THE ROLE OF MARKET DEFINITION IN SETTING ANTITRUST FINES

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ABSTRACT

The value of sales of an undertaking infringing antitrust law is a key determinant of the size of the fine levied by a competition authority. European competition authorities rely only on the turnover the undertaking receives from the products in relation to which the infringing conduct occurred. In contrast, UK competition authorities may also include revenue from substitutes which the infringing firm supplies. Nonetheless, there are good reasons to include substitutes in the value of sales and, as shown, their inclusion can have a material impact on the size of the fine.

JEL: K21; L40; A11

I. INTRODUCTION

It is common for competition authorities to sanction anticompetitive conduct which infringes competition law by imposing financial penalties on the infringing firms. Although each competition authority may have its particular approach to setting these fines, they will generally be based, as a starting point, on the turnover the infringing firms receive from the sale of the products which were subject to the anticompetitive agreement or conduct.

In the UK, the value of the fine imposed on an undertaking which has infringed the Competition Act 1998 is based on the 'relevant turnover' of the undertaking. In addition to the turnover the undertaking receives directly from the products over which the infringing conduct occurred, known as the 'Focal Products', this measure of relevant turnover includes any turnover the undertaking receives from demand and supply side substitutes to the Focal Products.

The role which substitutes play in the setting of fines has not been widely discussed. However, the impact of including substitutes on the size of the fine can be substantial. Businesses may have little appreciation of how market definition can impact on the size of antitrust fines.

The UK is unusual in including substitutes in the relevant turnover rather than focusing only on the turnover the undertaking receives from the products in relation to which the infringing conduct occurred. This is illustrated through a comparison with the approach of the European Commission and other European competition authorities. However, there are good reasons for the approach the UK has adopted, as set out in this paper.

It has been argued that, "*According to economic theory, fines should be at least equal to the expected illegally earned profits divided by the probability to be caught, hence they should relate to expected profits originating from the violation*".[1] Similarly, it has been argued that a fining policy is optimal

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[1] Ioannis Lianos, Frédéric Jenny, Florian Wagner von Papp, Evgenia Motchenkova, Eric David et al , *An Optimal and Just Financial Penalties System for Infringements of Competition Law: A Comparative Analysis*, CLES Research paper series 3/2014, UCL Faculty of Laws: London, May 2014, An Optimal and Just Financial Penalties System for Infringements of Competition Law: A Comparative Analysis.

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which sets the expected fine greater than the expected gain by a sufficient margin.[2] As discussed at Section V, fines which include demand side substitutes in the relevant turnover appear more likely to reflect the full potential extent of enrichment from anticompetitive activity than fines which do not include demand side substitutes. Also, fines which include supply side substitutes in the relevant turnover may capture an additional element of harm arising with the anticompetitive activity.

Not including turnover from substitutes could risk setting an inappropriate level of fine. Therefore, other jurisdictions should evaluate the benefits of including turnover from demand and supply side substitutes when determining antitrust fines.

II. THE ROLE OF THE RELEVANT MARKET AND RELEVANT TURNOVER IN SETTING FINES

The UK's Competition and Markets Authority (CMA) guidance as to the appropriate amount of a penalty for CA98 infringements ('CMA's Fining Guidance') states that the starting point for determining the level of financial penalty which will be imposed on an undertaking is calculated having regard to (i) the seriousness of the infringement and the need for general deterrence; and (ii) the relevant turnover of the undertaking.[3] The focus here is on how the relevant turnover is determined.

The CMA's Fining Guidance states that "*The relevant turnover is the turnover of the undertaking in the relevant product market and relevant geographic market affected by the infringement in the undertaking's last business year*";[4] and refers to the published guidance on Market Definition for further information.[5] Therefore, it is expected that the relevant turnover on which any fining calculation is to be made will be based on the normal competition law approach to defining markets, which is the assessment of demand and supply side substitutes within the conceptual framework of the hypothetical monopolist test.

The starting point for defining the relevant market is to consider the Focal Products. It may be that the Focal Products represent the totality of the relevant market or form part of a broader market due to the presence of demand or supply side substitutes to these Focal Products. If the infringing parties do not earn revenue from other products in the relevant market, then a wider market definition makes no difference to the relevant turnover and, in turn, there is no impact on the potential size of the fine. However, if an infringing undertaking supplies demand or supply side substitutes to the Focal Products, then the revenue from these substitutes will be added to the relevant turnover.[6]

The UK Competition Appeals Tribunal (CAT) has accepted that the CMA may determine the turnover for the starting point by considering not only the relevant product market directly affected by the infringement but also the turnover in related products which may reasonably be considered to have

[2] Wouter P.J Wils, *The European Commission's 2006 Guidelines on Antitrust Fines: A Legal and Economic Analysis. World Competition: Law and Economics Review*, Vol. 30, No. 2, June 2007, The European Commission's 2006 Guidelines on Antitrust Fines: A Legal and Economic Analysis.

[3] *CMA 73*, Paragraph 2.2, 16 December 2021, CMA's guidance as to the appropriate amount of a penalty.

[4] *CMA 73*, Paragraph 2.10, 16 December 2021, CMA's guidance as to the appropriate amount of a penalty.

[5] *OFT403*, Market Definition.

[6] The CMA's Market Definition guidance explains that the hypothetical monopolist test is applied to assess the relevant product and geographic market. The hypothetical monopolist test starts with the Focal Products – in the context of an antitrust infringement, these are those products over which the anticompetitive conduct took place. The CMA will then consider whether there are any demand and supply side substitutes which would broaden the relevant market and may, therefore, increase the relevant turnover of the infringing parties. Demand and supply side substitutes are those which are sufficiently close substitutes that the substitution to these would constrain a hypothetical monopolist of the Focal Products from increasing prices by 5 to 10 per cent.

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been affected by the infringement.[7] The CAT has also recognised that there is no need, for the purposes of setting fines, to proceed to a formal analysis of the relevant product market and it is sufficient for the competition authority to show that it had a reasonable basis for identifying a certain product market for the purposes of its turnover calculation.[8]

The CMA's Fining Guidance also explains how various adjustments may be made to the fine (for example, based on the seriousness of the offence, cooperation with the authority, etc). By setting the starting point for any fine, market definition plays a primary role in the ultimate size of the fine and the impact of other factors may be subsidiary.

A recent UK antitrust decision sets out in some detail how demand and supply side substitution were considered in defining the relevant market for the purpose of setting fines. This decision is also notable for the significant impact which the inclusion of such substitutes may have on the size of the fine. This decision is discussed next.

III. AN APPLICATION FROM THE PSR'S INFRINGEMENT DECISION

On 18 January 2022, the Payment Systems Regulator (PSR), a UK regulator with concurrent competition enforcement powers, issued an infringement decision in relation to anticompetitive conduct in the prepaid card services sector.[9] These pre-paid cards were used by local authorities to distribute welfare payments. The PSR found that five parties were involved in the infringing conduct and imposed fines totalling more than £33 million. There was a large range in the fines. Mastercard was fined over £31.5 million, while Sulion, a service provider to Mastercard, was fined only £572.

