CASE ASSOCIATES CASENOTE
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‘*Ethylene cartel did not cause damages*’

Says Dutch Court rejecting Shell’s €1bn claim

The ‘*ethylene cartel has caused no damage’* – these are the blunt words of the District Court of Amsterdam’s Press Release as it handed down two judgments dismissing Shell Chemicals Europe’s (SCE) and Repsol's damage claims against members of the ethylene buyers’ cartel (*Shell Chemicals Europe v Celanese* NL: RBAMS: 2026:7691 and *Ethylene Claims Foundation (Repsol) v Celanese* NL:RBAMS:2026:7690). These were follow-on actions arising from the European Commission’s Case AT.40410- Ethylene infringement decision, which found that the Defendants (Celanese, Vestolit, Westlake, Clarion), who were buyers of merchant ethylene, exchanged information before each monthly negotiation, which set the benchmark Monthly Contract Price (MCP). The two cases are part of a string of claims currently before the courts in the Netherlands and Germany for damages for underpayments that, in total, amounted to €18 bn. This Casenote focuses on the SCE judgment.

Background

Ethylene is the most produced organic chemical. It is used to manufacture plastics such as polyethylene, PVC and polyester fibres. In NW Europe, ethylene is produced by steam cracker plants using naphtha feedstock, which is piped to buyers through the ARG+ pipeline network. About 80% of the ethylene production is used by its producers in their downstream operations (captive use). The remainder is sold on the merchant market to contract and spot buyers. The four defendants were small contract buyers collectively purchasing on average around 15% of the annual volume of merchant ethylene. All four settled with the Commission, acknowledging that they had exchanged price-sensitive information between December 2011 and March 2017 and were fined €260m (which, before leniency and settlement discounts, would have been three times greater at €747m). SCE claimed that the Defendants depressed the MCPs so that they underpaid by €1bn for merchant ethylene.

The use of econometrics

SCE’s €1bn damage claim was solely reliant on its expert’s econometric analysis. He used a difference-in-differences (DiD) regression which compared the NW European and Asian ethylene markets based on the assumption that the latter was similar in all respects apart from the fact that it was not cartelised. If properly done, a DiD regression will isolate the causal effect of the cartel on prices. But the critical assumption of the DiD approach, as discussed in the Commission’s Practical Guide 2019/C267/07 (at recitals 95ff) and the judgment, is that price trends in the two geographic markets move in parallel but for the cartel, i.e. that the two markets are affected by the same factors absent the cartel.

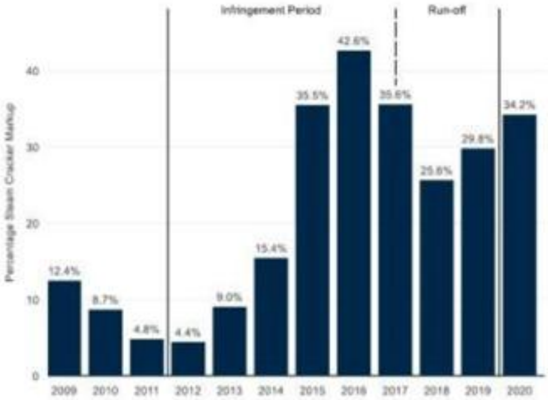
How the Claimant’s case came unstuck

The Claimant’s econometrics had two major defects – it compared the wrong markets and the wrong prices.

The most serious defect was that the Asian markets were not valid comparators. The Defendants’ experts persuasively showed that the NW European and Asian comparator markets differed significantly. The NW European market was mature and stable, with little expansion in plant capacity; the Asian markets were dynamic, growing with expanding production capacity. This violated the parallel prices assumption. As the Court (⁋12.11)) concluded ‘*the NWE ethylene trading market and the Asian ethylene trading markets **are not sufficiently comparable** for the application of the diff-in-diff method’*

Second, the claimant’s expert compared the wrong prices. The MCP is not the price paid to the producers of merchant ethylene. It is one component of a contractual pricing formula which includes substantial discounts, so the actual price was significantly less than the MCP. In Asia, merchant ethylene was sold at spot prices. Yet the Claimant’s expert used the MCPs for NW Europe and the spot prices for the comparator Asian markets as the dependent variables, which was illegitimate. Further, he used the ratio of the prices, so that prices that were radically different were treated so violating the statistical assumptions of a DiD regression.

