experts agreed that one would expect a smaller trailer/body complements price effect if trailer/body suppliers' margins were low, since a supplier with low margins would have less to gain and more to lose by responding to a fall in demand by lowering its prices.

502. It was also acknowledged that the trailer/body market was a relatively simple industry with more suppliers and lower market shares than the truck industry, which was relatively highly concentrated and supplied more sophisticated, differentiated products with high research and development costs. These facts would suggest an asymmetry between the margins of truck and trailer/body suppliers that would tell against a strong Complements effect. Yet Professor Neven was unable to justify why in his calibration of the model he used

trailer/body suppliers' margins that were in the middle of those for larger and smaller truck suppliers. All Professor Neven could say was that he wished he had better data but he had to make do with the limited data that he did have.

503. Taking these considerations into account, we do not find any good reason to accept DAF's claim that we should have confidence that Professor Neven's simulation exercise provides a reliable (let alone conservative) basis for estimating the size of any Complements effect. Given the paucity in the relevant data and the dependence of Professor Neven's methodology on a network of simplifying (and often arbitrary) assumptions, together with an absence of any significant empirical or real-world underpinning to his results, we find that DAF has come nowhere near to establishing on the facts that there was a Complements effect in this case.

504. We go further and say that this should have been obvious to DAF and Professor Neven when considering whether to pursue this mitigation defence. Yet they embarked on the complex and disproportionate exercise of setting up and implementing a simulation model that they should have appreciated would have been extremely unlikely to yield meaningful results because of the lack of data and evidence. Substantial time and expense both in the preparation of the expert evidence and at the hearing could have been saved with a more realistic assessment of this issue, taking into account the relative importance of it to the outcome.

(c) Mr Harvey's trailer/body suppliers' margins analysis

505. Mr Harvey heavily criticised Professor Neven's simulation model and approach and we have referred to his points above. But he also sought to assess the Complements effect by a rather different approach, focusing on the collection and graphical presentation of published margin data from a number of trailer/body suppliers. He concluded that this failed to show any evidence that trailer/body suppliers' margins fell when the Infringement was in place.

506. Mr Harvey was open on the limitations of this analysis, both with respect to the quality of published data on margins (which relied on the accounting practices

and corporate structures of individual trailer/body suppliers), and with respect to the ability of any such analysis to identify the impact of the Infringement on trailer/body suppliers' margins when no attempt was made to control for all the other factors that might also have an impact on this parameter.

507. Mr Beard KC and Professor Neven heavily criticised Mr Harvey's approach, and generally we feel that those criticisms are justified. A simple graphical representation of a relatively small sample of published financial data without any attempt to control for other factors is extremely unlikely to yield any definitive conclusions on the existence of a Complements effect. We therefore do not believe that Mr Harvey's evidence served any useful purpose, and this must again bring into question what possible value the Claimants expected to derive from asking their expert to conduct this exercise.

(d) Conclusions

508. We and the experts agree that economic theory supports the plausibility that a Complements effect might exist, and that trailer/body suppliers might have responded to the fall in demand for their products after the Infringement increased truck prices by reducing their selling prices and margins. However, plausibility does not prove that it actually happened. The theory needs to be tested against reality and the available evidence in order to show whether there was such an effect and, if so, the size of it.

509. For the reasons set out above, we do not find that Professor Neven's simulation modelling exercise, and the claims he makes for the size of the mitigation, comes even close to establishing that there was a Complements effect in relation to trucks and trailers/bodies. There is no basis for offsetting anything against the Overcharge that we have found proved. We reject this mitigation defence.

M. RESALE PASS-ON

511. A further mitigation defence put forward by DAF concerns the resale of used trucks by the Claimants. As with the Complements issue, we referred to this form of pass-on in our section H on the legal test for causation and again it appears to be accepted that the legal test would be satisfied if it is established on the facts that the Claimants received higher used truck prices as a result of the Overcharge. If the link is established, then the relevant percentage would be offset against the Overcharge. It also follows that, in principle, the purchasers of the used trucks who have paid higher prices would have a potential claim against DAF because the Infringement will have caused the used truck prices to be higher than they would have been in the counterfactual without the Infringement.

512. The relevant figures in relation to this issue are as follows:

	Royal Mail	**BT**
Number of new trucks purchased from DAF during the infringement period	8,108	1,868
Number of the trucks above subsequently resold	6, 252	605
Average new purchase price	£26,843	£23,291
Average resale price	£3,435	£2,018
Average truck age at time of resale	6.5 years	12.4 years
Average mileage at time of resale	358,469	274,512

513. The data on new truck sales was from DAF's databases. Royal Mail provided data in relation to its sales of used trucks, which included data about the resale price as well as the age of the vehicle, its condition and mileage at the time of resale. BT provided data about the price at which it resold trucks but it did not consistently include information about the condition of resold trucks. The lack of detail in the data from BT caused Professor Neven serious problems and he resorted to relying on the results in relation to Royal Mail to estimate the effect on BT's resales of used trucks, even though they would have had very different characteristics and age (the table above shows that Royal Mail resold trucks when they were approximately half the age of BT's). We deal with this point below.

514. Again, Professor Neven and Mr Harvey gave evidence in concurrent session on this issue.

(a) The economic theory

515. The experts broadly agreed that, in theory, there were two possible mechanisms whereby an increase in the price of new trucks could cause an increase in the price of used trucks:

(1) The "*immediate*" or "*substitution*" effect.

This is where there is an immediate impact on the prices received for the sale of used trucks that are sold by the Claimants when they buy new trucks. Since new trucks are to some extent in competition with used trucks, the latter can be considered to be substitutes for the former. A cartel that increased the prices of new trucks will cause some demand to switch to used trucks. This increase in demand for used trucks will in turn tend to raise used truck prices. Since the Claimants are both sellers of used trucks (for example to make way for the new trucks that they buy) they would gain a commercial benefit from these higher used truck sales prices that to some extent compensated for the higher prices they had paid for new trucks.

(2) The "*intertemporal*" or "*reduced supply*" effect.

This effect relates to a longer term impact on the eventual sales price achieved for the trucks that are purchased at the elevated cartel price. Since any overcharge will reduce the total number of new trucks delivered in the UK market, this will make trucks more scarce than they would otherwise be, which in turn will tend to generate a higher selling price for any trucks that the Claimants bought from DAF during the Infringement period when they eventually came to dispose of them.

516. Even though Mr Harvey agreed that these were two theoretical possibilities, he tested whether each of them might apply in this case but concluded that the Claimants were unlikely to have achieved higher prices for the used trucks they sold as a result of the Overcharge. We examine his main points below.

(1) <u>The *immediate* or *substitute* effect</u>

517. Mr Harvey concentrated on the evidence in support of substitutability. He noted that the used trucks sold by the Claimants were very poor, indirect substitutes for new trucks. In Royal Mail's case, used trucks were sold at an average age of 6.5 years and an average price of £3,435; and for BT, the corresponding figures were 12.4 years and £2,018. These used truck prices were respectively some 13% and 9% of the prices that the two Claimants paid for new trucks.

518. Mr Ward KC referred to two paragraphs in Mr Ashworth's witness statement that seemed to support the view that the Claimants' used truck sales were only distantly related to new truck purchases:

> "Royal Mail ran its 7.5 tonne LF trucks for around 10 years, or until they were no longer fit for purpose. This was much longer than most other customers. However, the specification that Royal Mail required for these vehicles meant there was a limited resale market for them."
>
> "Due to the complexity of the bodies, BT tended to run its LF trucks for ten to fifteen years, at which point they were usually scrapped. There was therefore no requirement for a contractual buy-back in the form of an RVG."

519. Mr Harvey and the Claimants contended that these features seriously undermined the notion that used trucks sold by them were effective substitutes

for new trucks. Hence, they emphasised that Professor Neven's argument relies on a "*chain of substitution*" phenomenon, whereby the influence of new truck prices on used trucks prices is (at best) indirect, cascading down from new to nearly-new, and eventually to very old trucks. Mr Harvey said that such a chain would have to be very long and therefore susceptible to being broken and, in any event, weak. The fact that the Claimants' trucks were tailored in nature would make them less substitutable. He therefore regarded this indirect chain as unreliable and untested.

520. Professor Neven did not dispute that the used trucks sold by the Claimants were not direct substitutes for new trucks. But he did argue (with some justification) that if one views a truck as a durable good that delivers a multi-year stream of transportation services to the owner, then the scope for substitution between new and even much older used trucks could have some legitimacy. This was seen, for example, in the evidence that both Claimants had taken the decision to extend the life of their trucks in response to the need to find cost economies after the GFC in 2008. A decision to hold on to an old truck for an additional year instead of replacing it with a new truck does in some sense involve substituting an old truck for a new one, even if new and old trucks might have very different cost and operational reliability characteristics.

521. During the hearing, Professor Neven also referred to the existence of current news reports that the prices of second-hand cars had increased sharply in the current market, a change that is reported to have been caused by the supply constraints in the new car market. Specifically, he referred to a reported 30% increase in the prices of a "*three to five-years-old Ford Fiesta*". Whilst Professor Neven acknowledged the need to be cautious about drawing inferences from one market sector to another, he claimed that such evidence established that the used truck price effect at issue here was an empirically established phenomenon. However, we can place no real weight on this evidence without much more detailed and careful consideration of the facts surrounding the used car market, for example: the scale of the contraction in the supply of new cars; and the extent to which any second-hand price extends to older vehicles nearing the end of their lives. Since both experts agreed that in principle a used truck price effect might arise from a fall in new truck volumes,

this rather anecdotal evidence from the new and used cars market does not add material value to the debate.

522. Because of the theoretical effect, Professor Neven sought to test empirically whether the chain of substitution led to price effects on the used trucks sold by the Claimants in the form of a regression.

(2) The *intertemporal*" or *reduced supply* effect

523. In relation to this second strand of the theory, Mr Harvey argued that any used truck price effect could arise only if the Cartel Overcharge led to a significant fall in the quantity of new trucks purchased. He presented evidence of a low elasticity of demand for new trucks as a whole, meaning the increase in the price of new trucks would not have led to much of a fall in demand. On his analysis, even a 10% Overcharge would lead to a fall in demand for new trucks of between just 1 and 3%, and he argued that such small volume changes would be insufficient to exert a material effect on used truck prices, especially since the stock of used trucks vastly outnumbered the flow of new trucks coming on to the market.

524. Professor Neven contested Mr Harvey's estimate of demand elasticity. He referred to the estimates that had been used by the European Commission in the context of the Volvo/Scania Merger Regulation investigation in 2000, and to the demand estimation that had been done for the Commission by *Ivaldi and Verboven* in connection with that case. Whilst Professor Neven believed that the *Ivaldi and Verboven* estimates for demand elasticity were too high, he noted that the Commission had adopted a demand elasticity assumption for new trucks that was higher than the level cited by Mr Harvey.

525. Mr Harvey said the *Ivaldi and Verboven* estimates had significant limitations and were likely to have overstated elasticity because they were only considering the supply of trucks over 16 tonnes, whereas this case concerns all trucks of 6 tonnes and more.

526. Ultimately, however, Professor Neven argued that his approach to estimating the used trucks effect did not need to rely on any specific figure for demand elasticity, or to engage in detail with the mechanism through which a used truck price effect might arise. Instead, he focused on an econometric analysis to which we now turn.

(b) Professor Neven's econometric model

527. Professor Neven sought to show, primarily on the basis of an econometric analysis, that there was a robust link between new and used truck prices. He presented a variety of estimates, some of which were adjusted in response to criticisms raised by Mr Harvey, but Professor Neven's final analysis showed that for every 1% Overcharge in new truck prices there would be an increase of between 0.7% and 0.9% in the prices received by sellers of used trucks. Professor Neven explained that his estimates should be seen as capturing a combination of both the *immediate* and the *intertemporal* or *reduced supply* effect of new truck prices on used truck prices (as described in the economic theory section above).

528. The data that Professor Neven used in his model was as follows:

(a) Actual prices at which Royal Mail resold used DAF trucks during or after the Infringement. These prices were provided by Royal Mail.

(b) Actual prices of those resold trucks when they were purchased new from DAF by Royal Mail, whether before, during or after the Infringement. These prices were also derived from DAF's transaction data.

(c) Estimated average prices of new trucks similar to the relevant used truck, both when the truck was purchased from DAF and when it was resold. This estimate is arrived at by using an "*auxiliary regression*", comprised of DAF's actual transaction data as to the prices of trucks sold by it.

529. As to the auxiliary regression, Professor Neven explained why he was using the average price of a similar truck at the time when it was bought new rather than the actual price paid by Royal Mail:

> "… if you were a good bargainer, in buying the truck, you would have a low price initially. But when you resell it in the second-hand market, the fact that you had a very good bargain initially would not matter anymore because the substitutes at that point are other trucks that are similar."
>
> "It is important to do that, not to be misled actually by the fact that possibly Royal Mail has obtained very good prices initially. … You know, and of course the fact that Royal Mail has obtained very good prices initially gives it – with the opportunity to monetise that, because when it is reselling the truck, it is reselling the truck in competition with customers that were not as good as Royal Mail in obtaining low prices initially."

530. Professor Neven said that it was necessary to estimate the price for similar new trucks at the time when the relevant used truck was resold to control in the main regression for new truck prices at the time of resale. This control is necessary because new truck prices at the time of resale may affect the price of the used truck.

531. The auxiliary regression controlled for five truck characteristics: series, number of axles, cabin type, horsepower and tractor / rigid. The main regression did not control for any truck characteristics, which Mr Harvey said could have led to problems of bias and multicollinearity.

(c) The problems with Professor Neven's model

532. The Claimants and Mr Harvey raised a number of criticisms against Professor Neven's econometric results.

(i) Data limitations

533. Mr Harvey considered that the data used by Professor Neven was insufficient for a robust regression. Professor Neven's econometric results were based on a very limited range of data, drawn from DAF's new truck prices and Royal Mail's used truck prices. Mr Harvey contended that the absence of data from other truck manufacturers seriously limited the ability of the analysis to capture a market-wide effect.

534. Professor Neven did not accept that this was a serious problem because he was only generating a "*local estimation*" in relation to Royal Mail's trucks and he contended (without presenting any evidence in support) that the closest substitute to a used DAF truck is a new DAF truck. Furthermore, he explained that he had carried out sensitivities that provided him with comfort that the modelling was robust to reasonable changes in the scope of the characteristics of the substitute truck, which would include substitute trucks from other manufacturers.

(ii) Application of model to BT

535. The more significant point in relation to data limitations concerns whether the results obtained from Royal Mail's data on its used truck sales can be extended to apply to BT, as Professor Neven sought to do. Mr Ward KC submitted that Professor Neven could not rely on results derived from Royal Mail's used truck sales to infer the relationship between BT's new and used truck sale prices, given the substantial differences in the two firms' truck fleets and disposals policies. Professor Neven accepted that he had too few observations on BT used truck sales to enable any robust results to be derived from BT's data, but argued that it was "*reasonable to apply my baseline results to BT*".

536. When pressed on this point at the hearing, Professor Neven made a significant concession on his ability to infer results applicable to BT from a sample that was drawn overwhelmingly from Royal Mail's used truck price observations:

> "PROFESSOR NEVEN: I observed, like Mr Harvey, that BT trucks are sold older, I mean, typically around sort of ten/twelve years. It is possible that the relationship between second-hand truck prices and new truck prices is different for that sort of population of trucks but there is no way I can identify this with the data that I have, and the fact that the estimates are robust when I add BT should not be over-emphasised, given --
>
> MR RIDYARD: But you are making a positive argument that the results do carry over or ...?
>
> PROFESSOR NEVEN: I am making the argument that this is all I can say about BT, okay?
>
> MR RIDYARD: That is not the same as saying you think we should rely on the RM results –

> PROFESSOR NEVEN: I am saying that I really caveat this extension of the estimation to BT given the characteristics of the data and given the relative significance of the sample.
>
> MR RIDYARD: Okay.
>
> PROFESSOR NEVEN: So I am not sort of positively saying we should really use it for BT. I think this is indeed a source of concern."

537. We take that as a concession that his results in relation to Royal Mail's used truck prices cannot be applied to BT.

(iii) Multicollinearity and bias

538. As identified above, Professor Neven controlled for truck characteristics in his auxiliary regression but not in his main regression. Professor Neven accepted that omitting truck characteristics from the main regression could lead to a potential bias, in that the effect of the omitted explanatory variables could be wrongly attributed to other variables. However, the inclusion of truck characteristics controls in the main regression as well as the auxiliary regression could give rise to the problem of multicollinearity, where two or more explanatory variables in the model are highly correlated with each other.

539. As described above in the discussion of the econometric results on Overcharge, multicollinearity relates essentially to the concern that if the explanatory variables in a model move in line with one another, it is not possible to disentangle the influence of one explanatory variable from that of another. This makes it inherently more difficult to be confident that the influence of any single variable has been correctly identified.

540. Mr Harvey was particularly concerned with this, specifically that new truck prices and truck characteristics, such as the size of the truck, are obviously correlated with each other. If both are used as explanatory variables in Professor Neven's model, the stated relationship between new and used truck prices might be actually due to the fact that, for example, big trucks command a price premium over small trucks in both the new and used truck markets. Therefore, a finding that new and used truck prices appear to be correlated might simply

reflect the influence of truck specification rather than any causal link between new and used prices.

541. This problem was acknowledged by Professor Neven, and he sought to address it by experimenting with including and excluding different explanatory variables in both the main and auxiliary regressions. He acknowledged, however, that each of these variations led to a series of trade-offs between undesirable features: eliminating an explanatory variable to avoid the problem of the explanatory variables being correlated with one another led to the risk of omitted variable bias; whereas including such variables introduced the multicollinearity problem.

542. Mr Beard KC said that Mr Harvey has exaggerated the extent of the problems that this gives rise to and Professor Neven's sensitivity analyses show that the potential problems of bias and multicollinearity do not preclude a robust empirical result. He also criticised Mr Harvey's own sensitivity analyses, including the splitting of the sample of trucks used between LF and CF models, as being unreasonable and uninformative, largely because the splitting of the sample causes a reduction in the variability of the data which is important for robust identification.

543. In our view this is problematic and the absence of a satisfactory solution to this intractable problem between bias and multicollinearity does undermine the ability of Professor Neven's model to yield robust results.

(iv) Endogeneity

544. Similarly, Professor Neven identified that his model also suffered a potential problem of endogeneity bias. This arises from the fact that common factors might affect both the explanatory variables in his regression and the price that the model is seeking to explain, and which renders conventional ("*ordinary least squares*") regression results both biased and imprecise. For example, an improvement in general economic conditions might be expected to exert an upward influence on both new and used truck prices.

545. Professor Neven proposed to address this by the use of a so-called "*2-stage least squares*" model, in which the problematic explanatory variable is replaced with an "*instrument*" – a different variable that is correlated with the variable of interest but does not suffer from the endogeneity problem.

546. In his closing submissions, Mr Beard KC asserted that the experts were in agreement that a 2-stage least squares model was the appropriate way to address endogeneity. However, we are not convinced that Professor Neven's specific approach provides a definitive or even adequate solution to the problem. It is in practice hard to find an instrument that provides a robust solution to the endogeneity problem, and it is not the case that the simple fact of having done a 2-stage least squares model means that the issues arising from the endogeneity problem have been resolved. We are surprised that Mr Harvey was not more concerned about this and we consider that there are serious issues here.

(d) Conclusion

547. Taking all the above factors into account, we conclude that DAF and Professor Neven have not established on the facts that the Claimants' used truck prices were elevated by the Overcharge on the new trucks they purchased from DAF. There are too many unresolved technical and empirical questions surrounding Professor Neven's econometric analysis, and an insufficiently clear link between the observed facts of the case and the conclusions he draws, to meet the test. This impression is reinforced by the obvious conflict between the concrete description of the Claimants' used truck sales, for example as provided by Mr Ashworth, and the abstract nature of Professor Neven's efforts to measure the effect in question.

548. Accordingly, we reject DAF's resale pass-on mitigation defence because it has not proved, on the balance of probabilities, that the Claimants effectively suffered less harm from the Overcharge as a result of receiving higher prices on the resale of their used trucks.

N. SUPPLY PASS-ON

549. As will become apparent, we are divided in our opinions in relation to the Supply Pass-On ("**SPO**") issue, although we are agreed on the outcome. Accordingly, we deal with SPO in this way:

(1) The majority judgment on SPO, being the Chair and Sir Iain McMillan, which constitutes the CAT's judgment in this respect (when referring to "we" in this first section, we mean the Chair and Sir Iain McMillan);

(2) Mr Derek Ridyard's dissenting opinion on SPO;

(3) Loss of volume; and

(4) Our overall conclusion.

(1) The majority judgment of the Chair and Sir Iain McMillan

(a) Introduction

550. We have set out in Section H(b), our conclusions in relation to the law relating to SPO. These are our unanimous conclusions. We held that, for the purposes of legal causation, there are a number of relevant factors to take into account, none of them being necessary factors but all of which have to be weighed in the balance to decide if there is the requisite degree of proximity to establish a direct causative link between the Overcharge and the prices charged by the Claimants to their customers. Those factors include the following:

(1) Knowledge of the Overcharge or the specific increase in the cost in question;

(2) The relative size of the Overcharge against the Claimants' overall costs and revenue;

(3) The relationship or association between what the Overcharge is incurred on and the product whose prices have been increased; and/or

(4) Whether there are identifiable claims by identifiable purchasers from the Claimants in respect of losses caused by the Overcharge.

551. There is no dispute about knowledge: neither of the Claimants knew anything about the Infringement or the Overcharge at the time. Nor were they aware of any particular increase in their truck costs. Therefore, they could not be said to be reacting to the imposition of the Overcharge by increasing their prices. They could not be said to be specifically seeking to address the costs increase.