The five companies were participants in the National Prepaid Cards Network (Network), which brought together providers of prepaid card services with local authorities that were potentially interested in prepaid cards. APS, allpay and PFS (the three Network Programme Managers) supplied services to local authorities to support the prepaid cards issued. Mastercard sponsored and funded the Network. In the context of the Network, the five parties arranged for each of the three Network Programme Managers not to target or poach each other's public sector customers that were already in contract.

The Focal Products in this case were the supply of prepaid card services for welfare disbursements to public bodies.[10] However, the PSR recognised that the Network Programme Managers and Mastercard operate at different levels in the supply chain, such that the starting point for assessing the relevant market for Mastercard was its supply of card network services for issuers of prepaid cards for public bodies for the purposes of welfare disbursements.[11] Our interest is primarily in how the broadening of the relevant market in which Mastercard was found to have infringed, through the inclusion of supply side substitutes, led to a substantial increase in Mastercard's fine.

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[7] "*We further accept that when considering the turnover "in the relevant product market… affected by the infringement" under paragraph 2.3 of Guidance, the OFT is entitled to take into account not only the turnover in the products or markets directly affected by the infringement, but also the turnover in neighbouring products or markets which may reasonably be considered to have been "affected by" the infringement, for example as to the prices charged*". Umbro Holdings Ltd v. OFT, CAT 22, paragraph 116, [2005].

[8] Umbro Holdings Ltd v. OFT, CAT 22, paragraph 112, [2005].

[9] *PSR*, 18 January 2022, The PSR fines five companies more than £33 million for cartel behaviour in the prepaid cards market.

[10] Public bodies can use prepaid cards to disburse a wide variety of welfare payments to individuals. For example, social care benefits (allowances for young people in local authority care, Carer's Allowance, housing and disability benefit etc), and emergency assistance payments (for asylum seekers, prisoners released on licence etc). PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 3.53, 18 January 2022.

[11] PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 6.14, 18 January 2022.

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A. Supply side substitutes to card network services for prepaid cards for welfare disbursements

The PSR considered that, at a high level, many of the services which four-party card networks, such as Mastercard, provide to card issuer members are applicable to, and scalable across, the different card products which a card scheme supports. Mastercard has developed detailed rule books and sophisticated IT systems to support the transactions of their members. Different types of cards (prepaid, debit, and credit) will utilise similar card network IT capability and capacity, and many aspects of the rulebook are common across different card products.[12] It is in this context that the PSR considered possible supply side substitutes to the Focal Products.[13]

The PSR found that, prior to entering into the supply of prepaid card network services for welfare disbursements, Mastercard was already active in the supply of network services for prepaid cards for consumers and private sector corporates.[14] Moreover, the PSR found that that Mastercard did not incur substantial sunk costs in amending its systems and rules in supporting its entry into the supply of network services for prepaid cards for welfare disbursements.[15]

In particular, the PSR found that Mastercard entered the supply of prepaid card scheme services for welfare disbursements:[16]

- using staff who were, initially, working on Mastercard's network services for prepaid cards across corporates (both private and public sector) and consumers;
- applying much of the technology, rules and processes to supporting welfare disbursements as it was already applying to its corporate and consumer prepaid cards;
- with investments which were not large and were incurred incrementally, increasing as the revenues from that business grew.

For these reasons the PSR extended the relevant market to include the supply of prepaid card network services to public sector bodies for purposes other than welfare disbursements, including use cases such as travel and procurement; and the supply of network services for prepaid cards for private corporates and consumers.[17] The PSR concluded that the relevant market in which Mastercard operated was that for the supply of network services for prepaid cards in the UK.

B. The impact of supply side substitution on the size of Mastercard's fine

The inclusion of Mastercard revenue received for the supply of prepaid card network services for purposes other than welfare disbursements, due to them being considered as supply side substitutes, increased the relevant turnover substantially. In turn, this clearly led to a substantial increase in the fine. The PSR does not identify how the inclusion of supply side substitutes affects the size of the fine. However, there are indications from the PSR's approach. As part of the process of setting an antitrust fine, a UK competition authority will consider adjusting the fine upwards to act as a specific deterrent,

[12] PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 6.36, 18 January 2022.

[13] The CMA's guidance paper, Market Definition (OFT403) explains supply side substitution in the context of applying the hypothetical monopolist test: "*If prices rise, undertakings that do not currently supply a product might be able to supply it at short notice and without incurring substantial sunk costs. This may prevent a hypothetical monopolist profitably sustaining prices 5 to 10 per cent above competitive levels. This form of substitution is carried out by suppliers and hence is known as supply side substitution*". "*Supply side substitution can be thought of as a special case of entry – entry that occurs quickly (e.g. less than one year), effectively (e.g. on a scale large enough to affect prices), and without the need for substantial sunk investments. Supply side substitution addresses the questions of whether, to what extent, and how quickly, undertakings would start supplying a market in response to a hypothetical monopolist attempting to sustain supra competitive prices*." Paragraphs 3.13 and 3.15.

[14] PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 6.39, 18 January 2022.

[15] PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 6.46, 18 January 2022.

[16] PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 6.51, 18 January 2022.

[17] PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 6.52, 18 January 2022.

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particularly for undertakings with a significant proportion of revenue from activities outside the relevant market. In this case, the inclusion of the substantial revenues from supply side substitutes in the relevant turnover, mean that there was no need for the PSR to adjust the fine for specific deterrence, despite the significant proportion of revenue which Mastercard earns from other activities outside the relevant market.[18]

One can contrast this with the approach of the CMA in Pfizer Flynn where the CMA considered that, in light of Pfizer's overall size and financial position, a significant uplift, of 400%, was required to ensure that Pfizer would be deterred from engaging in anti-competitive conduct in the future.[19] In particular, the CMA was concerned that, despite the significant negative impact of the infringement on consumers in the UK, the penalty would, in the absence of a significant uplift, have very little impact on Pfizer's overall financial position and, therefore, would be insufficient to deter Pfizer from engaging in anticompetitive conduct in future.[20]

The ability to set a larger fine for Mastercard on the basis of a broader relevant market than the Focal Products, meant that there was no need for the PSR to take a similar approach to the CMA in uplifting the fine for deterrence.[21] The PSR's approach may be attractive to UK competition authorities because it is based on the circumstances of the market and may be more defensible than very large uplifts for deterrence, which could be seen as arbitrary.[22]

Although Mastercard incurred a substantially higher fine than the turnover it accrued from services over which the infringement took place, things could have been worse for Mastercard. The PSR considered expanding the relevant market further, to include network services for debit and credit cards, which would have greatly increased the starting point for the calculating the fine, the relevant turnover.[23] However, the PSR ultimately did not consider debit and credit cards to be sufficiently close supply side substitutes.