Based on his defective regression analysis, the Claimant’s expert estimated ‘*enormous*’ (the Court’s word) 20% to 50% underpayments by the Defendants. However, a closer inspection revealed that most of the massive underpayments were estimated during the second half of the Infringement Period. Yet this was a period when NW European ethylene producers enjoyed historically high gross margins (see graph below). This was because they, including SCE, failed to pass on the decline in naphtha costs, which represented 97% of the variable costs of producing ethylene, to their customers, including the Defendants. If the expert's estimate was to be believed, ethylene producers' margins should have been even larger. The Court found this implausible (para 12.47) and '*therefore provides no evidence that the MCP was successfully manipulated downwards'*.



The Claimant's over-reliance on the expert's econometric evidence was fatal. The Defendants' experts persuasively showed that the Claimant's regression generated the *'enormous'* undercharges by including five arbitrary dummy variables. This was an undisguised overfitting of the model designed to wash out inconvenient results. Or put even more bluntly, the econometrics was fashioned to support the Claimant's case by what is euphemistically called data mining or more technically '*p-hacking' (*See further my JAE article on use of econometrics in damage cases). As the trial progressed, the Claimant's expert struggled to defend his analysis and, as the Court commented, often failed to adequately address the Defendants' criticisms.

The Implausibility of the claim

The Court considered whether it was plausible that the Defendants' exchange of information could have influenced the MCP negotiations. The MCPs were based on a bilateral 2x2 settlement process. Each month, the parties in long-term contracts could, if they wished, participate in the MCP settlement process. This involved an initial settlement between a contracting buyer and seller on the price per tonne of ethylene for the forthcoming month. This needed to be confirmed by a second settlement between different contracting parties at the same price. This then became the following month's MCP.

The MCPs were bilaterally negotiated, requiring the agreement of two different sellers of merchant ethylene. Since there were only five/six sellers, the MCPs were at any one time validated by a third or more of all sellers of merchant ethylene. The Court (⁋12.41) held that it would not have been possible for the Defendants to manipulate the MCPs:

> *It is therefore implausible that the cooperation of a few customers, who, moreover, together accounted for only 14.6 per cent of purchases, could have exerted an influence on the MCP such that it increasingly deviated from what should have been a market-based price based on the most decisive factors – the price of naphtha and supply and demand – and that this, moreover, would have gone unnoticed. Furthermore, the settlement process is based on consensus regarding the price, which ensures that an MCP was always established that was acceptable to at least two suppliers. The court, unlike SCE, considers it implausible that suppliers who had sufficient information to assess what a market-conform price would be would have systematically agreed to a price lower than that which would be market-conform.*

This quotation makes several common sense observations which should be firmly borne in mind by Claimants in antitrust damages action. That the size of the cartel matters, as does the sophistication of the claimant. The claimants were large, global petrochemical companies (Shell, BP, TotalEnergies, BASF, Dow) who never raised concerns that they were being grossly underpaid. As the Court (¶12.49) commented: *'SCE had a finance department with specialized (market) analysts, which means that an 'undervalued' MCP—and certainly an MCP that was systematically adjusted downward—and consequently the price of ethylene—must have caught its attention.'* The Dutch Court here echoed the UK Competition Appeal Tribunal (CAT) sentiment in *Stellantis v Autoliv* [2025] CAT 9 that a knowledgeable claimant would not have ignored a large 20% plus disparity in prices as one ground for dismissing the (same) expert's econometric evidence. So, if a knowledgeable Claimant such as Shell is seriously alleging large undercharges of 20% to 50%, it better back this up with evidence that it complained about it at the time.