552. It is also accepted that the size of the Overcharge was, for both Claimants, tiny relative to their overall costs and revenue. DAF says that size is irrelevant if, as a matter of fact, it was passed on to the downstream customers. Size is also linked to knowledge in that the larger a cost increase is, the more likely it is to be noticed and therefore specifically addressed. But the Claimants' main point is that their prices were not "*fine-tuned*" enough to be able to conclude that they were actually higher as a result of the Overcharge.

553. As to the relationship or association between the trucks bought or leased by the Claimants and the products sold by them, this is clearly not present in the same way that it is on the Complements or Resale Pass-on issues. But it can fairly be said that, in relation to Royal Mail, customers who purchase stamps, for example, are essentially purchasing transportation services for their mail and that this includes the truck costs. But that cannot really be said in relation to BT's products although it was treated by it and its regulators as an input cost that had been internally allocated to a vast array of products that it was selling to its customers.

554. The question of identifiable claims by identifiable purchasers is an important albeit not necessary factor. The factual question with which we are concerned is, as defined by the Supreme Court in *Sainsbury's*, whether by passing-on the cost to their customers the Claimants "*transferred all or part of [their] loss to others*". It might be thought that the "*others*" should be identified, whether as a class or not, together with at least an approximation as to the amount of the loss that was so transferred.

555. The experts who opined on this issue, Mr Bezant for DAF and Mr Harvey for the Claimants, were agreed that they were engaged in an analysis of what would have happened in the counterfactual if there was no Overcharge. As there were regulatory price controls in place for much of the Infringement period, the question is largely whether there would have been a different outcome to the respective regulator's price control in the counterfactual, as the Claimants tended to price up to the price cap. Mr Bezant was correct to state that there would be a different set of costs in the counterfactual as the regulator would not know about the Overcharge or increase in costs in the actual world. However, Mr Bezant also was of the view that all other discretionary elements or matters of regulatory judgment would be exercised in the same way in the actual and counterfactual; the only thing that would be different would be the cost base.

(b) Does size matter?

556. We believe that size does matter and that in this case it is a highly significant factor. Mr Ward KC used a number of metaphors, such as a "*needle in a haystack*" or "*a grain of sand on the beach*", to describe what he said was the insurmountable difficulty in DAF's case on SPO. He was roundly criticised by Mr Beard KC for using misleading hyperbole. But the facts speak for themselves and were not challenged by DAF.

557. In relation to Royal Mail, Mr Harvey estimated that the Overcharge never exceeded 0.05% of its relevant revenue in any year, and was as low as 0.001%. If the entire Overcharge for a given year was allocated to the price of a stamp (one of Royal Mail's million price points), that entire Overcharge would represent 0.014p on the price of a stamp. This was based on Mr Harvey's Overcharge estimate which averaged at 9.95%; whereas we have found the Overcharge to be 5%. Therefore, the actual size is around half of Mr Harvey's estimates.

558. In the case of BT, the Overcharge is even smaller. Openreach, which the experts agreed is the most important part of BT for the purpose of the SPO analysis, had annual revenues in 2015/16 (for example) of £5.2 billion. Mr Harvey has

estimated that the Overcharge allocated to Openreach was worth a total of less than 0.003% of Openreach's revenues over the entire period.

559. Both Royal Mail and BT sold a vast number of different products, some at low prices in very high volumes. In 2003/04 Royal Mail sold 22 billion products or services. An Overcharge of £10 million in that year (this is far larger than it was) would therefore have had a cost impact on each item sold of 0.045p on average. BT has millions of customers for landline or broadband services and the impact would have been even smaller.

560. Mr Beard KC said that there is a simple question for us, namely whether the prices of the Claimants' vast portfolio of products are likely to have increased because of the inclusion of the Overcharge in the Claimants' costs stack. And he says that the size of the unknown increment to truck costs representing the Overcharge is irrelevant if it can be shown that it did produce a different result. He submitted that the Claimants were suffering from the "*fallacy of small effects*" adopting what Professor Neven had said in another context that big effects are the combination of small effects and so if the small effects are ignored, there cannot be any big effects either. However, we think that that rather misses the point, as the question is whether the small increase in truck costs actually caused a downstream price increment, not whether it combined to have some larger effect.

561. In fact, Mr Beard KC actually tried to turn the relative smallness of the Overcharge to his advantage. He submitted that Mr Bezant had showed that the regulators adopted very granular modelling such that the headroom that they were allowing Royal Mail in one instance was down to a few million pounds. This meant that even if there were relatively small differences in the costs figures it would be likely to have a direct effect on the price cap.

562. Furthermore, Mr Beard KC submitted that the regulators basically set their models and structures in advance and that this was when regulatory judgment was applied to the process. In other words, their regulatory judgment and discretion shaped and was already baked in to their modelling. This meant that it was thereafter a mechanical exercise to input the costs stack and, if there was

an increase, however small, in one particular item, that would work itself through the system to a different output. That sort of result could only be achieved if there was only a very small increase to an input cost because a large increase may actually affect the regulatory judgments that had gone to shape the model.

563. However, this strikes us as potentially inconsistent with Mr Beard KC's acceptance on an earlier occasion (see [202] above) at the March 2021 CMC that "*it is insufficient to allege that all input costs of the business feed into business planning and that businesses recover their costs.*" What he meant there was that DAF recognised that it had to prove something more than that the Claimants sought to recover all their costs and that all costs were taken into account in their normal planning and budgetary processes. Because of the formalistic nature of the regulatory process, we and the experts have much more material than would otherwise be available as to how the Claimants set their prices. But if that merely shows that all costs were taken into account, it does not necessarily show that every small increase in costs caused an increase in prices.

(c) Cost recovery

564. Looking at the notion of cost recovery in a bit more detail, this seemed to underpin much of Mr Bezant's analysis, particularly in relation to the unregulated periods. All businesses seek to recover their costs and make a profit. But in itself, that tells you nothing about whether a price increase has been caused by an increase in costs.

565. Mr Bezant said that he still thought that cost recovery as an objective was "*informative*" as to whether prices were increased by a costs increase. He said:

> "Cost recovery as an objective and as a basis for the way that you organise your affairs and set your prices, and cost recovery as an outcome through profits can tell you something about the extent to which you were trying to recover your costs and, over the long haul, you have recovered your costs. It is not determinative, but I think it is informative."

566. Mr Bezant also relied on various scatter plots which he said illustrated the relationship between costs and prices. However, a relationship does not mean that a very small increase in one particular cost input would inevitably lead to a price rise. The general proposition of a relationship cannot itself prove the requisite causation.

567. In an unregulated world there is a broad range of factors that are taken into account in setting prices at the profit-maximising level after a costs change, in particular the impact on sales volumes. Furthermore, in the regulated world, there is overlain regulatory judgment which takes into account the public interest and relies on forecasts and judgments as to future sales and volumes. The regulatory objective was generally to allow the Claimants to recover their efficiently incurred costs plus, in most cases, a profit allowance. Cost recovery, as an objective, is therefore assumed. The question is whether margins are maintained by automatically raising prices by the amount of a costs increase, however small that increase may be.

(d) The expert evidence

568. Mr Bezant sought to show that it was highly likely or at least more likely than not that an increase in truck costs, even a tiny increase, would have affected the level of the price cap set by the respective regulators. Even though truck costs were not a specific category in Royal Mail's costing systems, they were included and the detailed and precise way in which the price cap was calculated shows that a different set of costs in the counterfactual, without the Overcharge, would have led to a lower price cap.

569. Mr Harvey concluded that SPO was highly unlikely because of the smallness of the Overcharge and the broad range of views open to the regulators in the exercise of their considerable discretion. The mere fact that the Overcharge would be included in the costs stack presented to the regulators did not mean that the price cap would have been different in the counterfactual.

570. Mr Beard KC heavily criticised Mr Harvey's evidence for two particular mistakes that he made which he admitted. These concerned the number of leased

trucks, which Mr Harvey considerably understated and an issue around irrecoverable VAT. While regrettable, we do not think that these are particularly relevant to the conclusions that Mr Harvey came to in relation to SPO.

571. It is more relevant to consider where the expert evidence actually takes us in this case in relation to SPO, given our conclusions on the law.

572. As we have already said, in relation to the four factors identified in [550] above, none of them are present in this case. The absence of knowledge, together with the tiny size of the Overcharge, means that there was obviously no specific decision by the Claimants to increase prices in response to the increase in costs. Nor is there any direct association between truck costs and the products sold by the Claimants, even though an element is properly attributable to each product. And even if it can be shown that there was an increase in prices because of an increase in costs, it will be impossible to identify which prices in relation to which specific products actually increased because of the Overcharge. Therefore, we find it difficult to see how there can be sufficiently identifiable purchasers from the Claimants who could make a claim in respect of the Overcharge or to whom it could be said that the loss suffered by the Claimants had been transferred.

573. In the circumstances, we do not think that DAF can satisfy the legal test for causation which requires the Overcharge to be a direct and proximate cause of the increase in specific prices. Even if, as a matter of forensic accountancy, DAF is able to show that the miniscule Overcharge can be traced through the series of internal steps, judgments and regulatory intervention resulting in a higher price setting, the absence of the four factors means that the Overcharge is too remote from the downstream prices. While the four factors are not themselves decisive or necessary, we think that in a situation where none are present, the evidence of factual causation needs to be that much stronger so that the requisite proximity can be established.

574. We will still examine the evidence and the experts' opinions to see if it is strong enough to overcome the absence of the relevant factors we have identified. Despite Mr Bezant's careful, meticulous and professional approach to the

material that he had, we are clear that his evidence does not sufficiently bridge the gap between the Overcharge and downstream prices so as to establish on the facts the requisite proximity to satisfy the legal test for causation.

(e) Royal Mail

575. There are five relevant periods in relation to Royal Mail:

(1) 1996-2001 the "**Government Period**";

(2) 2001-2003 First Price Control ("**PC1**");

(3) 2003-2006 Second Price Control ("**PC2**");

(4) 2006-2012 Third Price Control ("**PC3**")

(5) 2012 onwards the "**Ofcom Period**".

576. As they together formed the majority of the costs allocated to the Overcharge, DAF preferred to concentrate on the PC2 and PC3 periods when Royal Mail was regulated by Postcomm. There was much more information available in relation to those periods and Mr Bezant stated that his conclusions were more certain as a result. Mr Beard KC, no doubt for good forensic reasons, ordered his written submissions to deal with the periods in the following order: PC3; PC2; the Ofcom Period; and the Government Period and PC1 (together). By doing so, he was hoping that findings in relation to PC2 and PC3 would influence the findings in the other, largely unregulated, periods.

577. However, we will deal with the periods in chronological order. It is also necessary to look at Royal Mail's unregulated products and Parcelforce.

578. Royal Mail had highly detailed and sophisticated systems for recording and allocating its costs, as one would expect. Indeed, throughout almost all of the period, Royal Mail was obliged by European law (as the universal service provider) to record and understand its costs in detail; to allocate those detailed

costs to its different activities and products; and to set prices so that they reflected those costs.

579. Trucks were purchased by Royal Mail Fleet and internal charges were raised against other business units. There was a complex chain of cost allocation to individual products.

580. Royal Mail did not record "*truck costs*" as a specific category in its costings systems. The category of "*vehicle costs*" was used but the vast majority of the vehicles that that included were vans. The category also included depreciation, fuel and maintenance. Thus, there was no way of knowing precisely how much of the charges in the costing models related to the capital cost of the vehicle, let alone a truck. It was therefore not clear how much of the "*vehicle costs*" actually related to the capital cost of trucks, of which the Overcharge would form a small portion.

581. Mr Bezant recognised this issue but said that it did not affect his ability to trace the Overcharge through to prices:

> "… [w]hen you look at it at that level of reporting or presentation you do not see trucks. But my point was, from the way costs are built up and allocated in a very precise way, then they are included. They may not be separately identified, but they are included."

582. The Claimants said that the multiple steps involved in internally passing on the costs and the judgments involved in doing so constitutes a significant break in the chain of causation. Mr Bezant accepted that:

> "The cost allocations do involve judgment, for example how much a particular product uses a particular resource, but once those judgments are made, the cost flows through the system."

583. The process of cost allocation certainly adds complexity, judgment and distance between the incurring of the original cost and the ultimate pricing of Royal Mail's products.

584. We will now look at whether the Overcharge can indeed be tracked through to increases in prices by reference to the distinct periods and then in relation to unregulated products and Parcelforce.

(1) The Government Period

585. At this time, Royal Mail was a statutory corporation under the control of the government. There was no price control regulation and so there was considerable discretion as to its pricing. It was required to meet an external financing limit.

586. The experts estimated that between 7%-9% of the Overcharge was incurred in the Government Period.

587. Mr Harvey concluded that it was highly unlikely that Royal Mail increased its prices as a result of the Overcharge during the Government Period. Mr Bezant, however, considered it "*more likely than not*" that Royal Mail would have set lower prices in the counterfactual as "*there was likely a relationship between RMG's costs and prices*" during this period and he quantified its level at 75%. Mr Bezant did "*acknowledge the limitations in the available evidence for this period*" and provided alternative quantifications of 37.5% and 0%.

588. In coming to that conclusion, Mr Bezant mainly relied on a broad and generalised link between costs and prices. This was based on some unparticularised factors such as: the implementation of a cost monitoring system; that Royal Mail was required to set prices "*geared to costs*" under the 1997 Postal Services Directive; it had a wide range of products; it made only a small operating profit; and it was set targets by agreement with the government based on its financial performance. We agree with Mr Ward KC that this is wholly insufficient to show that a small increase in one input (truck costs) caused a similar or any increase in prices. Merely pointing to a possible link or relationship between costs and prices does not prove causation.

589. Mr Bezant recognised the limited information available for this period. When challenged as to whether he could come to such a conclusion when the increase to truck costs, and the truck costs themselves, was so small by comparison with the £5 to £6 billion of total costs, he said

> "So what I have said here is, given the information we have and given that truck costs are part of the total costs, total costs are being treated equivalently,

> that is aggregated cost, truck costs, are part of it, to the extent there have been differences in costs, there would be an expectation of differences in prices, but there is very limited information with which to work"

590. Mr Harvey referred to a number of factors that he said showed that such a small increase in costs would not have caused a commensurate increase in prices. These included: the relative size of the Overcharge as against the total costs and revenues; the prices of first and second class stamps were frozen between 1997 and 1999; first class stamps only rose by 1p in April 2000; and the fact that there were other non-cost factors that were highly influential on pricing particularly in relation to first and second class consumer products. Mr Bezant suggested that he expected other commercial factors to be the same in the counterfactual so that they would not affect the link between costs and prices. However, that depends on there being a highly mechanistic link between the two, where no commercial judgment is applied. Mr Bezant accepted: "*there will be moments and there will be products where the pricing decisions do not respond to changes in costs*."

591. The trouble with Mr Bezant's argument is that it assumes that a tiny increment in one costs input will inevitably lead to an increase in downstream prices. However, there is simply no evidence that this is what happened in this period and we reject DAF's case that there was any SPO of the Overcharge in it.

(2) <u>PC1</u>

592. Both experts agree that there is a close link between the Government Period and PC1 and that the extent of SPO in the Government Period would largely be determinative of PC1. This is because there was a price freeze in nominal terms for Royal Mail's "Reserved Area" products and in real terms for products that were subject to limited competition. Price regulation in PC1 was not linked to costs. Approximately 14% of the Overcharge claimed by Royal Mail is applicable to PC1.

593. Mr Bezant concluded that the Overcharge incurred during the Government Period would continue to be passed-on at a rate of 75% in PC1. He conceded that there could be no SPO in respect of trucks procured during PC1. He said

therefore the weighted average SPO for PC1 was 57%. He also accepted that because of the uncertainty over the Government Period there could have been 25% or even 0% SPO.

594. We have already found that there was no SPO for the Government Period. Accordingly, there can be no SPO for PC1.

(3) PC2

595. The amount of the Overcharge attributed to PC2 by the experts is approximately 26%. It is therefore significant in terms of Royal Mail's overall claim.

596. During PC2, the vast majority of Royal Mail's products remained subject to price regulation. Postcomm, the regulator, implemented glidepath controls in the form of an RPI-X, or P_0-X, tariff basket control. Glidepath controls are intended to encourage the regulated entity to make efficiency savings and the allowed revenues reduce during the period in real terms. The P_0 and X percentages are fixed at the outset and they worked as follows: a P_0 of 3% meant that Royal Mail's allowed revenues in the first year of the price control were its base year costs plus 3%; and an X (or efficiency factor) of 1% meant that the allowed revenues would decrease for each following year by that amount for the remaining period of the price control.

597. For PC2, those were the figures that were set by Postcomm: P_0 of 3%; and X of 1%. These percentages would be applied to the weighted average of prices in the basket at the outset of PC2. Additionally Royal Mail's scope to increase average prices of individual products within the basket was subject to sub-caps which prevented it from increasing prices by more than 2.5% above the level implied by the level of the price control in each year for each product.

598. Unlike PC3, PC2 was a cash-based control meaning that Royal Mail was assumed to have fully financed all capital purchases made prior to the start of the period and that all new capital assets would be acquired without financing.

599. Royal Mail's price-controlled revenue during this period was £17.8 billion whereas the estimated Overcharge attributable to this period was in the region of £8 million (although this would be approximately halved now by reference to our findings on the Overcharge percentage). On any view that is a tiny amount but Mr Bezant concluded that Postcomm's decision on the level of the price cap, whether by a change to P_0 or to X, would have likely been different in the counterfactual without the Overcharge. He came to that conclusion for two principal reasons: (i) because Postcomm would want to maintain the headroom figure of £21 million; and (ii) because of the underlying relationship between Royal Mail's truck costs and prices.

600. Mr Harvey said that it was highly unlikely that there was SPO during PC2 on the general ground that Postcomm took into account a range of evidence in order to exercise its regulatory judgment in setting allowed revenues. More particularly it allowed additional revenues of £170 million per year of PC2 to fund Royal Mail's modernisation programme, something which Royal Mail had been asking for since 2001. This was a good example of the broad regulatory judgment that Postcomm exercised in setting the price cap.

601. In relation to the £170 million requested by Royal Mail, Postcomm was originally minded to allow it in the form of a P_0 of 3% but an X of 2.5%, wanting to match it to forecast inflation so that average prices would be stationary. However, at a late stage in the process, Postcomm decided to change the efficiency challenge represented by the X to 1% because of the: "*unusual…level of uncertainty surrounding two key determinants of Royal Mail's forecast, namely the realisable level of its costs savings given its Renewal Plan, and its likely future levels of business volume given market developments.*" ([3.5] of Postcomm's Final Price Control Proposals dated February 2003). After setting out three different options for P_0 and X, it decided on 3% and 1% respectively, taking into account "*customers' desire to see a reasonably smooth profile of prices over time, and avoid prices going up in one year, only to come down in the following year, or vice versa.*" ([7.49]). Postcomm considered that this "*would best achieve the discharge of its duties in setting Royal Mail's second price control.*"

602. Mr Bezant accepted that this shows the exercise of regulatory judgment "*at the very end of the process*". While he still maintained that a different set of costs at the outset (ie without the Overcharge) would have led to different P_0 and/or X percentages, we think that his analysis fails adequately to account for the overarching regulatory judgment that ultimately determines the price cap.

603. As to the headroom (the amount of positive cash flow implied by Postcomm's modelling of efficient costs and forecast volumes and product mix assumptions), the options identified by Postcomm for PC2 had a range from £2 million to £21 million. Mr Beard KC submitted that this shows that Postcomm was seeking to match as closely as possible projected costs and projected revenues and in the context of forecast costs of £17 billion, the headroom of £21 million showed that it was operating on very fine margins of a few million pounds. This meant that an Overcharge of £8 million would be a significant figure and would ultimately affect the price cap.

604. Mr Ward KC submitted that there was no magic in the £21 million headroom figure which is just the arithmetic result of the decision that Postcomm had reached based on much broader regulatory considerations. Postcomm itself said that it set the control on the basis of its "*central view of volumes, operating, capital and renewals expenditure*", with the use of the word "*central*" indicating that there were a range of views and assumptions that came into it. In particular volume forecasts were notoriously imprecise and again therefore judgment had to be applied in that respect. Therefore, there can be no good reason to conclude that Postcomm would not have allowed a slightly higher headroom that would have been brought in the counterfactual by a lack of Overcharge.

605. We agree with the Claimants that there is no evidence to suggest that Postcomm set the price control to achieve a specific headroom figure. That was not the basis on which it decided on the option of P_0 of 3% and X of 1%, over the other options; nor was it the reason it changed from an X of 2.5% late on in the process. We do not think that Mr Bezant has demonstrated that it is highly likely, or at least more likely than not, that the level at which Postcomm set the price controls in PC2 would have been different without the tiny Overcharge.

606. There is a further problem for DAF's case. The price control is an overall cap on Royal Mail's revenue but it does not dictate what prices Royal Mail must set. It was accepted by Royal Mail that it generally sought to recover the maximum allowed revenue and therefore would price up to the cap. But this could be quite challenging as Royal Mail would have to predict sales volumes and the mix of products and assess the impact on demand of price changes. This requires a substantial degree of commercial judgment and imprecision is inherent in the process. Far from it being a mechanical exercise that an increase in a tiny amount of costs will inevitably feed through to the price cap, the price setting process for each product is much more complicated than that and involves judgment, both commercial and regulatory, as well as inherent uncertainty and imprecision. It will also be impossible to identify into which of Royal Mail's products the Overcharge was passed on and therefore to whom the loss was transferred.