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[18] "*Mastercard's penalty after Step 3 is £39,450,078. The PSR considers that this figure is appropriate in this case to act as a specific deterrent, without being disproportionate or excessive. … In this regard, the PSR notes specifically that a significant proportion of Mastercard's turnover was outside the relevant market, which is one of the situations where the penalty might be increased at Step 4 for specific deterrence. However, Mastercard's relevant turnover for the starting point at Step 1 already includes revenues not generated from the use of prepaid cards by the public sector for welfare disbursement purposes*." PSR, Anti-competitive conduct in the prepaid card services sector, Paragraph 8.65, 18 January 2022.

[19] *Decision of the Competition and Markets Authority*, Paragraph 7.104, Case CE/9742-13, 7 December 2016, Unfair pricing in respect of the supply of phenytoin sodium capsules in the UK.

[20] *Decision of the Competition and Markets Authority*, Paragraph 7.105, Case CE/9742-13, 7 December 2016, Unfair pricing in respect of the supply of phenytoin sodium capsules in the UK.

[21] This is not to say that the CMA should have sought to broaden the relevant market in its Pfizer Flynn Decision. In that Decision, the CMA defined the relevant market as being no wider than Pfizer Flynn Capsules, and this was upheld on appeal. More broadly, abuse of dominance investigations, by their nature, are unlikely to be suitable for an assessment of whether the relevant market may be defined more broadly for the purpose of setting fines on the basis of demand and supply side substitution. Rather, all the instances in this paper, of when substitutes supplied by the infringing firm could impact on the size of the fine, arise in relation to anticompetitive agreements, Article 101 TFEU, or Chapter I Competition Act 1998. However, the PSR Decision and the CMA Pfizer Flynn Decisions can still be contrasted in the different approaches taken to flexing the level of the fine.

[22] In relation to the uplift of 400% applied by the CMA to Pfizer's penalty, the Competition Appeal Tribunal concluded that it would "*likely have regarded the very substantial uplift for deterrence applied to Pfizer as, on its face, difficult to justify and not required by the CMA's own penalty guidance*". Competition Appeal Tribunal, Flynn Pharma Limited and Pfizer Limited v Competition and Markets Authority, Paragraph 461, Case Nos: 1275-1276/1/12/17, 7 June 2018, https://www.catribunal.org.uk/sites/default/files/2018-08/1275-1276_Flynn_Judgment_CAT_11_070618.pdf.

[23] The PSR appeared to consider that there was some prospect of card network services being considered as a supply side substitute. "*Mastercard has noted that a prepaid card is a form of debit card. In addition, Mastercard's role in the provision of prepaid cards is the same as its role in the provision of other types of cards. Mastercard has also explained that its scheme fee structure does not differ between prepaid cards and other payment cards, suggesting that the costs of supply for Mastercard are similar. Nevertheless, the PSR recognises that debit and credit cards are substantially different products from prepaid cards and entry into the supply of network services for prepaid cards, for providers of network services for debit and credit cards, could be costly*." PSR, Anti-competitive conduct in the prepaid card services sector, Paragraphs 6.58 and 6.59, 18 January 2022.

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C. Broader implication of the PSR's approach to supply side substitution

Prior to the PSR's decision, supply side substitution had not played such a leading role in setting the quantum of the fine. The PSR's decision shows the substantial impact which supply side substitution can have on the size of the fine. This could be particularly important in setting fines for any undertakings found to infringe in markets where the infringing firm supplies products/services which use much the same assets as are utilised to supply the products/services over which the infringement took place. For example, some tech sector firms, as providers of technology products and/or digital platforms, may have the capacity to expand into new offerings without incurring large additional sunk costs due to the ability to leverage off existing strengths. Therefore, the existence of supply side substitutes (or demand side substitutes) could lead to far greater fines than would be indicated by the value of the turnover from the products over which the infringing conduct took place.

The propensity for supply side substitution to broaden relevant product markets in 'new economy' industries, relative to traditional industries, has been identified. This perspective argues that "*there are certain features of the new economy that make supply-side substitution a much more common and also a much more effective competitive constraint*" including that: [24]

- Marginal costs of production are near zero for almost any production level. Consequently, the magnitude of a potential supply response to a price increase can be as large as required by the market, provided that it is economically profitable to produce the first unit or that any required assets are in place.
- Technological convergence facilitates entry of new products into the relevant market and, in particular, increases the number of potential points of entry into the market in response to a price increase.
- Firms in these industries may follow a strategy of 'versioning' in which they create different versions of a product for different market segments, such as a basic/standard product and a premium product with additional functionality. A manufacturer of a high-end product will often be able to switch production to offer a lower-quality product in response to a price increase and vice versa.

IV. PREVIOUS UK PRACTICE ON MARKET DEFINITION FOR THE PURPOSE OF SETTING FINES

The CMA (and its predecessor, the Office of Fair Trading or 'OFT') has a well-established practice of assessing demand and supply side substitution when defining relevant markets for the purpose of setting fines. As reflected by the examples summarised below, CMA (and OFT) decisions in relation to anticompetitive agreements show that the relevant market has been expanded beyond the Focal Products to include demand side substitutes (see 'Bathroom fittings RPM'; 'Mobility scooters'; and 'Digital pianos, keyboards, and guitars – Yamaha/GAK') and supply side substitutes ('Privately funded ophthalmology services'). This shows that the approach of the PSR is not unusual.

In 'Digital pianos, keyboards, and guitars – Yamaha/GAK', the Focal Products were the Yamaha musical instruments sold through GAK, a retailer. GAK identified a number of demand-side substitutes as being the musical instruments provided to GAK by other manufacturers. On this basis, the CMA concluded that the relevant product market should include these.[25] Therefore, the CMA considered, "*the relevant turnover from the supply by GAK through online and offline sales of digital pianos, digital keyboards*

[24] Atilano Jorge Padilla, The role of supply-side substitution in the definition of the relevant market in merger control, A report for DG Enterprise, European Commission, 2001.
[25] CMA, Paragraphs 3.153 and 3.160, Digital pianos, keyboards, and guitars – Yamaha/GAK, Case 50565-6, 17 July 2020.