Implication for cartel enforcement

The ethylene cartel is one of those rare buyer cartels prosecuted by the European Commission. It is cited as an example of the existence of harmful buyer cartels by the European Commission and the OECD. There is no dispute that the Defendants exchanged price-sensitive information or that the Commission did not need to show an actual effect or harm to find a restriction of competition 'by object'. While the Commission said that the Defendants intended to secure the lowest prices (which is not in itself illegal), it did not need to find that (⁋71)'*the parties ultimately succeeded in reaching the desired level of the MCP.'* Nonetheless, the Commission (in my view) failed to undertake a proper competitive assessment to see whether the exchange of information was likely to cause a sufficient degree of harm to qualify as anticompetitive 'by object'. It is now settled law that a 'by object' infringement must be based on an examination of the economic and legal context, as said most recently by the European Court in *C-133/24 Tondela* (at ⁋45 citing *C-333/21 European Superleague Company v FIFA & UEFA* (at ⁋166): '*as regards the economic and legal context of which the conduct in question forms a part, it is necessary to take into consideration the nature of the products or services concerned, as well as the real conditions of the structure and functioning of the sector(s) or market(s) in question.'* (emphasis added).

Had the Commission undertaken such a competitive assessment, it would have found that the Defendants were among the smallest of the 18 buyers of merchant ethylene, at any one time had a collective market share of around 15% and, in the early years when there were only three Defendants, 8%, which was dwarfed by each of the individual market shares of the three largest sellers of merchant ethylene. The Defendants did not exchange information with the 14 other often much larger buyers who together purchased 85% of the merchant ethylene. These '*real conditions of the structure and functioning'* of the merchant ethylene market meant that the Defendants were not operating a hardcore cartel likely to affect prices. Fortunately for the Defendants, the Dutch Court agreed.

The Commission could also have taken account of its previous competitive assessments of the ethylene market in its 2001 merger decisions (COMP/M.2389 - Shell/DEA and COMP/M.2533- BP/E.ON) and 2024 decision (M.11247 - Ineos/Totalenergies) which neatly bracket the infringement period. In these decisions, the Commission found that well before, during and after the infringement period the merchant ethylene market was highly susceptible to seller collusion arising from the transparency of prices largely due to the MCP settlement process, the myriad links between sellers such as swap arrangements, and the absence of countervailing buyer power.

Implications for litigation

The implications for those litigating antitrust claims are straightforward. Do not over-rely, and certainly not exclusively rely, on an economist's econometric analysis; this is just one element of the evidence needed to prove damages. It must be backed by documentary evidence and a plausible, realistic theory of harm. Secondly, if the econometric analysis suggests a double-digit overcharge, or, as in this case, an undercharge, then if it has gone unnoticed by a sophisticated buyer such as SCE it is highly likely to be treated as implausible by the court. Thirdly, do not assume that because the European Commission or national competition authority finds an infringement '*by object*' that this indicates a high probability of a successful damage claim. As competition authorities expand the web of 'by object' infringements to information exchange and unilateral actions, the link between the infringement and damages becomes more tenuous. This is more so when as in the ethylene decision, the Commission over-relies on documentary evidence of agreement or understandings rather than the required assessment of the '*real conditions of the structure and functioning of the sector(s) or market(s) in question.'* This provides a weak basis for an actionable claim, especially when further analysis shows that the buyers' cartel was small and unlikely to wield effective negotiation power given the way the MCPs were bilaterally negotiated. As all lawyers know, claimants must prove causation and quantum based on the facts and a plausible theory of harm. This despite Article 17 of the Damages Directive that an infringement decision gives rise to a rebuttable presumption of harm. While this may satisfy some preliminary procedural requirements, it does not assist the exercise except in those jurisdictions that set out a default overcharge percentage (such as Hungary). The emphasis is on *rebuttable;* while the reality is that the burden of proof lies with the Claimant. Finally, it is antitrust folklore that Claimants are generally disadvantaged by an information asymmetry, especially in jurisdictions such as Germany and the Netherlands, where there is little disclosure. However, in the ethylene buyers' cartel, it was the defendants who were at a disadvantage, as much of the relevant information was in the hands of a small number of larger Claimants.

The author is an expert economist witness for Vestolit, instructed by White & Case and Houthoff. The Casenote expresses the author's opinions.