(4) PC3

607. Similar issues and conclusions apply to PC3, which is the most significant period because it represents approximately 32% of the Overcharge. Mr Harvey estimated this at around £10 million (but, again, this is about half in our estimation). Postcomm again used glidepath controls.

608. For the same reasons as in relation to PC2, principally the size of the Overcharge and the influence of regulatory and other judgments, Mr Harvey concluded that SPO was highly unlikely to have occurred. Mr Bezant however concluded that there was a high likelihood of 100% for the Overcharge classified as opex for regulatory purposes and around 140% SPO for the amount classified as capex.

609. The latter distinction was the principal difference between PC2 and PC3: Postcomm used a regulatory asset base ("**RAB**") control in PC3, rather than the cash based control used in PC2. Postcomm's modelling of costs and revenues was therefore different and allowances could be made for depreciation and profit by reference to the RAB. When modelling Royal Mail's efficient costs for PC3, Postcomm made an assessment of the value of Royal Mail's capital assets purchased prior to the start of PC3 and estimated the value of the capital

assets Royal Mail expected to purchase during PC3 and included in its modelling: (i) an allowance for depreciation of the regulatory asset based on the useful economic lives of Royal Mail's assets; and (ii) an allowance for a return on capital calculated by applying a pre-tax real weighted average cost of capital to a RAB of £2.3 billion.

610. In setting the control, Postcomm identified two baskets of products: the "*captive basket*" which was roughly equivalent to the Reserved Area products in PC1; and the "*non-captive basket*" which was similarly equivalent to the PC1 category of products subject to limited competition. Postcomm determined the price caps as a P_0 of 4% and an X of 0.14% for the captive basket and 1.96% for the non-captive basket. The X was set to two decimal places which was the subject of some debate at the hearing because DAF's case is that this meant that the price control was set with a "*high degree of precision*". However, Mr Ward KC showed that Postcomm was in reality using one decimal place and that the X was only stated to two decimal places so as to "*sculpt*" the price control to ensure that the initial price rise, ie the P_0, was 4%, which meant that arithmetically the X had to be calculated with more precision.

611. The other major difference between PC2 and PC3 was that the market in which Royal Mail was operating was changing dramatically, in particular because of "*e-substitution*". After the price control was set, Royal Mail suffered unpredicted losses of volume and it could not recover its projected revenues during the period. This was seen as a serious failure of Postcomm's regulation, with the conclusion of a report carried out by Mr Richard Hooper CBE in 2007/08 and updated in June 2010 that "*the current regulatory regime is not fit for purpose*". It recommended transferring regulation to Ofcom, which was planned from 2010. However, PC3 was extended (with modifications) from its initial four-year period to 2010 to cover the period of the transfer to Ofcom in 2012.

612. As a result of the failure to forecast loss of volume, Royal Mail's cashflow turned out to be some £3 billion lower than Postcomm had forecast and this threatened its financial stability. Clearly this calls into question whether Royal Mail did in fact recover the Overcharge costs. Mr Bezant suggested that Royal

Mail's *ex post* performance was irrelevant because it cannot affect the only relevant question which is whether price control set *ex ante* would have been different absent the Overcharge. However, we agree with Mr Harvey, that what happened relatively quickly after the PC3 price control was set, shows that the assumptions and regulatory judgments that were made by Postcomm were deeply flawed and indicates that the forecasts of Royal Mail's costs and volumes were not fine-tuned enough to ensure that the miniscule increase in costs represented by the Overcharge was reflected in the price control.

613. Unlike with PC2, Mr Bezant could not identify any particular headroom that Postcomm was aiming for. He was unable to say whether "*in the counterfactual scenario, Postcomm would have determined the same, or a different level of headroom (either higher or lower).*" This indicates that there is a lack of precision in the price control and that regulatory judgment was being exercised in relation to a wide range of matters within the process. For example, there were significant differences in Royal Mail's and Postcomm's volume forecasts and changes to the assumptions had serious financial implications, dwarfing the size of the Overcharge. Mr Bezant was unable to say whether Postcomm's modelling would have been sufficiently refined to be able to compensate Royal Mail for loss of volume through infra-marginal sales.

614. Mr Bezant's conclusion was based on the assumption that Royal Mail's truck costs, including the Overcharge, were included in its costs forecasts and RAB estimates. Mr Harvey accepted that to the extent that truck costs were included in the £47 million of owned vehicles purchased prior to PC3, then the Overcharge would have likely been included in the opening RAB.

615. In relation to forecast capital costs for PC3, the experts differed on whether Postcomm would have come to a different determination of Royal Mail's efficient capital expenditure in the counterfactual. Mr Bezant was convinced that Postcomm and its advisors, LECG, would have done a precise calculation of future capital costs that included truck costs and the Overcharge. However, it appears that Royal Mail's forecast of vehicle costs was £484 million and this was confirmed by Mr Jeavons on behalf of Royal Mail and Mr Harvey to have been calculated by a sophisticated analysis but that it was not an exact science

and it was difficult to say now what historical data was used. In any event, Royal Mail's figure was cut down by LECG to £380 million for the period, or around £95 million in each year of PC3. LECG did this because of the limited detail that Royal Mail had provided and its own calculations. Mr Bezant accepted that it was not clear what LECG had done to arrive at the lower figure but said that he had "*no reason to believe [LECG's adjustment] was not done precisely.*"

616. Therefore, as explained above, there was already some uncertainty in relation to the vehicle costs figure which was mainly in respect of vans, not trucks, and included items such as fuel and maintenance. Even if the Overcharge was included in these figures, it is unclear whether it would have survived LECG's recalculations and the serious reduction that it applied. If it is uncertain whether the Overcharge is even in the costs figures being considered by Postcomm, there must be more uncertainty as to whether it could have affected the price control.

617. Accordingly, we do not consider that DAF has proved factual causation in relation to PC3.

(5) Ofcom Period

618. The Ofcom Period falls after the Infringement ended, so no new Overcharge related costs would have been added to Royal Mail's costs base. Both experts were agreed however that approximately 7% of the Overcharge should be allocated to the Ofcom Period.

619. From 2012 onwards, the postal market was substantially deregulated. The only regulatory controls on Royal Mail's pricing were: some safeguard caps on second class letter, large letter and sub-2kg parcel services (around 6% of Royal Mail's revenue); a margin squeeze test on certain of its bulk letter services (0.6% of revenue); and a general obligation to provide its USO products and services at an affordable, uniform public tariff and on fair and reasonable terms across the UK and to places outside the UK.

620. Mr Barnes gave evidence for Royal Mail as to its price setting in this period. He was clear that it was not on a costs-plus basis. While costs are an important

consideration, many other factors all played a part in pricing in the Ofcom Period. Mr Barnes said in his witness statement:

> "[✂]"

621. Royal Mail was therefore setting its prices more like any other profit-seeking commercial organisation. In explaining a Royal Mail Group Pricing Strategy Board document from March 2013, Mr Barnes indicated the relevance of "*product margins*" on different products:

> "THE CHAIR: So you are saying that the product margins, what we were looking at, that is a check on the prices?
>
> A. Yes.
>
> THE CHAIR: Rather than the way prices were being set?
>
> A. [✂]"

Royal Mail's approach to pricing was summarised as follows:

> "SIR IAIN MCMILLAN: It is just to have absolute clarity here. What I think you appear to be telling the tribunal is that, whilst you have regard to costs and in an ideal world would want a margin above the costs to ensure profitability, what in fact you do is, whilst you have regard to that, you price on the optimum yield curve and sometimes that margin will be greater sometimes it will be smaller?
>
> A. Exactly."

622. Mr Bezant's opinion was that there had been 100% SPO in the Ofcom Period. This was largely based on what he said was the strong relationship between costs and prices. But the factors that he relies on are largely the factors that would be present for any profit-maximising business and Mr Beard KC has already accepted that SPO cannot be proved by simply pointing to the fact that a particular cost was taken into account in a business's ordinary budgetary and pricing processes. We do not consider that his evidence gets anywhere near demonstrating that the connection between costs and prices was so strong that it is highly likely, or even more likely than not, that prices would have been lower in the counterfactual without the Overcharge.

(6) Unregulated products in PC2 and PC3

623. Royal Mail's unregulated products comprised a small fraction in terms of its overall revenue. There were also some regulated but non-price controlled products. Together the experts were broadly agreed that these formed approximately 10% of Royal Mail's revenue during the Postcomm period.

624. DAF's request for transaction-level data in relation to these products was rejected by the CAT at the March 2021 CMC on the grounds of proportionality. There was therefore limited information available in respect of these products. Accordingly, DAF simply invited us to adopt the same approach in relation to SPO for these products as we did for the regulated products in PC2 and PC3. In other words, DAF is asserting that there was 100% SPO on the basis of the broad relationship between costs and prices that underlined much of its case on PC2 and PC3.

625. We have however rejected DAF's case on SPO in both PC2 and PC3 and clearly we must therefore reject it in relation to unregulated products and non-price controlled products as well. It suffers from the same flawed bases of generalised cost recovery and the smallness of the sums in question. There is no evidence to support the claim that the prices of these products would have been lower in the counterfactual.

(7) Parcelforce

626. Parcelforce has been a distinct brand within the Royal Mail Group since the 1990s. It has its own products and services, an internal profit and loss account and its own dedicated pricing team. Mr Cahill worked in the finance function for Parcelforce since 2005 and gave evidence for Royal Mail in relation to its pricing.

627. Until approximately 2002, Parcelforce was responsible for delivering "*standard parcels*" (i.e., first and second class stamped parcels). Following restructuring, Parcelforce's products and services have been limited to premium, express collection and delivery services of parcels of up to 30kg. It provides these products and services to: (i) consumers (15%-20% of Parcelforce's revenue);

(ii) account/business customers (comprising the bulk of Parcelforce's revenue); and (iii) international customers.

628. The two main areas of disagreement between the experts were as to: (a) the proportion of the Overcharge attributable to Parcelforce for the purposes of SPO; and (b) whether there was any SPO and, if so, how much.

629. As to allocation of the Overcharge, Mr Bezant estimated it to be 5%; Mr Harvey estimated 12.5%. The basic difference between the two is that Mr Bezant relied on the relative revenues between Parcelforce and Royal Mail whereas Mr Harvey was of the view that a higher number was justified because Parcelforce used proportionately more trucks than its share of revenue would otherwise have suggested. Mr Harvey therefore used information on the charges Parcelforce paid for its use of trucks. There was sensibly not much cross-examination on this even though both experts had, perhaps overly, intricate arguments in relation to this in their reports.

630. We do not think it necessary to decide this point. The debate rather emphasises how difficult it is to identify the actual amount of Overcharge that DAF is saying was passed on by Parcelforce to its customers. On either view, it is very small relative to Parcelforce's revenues: Mr Harvey's higher estimate comes out at between 0.001% and 0.13% of Parcelforce's revenues. Mr Bezant's view would be that the proportion is considerably lower, which does not necessarily assist DAF in this respect.

631. As to pricing, Parcelforce had three broad categories of rates charged to customers:

(1) General consumer tariff rates: These are published (non-account) rates targeted at consumers and small businesses;

(2) General business tariff rates: These are published full-priced rates for business customers. In practice very few larger business customers paid full-price rates, instead preferring to open an account and agree a contract discount.

(3) Bespoke account rates: Parcelforce has agreed bespoke rates with the majority of its business customers since at least the late 1990s, and likely prior to this. Parcelforce's biggest customers were escalated to the central pricing team.

632. The tariff rates in (1) and (2) above, including fixed contract discounts from them, were explained by Mr Cahill and Mr Harvey and neither were cross-examined on them. They made clear that a range of factors were relied upon by Parcelforce in setting these published prices and they were not changed every year. When they did change it was generally by reference to RPI and not by reference to truck or any other of Parcelforce's costs. Mr Bezant sought to suggest there was a relationship between costs and prices but he conceded in his oral evidence that if there were more factors taken into account in price setting then it was not a simple cost plus approach. Accordingly in relation to the tariff rates and any discounts to them, there can have been no SPO.

633. DAF focused far more on the bespoke rates negotiated and agreed with most of Parcelforce's business customers. Mr Beard KC submitted that Mr Cahill had confirmed in his evidence that the bespoke prices were, for most of the relevant period, generated by a model that used a costs plus approach, with costs and margin inputs. Therefore, the models used by Parcelforce were updated to reflect small changes in costs and these would affect the prices agreed with the business customers.

634. However, we do not think that that is a fair summary of Mr Cahill's evidence. He exhibited a one sheet model dated 2007 to his witness statement which appeared to suggest that margins were manually input into the model. However, in his oral evidence he said that the models actually had another sheet to them that had inputs for the price. There were other examples of models in the disclosure, for 2008 and 2012, that had this extra sheet showing inputs for the price and Mr Cahill confirmed that the 2007 model would also have had that sheet. So his evidence was that costs and a price were input into the model and that produced a margin, which would have to be approved or rejected at the appropriate level.

635. Mr Cahill explained the process in his witness statement:

> "It is important to bear in mind that the pricing models used as part of the pricing process do not define the rate charged for a given product/to a given customer. The pricing model simply allows Parcelforce to understand the rate at which it would need to price to achieve a particular margin. The data in the pricing model is just one of the factors that Parcelforce takes into account when deciding on an initial price to propose to a customer – the competitive environment and the strategic importance of the customer also play a role."

And in his oral evidence he said the models were used: "*to produce the estimated cost of delivering each mail item and estimated contribution margin if we price at a particular level*." And then continued:

> "The price that we input into the pricing model is the price we think we need to charge in order to win the customer's business (based on our understanding of the competitive environment). We input the price manually (it is not suggested by the model) and the model allows us to understand the kind of margin we would make if we sign off at that level. The level of contribution margin generated by the model typically dictates who can sign off on the proposed pricing."

636. Therefore, margins were only one element in the process of price setting, as were the models themselves. These were negotiated with sophisticated business customers where lots of factors come into play on both sides. It is clear that the bespoke rates agreed with such customers were not simply costs plus and therefore it cannot be said that a tiny increase in one small costs input would have led to a different price agreed with the customer.

637. Accordingly, we find that DAF has not proved that there was SPO in relation to Parcelforce.

(f) BT

638. The SPO analysis in relation to BT is again dominated by the consideration of the glidepath controls used by its regulator, Ofcom. Unlike with Royal Mail, the analysis for BT is not divided in relation to periods of time; instead, the experts have concentrated on BT's different lines of business, in particular Openreach.

639. As to cost allocation, trucks were purchased by BT Fleet, which levied internal credit hire charges to the different business units within the Group. Those

charges were allocated to a wider category of "*Motor Transport*" costs in BT's costs allocation systems, and this included depreciation and non-capital costs such as maintenance and fuel. BT estimated that the trucks in its claim formed around 10% of its fleet. It is therefore not possible to track the allocation of truck costs and any Overcharge, or the extent of those costs, through to the products and services sold by BT's customer facing lines of business. The experts have sought to estimate the value of the Overcharge allocated to BT's products and services on the assumption that this was proportionate to the share of revenues of the product or service.

640. BT Fleet recharged the vast majority of its truck costs to BT Supply Chain and Openreach. BT Supply Chain incurred 25 to 26% of BT Fleet's charges for the capital costs of trucks over the relevant period. Both experts agreed[17] that BT Supply Chain increased its prices to Openreach, BT Retail and BT Global as a result of the Overcharge.

641. Openreach used trucks provided by BT Fleet as well as inputs from BT Supply Chain to provide services to other lines of business in the Group and to third parties. The experts agreed that Openreach incurred some 60-62% of BT Fleet's charges for the capital costs of trucks over the relevant period. It was also the largest purchaser of services from BT Supply Chain. That is why Openreach is key to the SPO analysis for BT.

(1) <u>Openreach</u>

<u>(i) Introduction</u>

642. Openreach is a BT line of business which is responsible for maintaining and developing BT's physical telephone and broadband network which links BT's relevant exchanges with: (i) end customers' premises; and (ii) other BT exchanges, by means of either copper or optical fibre. Openreach sells a range of services enabling downstream communications providers to access BT's

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[17] Mr Harvey made a conservative assumption to such effect but he could not say whether that did happen because of the uncertainty over internal pricing before 2014.

physical network for the purposes of pricing communication services to end customers. During the period 2006 – 2018, Openreach earned a substantial proportion of its revenues from internal customers (approximately 70%). Openreach was established as a line of business in 2006, following the provision of undertakings by BT to Ofcom in 2005 in lieu of a market investigation reference and assumed many of the responsibilities of BT Wholesale. Where the experts referred to "*Openreach*" they were referring to BT Wholesale for the period 2001 – 2006 and BT's unitary business prior to 2001.

643. The experts were agreed that the majority of the Overcharge would have been allocated to Openreach. Mr Harvey assumed that approximately 75% of the Overcharge passed on from BT Fleet went to Openreach while Mr Bezant estimated that 77.3% of the Overcharge was allocated to Openreach, taking into account the amounts passed on to it by BT Supply Chain. That is why the focus has been on Openreach but DAF must prove its case in relation to all parts of BT's business. In the end, DAF invited us to assume that any SPO analysis for other parts of the business, such as BT Wholesale, BT Retail (BT Consumer) and BT Global Services, would be similar to Openreach with the same conclusion. Mr Bezant concluded there was 100% SPO for Openreach; Mr Harvey that there was nil SPO.

644. Once again, the Claimants rely on the miniscule scale of the Overcharge relative to the size of Openreach's business. Mr Harvey referred to Openreach's revenues in the year 2015/16 alone of £5.2 billion which he compared to the total Overcharge assumed to be allocated to Openreach over the 25-year period of £3.58 million. Mr Harvey stated that

> "[o]ver the entire period therefore, the total overcharge allocated to Openreach was worth less than 0.003% of Openreach's (and BT Wholesale's before 2006) revenues over the period. This value varies in each year, and I estimate that at its peak the depreciated overcharge was worth 0.005% of Openreach annual revenues".

645. Mr Harvey considered that size was relevant, as the "*smallness of truck costs means that BT's prices would have needed to be very "fine tuned" to their costs in order for them to have been different in a counterfactual absent the Overcharge."* Mr Bezant disagreed with Mr Harvey and said that "*for an*

assessment of Supply Pass-On, the size of the alleged Overcharge needs to be considered in the correct context – i.e. in light of the processes that determined the setting of BT's prices".

646. Mr Bezant again emphasised that when considering the counterfactual, one is looking at a different set of costs that does not include the Overcharge and from which a price is set rather than looking at the reduction in costs as compared to the actual world. However, in itself, that does not answer the key issue which is whether the tiny increment of Overcharge would have actually fed through to higher prices.

(ii) Glidepath Controls

647. It was agreed that, assuming that any Overcharge allocated to Openreach was allocated to its products/services in proportion to their respective revenues, 55% of the Overcharge related to products subject to glidepath charge controls. These were in the same RPI-X form as discussed above in relation to Royal Mail and were based on the regulator's forward looking forecast of what it considered to be BT's efficient costs during the price control period. It was intended to incentivise BT to make efficiency savings but there is a risk that not all costs will be recovered.

648. The principal issue between the parties in relation to Openreach concerned an argument of Mr Bezant's in relation to the cumulative probability of the rounded value of X in the glidepath control differing in the counterfactual without the Overcharge. This is discussed below.

649. Mr Ward KC submitted that, even before considering the probability analysis, it is necessary to bear in mind the influence of regulatory judgment that is at the core of the price controls. Ofcom was exercising a public law function and took into account a wide range of public interest considerations, as it was required by law to do. It takes into account responses to its consultations from stakeholders, including BT's wholesale customers and competitors, such as Sky and Virgin, for whom Openreach's prices were critical. These issues were addressed in Mr Nicholson's evidence on behalf of BT. Ofcom has to balance

the competing interests of BT, Openreach and all the different stakeholders in setting the charge controls. There were also specific policy objectives including promotion of efficiency and competition, regulatory certainty, delivery sustainability and maintaining incentives on Openreach to innovate and improve.

650. Mr Bezant was taken in detail through two examples of Ofcom charge controls: A New Pricing Framework For Openreach for 2009; and Wholesale Line Rental ("**WLR**"): Reviewing and setting charge ceilings for WLR services. The former was at an exceptionally high level of granularity; the latter less so. Both reflected the range of judgments that the regulator makes.

651. The first point to note is the difficulty in identifying how much truck cost, if any, has been allocated. The Openreach Pricing Framework charge control featured a cost line for "*Fleet*", but there was no way of knowing how much, if any, of that was trucks. Openreach had forecast its fleet costs for the period of the control as increasing from £87 million to £95 million. Ofcom however adjusted these and other costs figures based on a number of assumptions set out in a detailed table, including as to: "*Aggregate volumes"; "Change in mix-internal demand for MPF"; "Change in mix – external demand for MPF"*; "*Inflation"; "Commodity prices"; "Scope for efficiency gains"; "reduction in fault rates";* and *"cost allocation"*. Ofcom then stated that "*On this basis, we [Ofcom] have projected what we consider to represent a reasonable estimate of Openreach's costs and revenues (at current prices) for the Core Rental Services"*.

652. As a result of these steps, Ofcom substantially reduced the amount of operating costs, and fleet costs in particular, that it allowed. For example, Openreach forecast that its fleet costs in 2009/10 would be £89 million, but Ofcom forecast these costs to be £78 million – an £11 million reduction.

653. Second, in arriving at the value of X in the glidepath control, Ofcom took into account not only the historical and forecast costs but also other factors including inflation forecasts, the impact on competition and consumers and "*international price benchmarking*". Mr Bezant considered that those other factors would be

the same in the counterfactual as in the actual and so the only item that was different would be the absence of the Overcharge.