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and guitars" as opposed to the revenue GAK earned on the sale only of Yamaha digital pianos, keyboards, and guitars.[26]

In 'Bathroom fittings RPM', the CMA considered whether the relevant product market may be wider than bathroom fittings sold under the Hudson Reed and Ultra brands (the Focal Products), and also included (i) other brands sold by Ultra, (ii) brands owned by other manufacturers of bathroom fittings and (iii) unbranded bathroom fittings. Based on demand side evidence of competition, the CMA considered that the relevant product market included all bathroom fittings regardless of brand.[27]

In 'Mobility scooters', the OFT identified anticompetitive agreements which prohibited online sales and online advertising of prices by retailers of mobility scooters. It may be expected that the products directly affected by such restrictions would be the online sale of mobility scooters. Nevertheless, the OFT concluded that online and 'offline' (that is, bricks and mortar; mail, catalogue and telephone; and doorstep) retail sales of mobility scooters were part of the same relevant market.[28]

In 'Privately funded ophthalmology services', the infringement concerned the provision of initial consultations by the Ophthalmologists to self-pay ophthalmology patients at the Hospital. The CMA first expanded the relevant market to include follow-up treatment after the initial consultation. The CMA then found that, on the basis of supply side substitution, the relevant product market should include the provision of ophthalmology services provided to privately insured patients, rather than just self-pay patients.[29]

In addition to the examples above, there are numerous examples of the CMA taking a conservative approach to market definition in which the relevant market was not extended to include the revenue from demand or supply side substitutes provided by the infringing firms despite there being evidence to support a broader market definition.[30] In a number of these cases the CMA was explicit that it had chosen to adopt "*a conservative approach*". These examples show how the CMA had the flexibility to increase the level of the fine but considered that it could set the fine at a proportional level without recourse to a broader market and higher relevant turnover.

IV. THE APPROACH OF EUROPEAN COMPETITION AUTHORITIES TO IDENTIFYING THE RELEVANT TURNOVER

It is notable that UK competition authorities take a different approach to competition authorities in other European jurisdictions in terms of using turnover from the relevant market as the starting point for setting fines. While competition authorities will often use the concept of 'relevant turnover', the

[26] CMA, Paragraph 5.37, Digital pianos, keyboards, and guitars – Yamaha/GAK, Case 50565-6, 17 July 2020.

[27] CMA, Paragraphs B.7 and B.9, Case CE/9857-14, 10 May 2016, Online resale price maintenance in the bathroom fittings sector.

[28] The majority of the OFT's interviews with retailers highlighted that their 'offline' sales channel either competed directly on price with online retailers or the retailer would price match the offline price against an online price if a customer quotes an online price. Documentary and witness statement evidence also indicated that the 'bricks and mortar' retailers selling the products of one of the infringing party felt the competitive constraint of online retailers. In addition, the majority of mobility scooter suppliers were of the view that online sales had put pressure on prices of 'bricks and mortar' sales and had the effect of bringing 'bricks and mortar' prices down as the internet enabled consumers to readily compare the prices of products offered by retailers, Paragraphs B.29-B.30, CE/9578-12, 27 March 2014, Mobility scooters supplied by Pride Mobility Products Limited: prohibition on online advertising of prices below Pride's RRP.

[29] The CMA found that the provision of ophthalmology services to insured patients is a supply side substitute for the provision of these services to self-pay patients: "*Should the profitability of serving self-pay patients rise, consultant ophthalmologists could reduce the number of insured patients they serve in order to compete to serve more self-pay patients*". Paragraph 4.10, CMA Case 50782-1, Privately funded ophthalmology Services. 1 July 2020.

[30] The CMA chose to adopt this conservative approach in decisions such as Supply of ground works, Case 50415; Roofing materials, Case 50477; Domestic Lighting: anti-competitive practices concerning resale price maintenance, Case 50952; Supply of solid fuel and charcoal products, Case 50366-1; Commercial catering equipment, Case CE/9856/14; and Residential estate agency services in Berkshire, Case 50543.

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concept is used in different ways and the UK appears to be unique in considering the relevant turnover to include demand and supply side substitutes.[31]

A. Comparison against the European Commission

The European Commission has described the purpose of its fining policy as being twofold: "*to impose a pecuniary sanction on the undertaking for the infringement and prevent a repetition of the offence, and to make the prohibition in the Treaty more effective*".[32] Therefore, fines are there to punish and discourage recidivism and also to discourage similar conduct by other businesses. The CMA's fining guidelines set out similar views.[33]

The European Commission's Guidelines state that the Commission will "*refer to the value of the sales of goods or services to which the infringement relates as a basis for setting the fine*"; and that "*In determining the basic amount of the fine to be imposed, the Commission will take the value of the undertaking's sales of goods or services to which the infringement directly or indirectly relates in the relevant geographic area within the EEA*".[34] This suggests that the revenue considered will be that arising from the products over which the infringing conduct has occurred.

The EU Court of Justice has previously considered whether the revenue from sales to the downstream arm of the infringing firm should be included, in addition to the revenue from sales to independent third parties, when setting the fine. The EU Court of Justice's comments there are enlightening as to whether the relevant turnover for the purpose of setting fines is limited only to the revenue deriving from those products subject to the infringing conduct or may also include revenue from substitute products supplied by the infringing parties. Referring to paragraph 13 of the European Commission's Guidelines, the EU Court of Justice stated that (underline added):[35]

"*Point 13 of the 2006 Guidelines pursues the objective of adopting, as the starting point for the calculation of the fine imposed on an undertaking, an amount which reflects the economic significance of the infringement and the relative size of the undertaking's contribution to it. Consequently, while the concept of the value of sales referred to in point 13 of those guidelines admittedly cannot extend to encompassing sales made by the undertaking in question which do not fall within the scope of the alleged cartel, it would, however, be contrary to the goal pursued by that provision if that concept were to be understood as applying only to turnover achieved by the sales in respect of which it is established that they were actually affected by that cartel*".[36]

"The Court also noted that the proportion of the overall turnover deriving from the sale of products in respect of which the infringement was committed is best able to reflect the economic importance of that infringement".[37]

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[31] The OECD has observed that "*Many jurisdictions refer to the turnover/volume of affected commerce of the undertaking as the basis for the calculation of the fine because they consider this concept as a proxy of the illegal gain deriving from anticompetitive conduct or the presumed damage to consumers. Although the jurisdictions may not always refer to the same amount or concept of turnover, it can be observed that they use the concept of relevant turnover as a basis for calculating basic fine*." OECD, 14 October 2016, Page 11, Sanctions in Antitrust Cases, Background Paper by the Secretariat.

[32] Paragraph 62, *European Commission,* Thirteenth Report on Competition Policy, Publications Office, 1996.

[33] Consistent with section 36 (7A) of the UK Competition Act 1998, the twin objectives of the CMA's policy on financial penalties are: (i) to impose penalties on infringing undertakings which reflect the seriousness of the infringement; and (ii) to ensure that the threat of penalties will deter both the infringing undertakings and other undertakings that may be considering anticompetitive activities from engaging in them. There are two aspects to deterrence in this context. First, there is a need to deter the undertakings which are subject to the decision from engaging in future anti-competitive activity (often referred to as 'specific deterrence'). Second, there is a need to deter other undertakings which might be considering activities contrary to the Chapter I or Chapter II prohibitions from breaching the law (often referred to as 'general deterrence'). Paragraphs 1.2 and 1.3. CMA's guidance as to the appropriate amount of a penalty, CMA73, 16 December 2021.

[34] Paragraph 5 and 13, Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003.

[35] Guardian Industries Corp. v European Commission, Judgment of the Court (Third Chamber), Paragraph 31, 12 November 2014, Case C-580/12 P.