654. For the 2009 Openreach charge control, in respect of rental charges for Metallic Path Facilities ("**MPF**") (one of the core regulated products in the WLR market allowing communication providers, including BT's competitors, to access Openreach's network) Ofcom set a starting price charge ceiling of £86.40 and then a glidepath of RPI+5.5% to apply from 1 April 2010. Ofcom explained that it determined these values in four stages:

> "7.31.1 First we considered what a four-year (real terms) glide path would look like based on our estimate of the 2012/13 costs and the expected rate of RPI inflation over the period.
>
> 7.31.2 Informed by that glide path, we then determined the appropriate starting charge for MPF in 2009/10 giving weight to alternative methods for determining the start charge - including the case for full cost recovery in 2009/10, as set out in Annex 5. We adopt a value close to the middle of the range bounded by these alternative approaches.
>
> 7.31.3 Having established the appropriate starting charge for MPF in 2009/10, we determined the appropriate glide path over the remaining three years, again based on our estimate of the 2012/13 costs and the expected rate of RPI inflation over the remaining period.
>
> 7.31.4 We then defined the X in 2010/11 to reflect the fact that the RPI statistic that will be used in the control does not reflect our assessment of the relevant underlying rate of inflation for the period in question.
>
> 7.32 Our analysis suggests that a 'true' real terms increase of approximately 1.5% per annum is needed to allow prices to move towards full cost recovery by 2012/13"

655. Ofcom then noted that due to material changes in the level of inflation, it was necessary to increase the level of the X of "*approximately 1.5%"* by "*approximately 4%"* and landed on an X of 5.5%:

> "7.33 However, in order to deliver this real terms increase in 2010/11 we have adjusted the X to allow for the expected difference between the reported RPI in October 2009 and the actual RPI for 2010/11.
>
> 7.34 **The difference is significant – approximately 4%**. On this basis, we consider that an X of 5.5% is appropriate for 2010/11" (emphasis added)

656. It is clear from the above, that the Regulator was exercising its regulatory discretion when adjusting the X upwards from 1.5% and was doing so in the language of approximations. As stated above, Mr Bezant argued that Ofcom

would have applied the *same* discretion in the counterfactual scenario as in the actual scenario in terms of the efficiency and inflation assumptions. But the level of the price control, and its structure represents an overall judgment by Ofcom in setting the price at £86.40 and the RPI +5.5%. What has to be considered is whether the Overcharge could have made a difference to the X figure, which seems to have been arrived at in a rather broad brush way. The size of the Overcharge therefore becomes highly relevant.

657. Mr Harvey carried out an estimation of how much truck cost could be attributed to the relevant products. For the Openreach charge control in respect of MPF, he estimated the total value of the attributable Overcharge was £5,428, out of £106 million in costs amounting to 0.005% of total MPF rental costs. Mr Bezant accepted that he could not test the effect of such a small costs increase without Ofcom's models. He said:

> "A. So for a given product, the effect may be nil. For a given product, the effect may be more than nil. This was discussed yesterday because, once you have made a whole series of judgments, decided to use a particular process, inputted the costs into that process to understand the implications for price, then the answer may change if you change your costs, because they are part of the process. So it may change depending upon the inputs. We do not have the models to test this factually, we do not have the models, so we have to -- and we discussed the probabilities of things changing and so on, and the implications of that, so that is the world we are in.
>
> Q. So it would be fair to say, would it not, that you do not know whether the overcharge could have made – would have made a difference here?
>
> A. I think Mr Harvey and I agree that if we had the models, we could test them and then we would know, but we do not have the models…"

658. However, DAF bears the burden of proof of showing that the very small Overcharge actually did make a difference. The charge controls are not set down to the fullest possible level of cost granularity. They may be set in whole pounds or pence. An RPI–X may be set to a whole number or one decimal place, meaning that it cannot capture a tiny cost increase. That is why the probability analysis came to the fore of Mr Bezant's argument.

(iii) Probability Analysis

659. The probability analysis is concerned with the rounding of the value of X in the glidepath control. Mr Bezant's argument is that at some point the rounding would tip over into the next level, at which stage the Overcharge, however small, would likely be recovered. On the face of it, the fact that Mr Bezant is driven to having to make this sort of argument seems to demonstrate DAF's inability to trace the Overcharge through into downstream prices and therefore to be a long way from the proximity required to satisfy the legal (or factual) test for causation. Nevertheless, we will explore it a little further.

660. DAF's argument on cumulative probability was developed by Mr Bezant in his second report. He argued that whilst "*the probability that the rounded value of X of each of the Regulator's glidepath charge controls calculations would differ in the absence of the alleged Overcharge is relatively low*" nevertheless "*the probability of at least one of the calculations changing (and therefore resulting in some SPO across all of the Regulator's glidepath charge control models) is relatively high*".

661. Ofcom set the level of X in the glidepath charge controls by rounding it to the nearest 0.1% or 0.25%. Because of this rounding, any given change in the cost base could result in there being either a proportionally smaller or a proportionally greater change in the amount of costs passed on through the glidepath charge control. In other words, Openreach might pass-on slightly more or slightly less than the relevant cost, depending on the direction of the rounding.

662. The analysis is crucially dependent on there being a significant number of glidepath charge controls over the relevant period for Openreach's different products and services. Mr Harvey stated that there had been 32 separate glidepath charge controls between 1997 and 2021. Mr Bezant however included a further 40 glidepaths that he said were separate and relevant. Mr Harvey did not accept this. The reason why the number of glidepaths may be relevant is that Mr Bezant was seeking to prove the likelihood that, if the rounded value of X changed in any one of those glidepath controls, at any time, that rounding could have captured some or all of the Overcharge. The more glidepaths there are, the

greater the likelihood, DAF says, that any one of them would have been different because of the rounding change.

663. Both experts sought to calculate the probability that one of the glidepath controls would at some stage have rounded to a different value of X without the Overcharge tipped into the higher level as a result of rounding. Mr Harvey's initial calculations were criticised by DAF for failing to take account of the Overcharge passed on from BT Supply Chain to Openreach and also the Return of Capital Employed ("**ROCE**") that applied to certain of Openreach's costs. Mr Harvey accepted that these were valid criticisms and he did alternative calculations. In any event, both experts concluded that it was more likely than not that at least one of the glidepath controls would have been different without the Overcharge. Mr Bezant put the probability at 92%.

664. However, DAF has pursued this argument because it does not know if it actually happened. As Mr Bezant accepted, he did not have access to the detailed models in order to test how big the unrounded value of X was and how close the charge control was to the rounding step. This meant that the probability analysis was being used to predict what might have happened in the past and, as was discussed at the hearing, is effectively a "*jackpot*" theory in which the rounding could have taken place at any time in relation to any product producing an unknown amount that may cover some or all of the Overcharge. Mr Bezant tried to explain why this did not matter

> "MR RIDYARD: Mr Bezant, would it be a fair way to put your approach -- your approach is a bit -- in a way a bit of an act of faith, as it were, but it is based on what you understand about the process, but the approach you have taken, you sort of -- you know your approach is going to be wrong 19 times out of 20, or 99 times out of 100, but on the one occasion that it is right, because it does trigger the thing, the size of the revenue gain, you know, the jackpot effect -- I know you do not like that term, but it seems in a way quite appropriate – makes up for being wrong in almost all cases?
>
> A. So if the objective is to recover ten and you recover the ten in one model and not in nine, because of the way the allocations of the ten fall, and the trigger happens, then you get your ten.
>
> MR RIDYARD: Yes. So if you buy enough lottery tickets, you will win sooner or later?
>
> A. Well, it is not a lottery in that sense, because the thing is structured to recover the overall cost base of the business which is being allocated into the

> products. There is an outcome that is a desired outcome here. The modelling involving rounding, to a certain extent, as you move through different products, there are some products that have got a slight under-recovery of their total costs and there are some that, arguably, have got a slight over-recovery of their total costs. That is the way the model works. It is not an overcharge issue; it is the model construction. But overall, you get your costs back, in the round. As I said, the ten, my example, is in this product and it is not in the other nine, but the bulk of the costs obviously are in the underlying products, it is just gradations as you move through time."

665. The logic of Mr Bezant's argument is that over the 25-year period being considered in the SPO analysis, if one price control "*tipped*" because of the Overcharge, that "*jackpot*" could be applied to other products, under other time periods and under different charge controls. During that period, some products will have been introduced, and others made obsolete. Trucks will have been purchased and disposed of. Yet on Mr Bezant's approach a "*jackpot*" in 2018 in fibre broadband could be said to constitute SPO of truck costs incurred in respect of retail line rental in 1997, or vice-versa.

666. It also matters greatly which charge control "*tips*", as they would all have different rounding values. Mr Harvey estimated that of the 29 glidepaths he had considered, the largest revenue difference that would follow from a rounding of X would be £2,171,143, and the smallest £49,761. In Mr Bezant's 40 additional glidepaths, which were largely concerned with ancillary services, the likelihood of a rounding may increase but the "*jackpot*" may be as little as £100. Mr Bezant accepted this: "*It does matter which product. As you know and as we have discussed, we do not have the models to identify that*."

667. In our view, this is wholly inadequate evidence upon which to prove that there has been SPO, let alone 100% SPO, in relation to the Overcharge attributed to Openreach. DAF cannot show this actually happened. Even if it is more likely than not that one (or more) charge control "*tipped*", DAF cannot show which one did and when it happened. It is impossible to identify which downstream customers may have ended up paying the Overcharge or who may have a claim against DAF. It cannot be said that BT has recovered the Overcharge from others and so factual causation has not been established. Even if BT might have hit the jackpot at some point, that cannot represent the recovery of the

Overcharge and we do not think that that could have been the intention of Ofcom as to the way it would work.

668. We also think that this cannot amount to sufficient proximity between the Overcharge and the prices charged to Openreach's customers to satisfy the legal test for causation. Accordingly, we reject DAF's case on SPO in relation to Openreach.

669. Mr Beard KC also invited us to extend our conclusions in relation to Openreach's other products that were not subject to glidepath charge controls, namely those subject to other forms of price controls and those not subject to any price controls. We do so but only in the sense of rejecting any SPO in relation to Openreach's external customers.

(2) BT's other lines of business

670. Whilst it occupied many pages of the experts' reports, SPO in relation to BT's other lines of business was hardly touched on in cross-examination or submissions. Mr Beard KC said that there was a lack of detailed information and disclosure and DAF had decided in the interests of proportionality not to pursue applications in such respect. DAF concentrated instead on Openreach, presumably because it felt it had the strongest evidence to support its case. But that failed to persuade us. The result is the same in relation to the other lines of business and we will confine ourselves to short reasons for this.

(i) BT Wholesale (post 2006)

671. BT Wholesale supplied telecommunication services to other communication providers. From 2006 onwards, Openreach assumed responsibility for a set of services previously supplied by BT Wholesale and those products/services were considered by the experts and us in the Openreach section above. The products which continued to be supplied by BT Wholesale after 2006 were Traditional Interface Symmetric Broadband Origination, Wholesale Broadband Access and interconnection circuits. BT served a witness statement by Mr Gavin Jones in relation to BT Wholesale's pricing but DAF did not ask to cross-examine him.

672. BT Wholesale's products and services were subject to similar forms of price controls and the experts were agreed that the analysis of SPO for BT Wholesale would therefore be similar to that of Openreach. The scale of the Overcharge attributable to BT Wholesale would be even smaller to that incurred by Openreach. Accordingly, it would be unlikely that there would be SPO of a tiny Overcharge in BT Wholesale when there was not in Openreach.

(ii) BT Retail (BT Consumer)

673. BT Retail offered BT branded fixed line voice, dial up internet and broadband to UK homes, in addition to TV services, BT mobile services to UK consumers and various consumer devices. BT Retail procured services from Openreach for the purposes of supplying fixed line telephony, dial up internet and broadband, mobile telephony and TV and Sport to BT Consumer's customers.

674. The experts agreed that the relevance of BT Retail/BT Consumer arises to the extent that this line of business received input from Openreach and BT Supply Chain, the prices of which included the Overcharge. BT Retail actually accounts for a relatively high proportion of the Overcharge: approximately 43% (of which approximately 36% relates to Overcharge passed-on by Openreach and the other 7% relates to pass-on by BT Supply Chain).

675. The CAT ordered that, in lieu of disclosure, BT provide in respect of BT Retail "*a description of the goods and services supplied by: (i) BT Wholesale and/or Openreach to BT Retail…and the prices paid for those goods and services; and (ii) BT Retail…to external customers which use or otherwise incorporate the costs of the goods and services supplied by BT Wholesale and/or Openreach and how those prices are set/agreed with BT Retail's…customers (including by reference to price setting guidelines/models)*" (the "**Consumer Pricing Statement**"). BT also disclosed to DAF BT Retail's management accounts and certain budget and regulatory documents.

676. Based on the Consumer Pricing Statement and his analysis of the wider market conditions, Mr Bezant concludes that there was 100% SPO by BT Retail to its customers. In short summary this was explained as follows:

(a) during the period between 1997 and 2006, BT Consumer was subject to retail price caps (and would have priced up to the allowed cap); and, until 2002, the approach adopted by the regulator was similar to that adopted in respect of Openreach's glidepath charge controls, as discussed above; and

(b) in respect of products not subject to regulation (including in the period after 2006), BT Retail operated in an increasingly competitive market; and BT Retail and its competitors incurred the same variable input costs from Openreach. BT Retail and its competitors would therefore not be placed at a competitive disadvantage relative to each other as a result of passing on any industry-wide change in costs.

677. Insofar as we were being asked to apply our analysis on Openreach to BT Retail, that obviously means that we find that there was no SPO in the period to 2006. In relation to the period from 2006 when BT Retail was in a competitive market, Mr Harvey did not accept that common costs incurred by BT Retail and its competitors would necessarily be passed on to their customers because it depended on "*how competition in that market works and how they go about setting their prices and whether they used rounded figures*".

678. In common with other areas of the business, the Consumer Pricing Statement made clear that, when setting a new list price for a product, BT Retail would have regard to a variety of significant factors other than cost to inform the appropriate retail price for consumers, including (i) relevant market benchmarks and the level of competition in the market, (ii) compliance with BT's regulatory obligations and any voluntary commitments it had made, and (iii) customers' willingness to pay at a particular price point. Mr Bezant acknowledged the influence of factors other than costs: "*Costs were relevant to prices, other factors were too*".

679. The Consumer Pricing Statement went on to explain that BT rounded and held prices at marketable price points, even where this meant foregoing a price increase to reflect an increase in costs:

"[✂]".

680. The obvious implication of marketable price points is that small changes in cost might not be reflected in price changes if that change in cost suggested only a small change in prices. The Consumer Pricing Statement also referred to price reviews, in which BT Consumer would "[✂]". It also went on to make clear this was not the only factor: it would have regard to "[✂]".

681. These are all cogent reasons as to why a company's pricing decisions are far more complex than simply seeking to recover its costs. They are why it is impossible to say that a very small costs increase would have actually caused BT Retail's prices to its customers to have been raised commensurately.

682. Accordingly, we find that SPO for BT Retail has not been made out.

(iii) BT Global Services

683. BT Global Services offered managed network IT services to large corporate and public sector customers, both in the UK and overseas. In 2011 it offered services to around 7,000 corporate and public sector customers with operations around the world, and consumed a number of access products from Openreach in order to supply services to its own customers. Mr Mark Nervais of BT Global put in a witness statement for BT but he was not asked to be cross-examined. No more than 4% of the Overcharge is attributable to BT Global Services.

684. The CAT ordered a similar pricing statement to BT Retail to be provided on behalf of BT Global Services. Mr Nervais explained in that Global Pricing Statement, that BT Global Services operated in a customer-led bidding market in which BT Global Services would bid to provide a solution in response to competitive tenders. He further explained that BT Global Services used Business Cost or Business Case Model ("**BCM**") to generate a bid price for a customer, which:

"[✂]"

685. Mr Nervais explained that the BCM contained a "*minimum margin target*" and that BT would always seek to recover its costs. Crucially however, Mr Nervais went on to explain that the bid price generated by the BCM was "*only the starting point"* as BT Global Services would present the customer with "*a number of different options*" and "*enter into negotiations*". As Mr Harvey observed, "*BT Global operated in a customer-led bidding market, which is likely to mean that BT Global relied on commercial judgment when setting prices and was unlikely to have "fine tuned" bids to costs"* particularly a cost at the scale of the Overcharge.

686. Mr Bezant's approach to this was similar to his previous arguments about looking at a different set of costs in the counterfactual and assuming that the same commercial judgments would be made in both the counterfactual and the actual worlds. We agree with Mr Ward KC's submission that this approach is speculative and formalistic as it treats the process as purely mechanistic, ignoring the commercial factors and judgments in play when setting prices.

687. We therefore do not consider that DAF has shown that a very small increase in truck costs would have likely led to an increase in prices charged by BT Global Services to its customers.

(g) Conclusion on SPO

688. We have rejected DAF's case on SPO in relation to both Royal Mail and BT for all periods and lines of business. We have found on the balance of probabilities that DAF has not established on the facts that the prices charged to the Claimants' customers would have been lower in the counterfactual absent the Overcharge. We have also been clear that, as a matter of law, we do not consider there to be the necessary proximate and direct causative link between the Overcharge and the downstream prices so as to satisfy the legal test for causation.

689. In coming to those conclusions, we paused to consider the impact both on potential downstream customer claims and whether the Claimants might therefore be overcompensated for the losses they actually suffered. This is the

difficulty with only having the Claimants and DAF before us. If there were potential claims by the Claimants' customers then it would obviously be preferable for those to be litigated together with these claims, in which case it would not be DAF that would be arguing for SPO.

690. But our conclusion on the evidence before us is that there was no SPO. We cannot rule out the possibility that the Claimants' customers might try to claim in the future, whether by class or individually, and our findings will not be binding on them. We agree with Mr Ridyard that the monetary size of the Overcharge together with the number of downstream customers makes it virtually impossible for them to mount a viable claim even if they were able to prove SPO. It is obvious that any such claim would have difficulties in the light of our conclusions and there would be serious issues in relation to whether it would be financially worthwhile pursuing it. But we cannot shrink from such conclusions because of their potential impact on unknown other claims. It necessarily follows from our findings that we do not think that, in the words of the Supreme Court in *Sainsbury's*, the Claimants have "*recovered from others*" the Overcharge or "*transferred all or part of [their] loss to others*". In the circumstances, the Claimants are not being overcompensated.

691. As we have said above, it is important to distinguish between the economic concept of pass-on and the legal test for causation in relation to mitigation of loss. The former is likely to be much broader than the latter which requires there to be demonstrated a proximate causal connection between the Overcharge and an increase in downstream prices. Mere recovery of costs is insufficient proof of such a connection. Something more is required and we are satisfied that DAF has not in the end provided us with anything more than that the increase in truck costs represented by the Overcharge was taken into account in the price setting process, whether by the respective regulators or the Claimants themselves. A number of other factors were also taken into account as well as costs and these were overlain with regulatory, public interest and commercial judgments being made. It is not possible to say that an increase in truck costs, however small, was likely to have led to an increase in prices. And if that is the case, there can be no SPO defence of mitigation.

(2) Mr Ridyard's dissenting opinion

692. I set out here my assessment and conclusions on the SPO question, on which I unfortunately disagree with my colleagues. I believe, contrary to the majority view, that it is likely that both Claimants did pass on a substantial amount of the Overcharge to their downstream consumers, and that there is a sufficiently close causal connection between the Overcharge and a likely SPO. However, I am not persuaded that the SPO argument should be used to impose a reduction in the damages awarded to the Claimants because, given the specific facts associated with this case, to do so would jeopardise the principle of effectiveness. Hence, I agree with my colleagues on the overall conclusion to DAF's SPO "*defence*" against the damages award, but disagree on the reasoning that gets us to that conclusion.

693. Since there is no disagreement between us on the ultimate conclusion on this topic, I appreciate there is a danger that my dissenting opinion could be seen as academic and/or irrelevant. I have, however, taken the view that it is more transparent to use this opinion to highlight the choices that must be made in order to arrive at a just solution to the mitigation assessment. I identify the disagreement between us because of the possibility that similar points might arise in future cases in which the points on which we disagree might lead to different outcomes on damages awards.

694. This opinion is structured as follows:

(a) First, I set out what I understand to be the legal test when assessing mitigation, and specifically SPO;

(b) Second, I comment on the nature of the SPO mechanism in this case, and how it differs from several other mitigation claims that have been analysed in previous judgments;

(c) Third, I assess the SPO issues in this case against the four factors that have been identified both in our judgment and more generally in the case law as relevant to mitigation, namely the

relevance of: knowledge of the Overcharge; the size of the Overcharge relative to the value of the downstream market; the relationship between the upstream and downstream markets; and the need to identify a downstream claimant;

(d) Fourth, I comment on how my conclusions on SPO relate to the unanimous conclusion we have reached on the other two mitigation arguments, relating to Resale of Used Trucks and Complements; and

(e) Fifth, I summarise my conclusions.

(a) The legal test for pass-on mitigation

695. I have taken the legal test for mitigation as set out in the Supreme Court's judgment in *Sainsbury's* as the basis for my assessment. My reading of that judgment provides a number of useful pointers for the assessment of SPO, which can be summarised as follows:

(1) Assessing the mitigation of loss through pass-on is an element in the assessment of damages rather than a separate defence.

(2) Proof of whether such mitigation has occurred should be done on a balance of probabilities test.

(3) There needs to be a sufficiently close causal connection between the overcharge and the downstream pricing decision that is the mechanism for pass-on.

(4) The defendant bears the burden of proof, but the significance of this burden "*should not be overstated*" and does not impose on the defendant a duty to establish the pass-on effect with greater precision than that which faces the claimant when establishing the extent of any initial overcharge.