[36] Guardian Industries Corp. v European Commission, Judgment of the Court (Third Chamber), Paragraph 57, 12 November 2014, Case C-580/12 P.

[37] Guardian Industries Corp. v European Commission, Judgment of the Court (Third Chamber), Paragraph 59, 12 November 2014, Case C-580/12 P.

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The highlighted text above appears to indicate that substitutes should not be included in the relevant turnover. Nonetheless, might it be that the references to "*sales indirectly related to the infringement*", at paragraph 13 of the Commission's Fining Guidelines, allow room for the inclusion of turnover from substitute products?[38] This does not appear to be the case. The phrasing in paragraph 13 appears designed to ensure that the sales of the product, over which the infringing activity occurred, are included in the base for the fine, rather than only those sales of a product for which the Commission has direct evidence of being affected by the infringing conduct (for example, ensuring that the relevant turnover relates to all the Focal Products rather than some proportion of them for which the evidence of infringement is strongest).[39]

Arguably, though, the European Commission has cover from the EU Court of Justice to go further and include in the fine turnover from products supplied by the infringing firm which are not Focal Products (and, so, not directly subject to the infringing activity). In particular, the EU Court of Justice has noted that "*it is permissible, for the purpose of fixing the fine, to have regard both to the total turnover of the undertaking, which gives an indication, albeit approximate and imperfect, of the size of the undertaking and of its economic power, and to the proportion of that turnover accounted for by the goods in respect of which the infringement was committed, which gives an indication of the scale of the infringement*".[40] Therefore, including turnover from other products sold by the infringing firm, not limited to those subject to the infringement, has been identified as leading to a appropriate fine.

B. Comparison against other national competition authorities

Other jurisdictions focus more explicitly on the turnover arising directly from the infringement. In Germany, the relevant turnover is that which the undertaking in question generates from those goods and/or services which are linked to the infringement.[41] In its guidelines on fines, the Irish competition authority limited the starting point to the turnover the infringing undertaking accrues on the products over which the anticompetitive conduct has occurred, rather than allowing for the relevant turnover to include demand or supply side substitutes.[42]

Similarly, the French competition authority refers to the value of products or services directly or indirectly related to the offence.[43] The French authority also provides an example of what might be

[38] "*In determining the basic amount of the fine to be imposed, the Commission will take the value of the undertaking's sales of goods or services to which the infringement directly or indirectly relates in the relevant geographic area within the EEA*". Paragraph 13, Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003.

[39] "*In the International removal services case, in response to an argument that the Commission should have to prove that each transaction was affected by the infringement, the Commission stated that: "the use of the expression 'goods or services' to which the infringement … relates', instead of the expression 'goods or services affected', indicates that [paragraph 13 of the Fining Guidelines] for calculating fines does not refer to sales of goods or services where there is direct proof of their being affected by the infringement". This means that, in order to determine the basic amount of the fine, the Commission need not provide proof of each occasion where the infringement affected individual sales. This means that, once the Commission has established which goods or services directly or indirectly relate to the infringement, the Commission will take into account the value of sales of all such goods or services when establishing the basic amount of the fine. The European Courts have consistently upheld the Commission's interpretation that the 'value of sales to which the infringement relates' is not limited to those sales where direct evidence establishes that the infringement actually affected the sales; the sales need only fall directly or indirectly within the scope of the alleged infringement*". Competition Law of the European Union, Van Bael and Bellis, March 2021, 6th Edition. A similar view is expressed in Handbook on European Competition Law: Enforcement and Procedure, edited by Ioannis Lianos, Damien Geradin.

[40] Pioneer High Fidelity (GB) Limited vs Commission, Judgment of 7 June 1983, Paragraph 120-121, Joined cases 100-103/80, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:61980CJ0100&from=en.

[41] *Bundeskartellamt*, Guidelines for the Setting of Fines in Cartel Administrative Offence Proceedings, paragraph 10, 7 October 2021,.

[42] *Competition and Consumer Protection Commission*, "*In order to provide a link between the undertaking and the activity in which the infringement of relevant competition law occurred or is occurring, the calculation of the basic amount should be grounded in the value of the undertaking's sales of goods or services. This should relate to sales to which the infringement directly or indirectly relates in the relevant geographic area within the State*". Paragraph 2.8. Consultation Draft, April 2022, Guidelines on the determination of administrative financial sanctions and periodic penalty payments.

[43] Autorité de la concurrence, Communiqué de l'Autorité de la concurrence relatif à la méthode de détermination des sanctions pécuniaires, Paragraph 22, 30 July 2021, Communiqué de l'Autorité de la concurrence relatif à la méthode de détermination des sanctions pécuniaires.

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meant by the value of sales indirectly affected: when the price of one product, subject to a horizontal agreement on price, is then used as the basis for the price of higher or lower quality products.[44]

The Netherlands competition authority indicated that relevant turnover refers to "*the revenue achieved by an offender for the total duration of a violation by supplying goods and services to which that violation relates*".[45] Updated guidance gives the authority a degree of flexibility to adjust the fine based on the economic power of the infringing firm, or its gains from the anticompetitive activity.[46]

The Italian Competition Authority's fining guidelines indicate that the fine "*is a function of the total value of the sales affected by the unlawful conduct" and "should be calculated from the value of the sales of goods or services which are - directly or indirectly - related to the infringement committed by the undertaking on the relevant market(s)*".[47] The concept of the relevant market adopted here appears to relate to the total value of sales of the product/service over which the infringing conduct took place, rather than including substitutes to these products.[48]

For other competition authorities, the approach may be more ambiguous. For example, the Swedish competition authority notes that "*As a general rule, the appropriate starting point for assessing the gravity of an infringement is the turnover of the undertaking or association of undertakings on the market affected by the infringement, the so-called relevant market*", but does not provide a further description of what the relevant market refers to when setting fines.[49]

The Spanish Competition Act indicates that "*The amount of the fines shall be set in light, among others, of the following criteria: a) The dimension and characteristics of the market affected by the infringement*" and "*f) The illicit benefits obtained as a consequence of the infringement*".[50]

The foregoing shows that the UK is unusual in its approach to defining the relevant turnover explicitly as including demand and supply side substitutes to the Focal Products. Various adjustments that are made to the calculation of fines by competition authorities in different jurisdictions, such as those outlined above, may even out approaches between them. Nonetheless, the ability to include demand and supply side substitutes appears to give UK competition authorities greater latitude in determining fines because the approach to the calculation of the relevant turnover may provide a higher starting point. Therefore, it is interesting to explore what might justify the alternative approach. In the following sections, I set out reasons for including revenue from demand and supply side substitutes which are provided by an infringing firm.

[44] Autorité de la concurrence, Communiqué de l'Autorité de la concurrence relatif à la méthode de détermination des sanctions pécuniaires, Footnote 4, 30 July 2021, Communiqué de l'Autorité de la concurrence relatif à la méthode de détermination des sanctions pécuniaires.

[45] M.J.A. van der Hoeven, *Section 1(b),* 2009, Policy Rules of the Minister of Economic Affairs on the imposition of administrative fines by the NMa 2009.

[46] H.G.J. Kamp, *See Articles 2.3(5) and 2.6(5),* 2016, 2014 ACM Fining Policy Rule, amended on July 1, 2016.

[47] *AGCM*, AGCM Resolution no. 25152 of October 22th, 2014 - Guidelines on the method of setting pecuniary administrative fines pursuant to Article 15, paragraph 1, of Law no. 287/90, Paragraph 8.

[48] The guidelines refer to the situation in which the anticompetitive activity affects tenders and the specific volume of products associated with those tenders. The guidelines indicate that the fine may take account of the value of sales in the entire market of the product/service affected, so not just the sales related to the tender. Paragraph 18, Guidelines on the method of setting pecuniary administrative fines pursuant to Article 15, paragraph 1, of Law no. 287/90.

[49] *Swedish Competition Authority*, Policy Statement, Paragraph 12, 1 July 2021, Method for determining the size of the administrative fine.

[50] AGCM, Article 64, 15/2007, Spanish Competition Act.

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V. THE CASE FOR INCLUDING SUBSTITUTES IN THE RELEVANT TURNOVER WHEN SETTING FINES

A. The case for including demand side substitutes

Although the UK is unusual in including demand side substitutes in the calculation of the relevant turnover, for the purpose of setting fines, there is a clear and intuitive logic for doing so, particularly in relation to anticompetitive agreements.[51] Anticompetitive conduct which increases the price of the Focal Products may also increase the revenues of the infringing firm from any demand side substitutes it also supplies, as demand shifts to them. Therefore, the fine should reflect this additional potential benefit to the infringing firm.

This is illustrated with reference to the hypothetical monopolist test and by reference to how mergers of close substitute products affect the incentives to increase price.

Recall that the relevant market is usually defined by reference to the hypothetical monopolist test. The Focal Products are the starting point for defining the relevant market. If there are not sufficiently close demand or supply side substitutes, then the relevant market will be no wider than the Focal Products. If there are close demand side substitutes, then a hypothetical monopolist would not find it profitable to monopolise the market for the supply of the Focal Products as, if it increased the price of these Focal Products, consumers would substitute away to the demand side substitutes, rendering the price increase unprofitable.

Now assume that some of the demand side substitute products to the Focal Products are also supplied by the hypothetical monopolist. Then, when the price of the Focal Products increases, some of the diverted demand will be recaptured by the hypothetical monopolist on those demand side substitutes which it supplies. This may be expected to increase the incentive to increase prices on the Focal Products in the first place, relative to a situation where the hypothetical monopolist did not supply demand side substitutes.[52] To see this, the CMA's discussion of diversion ratios in retail mergers is illustrative.

"*When reviewing a merger, the CMA considers whether some of the profits lost by one of the Parties (resulting from a hypothetical change in the retail offer) would be recaptured by the other Party. If so, the merger may create an incentive to change the retail offer (for example, raise prices). The strength of this incentive will depend, among other things, on the profits from sales that the Parties would recapture from the change to the retail offer*".[53] An important driver of the extent to which sales would be recaptured is the closeness of competition between the products.

A similar logic applies to how a firm engaged in an anticompetitive agreement can reap additional profits from the agreement, when supplying demand side substitutes, in addition to the higher profits it receives on the Focal Products which were subject to the agreement.

Anticompetitive conduct in relation to a product usually increases its price. Some erstwhile demand for this product will be displaced to demand side substitutes as some customers seek to avoid the price increase, increasing the demand for these substitute products. If the undertaking engaged in the anticompetitive activities also supplies some demand side substitutes, then it will benefit from higher revenues/profits on those substitute products. This benefit is additional to any increase in

[51] There are no publications from the CMA, or regulators with concurrent competition powers, on why demand and supply side substitutes should be in the relevant turnover for setting fines for CA98 infringements.

[52] The incentive to increase the price of the demand side substitutes to the Focal Products will generally also increase, in response to an increase in the price of the Focal Products.

[53] CMA, Paragraph 5.5, CMA, 10 April 2017, Retail mergers commentary.

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revenues/profits on the product over which the anticompetitive conduct occurred. In this way, a firm supplying a demand-side substitute product to the Focal Products will have an increased incentive to engage in the anticompetitive conduct relative to a firm not supplying demand side substitutes.

By including demand side substitutes supplied by the company in the relevant turnover and, therefore, in the turnover used in setting the fine, the authority seeks to ensure that any fine reflects the overall enrichment achieved by the company.

B. The case for including supply side substitutes

It is also reasonable to include supply side substitutes in the relevant turnover for the purpose of setting fines. However, the logic, relating to how the anticompetitive activity may give rise to deadweight loss, is more nuanced than for demand side substitutes.

An undertaking producing supply side substitutes to the Focal Products has, by definition, capacity to expand the production of the Focal Products. This capacity is being used to produce the supply side substitute products rather than the Focal Products, but it could easily and quickly be switched to producing the Focal Products and expanding their supply. It would also be profitable to do so in response to a small but significant increase in price of the Focal Product above the competitive level. One would expect anticompetitive activity generally to increase price of the Focal Products above the competitive level.[54]

The infringing undertaking is effectively restricting supply of the Focal Products and does this in two ways.[55] First, it restricts supply of the Focal Products directly through the anticompetitive agreement and, second, it restricts supply of the Focal Products indirectly by not using the capacity from supply side substitutes to respond to the price increase of the Focal Products by producing more of the Focal Product. It would be expected to use this capacity to expand supply in response to a price rise of the Focal Product if it were not party to an anticompetitive agreement.[56]

In this way, the undertaking creates, or adds to, a deadweight loss from the anticompetitive activity. This deadweight loss arises because there is a difference between the price consumers are willing to pay for a product and the cost at which a producer is able to supply the product. The creation of deadweight loss through the exercise of market power is a loss of welfare to society and is one of the justifications for antitrust enforcement to prevent or mitigate the exercise of market power.[57] This deadweight loss may also be described as a loss of allocative efficiency.

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[54] In relation to exclusionary abuse of dominance cases, it may take some time until the conduct by the dominant firm would lead to the exit of a rival, such that higher prices may not be an immediate response to an exclusionary abuse of dominance. On the other hand, exploitative abuses of dominance may lead to higher prices to customers directly and more immediately as a result of the abusive conduct.

[55] This is clearest where the anticompetitive agreement is designed directly to restrict supply of a product. However, an agreement to increase price above the competitive level will reduce demand for a product and therefore the volume of the product supplied. Moreover, it has been shown that, as the mode of competition becomes less intense in a market (say, due to anticompetitive activity), then the industry strategic supply curve becomes steeper. That means that, for a given demand curve, less will be supplied and prices will be higher in equilibrium as the intensity of competition is weaker; or, for a given price, a reduction in competition implies a willingness to supply less at that price. See *The Journal of Industrial Economics*, Figure 3, Volume 68, issue 3, September 2020, The Strategic Industry Supply Curve [https://onlinelibrary.wiley.com/doi/full/10.1111/joie.12229].