(5) Once a defendant has satisfied the court that, on a balance of probabilities, pass-on has occurred, it becomes appropriate to adopt "*broad axe*" principles to assess its mitigating effect. Specifically, the Supreme Court said in *Sainsbury's*:

> "We see no reason in principle why, in assessing compensatory damages, there should be a requirement of greater precision in the quantification of the amount of an overcharge which has been passed on to suppliers or customers because there is a legal burden on the defendants in relation to mitigation of loss." [219]

(6) In assessing a pass-on effect, the court's efforts should be proportionate, cannot require too much precision, and might "*have to resort to estimates*".

(7) The approach to pass-on must bear in mind that the purpose is to compensate the claimant, but it must do so in a way that does not render the exercise of rights conferred by EU law excessively difficult or impossible (the principle of "*effectiveness*").

(b) The Pass-On mechanism in this instance

696. As has been discussed earlier in this judgment, a variety of pass-on mechanisms have been addressed in the previous cases that have dealt with this issue. These have been captured in the four options for possible responses to an overcharge that were first set out in *CAT Sainsbury's* and reproduced (in slightly amended form) by the Supreme Court in *Sainsbury's*. To recap: option (i) was to do nothing, hence absorbing the overcharge in reduced margins and profits; options (ii) and (iii) involved the claimant reducing costs elsewhere in its business to compensate for the adverse impact of the overcharge; and option (iv) involved the claimant increasing the price of the product that used the input affected by the overcharge in its downstream market.

697. The SPO argument in the current case falls squarely into option (iv). DAF's argument is that Royal Mail and BT both used trucks as an input into the provision of their respective postal and telecommunications services, and that they were able to use the regulatory process (and to a lesser extent the normal

forces of competition) to pass on higher truck prices in elevated prices that they charged for these services to their downstream customers. I regard this as a very important feature of the current case, since the distinction as to whether a pass-on mechanism falls into option (ii) or (iii) on the one hand, or option (iv) on the other, is critical to understanding the causal link between the overcharge and the pass-on.

698. To explain this, it is first relevant to provide some context on the economics of pass-on. Our judgment has already cited *CAT Sainsbury's* as characterising economic thinking on pass-on as follows: "*whereas an economist might well define pass-on more widely (i.e. to include cost savings and reduced expenditure), the pass-on defence is only concerned with identifiable increases in prices by a firm to its customers.*" I cannot purport to speak for all economists, but this statement does not correspond to my understanding of the main thrust of economic thinking on pass-on. The considerable economic literature that exists in this area does not regard pass-on as a phenomenon that is focused on cost or profit recovery in a general sense, but rather on understanding how a change in one cost facing a firm (such as an increase in an input cost) is likely to cause the firm to adjust its profit-maximising price when selling products that depend on the affected input. For example, suppose a firm incurs unit costs of £5 to make product A, and chooses to sell it at a profit-maximising price of £7, earning a margin of £2 per unit. If some external event occurs that increases its unit cost from £5 to £6, the primary question that is addressed by the economics of pass-on is how this change is likely to cause the firm to revise its profit-maximising price in the downstream market. That decision typically depends on a trade-off between the advantages of raising prices to restore the firm's price-cost margin (full pass-on in this illustration would involve an increase in selling price from £7 to £8), and the disadvantages associated with losing sales volumes (hence profits on lost sales) if such pass on occurs. The economics of pass-on explore the factors that affect this trade-off to derive predictions about the most likely rate of pass-on under different market and competitive conditions. Many outcomes are possible, but a large proportion of predicted outcomes involve some degree of downstream pass-on because in all but extreme cases the firm's optimal response to this adverse cost

influence is to restore at least some of the lost profit margin. As such, the economics is intently focused on incentives and hence on causal influences, and it is largely concerned with the kind of responses that fall within option (iv) of the classification described above.

699. The main results derived from the economics of pass-on do not envisage options that would fall into options (ii) or (iii) of the above categorisation. In other words, it is not normally predicted that a profit-seeking firm will respond to an increase in the input cost of making product A by reducing the amount it seeks to pay for inputs to unrelated products B or C. There is normally no causal link between these elements because a well-run firm will already have taken steps to ensure it does not incur higher costs than are necessary to make other products. This is not to say that an option (ii)/(iii) response can never be the predicted outcome, but it does indicate that a claim of mitigation that relies on such a mechanism is likely to find itself battling against established economic theory on pass-on.

700. This point is clearly illustrated by the *Stellantis* case, in which the defendant (NTN) specifically raised a pass-on defence that asserted that the claimant (FCA) would respond to an overcharge by achieving offsetting cost savings elsewhere in its business. In its judgment, the CAT at [34] rejected this argument in very clear terms:

> "... the argument assumes that procurement staff would not negotiate as hard as they could for lower prices, but would do so only to the extent required to meet the target. …. NTN's implicit case that FCA's negotiators would not negotiate as hard as they could, and would stop when they had reached their target because the target operated as a cap on what they were required to do or did, is unpleaded and speculative."

701. The Court of Appeal subsequently endorsed the CAT's judgment, confirming that its assessment was sound as a matter of law. It was also sound as a matter of economics, for the reasons discussed above. I come back to this distinction between option (iv) and other pass-on cases below, when evaluating the existence of a causal link between the Overcharge and SPO.

(c) Evaluating SPO in the current case against the four identified factors

702. In our (unanimous) discussion of the legal principles we have emphasised that it is not sufficient for DAF simply to say that all costs are fed into the Claimants' business planning and budgetary processes, and that establishing pass-on requires something more specifically related to a causal influence. We have also referred to four (non-exhaustive) potentially relevant factors that can assist in assessing whether DAF's pass-on arguments establish the requisite legal and factual tests. To recap, these are:

    I. Knowledge of the Overcharge or the specific increase in the cost in question;

    II. The relative size of the Overcharge against the Claimants' overall costs and downstream revenues;

    III. The relationship or association between the product on which the Overcharge is incurred, and the product whose prices have been increased; and/or

    IV. Whether there are identifiable claims by identifiable purchasers from the Claimants in respect of losses caused by the Overcharge.

I. Knowledge

703. As regards the first of these, knowledge of an overcharge would increase the chances that a paper trail exists within the claimant's business, for example providing clues as to how it might address the cost pressures that had been created by the overcharge. Such a paper trail might, subject to the availability of corroborating evidence, be particularly useful to rebut the scepticism that naturally attaches to a pass-on argument that a claimant took steps to address an overcharge by reducing expenditure on unrelated cost items.

704. It is a peculiarity of the MIF cases that knowledge of the charge in question did exist because the MIF arrangements between banks were not secret. It is plainly the case, however, that in the current case the Claimants had no knowledge of the trucks Cartel or of DAF's Overcharge, and indeed the same will be true in the vast majority of cartel damages cases. Hence, whilst I agree that the visibility of an overcharge would make it more straightforward to establish a causal link with any consequent change in claimant behaviour, it cannot be regarded as a necessary condition. I do not place significant weight on this factor in my assessment of the current case.

II. Relative size

705. The second factor, the size of an overcharge relative to the value of the claimant's downstream business, has an obvious influence on the ability to measure and identify a pass-on effect. In the current case there is no dispute that the Overcharge we have found, whilst substantial in its own right at somewhere in the region of £15 million in historic values, is extremely small relative to the value of the Claimants' downstream businesses. This factor renders any attempt to measure pass-on empirically hopeless, and it plainly presents the biggest obstacle to proving the existence of pass-on.

706. The key question is whether this practical impossibility of measuring the specific downstream impact of a pass-on effect is sufficient to prove (on a balance of probabilities test) that such an effect does not exist. I believe this is the factor that has most influenced my colleagues to reach their conclusion on pass-on, and I fully understand and respect their rationale. However, I do not agree that the fact that an effect is too small to be measured or separately identified within the price of the downstream product means that it must be unlikely to exist. To make that assessment, it is necessary to look to other contextual evidence that might reveal the existence of a likely pass-on mechanism at work.

III. Relationship between upstream costs and downstream prices

707. I have noted above that I see the SPO argument as falling clearly into the option (iv) category, because both Claimants employed trucks as an input in providing their respective downstream services. In both cases, of course, trucks represented just one of many inputs, and truck costs were an extremely small component of total costs.

708. We have noted that in the course of previous CMCs on the current case (in December 2017 and June 2018), some scepticism was noted on whether there is a "*direct causal link*" between trucks and the Claimants' downstream services. This is most evident in the observation from Rose J (during the December 2017 CMC) that *"unless you're actually selling on the trucks to somebody you can't show pass-on because it's impossible to prove a link between the price of a stamp and the price that was paid for these trucks".* This point was taken up by Roth J in the June 2018 CMC. He likened the SPO argument, advanced for the Claimants at that time by Mr Pickford KC, to one in which a department store that sells both shoes and kitchen equipment is assumed to respond to an increase in the upstream price it pays to procure shoes by seeking to increase the downstream prices it charges for kitchen equipment. Such a response would be more akin to option (iii) as described by the Supreme Court in *Sainsbury's*, since it would involve a measure taken to offset a cost increase in one area by adjusting the profitability in an unrelated activity (though acting on revenues rather than cost, in this instance). Roth J went on first to say of this hypothesised price rise of kitchen equipment that "*I am sure an economist would say it is pass-through*", and then to comment as follows: "*I have to say, without having heard argument - and obviously it would depend on that and the authorities - my very provisional view is that the pass-on, as a matter of law, does not stretch beyond the cartelised product* ***or other products that incorporate the cartelised product if it is a component or costs on the transaction involving the cartelised product directly****"* (my emphasis).

709. I agree with the conclusion reached here with regard to the department store that sells both shoes and kitchen equipment. A mitigation or pass-on argument that was framed in this way would clearly fall outside the option (iv) category, and would rightly face sceptical scrutiny on both economic and legal grounds. I therefore do not agree with Roth J's aside that "*I am sure an economist would*

say it is pass-through". As I have noted above, I think most economists would be naturally very sceptical about an option (iii) mechanism for pass-on. The approach taken by the CAT in the *Stellantis* case (as discussed above in this opinion) would provide a valuable model to follow in any such case. Following the clear logic of the CAT in that case, the most natural assumption would be that the department store in question had already set a downstream price for kitchen equipment that maximised the retailer's profit in the sale of that category. Hence, there is no good reason (absent clear evidence to the contrary) that deciding to increase that retail price would do anything to improve the retailer's profit position, or to mitigate the adverse effect of the posited increase in the input price it paid for shoes. Hence, I do not agree that the shoes/kitchen equipment analogy carries over to the trucks/postal services case, and my view is that the posited change in the pricing of kitchen equipment describes an inherently implausible pass-on story. I also think most economists would share this view, because as described above the economics of pass-on is focused on causal connections created by economic incentives, and not some more general notion of cost recovery.

710. If I have laboured this point, and the shoes/kitchen equipment analogy, it is because of the critical importance of understanding the relationship between truck costs and the Claimants' downstream services. One might in common parlance say that trucks and postal services are "*unrelated*", but to do so would not be a true reflection of the economic substance. Trucks are purchased by the Claimants in order to enable them to provide their downstream postal and telecommunications services, so they are in both cases "*components or costs*" that are directly used in the downstream activities in which the SPO is alleged to occur. The proposition that trucks were an input used by both Claimants in providing their respective downstream services was accepted by the Claimants' expert Mr Harvey. The fact that in both cases the impact of these components is dramatically diluted by the costs associated with all the other inputs that also go in to the provision of the Claimants' downstream operations does not negate the fact that they are related. I consider that this applies equally to both Claimants; the fact that trucks are perhaps a more identifiable feature of a postal

service than of a telecommunications service does not to my mind make trucks any less of an input in BT's case.

711. The factual evidence on this can be found in the evidence presented by DAF's SPO expert Mr Bezant. Truck costs formed a part of vehicle costs for both Claimants, and detailed information on vehicle costs was included at a very granular level, albeit as one small part of a much broader cost picture, in the costs data that was collated and submitted by the Claimants to their respective regulators. Since truck costs were included in these cost figures, then it seems clear to me that the Overcharge must also have been included in them during the relevant time period, whereas in the counterfactual it would have to be deducted.

712. The next question is to address the causal connection between the Overcharge and downstream prices. As Mr Bezant's evidence makes clear, that must be addressed primarily by examining the way the Claimants' businesses were regulated. Both Claimants operate natural monopoly networks which possess latent market power. Whereas firms that compete in competitive markets are generally free to set their own prices, the Claimants' monopoly networks are required in effect to obtain permission from their regulators to raise prices, which is granted only after a process of regulatory scrutiny that culminates in the provision of a price cap or comparable constraint. Very broadly speaking, that constraint is set so as to try to replicate the pressures that the monopoly businesses would face if they did operate in competitive markets. There are many facets to this assessment, but a central premise is that the regulated firms should be entitled to recover reasonably incurred (efficient) levels of cost from their monopoly activities. Mr Bezant's evidence detailed how the respective regulators expressly established pricing mechanisms and price controls by reference to the Claimants' costs and with the purpose of achieving cost recovery.

713. If economic regulation took the most naïve form of a rule that simply allowed the Claimants to recover their costs, the causal link between the Overcharge and downstream regulated prices would be clear. If truck costs are part of the total costs of operating a postal or telecommunications service, the regulator would

set price controls to allow the Claimants to recover their truck costs, and so by definition it follows that it would also have allowed them to pass through the Overcharge which was a (hidden) component of those truck costs during the relevant period. I can see no reason why the fact that the Overcharge was small in relation to total costs or revenues would in any way alter that conclusion.

714. In reality, however, there are a number of attributes of the regulatory systems that apply to the Claimants' businesses that depart from this naïve cost-plus model. I do not propose in this opinion to deal with all of these complications, or to run through the specific pass-on mechanisms that arose for each of Royal Mail and BT in each of their separate business units and/or phases of regulation. Many of these complicating factors were explored in Mr Bezant's evidence and the exchanges he had with Mr Harvey and have been discussed in the majority judgment on SPO above. I would highlight three areas in particular:

(1) Evidence of the steps taken by the regulators to disallow parts of the estimated costs and budgets that were presented by the Claimants, recognising the danger that the application of a simple cost-plus formula would encourage and reward excessive and inefficient levels of cost. This is exemplified in the two episodes cited above: in the PC3 period for Royal Mail in which its bid for £484 million in vehicle costs was cut back to £380 million by the regulator; and in 2009/10 when BT's bid for £89 million in fleet costs was cut back to £78 million by Ofcom.

(2) Evidence that, in particular during the PC3 period, Postcomm disagreed with Royal Mail's projected sales volumes, which led to a large gap between the two sides' views on the level of revenue required to finance the postal service, and, in the event, to actual Royal Mail revenues that were some £3 billion below the regulator's estimates and hence to a price control outcome that failed to remunerate Royal Mail's projected costs.

(3) Evidence that parts of both of the Claimants' businesses, for example Royal Mail's Parcelforce business, are not natural monopoly activities, but rather operate under competitive conditions that did not require regulatory oversight or constraints.

715. As to the first of these, I acknowledge that push-back from the regulator does create a risk that the regulated firm would fail to gain full revenue compensation for some of its projected costs, and it must be possible that if such push-back arose in relation to truck costs it could also have applied to any Overcharge within those truck costs at any point in time. But, whilst that is potentially relevant for evaluating the rate of pass-on, it does not in my view undermine the likelihood that reasonably incurred truck costs were more likely than not to be remunerated by the regulatory process.

716. As to the second, and accepting both that in this instance Postcomm made an error of judgment in under-estimating the volume losses that Royal Mail's postal business faced, and that this error led to a price cap that failed to cover Royal Mail's efficient costs, in my view the most reasonable inference is to assume that this error would have occurred with or without the trucks Overcharge. Thus, the financial consequences of this error for Royal Mail's position would have applied irrespective and independently of the Overcharge. It does not alter the fact that the value of Royal Mail's truck costs would still be expected to be positively correlated with the (inadequately low) revenue requirement on which Postcomm's regulatory deal was settled. A finding that the Overcharge was likely to have been passed on in higher downstream prices does not depend on Royal Mail having been successful in covering its total costs. Similarly, an observation in other periods that Royal Mail succeeded in securing a regulatory settlement that did allow it to cover its costs does not prove that the Overcharge was passed on. The pass-on mechanism on which Mr Bezant relies, and which I find broadly convincing, is that the Overcharge would find its way into the Claimants' reasonably incurred costs and that the regulatory process is more likely than not to reflect the Overcharge element of these costs when setting the price control.

717. As regards parts of the Claimants' businesses that were not subject to regulation, to the (limited) extent that the Claimants' truck purchases were used in these business segments it is clear that the specific causal influence of the principle of reasonable cost recovery that drives regulatory price setting does not apply. But whilst it is true that firms operating in competitive markets have no assurance that they will earn revenues to compensate their costs, costs are often

a strong driver of prices in competitive markets and so some degree of SPO remains more likely than not.

718. In the case of Royal Mail, for example, in the initial Government Period from 1996-2001 and the following PC1 period in 2001-2003, there are strong indications that pricing was heavily influenced by regulatory considerations and cost recovery principles that have much in common with the more formal economic regulation that followed As regards the Parcelforce business which did compete in a more conventional unregulated market environment, I would acknowledge that the evidence on pass-on that was presented by DAF and its expert Mr Bezant is less convincing than it is in the regulated areas, but when assessing the likelihood of pass-on in competitive markets it is important to emphasise that businesses do not need to exhibit "cost-plus" characteristics in order for there to be a strong likelihood that, other things equal, changes in their costs will cause related changes to their prices. This is illustrated in the regression models explaining the determinants of DAF's truck prices, presented by the experts in their assessment of the Overcharge. Pricing in the trucks market is by no means a cost-plus exercise, and the experts' models showed how DAF's prices and margins were influenced by demand fluctuations, truck characteristics, seasonal and other factors (including the existence of the Cartel in the case of Mr Harvey's results), but both the experts' models showed that, once these other influences were controlled for, manufacturing costs exert a strong and systematic positive influence on DAF's transaction prices.

719. In any event I do not think the Claimants' limited use of trucks in unregulated activities are significant enough to negate the likelihood that across the Claimants' businesses as a whole, some pass-on of truck costs occurred. The influence of unregulated downstream business should be taken into account as part of the broad axe assessment of the rate of SPO. I do not see it as decisive in the assessment of whether SPO has been proved to exist.

720. In my assessment, therefore, none of these complicating factors fundamentally undermines the conclusion that the revenues earned by the Claimants in their respective downstream markets were substantially dependent on a regulatory process that was designed to remunerate reasonably incurred (efficient) costs.

Since the trucks Cartel was unlawful and covertly implemented, I do not see any basis on which the Overcharge paid by the Claimants could have been regarded as anything other than a reasonably incurred cost of providing their downstream services.

721. This is not to say that the Claimants would automatically have achieved 100% SPO, but in terms of the balance of probabilities I regard it as overwhelming likely – and certainly more likely than not - that a substantial part of any Overcharge would have found its way into the regulatory system and have been reimbursed through the price caps and constraints.

722. I am of course aware that my colleagues disagree with this conclusion, largely on the basis that the Overcharge was too small, relative to the total downstream revenues involved, to make a material difference. I would highlight two aspects of the evidence here that might illustrate the nature of this disagreement.

723. The first illustration concerns the way in which Mr Harvey presented the SPO analysis. He based his assessment of the counterfactual on the question of whether, starting from observed outcomes, there was evidence that the Claimants' prices were "*fine-tuned*" to costs in such a way as to generate a different outcome in the counterfactual world. Mr Bezant criticised this approach on the grounds that it considered "*whether a change in costs equal to the Overcharge*" would affect outcomes that were actually observed. He emphasised that there is no "*change*" involved in the counterfactual assessment, but instead the comparison should be between two separate scenarios – the actual and counterfactual – in which the Claimants' input costs happen to differ. This might seem to be a subtle distinction, but I think it is important, and that there is validity in Mr Bezant's criticism of Mr Harvey's approach here.

724. By choosing the actual outcomes as the relevant benchmark, Mr Harvey's approach places the burden on the counterfactual assessment to show how the absence of the Overcharge would be "*fine-tuned*" to deliver a different outcome. As Mr Bezant observed, one likely consequence of this approach is that, to the extent that there is any inertia in the setting of the Claimants' downstream prices, Mr Harvey's "*what changes?*" question requires the Overcharge itself to

overcome that inertia in order to establish the likelihood of an SPO effect. Given the very small scale of the Overcharge relative to the downstream market value, it is unsurprising that the Overcharge is unable to overcome this inertia. However, I consider that Mr Harvey's "*what changes*?" question is the wrong one to ask when addressing the legal question, and that this biases the assessment in a way that is likely to understate the degree of pass-on.

725. The second concerns a similar issue that is illustrated in the debate about the "*probabilistic*" analysis presented by Mr Bezant in relation to the way in which the Overcharge might have impacted the glidepath charge controls that applied to some of the relevant BT downstream activities. My colleagues have made clear they do not find this mechanism credible, but I see it differently. The issue here is one that is commonly found in pass-on analysis, for example where downstream retail prices are constrained to conform to arbitrary "*price points*" (e.g. £4.99, £5.99, £6.99, etc.). If cost increases occur in small increments of (say) 5p, most individual cost increases will have no impact on retail price, but assuming that downstream re-sellers will take steps to avoid making cash losses on their activities, there must come a point at which a particular 5p cost increase triggers a £1 retail price adjustment (which in this particular instance would create a 2,000% pass on). In some factual circumstances, it might be feasible to analyse pass-on in these situations on a detailed case-by-case basis, but if the analysis involves multiple time periods and cost increases and/or multiple products that exhibit this retail price point inertia, a probabilistic analysis is the most sensible and proportionate approach to take, especially in the context of a legal test that is based on a balance of probabilities.

726. In the context of the glidepath analysis, it was clearly not open to the experts to conduct a specific assessment of the impact of the Overcharge on the financial models used by the regulator because these models were not made available to the experts. Even had they been made available, in view of the small value of the Overcharge relative to the value of the Claimants' downstream businesses, it is extremely doubtful that specific trigger points would be identified with any degree of precision, or that seeking to follow through the effects of the Overcharge on individual price cap adjustments would yield any useful insights into which downstream prices were affected and in which time periods. This

seems to me to underline the sense of taking a probabilistic approach to the assessment of whether SPO occurred. I do not believe it justifies a conclusion that says a relationship between input costs and downstream prices is unlikely to exist.

727. Throughout all the above, I acknowledge that the small size of the Overcharge relative to downstream market values is problematic for DAF's pass-on argument. My point is that small pass-on effects can exist even if they are not easily identifiable, and that pass-on arguments should be able to succeed if there is a sufficiently clear factual basis for establishing that such pass-on occurs. In my assessment, Mr Bezant's evidence of a causal connection between the Claimants' input costs and downstream prices is sufficient to meet that test.

IV. Identifiability of downstream claims and implications for the principle of effectiveness

728. To the extent that the Claimants did pass on some or all of the Overcharge in their downstream markets, the passed-on cost (and hence damage) was in most cases likely to have been felt by customers of the Claimants' businesses, namely users of postal and telecommunications services. These will comprise a mix of individual consumers and corporate users of these services.

729. For reasons I describe further below, I do not think it is necessary to arrive at a specific value of the damage that is passed on to these downstream customers, but if for illustrative purposes we consider total damages in the region of £20 million, and assume that £15 million of this is passed on by the Claimants, of which £10 million applies to Royal Mail and £5 million to BT, it is evident that the passed on damage to any individual customer will be very small, and a matter of a few pence in the case of individual consumers or households.

730. In its submissions, it was notable that DAF described its SPO arguments as a "*defence*". It is true that in the current case any reduction in damages paid to the Claimants is money saved by DAF in the very short term, but since that damage still exists, and is instead incurred by parties downstream, in a smoothly functioning litigation system, an SPO finding would not result in any saving to

DAF. SPO would not be a "*defence*" at all. If all the potential claimants (both immediate and downstream) had been represented in the current proceedings, DAF might have been indifferent to the SPO question, and this would instead have been a debate between the Claimants and their customers as to how the damages award should be split. We have noted earlier in the judgment that when the CAT originally considered pass-on in *CAT Sainsbury's*, it proposed that pass-on should be granted only if the defendant identified the downstream parties to whom the damages should be paid (if not to the immediate claimant), though this proposition was rejected by the Court of Appeal in *CA Sainsbury's* (as explained in our section on the law of SPO above). This proposal from the CAT seemed to have been motivated by a concern that justice would not be done if defendants could successfully use pass-on arguments as a way to avoid the full consequences of the damage that their unlawful conduct had caused.

731. However, simply identifying the downstream claimants for any pass-on in this case does not in itself establish that they would be able to make a viable claim against DAF. In this respect, it is important to note that the guidance issued by the Supreme Court in *Sainsbury's* included the need to ensure that any approach on pass-on did not offend the principle of effectiveness. Specifically, it is necessary to consider whether the prospects of a successful claim from downstream customers against DAF would be "*excessively difficult or impossible*".

732. I think it is obvious that there is a very high risk that downstream claims for any passed on damage in this case would indeed fail this test. Individual claims would be far too small in value to be viable, and even a collective action on behalf of Royal Mail and/or BT consumers would be likely to face extreme difficulty. Even if a way were found to simplify the proof of downstream damages and the distribution mechanism, the need for legal and expert fees, and a return to a litigation funder, would mean that the prospective pay-out to downstream consumers could well exceed the administrative costs of making such payments.

733. This creates an obvious dilemma. On the one hand, if I am right in my assessment that a substantial degree of pass-on is more likely than not, then a

damages award that pays the full Overcharge to the Claimants will involve over-compensation for the damage they have actually suffered. On the other hand, if I am also right in my assessment that a successful claim from downstream customers for their share of the passed on damage would be excessively difficult or impossible, then an award that covers only a part (perhaps a small part) of the damage that has been caused by DAF's unlawful act would seem to fall foul of the principle of effectiveness.

734. I do not know how to resolve this dilemma, but since this is a difficulty that is likely to arise in many future cases, it seems worthwhile to explore some options. Two possible avenues suggest themselves:

(1) The first would be to make full payment to the Claimants, but to explore the possibility that a substantial share – say 75% - should be set aside or retained in some form, with a view to making payments to downstream claimants if they can make a case for passed on damages.

(2) The second would be again to make full payment of the Overcharge damage to the Claimants but then to require that each Claimant identify a proportion – again say 75% of the total – as a "*credit*" or costs reduction of some other kind of offset when presenting projections of their reasonably incurred costs to the regulatory process that will govern the next set of pricing controls. If a practical way could be found to achieve this, it would allow the actual rate of pass-on to work itself out through the regulatory process. If Mr Harvey's view, as shared by my colleagues, that relatively small sums which are fed in to one end of the regulatory process would make no difference to regulatory outcomes is correct, then the suggested adjustment to the Claimants' regulatory accounts would indeed prove costless to them. If, in the alternative, Mr Bezant's view, as shared in this opinion, that even small amounts would be expected to have some impact on price regulation outcomes is valid, then downstream customers would indeed benefit from some of the amount that had been fed in to the system.

735. I do not know whether either of these options, or some other solution, might be employed to address the effectiveness dilemma, and, since the majority judgment of this tribunal is that there is no SPO, the point does not need to be tested in this case. But it does seem potentially fruitful for the courts to explore these avenues in future damages cases that raise similar issues.

(d) Consistency with other mitigation conclusions

736. For completeness, I should place my conclusion on SPO against the unanimous conclusion we have reached on the other two areas of mitigation raised in this case, namely those relating to the Resale of Used Trucks, and Complements. These mitigation arguments work in a different way to SPO, since they do not require the Claimants to make any adjustment to their conduct. In each case, the offsetting benefit to the Claimants would arise from the anticipated changes in the conduct of other market participants – buyers of used trucks in one case and sellers of trailers in the other. If such changes took place, the Claimants would stand to gain from the higher prices that the former group were prepared to pay, and the lower prices that the latter group were prepared to offer in their transactions with the Claimants.

737. As we have noted, in both areas there was agreement in principle between the experts that there was a sound case for identifying and seeking to measure these mitigation effects, but having examined the evidence presented by the experts we found that neither effect was proved as a matter of fact. In contrast, with respect to SPO my conclusion is that although there is no effective way to measure the specific price impacts, there is sufficiently convincing evidence to prove that higher Claimant costs arising from the Overcharge are passed on in higher downstream prices, mainly through the regulatory process.

(e) Conclusions

738. I summarise the conclusions reached in this opinion as follows:

(1) Legal proof of an SPO effect does not require precision in identifying the effect but it does require that a balance of probabilities test is satisfied.

(2) Proof of an SPO effect cannot be assumed, and it requires evidence of a causal link rather than a general argument about the desire for cost recovery.

(3) The fact that trucks are recognised to be an input that is employed by the Claimants to provide their respective downstream postal and telecommunications services is in my view critically important to assessing whether a causal link exists between the Overcharge and an SPO effect. In terms of the classification of pass-on that has featured in the recent case law, an "option (iv)" pass-on mechanism such as we encounter here has a stronger underlying basis in economic theory than pass-on arguments that rely on the mechanisms described by options (ii) or (iii).

(4) The fact that trucks costs are very small relative to the downstream revenues of the two Claimant firms, and that the Overcharge itself is even smaller, makes it more challenging to identify a causal link, and virtually impossible to measure an SPO effect in the downstream market.

(5) The majority judgment is that DAF has failed to prove the existence of SPO, largely as a result of the problem that any such effect is extremely diluted in the Claimants' downstream markets.

(6) The disagreement I have expressed in this opinion arises from two main factors. First, I do not believe that an effect that is too small to measure cannot exist. Second, DAF's expert has in my view presented a convincing account of the way in which the regulatory processes controlled downstream pricing across the majority of the Claimants' relevant downstream businesses, and has shown both that it was capable,

and that in all likelihood it did in fact, achieve its stated aim, of allowing the Claimants to pass on reasonably incurred costs in downstream prices.

(7) My conclusion is therefore that convincing evidence of a causal mechanism for pass-on has been presented by DAF, and that SPO was much more likely to have occurred than not.

(8) I have not reached a firm view on the rate of SPO. The evidence on the way regulation operated indicates that it is likely to be high, but in my view it would be less than 100%, since the Claimants do face a number of challenges and risks (across both their regulated and unregulated businesses) that would make it unlikely that they would be insulated from all of the adverse commercial consequences of input cost increases such as the Overcharge.

(9) My conclusions would normally point to a recommendation to make a substantial deduction to the damages award to the Claimants, taking it well below the value of the Overcharge. However, the requirement to ensure that damages awards comply with the principle of effectiveness creates a dilemma here. Paying the full damages to the Claimants creates a risk of over-compensation, but there are also strong reasons to predict that the pursuit of downstream claims for damages would prove "*excessively difficult or impossible*". This means that any deduction from DAF's damages payment to reflect SPO would benefit DAF commercially because its SPO arguments would operate as a "*defence*" that would result in DAF paying damages that failed to match the consequences of its participation in the trucks Cartel.

(10) I do not know how to resolve this dilemma, and since the majority judgment has ruled against the existence of SPO it is not necessary to do so. I have, however, outlined some ideas that might be explored to find a workable compromise in this area.

(3) Loss of Volume

739. The loss of volume issue only arises in the event that DAF succeeds in establishing that Royal Mail passed on the Overcharge by SPO. (BT did not run a similar argument.) DAF has not succeeded on SPO, although Mr Ridyard's dissenting opinion does conclude that there was SPO. Accordingly, we consider this issue shortly and by reference to the SPO that Mr Ridyard found to exist.

740. The argument on loss of volume is that if any part of the Overcharge had been passed on in higher downstream prices for Royal Mail's postal services, this higher price would have resulted in lower sales volumes in the downstream market. This in turn would mean that Royal Mail would suffer a loss of profit on those discouraged sales volumes that should be offset against any mitigation that is granted in respect of SPO. The argument is therefore a "*mitigation on a mitigation*". This loss of volume effect, and its possible offsetting impact, is a standard feature of most pass-on mitigation scenarios.

741. Royal Mail accepted that it bears the burden of proof in establishing any loss of profit offset that arises from this volume effect. We are not sure that that is correct as it seems to us that this is an integral part of the SPO question upon which DAF bears the burden. It does not matter, as we do not decide this issue by reference to the burden of proof.

(a) Mr Harvey's approach

742. Mr Harvey presented the loss of volume analysis in a conventional manner. He considered a number of scenarios for the SPO rate and for each scenario he assessed first how much that SPO would be expected to reduce Royal Mail's volume of sales, and second what the lost profit contribution would have been on these volume losses. His calculations started from the assumption that the Overcharge was the full amount that he had estimated. For example, under Mr Harvey's approach, an SPO rate of 50% would mean that 50% of his estimate of the value of the Overcharge would be passed on in higher downstream prices. Since the value of Royal Mail's downstream sales is very large relative to the Overcharge, this resulted in a very small uplift in downstream prices (of

between 0.02 and 0.03%). Mr Harvey then applied an estimate of demand elasticity of between -0.33 and -0.36 to estimate the impact of this price increase on Royal Mail's volumes, and an estimate of the profit margin on these lost sales to derive an estimate of the loss of profit that Royal Mail would expect to suffer as a consequence of the lost volume effect.

743. The higher the rate of SPO, the higher the demand elasticity, and the higher the profit margin on lost volumes, the greater will be the offset to the SPO mitigation effect. Mr Harvey's different scenarios for these parameters led to the calculation of an offset of between 23% and 36% of the SPO effect. Assuming a 50% rate of SPO, on his "*low*" scenario (in which variable margin was 70%, and elasticity of demand -0.33) the loss of volume claim was £3,453,583 and on the "*high*" scenario (in which variable margin was 100% and elasticity of demand was -0.36) it was £5,382,208.

744. Mr Harvey argued that the extremely small downstream price increases envisaged in this analysis justified the use of a high profit margin when considering the lost profit from lost sales volumes. He reasoned that since small price changes led to very small volume losses, Royal Mail would have little opportunity in practice to save costs.

(b) Professor Neven's approach

745. Professor Neven made a number of criticisms of Mr Harvey's approach, including some detailed points about the precise workings of his calculations which led to only very small differences to the net result. He also adopted a different definition of the rate of pass-on which led to considerable, and largely avoidable, confusion between the two experts.

746. DAF's closing arguments reproduced a figure from one of Professor Neven's reports, providing a diagrammatic description of the trade-off between price increases and volume losses, highlighting the way that a price increase tends to generate an increase in per-unit profit on the sales volumes that would be retained despite a price rise, which DAF and Professor Neven labelled "*infra-marginal sales*". DAF claimed that this diagram provided insights into the trade-

off that the regulator would have made as between profit margins and volumes in the event of an Overcharge, but one notable omission from this diagram was any representation of the cost increase that provides the starting point for this assessment. Had the cost increase arising from the Overcharge been included in this diagram, and in the discussion of the insights that it can offer on mitigation, this part of Professor Neven's and DAF's points on mitigation might have been more effectively conveyed both at the hearing and in its closings.

747. Professor Neven's major point, however, was that profit offsets due to volume effects could be dismissed entirely because of the way in which regulation of Royal Mail's business worked. In essence, his argument was that, if regulation took into account the effect that SPO would have on volumes, including the loss of profits on lost sales volumes, then one could rely on regulation to compensate Royal Mail both on any higher costs associated with the Overcharge, and for the consequent losses associated with any fall in volume. If valid, this mechanism would dispense with any need to conduct an assessment of volume losses.

748. When examined on the evidence to support this argument, Professor Neven made clear that he had done no work on whether this regulatory mechanism could be identified, arguing that he relied upon Mr Bezant's evidence to support the existence of this compensation mechanism.

749. Mr Bezant was cross-examined on this point, and it emerged that whilst Mr Bezant had not expressly addressed the loss of volume claim and how it would work through the regulatory process, he did argue that Professor Neven's conclusion could be inferred from the work that Mr Bezant had done on the SPO issue. He argued that he "*would expect in principle the regulator ... to appreciate the interaction between volumes, prices and costs*" when determining the price controls that would apply for any particular period. However, when pressed on the detail behind this general expectation, he accepted that he did not have the access to the regulator's detailed modelling that would be needed to test this further. When asked about the parts of Royal Mail's business that were not subject to regulation, Mr Bezant accepted that the relationship between lower volumes and higher margins "*would be weakened*",

but said that he would rely on Professor Neven's analysis to test this further. As noted above, however, Professor Neven had left this area for Mr Bezant to cover, and so this left a notable gap in DAF's presentation on the volume issues.

750. Once the reliance that DAF placed on Mr Bezant's analysis of the regulatory regime here became clear, My Harvey argued that the small scale of the hypothesised SPO price rise made it very unlikely that this regulatory mechanism would work in practice. Consistent with his position on SPO, Mr Harvey focused on the very small "*change*" in downstream price as between the actual and counterfactual worlds, and argued that Postcomm would be unlikely to recalibrate its overall assessment of Royal Mail's price control for such a small change. In turn, DAF argued that Mr Harvey's argument mischaracterised the nature of the counterfactual exercise, which should look not at a "*change*" from one outcome to another, but to two comparative and parallel factual scenarios.

751. The issues here, and merits of the arguments, have been addressed in our consideration of SPO under both the majority and dissenting views. In particular, as this only arises in the situation in which Mr Ridyard found there to be SPO, we would refer to [724] to [725] above where he deals with why he thinks that Mr Harvey's approach on this to be wrong.

(c) Conclusion on loss of volume

752. As noted above, given our conclusion that no allowance should be made to reduce the damages award for reasons of SPO, it follows that the question of a further adjustment to the SPO impact to cover loss of volume does not apply. In any event, we did not find the way in which DAF argued the loss of volume effect to be convincing. It did not take sufficient care to align the evidence presented by Professor Neven and Mr Bezant, such that each seemed to rely on the other to provide the necessary support for DAF's contentions. When tested, it became evident that Professor Neven had no evidence to offer that the regulatory process incorporated in-built compensation for volume effects, and whilst Mr Bezant's evidence provided a very general description that might have filled this gap, the absence of any specific work on this aspect of the

regulatory mechanism was in marked contrast to the detailed evidence he had provided on the SPO mechanism, and left too many questions unresolved. Our unanimous view, therefore, is that DAF's evidence did not provide a convincing counterweight to Royal Mail's claims on volume effects.

(4) Overall conclusion on SPO

753. We unanimously conclude that there should be no deduction from the Claimants' damages award in respect of SPO, albeit we get to that position by different routes. Therefore, loss of volume does not come into play.

754. We are also unanimous in considering that SPO should not be a defence available to a defendant such as DAF. DAF caused the Overcharge and should be liable for the full amount by way of damages. The only issue in relation to SPO ought to be to whom DAF should pay those damages and that means that those who suffered loss because of the payment of the Overcharge ought to be compensated by DAF. The only reason why DAF is able to run SPO as a "*defence*" in this case is because there are no downstream claimants before us. Mr Ridyard's suggestions as to setting aside some portion of the damages to await claims that might be made may be worth exploring in future cases. But so far as this case is concerned, we think that it is a just and fair outcome that DAF should be liable to pay the Claimants the whole Overcharge that they paid to DAF without any deduction for SPO or any other form of mitigation.

O. FINANCING LOSSES

(a) Introduction

755. As we have found that there was an Overcharge and the Claimants have suffered loss therefrom, we now need to consider the Claimants' additional claims for damages in respect of the cost of financing the Overcharge. The Claimants actually part company in relation to this issue: Royal Mail is claiming that it should be compensated for its historic losses by way of compound interest based on its WACC; BT is claiming simple interest pursuant to s.35A of the Senior Courts Act 1981 at a rate of 6.3% pa or such other rate as we determine.

756. The main area of disagreement between the parties is in relation to the use of the WACC, both by reference to the expert evidence on this (Mr Earwaker for Royal Mail and Mr Delamer for DAF) and as a matter of law. The figures for Royal Mail's WACC were agreed between the experts. In the relevant period, 1997 to 2021/22, the figure ranges between 6.9% and 10%.

757. Royal Mail's alternative position, if we reject the WACC, is to claim compound interest based on its cost of debt and its foregone returns on short-term investments. DAF accepts the logic of the alternative measure, although not its calculation, but says that, in any event, it should be simple rather than compound interest. The choice between using investment returns and debt interest should vary year by year depending on whether Royal Mail was likely to have borrowed or invested marginal funds in each relevant year.

758. Mr Delamer prepared the following chart showing the effect in monetary terms of the different interest computations that he performed, as compared with Mr Earwaker's computation based on the WACC. The figures are based on Mr Harvey's estimates of the Overcharge on both leased and purchased trucks and will therefore be approximately half of the stated amount as a result of our Overcharge findings.[18]

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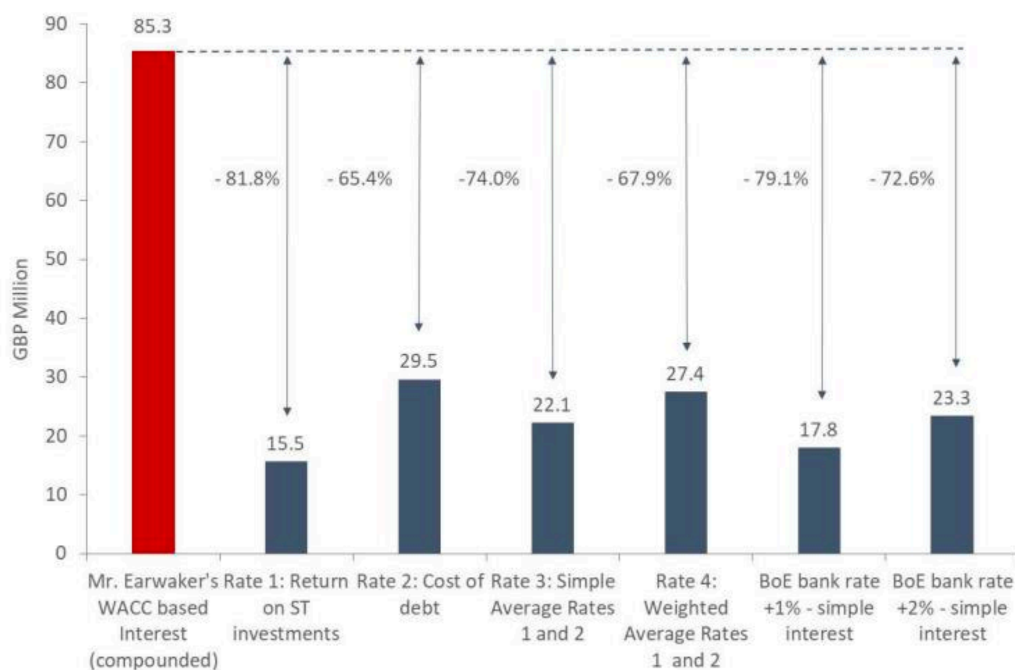
[18] Rate 1 is based on Mr Delamer's average return achieved on Royal Mail's short term investments; Rate 2 is Royal Mail's weighted average cost of debt; Rate 3 is a blended rate based on a simple average

Figure 1: Alternative Interest Computations – Summary



759. Mr Earwaker calculated his alternative interest rate, based on a different weighting as between the cost of debt (which was also different to Mr Delamer's calculation) and short term investment returns. Again based on Mr Harvey's Overcharge estimates, this figure resulted in approximately £36 million of financing losses which is higher than all of Mr Delamer's alternative rates.