[56] In this regard, it is notable that Article 102(b) TFEU (and Chapter II CA98) refers to an instance of an abuse of dominance as being "*limiting production ….to the prejudice of consumers*".

[57] "*Increases in prices above the competitive level as a result of the exercise of market power have two negative effects on consumer welfare: first, they transfer wealth, of rents, from consumers to firms, as every consumer who purchases the goods and services on offer pays more for them than in a competitive market; second, they destroy rents by forcing out of the market some consumers with relatively modest valuations*" The loss of rents is known as 'deadweight loss', "*since it measures the loss in overall welfare (consumer welfare plus firms' profits) resulting from a market price above the competitive benchmark. In economic terminology, at perfectly competitive prices,*

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A firm which is party to an anticompetitive agreement, which also sells supply side substitutes, but does not expand the supply of these in response to a supracompetitive price for the Focal Products, is increasing the extent of deadweight loss. This increase in deadweight loss is relative to what would arise if competitors, which were not party to the anticompetitive agreement, controlled the assets which are used to produce the supply side substitutes. If non-infringing competitors held these assets, they would be expected to expand supply in response to the reduced supply and higher price of the Focal Products. This would have a downward pressure on market prices and mitigate the deleterious effects of the anticompetitive activity by the infringing firms.[58] On the other hand, if the supply side substitutes are supplied by the infringing undertaking, then this will not occur.

In this way, the harm from the infringing conduct may be considered greater, justifying the inclusion of supply side substitutes in the relevant turnover and a higher fine. Not including revenue from supply side substitutes in the relevant turnover used to determine the fine for infringing firms risks not punishing them sufficiently for the harm to which their anticompetitive activity gives rise.

C. The case for including revenue from substitutes in an expanded geographic market

The foregoing discussion has focused on a potential expansion of the relevant product market, beyond the Focal Products, due to there being demand or supply side substitutes. However, it is also possible for the relevant geographic market to be expanded similarly, due to demand or supply side substitution. Consider a situation whereby an infringement pertains to the provision of a service in a particular geographical area, the Focal Area. The competition authority may apply a SSNIP test by considering whether:

- Consumers of this service would respond to a 5-10% price increase by a monopolist of this service in that particular area by substituting to providers of the same service based in neighbouring geographical areas; and
- Suppliers of this service in neighbouring geographical areas would begin supplying into the area in which the infringement took place in response to a 5-10% price increase there.

If the relevant geographic market was expanded and the infringing firm provided services in the areas included within a broader geographic market, then the revenue from these services should be included in the relevant turnover for the purposes of setting the fine.

For example, in 'Residential estate agency services in Berkshire', the CMA found an infringement by traditional estate agents in five localities in Berkshire in the UK.[59] The CMA found that nearby offices of some infringing estate agents were supplying services into the geographic areas where the infringement took place, which would generally imply a broader geographic market and a higher relevant turnover for setting fines. However, on "*a conservative basis*" the CMA chose not to define the relevant market as being wider than the five localities.[60]

the allocation of resources is allocatively efficient an all gains from trade are exhausted: there is no deadweight loss". Robert O'Donoghue, Jorge Padilla, The Law and Economics of Article 102 TFEU, Bloomsbury Publishing, Page 7, 2nd edition.

[58] One might think of this as similar to quantities being strategic substitutes in a Cournot quantity-setting game. When a firm's action (e.g. reducing the quantity of product which that firm is willing to supply for any given price) induces a rival to take the opposite action (e.g. use existing assets to expand rapidly supply of the product which is subject to the anticompetitive activity), then the actions may be considered as strategic substitutes. In the Cournot duopoly model, quantities are strategic substitutes as a quantity increase is the profit maximizing response by a firm to a competitor's quantity reduction, OFT1379, October 2011, See, for example, Conjectural Variations and Competition Policy: Theory and Empirical Techniques.

[59] CMA, Case 50543, 17 December 2019 Residential estate agency services in Berkshire.

[60] Paragraph 5.15, CMA, Case 50543, 17 December 2019 Residential estate agency services in Berkshire.

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VI. ALTERNATIVES TO EXPANDING THE RELEVANT MARKET WHEN SETTING FINES

We have argued that it is logical to add the turnover from substitutes, supplied by the infringing firm, to the turnover received from the products over which the infringement occurs when setting the level of the fine. It helps ensure both that the expected enrichment of the firm from the anticompetitive activity and/or the harm to consumers is better reflected than may be the case in the absence of substitutes being included. However, it is also clear that competition authorities have a margin of discretion in how they set fines and there may be ways, other than market definition, for the fine to be set at the appropriate level.

When setting an antitrust fine, the CMA, or a concurrent UK competition authority, will determine the relevant turnover, dependent on its findings on the relevant market, and apply the other elements of steps 1-3 of the CMA's Fining Guidance.[61] The authority will then consider making an 'adjustment for specific deterrence' at step 4 and an 'adjustment to ensure that the penalty is proportionate' at step 5.

In relation to step 4, the CMA's Fining Guidance states that (underline added):[62]

"*An increase at this step will also be appropriate where the CMA has evidence that the infringing undertaking has made, or is likely to derive, an economic or financial benefit from the infringement that is above the level of the penalty reached at the end of step 3. An important part of effective deterrence is that an undertaking should not be in a position in which it is able to make a profit from infringing competition law, even after having paid any penalty levied in respect of an infringement. Nor is it sufficient for any penalty only to neutralise an undertaking's likely gains from an infringement. To constitute an effective deterrent in this context, any penalty imposed should also exceed an undertaking's likely gains from an infringement by a material amount. Where relevant, the CMA's estimate would account for <u>any gain which might accrue to the undertaking in other product or geographic markets as well as the 'relevant' market under consideration</u>. The assessment of the need to adjust the penalty will be made on a case-by-case basis for each individual infringing undertaking*."

Therefore, even if the turnover from substitutes was not included by the CMA in the relevant turnover, the CMA may still adjust for any additional gains to the infringing firm. Additional profits received from demand side substitutes could be an example of such gains.

However, it does not appear likely that the various steps set out in the CMA's Fining Guidance act as a full substitute for expanding the relevant turnover based on the inclusion of demand and supply side substitutes.

First, the inclusion of turnover from demand and supply side substitutes can make an order of magnitude difference, as reflected in the PSR decision. It can set a much larger starting point for the fine and be much more impactful than the percentage adjustments to the size of the fine, from a lower starting point, which tend to arise at other steps.

Second, defining relevant markets; assessing evidence on demand-side and supply-side substitutes; and calculating relevant turnover is a well-established part of UK antitrust decisional practice.