760. The point of Mr Delamer's chart is to show that the use of the WACC to calculate Royal Mail's financing losses produces a significantly higher figure than all of the alternative interest computations.

(b) Simple v Compound interest

761. On whatever interest rate Royal Mail says its financing losses should be calculated, it asserts that it should be compounded year by year. DAF says that it should be simple interest only. BT are only claiming simple interest. It is convenient to deal with this dispute at the outset because it does not depend on whether the WACC is the appropriate measure.

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of the cost of debt and rate of return on short term investments; Rate 4 is also a blended rate based on the book values of Royal Mail's outstanding debt and short term investments.

762. For some reason, lawyers and judges seem particularly averse to compound interest. By contrast, economists have no problem with compound interest as it is what happens in the real world in borrowing and lending arrangements. Both experts seemed to agree that it properly captures what Mr Earwaker described as the "*the real life consequences that Royal Mail would have suffered*". Mr Delamer did not disagree but said that he thought this was a legal issue and therefore was outside of his expertise.

763. A claim for compound interest as better reflecting a claimant's actual interest losses was recognised by the House of Lords in *Sempra Metals Limited v Inland Revenue Commissioners* [2007] UKHL 34 ("***Sempra***"). At [52], Lord Nicholls said

> "We live in a world where interest payments for the use of money are calculated on a compound basis. Money is not available commercially on simple interest terms. This is the daily experience of everyone, whether borrowing money on overdrafts or credit cards or mortgages or shopping around for the best rates when depositing savings with banks or building societies. If the law is to achieve a fair and just outcome when assessing financial loss it must recognise and give effect to this reality."

764. Mr Lask, who made submissions on this topic and tax on behalf of the Claimants, referred to the helpful summary of the position by Males J (as he then was) in *Equitas Limited v Walsham Brothers & Co. Limited* [2013] EWHC 3264 ("***Equitas***") at [123]. This included the following:

> "ii) Second unless there is some positive reason to do otherwise, the law will proceed on the basis, at any rate in the commercial context, that a claimant kept out of its money has suffered losses as a result. That represents commercial reality and everyday experience. Specific evidence to that effect is not required and, even if adduced, may well be somewhat hypothetical and thus of little assistance…Accordingly the question in such a case is not whether a loss has been suffered, but how best that loss should be measured.
>
> …
>
> v) If a conventional borrowing cost is to be adopted in this way, the question whether interest should be simple or compound answers itself. While simple interest has the virtue of simplicity as Lord Hope observed, it also has the certainty of error and injustice. As their Lordships noted, it is impossible to borrow commercially on simple interest terms. I respectfully agree with Lord Nicholls that the law must recognise and give effect to this reality if it is to achieve a fair and just outcome when assessing financial loss. To conclude that, at least in a

> typical commercial case, the normal and conventional measure of damages for breach of an obligation to remit funds consists of compound interest at a conventional rate is therefore both principled and predictable, as well as being in accordance with what was actually awarded in *Sempra Metals*."

In the light of those comments it is perhaps surprising that compound interest is not ordered more often and the law still seems to be wedded to simple interest.

765. Mr Beard KC's only answer to this was to suggest that Royal Mail had inadequately pleaded its claim to compound interest and had not produced any evidence to support the claim, in particular as to how it would have used any additional financing in the counterfactual. He referred to some other passages in *Sempra* as follows:

> "17… the claimant must claim and prove his actual interest losses if he wishes to recover compound interest, as is the case where the claim is for a sum which includes interest charges. The claimant would have to show, if his claim is for ancillary interest, that his actual losses were more than he would recover by way of interest under the statute" (per Lord Hope)
>
> …
>
> "94. To this end, if your Lordships agree, the House should now hold that, in principle, it is always open to a claimant to plead and prove his actual interest losses caused by late payment of a debt. These losses will be recoverable, subject to the principles governing all claims for damages for breach of contract, such as remoteness, failure to mitigate and so forth.
>
> 95. In the nature of things the proof required to establish a claimed interest loss will depend upon the nature of the loss and the circumstances of the case. The loss may be the cost of borrowing money. That cost may include an element of compound interest. Or the loss may be loss of an opportunity to invest the promised money. Here again, where circumstances require, the investment loss may need to include a compound element if it is to be a fair measure of what the plaintiff lost by the late payment. Or the loss flowing from the late payment may take some other form. Whatever form the loss takes the court will, here as elsewhere, draw from the proved or admitted facts such inferences as are appropriate. That is a matter for the trial judge. There are no special rules for the proof of facts in this area of the law." (per Lord Nicholls)

766. We think there is nothing in the pleading or evidence points. Royal Mail pleaded its financing losses in [34] to [37] of the RRRAPOC, including compound interest. DAF and its expert have had no difficulty in understanding what Royal Mail's case is in this respect. There was a similar plea in *CAT Sainsbury's*, which at [522] held that it was adequately pleaded and compound interest was awarded.

767. As to the alleged lack of evidence, Males J's comments in *Equitas* are relevant and in any event the sort of evidence that DAF are demanding would be hypothetical. There is ample evidence before the court and considered by the experts as to what Royal Mail actually did at the time in terms of investment and debt finance. For example, Mr Jeavons referred to Royal Mail having borrowed from the Government at a rate of 12% compound interest. As was said in *CAT Sainsbury's*, the court or tribunal draws "*broad axe*" inferences as to what the claimant would have done in the counterfactual with the money it had to use to pay the Overcharge.

768. We have no difficulty in favouring a compound interest calculation over simple interest. This accords with economic reality and there is no legal bar to compounding the appropriate interest rate that we find to be applicable. This is what happens in the real world and it therefore corresponds to Royal Mail's actual losses. If it is appropriate to charge interest on a financial transaction, then it is self-evidently appropriate to apply interest also on any interest that has accrued between one period and another.

769. In relation to BT, it has not claimed compound interest, so we cannot award it.

(c) The WACC

<u>*(i) Introduction*</u>

770. WACC is a recognised concept in mainstream corporate finance theory. It is based on the idea that a firm raises finance for its operations from a mix of debt and equity, and that equity investors generally require a higher rate of return than lenders in order to compensate for the risk associated with the fact that the equity investors are normally last in line when it comes to drawing a return from the firm's trading performance.

771. There was very substantial agreement between the experts on both the concept of WACC and its role in corporate finance theory, and, as stated above, on the actual calculation of Royal Mail's WACC.

772. Where the parties diverged was principally over what the legal authorities say about the use of the WACC in this situation and whether, applying those authorities, the element in the WACC attributable to cost of equity finance is an "*actual cost*" such that it is an "*actual loss*" suffered by Royal Mail. Relying on what Marcus Smith J said in *Britned*, DAF argued that expected shareholder returns were not an actual cost to the company, but rather were merely the "*hoped for*" profits of equity investors.

773. Mr Lask argued that the WACC is the best available measure of Royal Mail's financing losses for the following main reasons:

(1) Royal Mail's expenditure on trucks (and therefore the Overcharge) was financed through a funding mix of debt and equity, in the form of retained earnings. However, it was accepted that Royal Mail did not raise any equity capital during the period 1997 to 2021.

(2) The WACC is a standard textbook measure of a firm's cost of debt and equity. This was not disputed and the experts adopted the following textbook definition:

> "The cost of capital is estimated as a blend of the cost of debt (the interest rate) and the cost of equity (the expected rate of return demanded by investors in the firm's common stock)…This blended measure of the company cost of capital is called the weighed-average cost of capital or WACC."

(3) Royal Mail used the WACC as a practical measure of its financing costs throughout the majority of the relevant financing period. As Ms Helen Bradshaw explained in her witness statement, Royal Mail had started considering the WACC in 2000 for internal finance assessments and from 2013 as the internal "*hurdle rate of return*" for investment decisions. Mr Jeavons said in his witness statement that the WACC was "*a fundamental aspect of how the Group operated*." However, DAF said that it was only late on in the Infringement period that Royal Mail had started taking the WACC seriously and, in any event, Royal Mail never achieved the WACC on any investments it made.

(4) The calculation of Royal Mail's WACC was agreed between the experts.

(ii) The legal position

774. Even though it is not particularly related to competition claims, the issue of the appropriateness of using the WACC in respect of calculating financing losses has been considered at first instance in some competition claims, in particular *CAT Sainsbury's* and *Britned.* In *CAT Sainsbury's*, the CAT rejected the WACC as the basis for the rate to measure Sainsbury's financing losses. It decided that the rate of interest to be used should be based on the factual circumstances of Sainsbury's loss. It found at [541] that:

> "It may well be that the WACC has its place in the assessment of what would be an appropriate price for the raising of large scale future capital for a firm. But it is a wholly inappropriate measure in the present case".

775. The CAT went on to reject the WACC as it did not reflect the "*actual loss*" suffered by Sainsbury's as required by *Sempra*. At [542] it said:

> "We consider that an assessment of the appropriate rate of interest must be based on the specific facts as we have found them to be. The cost of capital is the minimum expected rate of return that an investor will require to invest in a firm. *Sempra Metals* requires that the court quantifies the actual losses suffered by a firm. As noted above, in this case, Sainsbury's did not raise any equity during the claim period. An increase in the theoretical cost of equity does not equate to any actual loss paid out by the company in real life. We consider that, even if any changes in the cost of equity had occurred (contrary to the conclusions we have reached), these would have been too remote to be attributable to the overcharge."

The CAT decided that, on the evidence, the appropriate interest rate would be partially at the rate of cash earnings and partially at the cost of new debt (see [543]).

776. In *BritNed*, the claimant, which was owned, as part of a joint venture, by National Grid and TenneT (the operator of the Dutch electricity grid) claimed that it should have compound interest based on the WACC if its overcharge claim succeeded. It argued that payment of the overcharge required it to raise additional capital which was provided by the parent companies by way of equity. The equity was provided on the expectation that a minimum return was required (this "*internal rate of return*" was not specified in the judgment and

was referred to as "[X]"). The claimant argued that this was a loss for it, and not just its shareholders, that should be calculated by reference to its WACC.

777. Marcus Smith J rejected the claim as "*misconceived*" largely on the basis that this was the "*hoped-for profit of National Grid and TenneT*" and not a true reflection of the loss suffered by the claimant. At [549(3)], he said:

> "To calculate interest damages by reference to the hoped-for profit of National Grid and TenneT is fundamentally wrong. Even leaving on one side that the compensation is not being paid to National Grid or TenneT, payment on this basis would involve clear over-compensation: damages would be calculated by reference to a projected rate of return on a risky project without any reference to the risks to that profit being achieved. This serves to underline that fact that the IRR is a calculation of potential profit to National Grid and TenneT and not in any sense an assessment of BritNed's loss."

778. The judge went on to explain the difference between debt and equity finance to the claim for interest, at [549(6)]:

> "…there is, in this case, an essential distinction between debt finance arranged by BritNed (which did not occur […]) and an equity injection by BritNed's shareholders. The equity stake of National Grid and TenneT involves no cost to BritNed, save in an obligation to account for its profits to its shareholders. The cost of the equity injection is one borne by the shareholders, and one which, in principle, ought to be recoverable by them. But they are not party to these proceedings, and there is no evidence of what the additional finance provided to BritNed and caused by the overcharge actually cost them."

779. Mr Beard KC submitted that Royal Mail was trying to do precisely the same in this case as the claimant in *Britned*, seeking to say that, from a corporate finance point of view, the shareholders' opportunity cost of capital should be seen as a cost to Royal Mail, even though it is not an actual cost incurred by Royal Mail.

780. Mr Lask submitted that *CAT Sainsbury's* and *Britned* were decided on their own particular facts and they do not rule out the use of the WACC in an appropriate case – see for instance [541] in *CAT Sainsbury's*, quoted above. He also referred to *Multi Veste v NI Summer Row* [2011] EWHC 2026, in which Lewison J (as he then was) accepted the proposition that *"the WACC is a cost which the claimant would have borne in carrying out the development, and is to be treated no differently from the other finance costs"*. The fact that the claimant's actual cashflow calculations showed its cost of capital on a compounded basis was a *"strong pointer towards the conclusion that this is the correct method to adopt"*.

However, this was *obiter* as the claimant was only entitled to nominal damages on its breach of contract claim and the use of the WACC for internal cashflow forecasts seems to have led to an acceptance by both sides that the WACC would have been the appropriate rate, had quantum been relevant.

781. Mr Lask sought to distinguish *CAT Sainsbury's* on the basis that it was at least in part because of the CAT's rejection of the use by Sainsbury's expert of the *Modigliani-Miller* theorem (which Mr Earwaker did not rely upon) but also because of Royal Mail's factual evidence that it financed its purchase of trucks, including the Overcharge, out of a mix of debt and equity. The WACC was calculated, as agreed by Mr Delamer, on the basis of Royal Mail's actual borrowing rates, the well-established Capital Asset Pricing Model ("**CAPM**") for the cost of equity and the actual ratios of debt and equity held by Royal Mail. Mr Lask therefore said that Royal Mail had particularised and proved that this was its actual loss.

782. In relation to *Britned*, Mr Lask distinguished it by reference to the claimant's failure to identify a cost that it had suffered as opposed to its parent companies. In this case, he said that Mr Earwaker had explained why the use of equity capital to fund the Overcharge involved a cost to the business and it was not "*free*".

783. This latter point seems to us to be key: whether the use of equity is "*free*" for Royal Mail because it involves no actual cash outflow or whether it does constitute an actual cost that represents a loss suffered by Royal Mail. We examine this in the next section.

(iii) WACC economics

784. There is no dispute that the use of debt constitutes a cost to businesses in the form of interest rates payable on the debt finance. Mr Earwaker says that equity finance, which in this case means the use of retained earnings, represent a cost to Royal Mail and is not "*free*". He called this an "*opportunity cost*" and accepted that this was different from an actual loss to Royal Mail and it would not be reported in Royal Mail's accounts as a cost.

785. Mr Delamer was clear that this was not an actual cost for Royal Mail and so the WACC would not be a suitable measure for its past financing losses. He said this in his oral evidence:

> "Now, this cost of equity, which represents the opportunity cost, when I say it is not a monetary cost, it is because it is not. It is just a theoretical tool which helps in real life managers decide on investment opportunities to hopefully give their shareholders the return they want. But that return is not a cost to the firm. Returns then can be a bit higher, a bit lower. It does not change the cost with the shareholders. It just provides slightly higher or lower returns. So I think this is important because we agree on the theory but disagree on how this works in practice."

786. Mr Earwaker thought it untenable to treat equity financing as a form of free money. He said:

> "I do not think that it is tenable to regard equity capital as "a 'free' way of funding" (to quote Mr Delamer) or to think that Royal Mail could have financed sizeable Overcharge amounts – i.e. the amounts not financed by debt – free of consequences and at zero expense".

787. As to DAF's point that this was only, if anything, a cost to Royal Mail's shareholder (the Government), Mr Earwaker said that the opportunity cost to investors had a *"mirror image"* as a cost to the firm. Companies internalised their investors' opportunity costs as an ongoing cost to the business through various actions and decision-making such as when to retain earnings or pay dividends, taking account of their investors' required rates of return. Thus, it was argued that Royal Mail could have paid dividends if it had not had to pay the Overcharge that gave rise to an additional equity financing requirement and, consequently, an additional cost of equity financing. (Although see below as to whether the factual evidence supported this.)

788. Mr Earwaker's views were very much based on theory and he relied on corporate finance academic literature that suggests that using equity capital carries a cost to the business that is equivalent to the rate of return required by investors. Mr Delamer agreed that "*from a corporate finance perspective*" that would be the way to look at this issue but he maintained his view that the cost of equity is "*just a theoretical tool which helps in real life managers decide on investment opportunities to hopefully give their shareholders the return they want*."

789. Even though Mr Delamer accepted that companies strive to deliver returns to their investors in line with their expectations and that failure to do so could damage the companies' share values making it more expensive to raise capital in the future, he still emphasised that the use of retained earnings did not alter or create any costs for the company. What he meant by that was that there was no cash outflow and it was not an actual cost incurred by Royal Mail. This tied in with Mr Beard KC's formulation of the legal test as requiring Royal Mail to establish the "*actual loss*" suffered by it.

790. Mr Earwaker responded to Mr Delamer's position by saying that it was *"unnatural and unduly constraining"* from an economic perspective, not least because *"[t]he notion that shareholder equity capital comes with a cost provides a foundation to modern corporate finance as taught and applied around the world"*. Moreover, the notion (implicit in Mr Delamer's position) that a company could finance significant expenditure through equity capital *"free of consequences and at zero expense"* was not a tenable one. As Mr Earwaker explained, using retained earnings to finance an unlawful Overcharge meant paying a cartelist funds that could otherwise have been paid out as distributions.

(iv) The payment of dividends

791. As to the point about foregone dividends, it is not supported by Royal Mail's factual evidence. Mr Jeavons, the CFO of the Royal Mail Group, accepted that, even if there had been an Overcharge, it would have made no difference to dividend payments:

> "MR BEARD: You have indicated that no dividends were paid at any point, and I think you would agree that there would be no difference if there had been, in a hypothetical world, an overcharge on trucks, that would not have changed the position, there would still have been no dividends paid?
>
> MR JEAVONS: It is unlikely to have been remotely material to those decisions."

792. That means that, in the counterfactual, without the Overcharge, the position with respect to dividends would have been the same and no dividends would have been paid. This means that Royal Mail cannot have suffered any loss due to a

failure to pay out dividends, as was suggested by Mr Earwaker. In any event, Mr Beard KC submitted that any failure to pay out dividends could only have been a loss to its shareholder, not to Royal Mail itself.

793. There was a debate between the parties as to whether Royal Mail was a dividend paying company throughout the period. There was no dispute that Royal Mail started paying dividends following the 2013 IPO and that it has done so every year since then. Prior to that, and therefore during the whole period of the Infringement, Royal Mail did not pay dividends but Mr Earwaker and Mr Jeavons asserted that payments "*akin to dividends*" were paid. In particular this focused on the period from 2003 when the Mails Reserve was created and Royal Mail was required to transfer surplus retained earnings into the Mails Reserve. The Mails Reserve remained on Royal Mail's balance sheet (unlike a dividend) but was effectively under the control of the Government, Royal Mail's sole shareholder at the time. The Government directed Royal Mail to use the Mails Reserve for its own business or to fund the Post Office's rural network. It turned out from the evidence that in 2007 the Mails Reserve was transferred to Royal Mail's parent, Royal Mail Holdings plc, and there were no more transfers into the Mails Reserve thereafter by Royal Mail.

794. We do not think that this assists in the determination of the appropriateness of the WACC as an estimate of Royal Mail's financing losses. It is fairly clear that it did not pay dividends until 2013 but that it did thereafter. Mr Jeavons' acceptance that the Overcharge would have made no difference to whether dividends were paid or not means that that part of Mr Earwaker's argument in favour of the WACC cannot succeed.

(v) Conclusion on the WACC

795. There is intellectual validity to Mr Earwaker's argument on the desirability of using the WACC to measure a firm's cost of capital. From an economist's point of view, it is not right to treat equity finance as costless or "*free*" because equity investors have only a reasonable expectation, not a right, to a return on the funds they commit to a firm.

796. But the legal test is clear from the authorities, stemming from *Sempra*, that the "*actual losses*" suffered by Royal Mail must be based on "*actual costs*" incurred or paid by Royal Mail in financing the Overcharge. Using retained earnings may cause loss to its shareholder but Royal Mail itself has not suffered any loss therefrom. Even though the WACC may have been used by Royal Mail to evaluate investments, that only rather emphasises the point that the WACC is a tool for investors to assess investment opportunities.

797. Accordingly we reject the use of the WACC as the appropriate measure of Royal Mail's financing losses.

(d) The alternative measure of Royal Mail's financing losses

(i) Introduction

798. As we have rejected the WACC, we now turn to the alternative measure proposed by Royal Mail and Mr Earwaker, which is agreed to be appropriate in principle by DAF and Mr Delamer. As identified above, this alternative measure is based on a combination of Royal Mail's cost of debt finance and its returns on short term investments over the relevant finance period. This is broadly what happened in *CAT Sainsbury's* and involves assumptions as to how Royal Mail would have used the additional funds that it would have had in the absence of the Overcharge. As Mr Delamer put it:

> "But for an overcharge, the Claimant would have had additional funds. These funds could have been used to increase the actual investments in short term investments (generating additional returns to those it actually generated), or to reduce the amounts of debt the Claimant has actually held in the past (hence reducing the amounts of interest it has actually paid on such debt). As such, the potential relevance of short-term investments and debt when estimating the financing costs the Claimant could have avoided in the counterfactual scenario is self-evident to me".

799. Not only was the above approach agreed between the experts, they also managed to agree: (a) estimates of the returns made by Royal Mail on short-term investments over the entirety of the relevant period, 1997 to 2022; and (b) Royal Mail's cost of debt from 1997 until the end of 2012/13.

800. The only differences between the experts in relation to the alternative interest rate concerned:

(1) Royal Mail's cost of debt from 2013/14 until 2021/22; and

(2) the appropriate weighting to be applied as between short-term investments and debt.

(ii) Royal Mail's cost of debt from 2013/14 to 2021/22

801. The differences between the experts' cost of debt estimates for the period 2013/14 until 2021/22 are largely attributable to Mr Delamer's exclusion of the following loans from his calculations:

(1) a £500 million Government loan to Royal Mail, which Mr Delamer fully excluded from his calculations for 2013/14 on the basis that it was repaid part of the way through that financial year; and

(2) two loans totalling £935 million provided to Royal Mail by its parent company, Royal Mail Plc, which Mr Delamer excluded from his calculations entirely.

802. Mr Delamer justified both exclusions by reference to the way they were dealt with in Royal Mail's accounts. The effect of excluding these loans was to lower Royal Mail's average cost of debt from Mr Earwaker's 2.5% to Mr Delamer's 0.6%. In five of the nine years in this period, Mr Delamer calculated that Royal Mail's cost of debt was zero percent, which Royal Mail understandably says is wholly implausible.

(1) £500 million Government Loan

803. The experts agreed that one of Royal Mail's main financial debt instruments during the relevant period was a £500 million loan obtained from the National Loans Fund in February 2001. It was common ground that the loan constituted financial debt; that it was interest bearing at a rate of 5.8%; and that it represented an actual financing cost for Royal Mail. Mr Delamer included this

loan in his cost of debt calculations for 2000/01 (when it was obtained) and for all subsequent years until 2013/14.

804. Mr Delamer nevertheless excluded this loan from his debt calculations for 2013/14. The only reason for this was that Royal Mail repaid the loan half-way through the year (in October 2013) and Mr Delamer chose to apply a "*simplifying assumption*" of including only that debt which was outstanding at the end of each financial year. Mr Earwaker had broken down his analysis for that year into two sub-periods, before and after Royal Mail's IPO in October 2013 when the loan was repaid and calculated a weighted average of debt financing costs for the whole year.

805. We do not consider that Mr Delamer's approach is reasonable. Royal Mail clearly paid interest on the loan for a substantial part of the year and there is no reason not to take that into account and to calculate the annual average, as Mr Earwaker did.

(2) The parent company loans

806. Royal Mail plc issued interest paying bonds of €500 million and €550 million in 2014 and 2019 respectively. On each occasion the proceeds were immediately loaned to Royal Mail pursuant to loan agreements that provided for specified repayment dates and for Royal Mail to pay interest. The loans were Royal Mail's main source of debt finance and they were clearly back-to-back with the bonds issued to the market by Royal Mail plc.

807. Mr Delamer excluded them from his calculations of Royal Mail's cost of debt for two principal reasons:

(a) they were recorded in Royal Mail's financial statements under "*trade and other payables*" and not as financial debt; and

(b) they did not appear to be normal commercial debt arrangements, mainly because they were repayable on 5 days' notice.

808. It is correct that the loans were categorised as "*trade and other payables*" in the financial statements and that this normally covers short term debts with a company's suppliers. As Mr Delamer put it:

> "I do not have to then concern myself about these very complicated discussions about what is financial debt and what is not. I trust what the claimant and its management and its auditors did over 25 years when they classified some things as financial debt and some things as something else. So that is how I choose what to include or not."

809. Mr Lask pointed to Mr Delamer's explanation as to his overall approach to calculating Royal Mail's financing losses as follows:

> "The Claimant's claim for interest is therefore determined by what actual financing costs incurred on the amounts it "did" borrow during the relevant period would have been avoided if it had not paid the overcharge. As such, I understand it relates to cash outflows faced by the company, or liabilities generated that will imply a future cash outflow for the company at some point in time, which would have been avoided but for the overcharge."

810. Mr Delamer agreed that he was adopting a formalistic approach by reference to the financial statements:

> "THE CHAIR: It is a very sort of formalistic approach. You are just treating it -- because it appears in one particular place in the accounts, you are disregarding it.
>
> A. Absolutely. So it is a high-level approach; right? So we just focus on what has been determined as financial debt, and it works -- right? -- because for two-thirds of the period we get to the same numbers as Mr Earwaker. For this period we are in disagreement."

811. In any event, the financial statements contained notes that explained the loans. Royal Mail's 2014/15 accounts stated this in note 20:

> "In July 2014, Royal Mail plc (the Company's immediate and ultimate parent company) issued €500 million 2.375% Senior Fixed Rate Notes due July 2024. The proceeds of the issue were loaned from Royal Mail plc to the Company and used by the Company to repay £350 million of the existing syndicated bank loan facilities."

And its 2020/21 accounts recorded this under the heading "*trade and other payables*":

> "Amounts due to Royal Mail Group entities include £895 million (2019-20: £935 million) loaned to the Company by its parent company Royal Mail plc, following the issue of two bonds by Royal Mail plc. A €500 million bond was issued in July 2014 and a €550 million bond was issued in October 2019. These

loans are revalued at closing Sterling/Euro exchange rates, and the gains/losses recognised in the income statement."

812. These were quite clearly loans on which Royal Mail paid interest. We think that Mr Delamer has placed unrealistic emphasis on their formal categorisation in the financial statements and it is much more important to look at their substance. They fit the criteria that Mr Delamer himself set for determining financing costs, namely whether they involved "*cash outflows*" that would have been avoided without the Overcharge. The interest that Royal Mail paid on these loans must be recognised within any calculation of its cost of debt.

813. As to the point about the loans being repayable on 5 days notice, Mr Earwaker addressed this in his supplemental report, explaining that *"a requirement to repay loans on demand does not mean monies are not actually owed or that Royal Mail has not paid and/or does not need to pay interest"*. Since the loans are still referred to in Royal Mail's 2020/21 accounts, it is apparent that the parent company has not exercised the clause in question and therefore Royal Mail has continued to pay interest on the loans.

814. Mr Delamer had an alternative position if we were to find that the loans should be included. He said that "*the whole intra-group funding*" as recorded in the financial statements should be considered and he calculated an average interest rate based on the total amount of funding from the Group to Royal Mail. However there was no evidence before us that any other amounts in "*trade and other payables*" with other Group entities were financial debt or structured debt, which was the experts' criteria for including such amounts in the calculation. The point arose late in the day and there was therefore limited documentation as to what such amounts might be. Royal Mail's solicitors, in a letter dated 27 April 2022 explained, having made inquiries, that the other amounts in "*trade and other payables*" with Group entities were intra-group cash pooling arrangements and currency hedging. Cash pooling is not structured debt. And Royal Mail's hedging arrangements were taken into account in Mr Earwaker's cost of debt analysis.

815. During the cross-examination of Mr Earwaker, Mr Beard KC took him to some accounts of other Group companies that had only very recently been added to

the bundle and which neither Mr Earwaker nor Royal Mail had had an opportunity to consider in this context. The accounts showed that there were loan arrangements between Royal Mail and one of its subsidiaries, Royal Mail Investments Limited, in 2014 and that these were part of a hedging arrangement in relation to the 2014 loan from Royal Mail plc to Royal Mail. We agree with Mr Earwaker that this circular hedging arrangement is not relevant to a calculation of Royal Mail's cost of debt as it would not have been used to fund the Overcharge. Mr Beard KC complained that the underlying loan agreements were not made available, but they were never asked for and in any event they are not particularly relevant.

816. Mr Beard KC also referred to another intra group loan arrangement between Royal Mail and a further subsidiary, Royal Mail Estates Limited, derived from the latter's 2020/21 accounts. However, Mr Earwaker stated that he recognised this loan arrangement and it was related to lease back arrangements of properties held by Royal Mail Estates Limited. He did not believe that it would have been used to finance the Overcharge and so it was not included in his cost of debt calculation.

817. In our view, Mr Earwaker was fully justified in including the two loans from Royal Mail plc to Royal Mail, which were effectively structured finance arrangements from outside the Group through the bonds issues, and not including other intra-group funding arrangements, which were clearly not even akin to structured finance.

818. Finally, it is pertinent to note that the consequence of Mr Delamer's preferred position of excluding the two loans is that he ascribes a zero cost of debt to Royal Mail for the years of 2015/16, 2017/18, 2018/19, 2020/21 and 2021/22. As Mr Earwaker commented, it seems implausible that Royal Mail would have had access to interest-free debt finance during these years (in each of which it received positive though modest returns on its short term investments) as would be implied by Mr Delamer's approach.

(iii) Weighting between cost of debt and short term investment returns

819. This area of disagreement between the experts concerned how Royal Mail's cost of debt and return on short-term investments should be combined into a single figure for the appropriate interest rate to apply to past financing losses. Mr Earwaker proposed an approach to Royal Mail's actual finance costs that split the relevant period into two. He argued for "*a very binary approach*" in which for each period it was either 100% weighting to short-term investment returns and 0% for debt costs or vice versa. So for the period from 1997 to 2007/08 the rate was wholly based on Royal Mail's actual returns achieved on various short-term investments; and for the period 2008/09 to the present, it was wholly based on Royal Mail's cost of debt.

820. The rationale for this approach was that in the earlier period Royal Mail was not reliant on borrowings and had spare cash which it deployed in short-term investments; whereas in 2007 Royal Mail's short-term investments shrank rapidly and in this latter period Royal Mail became dependent on external loan finance. Mr Earwaker argued that in the counterfactual earlier period Royal Mail would have committed more funds to these short-term investments and hence that it lost out on the returns on those foregone investments. In the latter period, however, he argued that the most practical assessment is to assume Royal Mail would have borrowed less absent the Overcharge and hence that the relevant cost of funds was the interest paid on the extra borrowing that was due to the Overcharge. As Mr Earwaker explained in his report:

> "These short-term investments then shrank considerably during 2007 as the postal operations faced increasing financial challenges. From 2008 onwards, Royal Mail took on additional borrowing to finance its UK operations as its previously profitable business started to record losses. My understanding, based on the explanation that Mr Michael Jeavons gives in section 17 of his witness statement dated 25 June 2021, is that the amounts shown in the middle column of table from this point onwards represent a basic level of working capital that the Royal Mail directors judged they needed to maintain access to at short notice, rather than the kinds of surpluses of excess cash seen in the period 1997 to 2007."

821. Mr Earwaker's explanation for why Royal Mail actually held cash reserves in short-term investments at the same time as it was a net borrower of money was that Royal Mail, like many other businesses, needed to have some short-term funds available for liquidity purposes. Mr Earwaker took a similar approach to

that taken in *CAT Sainsbury's*, using a "*broad axe*" to assess how Royal Mail would have been likely to have used the extra funds in the counterfactual.

822. By contrast, Mr Delamer adopted a blended approach in which debt and investment income are both considered relevant across the entire period. Specifically, Mr Delamer applied weights based on the relative values of Royal Mail's debts and short-term investments at any point in time. This approach yielded a lower financing cost than the approach adopted by Mr Earwaker. Mr Beard KC said that it had the merit of not speculating on what Royal Mail would have done with the extra funds in the counterfactual, particularly where Royal Mail's evidence had not addressed that point.

823. Mr Lask submitted that Mr Delamer's approach was "*blunt and oversimplistic*" in that it assumed that Royal Mail would have used the additional funds to make short-term investments and to reduce debt in precisely the relative proportions that they bore to each other. That was wholly unrealistic and he said the more nuanced approach of Mr Earwaker is more likely to reflect reality and should be preferred.

824. We prefer Mr Earwaker's approach which is based on how a rational business such as Royal Mail would have used extra funds that it had at the relevant time. His two-period characterisation of Royal Mail's financial position, as a net investor in the first period and a net borrower in the second, is credible on the evidence and it would therefore be more likely that Royal Mail would use the funds in one direction rather than two. That therefore is a reasonable way to assess Royal Mail's actual cost of financing the Overcharge.

(e) BT's simple interest claim

825. BT only claimed simple interest pursuant to s.35A of the Senior Courts Act 1981 and it did not rely on any expert evidence. In its pleading, it claimed simple interest at the rate of 8% per annum; alternatively at such other rate as the Court determines.

826. The points that we made above in relation to simple or compound interest apply equally to BT, except that BT maintained to the end that it is only seeking simple interest. Accordingly, that is all that we can consider.

827. On 16 June 2022, after the end of the evidence and two working days before written closing submissions were due to be filed, BT's solicitors provided by way of a letter, with an enclosed Excel spreadsheet, a new analysis seeking to justify BT's simple interest claim by reference to its weighted average cost of debt during the relevant period. This analysis suggested that a rate of 6.3% would be appropriate.

828. Mr Beard KC objected to this being put in and considered, as being patently too late. We agree. If BT was inviting us to determine the interest rate in this way by reference to BT's cost of debt, that evidence should have been brought forward properly so that it could be tested both factually and by the experts. It is inappropriate for BT's case to be reinvented this way after the evidence has closed.

829. BT has clearly dropped its claim to a flat rate of 8% interest. Mr Lask's fall-back position was to rely on the principles applied under s.35A of the Senior Courts Act 1981 of compensating the claimant for being deprived of money that it ought to have received. The conventional approach is to fix an interest rate by reference to the Bank of England base rate at the time of the loss and adding a fixed percentage. Depending on the particular characteristics of the claimant, the fixed percentage is normally 1 or 2%. Unsurprisingly, BT asked for 2% and DAF suggested 1%.

830. We consider that the conventional approach of the CAT is to award base rate plus 2% to commercial claimants and we will do so in this case. It has been agreed that BT's simple interest should be calculated by reference to its post-tax Overcharge losses, not its post-tax Overcharge losses grossed up for tax.

(f) Summary of conclusions

831. For Royal Mail, we direct the interest to be calculated in accordance with Mr Earwaker's alternative approach including his weighting and cost of debt calculations and on a compound basis.

832. For BT, we direct that it should receive simple interest at a rate of Bank of England base rate plus 2%.

P. TAX

833. It is common ground that the claims must be adjusted to account for the effects of taxation. Two such adjustments are necessary: the quantum of the claims must be: first, reduced to reflect the reduction in corporation tax liability that accrued (or will accrue) to the Claimants due to their profits being reduced as a result of the Overcharge; and second, increased to reflect the corporation tax that the Claimants will have to pay on any damages award. Further, it is agreed that these adjustments do not cancel each other out.

834. We are very grateful to the parties and their experts on tax, Mr Singer for the Claimants and Mr Pritchard for DAF, for reaching agreement on nearly all of the complicated issues that have arisen in this area. By the time of the hearing, there were only two issues in dispute (and one was contingent on the other) and they both only arose in the event that we found in Royal Mail's favour on the WACC being the appropriate measure for its financing losses. Those two issues were:

   (a) whether Royal Mail's equity financing losses must be run through the tax modelling despite having been calculated on a post-tax basis; and

   (b) if so, what method and tax rate should be used to gross-up those losses before they are run through the modelling.

835. We have decided against Royal Mail on the WACC and so these issues do not arise. We do not think it is necessary or desirable for us to lengthen this judgment even further by discussing and deciding these complicated issues in detail.

836. In case this matter goes to appeal and we are overturned on the application of the WACC, we heard from the experts on these two issues and our conclusions on their evidence is as follows:

(1) We prefer Mr Pritchard's approach to include the equity finance losses in the tax model so as to assess their impact on Royal Mail's tax position in the counterfactual. There is clearly a conceptual problem for the tax experts because of the point discussed above that equity financing losses are not actual costs for Royal Mail that appear in its accounts. Mr Singer relied on the fact that Mr Earwaker had calculated the WACC on a "*post-tax*" basis but it seemed as though Mr Earwaker was relying on Mr Singer to analyse the tax position and that he had merely used the corporate financing tool, the CAPM, to calculate the vanilla WACC that he said was "*neutral as to tax*". But Mr Singer was relying on Mr Earwaker's "*post-tax*" rate which necessarily did not take into account Royal Mail's actual tax position.

(2) We therefore think that it is necessary to run the equity financing losses through the tax model to analyse Royal Mail's position in the counterfactual.

(3) In order to do that, the experts are agreed that it is necessary to gross up the equity financing losses to reflect a pre-tax value. They disagreed as to the appropriate rate to be used to gross up but only for the final period 2013/14 to 2020/21 (there was an immaterial difference on the first period 1996/97 to 1999/00). Mr Pritchard proposed using Royal Mail's effective tax rate ("**ETR**") which he calculated at 11.9% based partly on Mr Goldring's evidence for Royal Mail that it paid no tax between 2013/14 and 2016/17 and for the following period to 2020/21 it paid half the statutory rate by using historical trading losses.

(4) Mr Singer used the statutory rate which was approximately 20% for this period. He had previously suggested that the statutory rate should not be used for grossing up but by the time he had come to give evidence he had changed his mind. The business day before he was due to give evidence, he provided some calculations of the ETR if non-taxable profits were removed and this showed an ETR that was more than the statutory rate. He said that this showed the appropriateness of using the

statutory rate. However, we think it rather shows the opposite and indicates that there is a flaw in his calculation.

(5) We therefore think that the gross up rate should reflect Royal Mail's actual tax rate for the period and prefer Mr Pritchard's approach on this second issue as well.

837. Accordingly, had we decided to use the WACC to calculate Royal Mail's financing losses, we would have held in DAF's favour on the two consequential tax issues that this gave rise to.

Q. CONCLUSION AND OUTCOME

838. For the reasons that we have fully set out above, we find as follows:

(1) the Infringement caused loss to both Claimants in the form of the Overcharge;

(2) the Overcharge for which DAF is liable is assessed at 5% for both Royal Mail and BT on their value of commerce over the whole of the relevant period;

(3) that Royal Mail's value of commerce is **£260,597,683** as assessed by Mr Harvey including bodies bought from DAF; BT's value of commerce was agreed between the parties at **£44,961,617**;

(4) that DAF's mitigation "*defences*", that is SPO, Complements and Resale Pass-on, all fail;

(5) Royal Mail's claim to use the WACC to calculate its financing losses fails; they are to be calculated in accordance with Mr Earwaker's alternative interest rate based on his weighting of the cost of debt and short-term investment returns and on a compound basis;

(6) BT is entitled to simple interest on its damages award of base rate plus 2%;

(7) the tax experts' agreed modelling is adopted.

839. Accordingly, the Claimants succeed in their claims. We invite the parties to calculate the damages including interest and tax based on the above findings. If there are any issues arising that cannot be agreed this can be dealt with at a further hearing after the handing down of this judgment.

840. Finally, we again thank the parties and their legal teams for their excellent submissions and invaluable assistance they have provided us in relation to this

important case and for the efficient way that these proceedings have been conducted.

The Hon. Mr Justice Michael Green Chair	Sir Iain McMillan CBE FRSE DL	Derek Ridyard

Charles Dhanowa OBE KC (*Hon*) Registrar	Date: 7 February 2023

ANNEX 1

TERMS AND ABBREVIATIONS USED IN THE JUDGMENT

Term	Meaning	First Reference In The Judgment
Addressees / Cartelists	DAF, MAN, Daimler, Iveco and Volvo/Renault	1
BCM	Business Cost or Business Case Model	686
BT	BT Group	2
BT Fleet Limited	BT Fleet	99
CAPM	Capital Asset Pricing Model	783
Claimants	Royal Mail Group Limited and BT Group	2
Commission	European Commission	1
DAF Germany	DAF Trucks Deutschland GmbH	5
DAF Group	DAF	2
DAF NV	DAF Trucks N.V.	5
DAF UK	DAF Trucks Limited	5
EEA Agreement	Agreement on the European Economic Area	1
EGR	Exhaust Gas Recirculation	451
ETR	Effective Tax Rate	836
GFC	Global Financial Crisis	336
IKP	Derived from the Dutch "*integrale kostprijs*" or integral cost price	95
Infringement	Commission Settlement Decision which found that the Addressees / Cartelists had carried out a single and continuous infringement of Article 101 TFEU and Article 53 EEA Agreement between the period January 1997 to January 2011	1
M&S Director	Director of Marketing and Sales at DAF NV	103
MIF	Multilateral Interchange Fee	183
MLO	Material, labour and overhead costs	131
MPF	Metallic Path Facilities	655
MSC	Merchant Service Charge	183

OMS	DAF's Order Management System used from 2003	133
Overcharge	The Claimants' allegation that the prices and lease payments that they paid for trucks from DAF were higher than they would have been without the Infringement	2
PACCAR	PACCAR Inc.	5
RAB	Regulatory Asset Base	610
ROCE	Return of Capital Employed	665
Royal Mail	Royal Mail Group Limited	2
SCR	Selective Catalytic Reduction	451
Settlement Decision	Decision of the European Commission of 19 July 2016 in *Case AT.39824 - Trucks*	1
SMMT	Society of Motor Manufacturers and Traders	164
SPO	Supply Pass-On	177
TFEU	Treaty on the Functioning of the European Union	1
VoC	Value of Commerce	464
WACC	Weighted Average Cost of Capital	10
WLR	Wholesale Line Rental	651
WTP	Willingness to Pay	457
Cases		
Binding Recitals Judgment	*Royal Mail Group Ltd and Others v DAF Trucks Ltd & Others* [2020] CAT 7	40
BritNed	*BritNed Development Ltd v ABB AB and ors* [2018] EWHC 2616	169
CA Sainsbury's	*Sainsbury's Supermarkets Ltd v Mastercard Incorporated and Others* [2018] EWCA 1536 (Civ)	177
CAT Sainsbury's	*Sainsburys Supermarkets Ltd v Mastercard Incorporated and Others* [2016] CAT 11	177
Disclosure Judgment	*Ryder Ltd and Another v MAN SE and Others* [2020] CAT 3	75
Equitas	*Equitas Limited v Walsham Brothers & Co. Limited* [2013] EWHC 3264	765
May 2021 Judgment	*Royal Mail Group Ltd and Another v DAF Trucks Ltd and Others [2021] CAT 10*	200
MIF Umbrella Judgment	*The Merchant Interchange Fee Umbrella Proceedings* [2022] CAT 31	183

Prest	*Prest v Petrodel Resources Ltd* [2013] UKSC 34	109
Sainsbury's	*Sainsbury's Supermarkets Ltd v Mastercard Incorporated and Others* [2020] UKSC 24	167
Sempra	*Sempra Metals Limited v Inland Revenue Commissioners* [2007] UKHL 34	764
Stellantis	*NTN Corporation & Others v Stellantis NV* [2022] EWCA Civ 16	205