[61] Step 1 provides the starting point, having regard to the seriousness of the infringement and the relevant turnover of the undertaking. Step 2 provides an adjustment for duration. Step 3 provides for an adjustment for aggravating or mitigating factors.

[62] *CMA Fining Guidance,* CMA73, Paragraph 2.22 16 December 2021.

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Therefore, there should be greater certainty about this approach and the nature of probative evidence. Additionally, as discussed in this paper, there are good reasons for including demand and supply side substitutes in the relevant turnover. Therefore, there should be no meritorious claims that these should not be included in relevant turnover. In this way, it may be more robust to increase the level of the fine based on turnover from substitutes than to increase it based on an 'adjustment for specific deterrence'. Even if step 4 were to be utilised to justify a large adjustment, this might require an uplift to the fine by hundreds of percent, which may be open to material legal challenge.[63] Even if the authority does not seek to increase the fine at step 4, or even reduces it, the infringing parties may still appeal to seek greater discounts.[64]

For these reasons, considering whether to include turnover from substitutes in relevant turnover can give UK competition authorities substantial flexibility in setting the level of fines which they consider to be appropriate.

As a potential counter to this, it has been argued that fines should be more predictable;[65] also that continuous efforts should be made to improve transparency around fining policy.[66] There have also been calls for greater precision in setting antitrust fines.[67] There might, then, be concerns about a fine being more unpredictable, or less precise, when the relevant turnover may include turnover from demand or supply side substitutes as well as revenue from the products which were the subject of the infringing conduct.

However, this potential argument may be countered on a number of counts. As already noted, there are a number of steps which may determine the size of an antitrust fine. Therefore, the potential inclusion of revenue from substitutes is but one source of uncertainty.[68] Further, as the CMA Fining Guidelines indicate that the relevant turnover is based on market definition, and CMA cases have included turnover from substitutes, this approach should not be that surprising. Moreover, the CAT has recognised that deciding on the proportionality of a fine is by its nature subjective and discretionary and that the fining authority has a margin of discretion in setting the size of the fine.[69] Nevertheless, the evidence that can be adduced in relation to demand-side and supply-side

[63] As noted, the CAT considered that the 400% uplift applied by the CMA to a penalty for Pfizer *"as, on its face, difficult to justify and not required by the CMA's own penalty guidance*". Competition Appeal Tribunal, Flynn Pharma Limited and Pfizer Limited v Competition and Markets Authority, Paragraph 461, Case Nos: 1275-1276/1/12/17, 7 June 2018.

[64] In the Paroxetine Decision, the CMA chose to not to increase the penalty of any of the infringing parties (after steps 1-3) in order to achieve specific deterrence but, rather, to apply a 10% reduction. In the appeal to the CAT, the CAT considered that the CMA's approach to step 4 was flawed and, instead, applied a discount of 40%.

[65] See for instance the arguments of *Degussa*, as reported in paragraphs 34 and following of the *Judgment of the Court of First Instance* of 5 April 2006 in Case T-279/02, *Degussa v Commission*.

[66] Arguments for this include: (i) such transparency would help facilitate the implementation of the general principle of Community law concerning equal treatment; (ii) with increased transparency comes increased respect for the law and the competition authority; (iii) such respect will be needed in order to avoid popular censure in the media, particularly if increasing levels of fines; (iv) a lack of transparency in fining practice may undermine the successful operation of a leniency policy, as future whistleblowers need to know in advance the likely consequences of keeping quiet and risking later exposure., Competition Law Insight, 29 July 2008, Peter Whelan, See The Degussa Case.

[67] For example, it has been argued that "*the total sanction must be great enough, but no greater than necessary, to take the profit out of price-fixing*." "*With an appropriately calibrated corporate sanction, reputational penalties imposed upon the corporation and its agents will reduce the individual fines and jail sentences necessary to achieve the desired level of deterrence. On the other hand, if the corporate sanction exceeds this level, then it risks over-deterrence by providing an incentive for excessive corporate monitoring and compliance expenditures that are ultimately passed on to consumers in the form of higher prices and foregone products and, in any event, is likely inefficient*.", *Competition Policy International*, Vol. 6, No. 2, pp. 3-39, Autumn 2010, Douglas H Ginsburg and Joshua D Wright, 'Antitrust Sanctions'.

[68] It is also clear that authorities have adjusted fines by large multiples at step 4. See paragraph 7.104, Case CE/9742-13, 7 December 2016, Unfair pricing in respect of the supply of phenytoin sodium capsules in the UK.

[69] The UK Competition Appeals Tribunal has noted that its role may be both to consider the individual steps taken by the competition authority in setting the fine, but also "*to look at the matter 'in the round' and to see whether we think the penalty is appropriate in all the circumstances of the case*". In that case, the CAT also stated that "*As proportionality assessments are by their nature subjective and discretionary, we would consider this an area better reserved for the regulator's margin of discretion, and not one in which we would interfere unless we were clear, as we are not, that the decision on the amount of penalty was wrong*." Paragraphs 806 and 809, Royal Mail v Office of Communications and Whistl UK Limited, 12 November 2019, Case No: 1299/1/3/18.

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substitutes may provide a firmer basis for drawing conclusions on the proportionality of the fine than the reasoning used to justify substantial adjustments at other steps.
In any case, even were the inclusion of turnover from demand-side and supply-side substitutes to introduce an element of uncertainty as to the level of the fine, a number of general arguments have been made against having foreseeability as an objective for fining policy, including:[70]

- First, deterrence does not require that the expected fine (discounted for the probability of detection and punishment) equals the expected illicit gain, but rather that the expected fine exceeds the expected gain by a sufficient safety margin.[71]
- Second, because the marginal hurtfulness of fines increases with their amount, undertakings tend to be risk averters. This implies that a more indeterminate structure for setting fines generates more deterrence.
- Third, excessive precision as to the amount of the fines is likely to weaken the moral effects of the imposition of fines, as some otherwise law-abiding firms may then make a cost-benefit calculation that it is more profitable to engage in anticompetitive activity.

The foregoing indicates that the potential inclusion of turnover from substitutes in the relevant turnover for setting fines is not entirely unpredictable and only one factor which influences the level of the fine. It also indicates that, while some transparency around fining policy reflects good public administration, targeting clear predictability in fines may not be particularly desirable. Therefore, the additional flexibility in setting the level of fine, provided to an authority by the inclusion of turnover from substitutes, should assist in achieving proportionality while respecting transparency.

VII. A TENSION BETWEEN DEFINING A BROADER MARKET AND FINDING AN INFRINGEMENT 'BY OBJECT'

When a UK competition authority finds that there has been an infringement 'by object', as opposed to being 'by effect', there is no requirement on the enforcing authority to establish anticompetitive effects in the relevant markets to find an infringement.[72] As the CMA has noted, "*When applying the Chapter I prohibition, the CMA is not obliged to define the relevant market, unless it is impossible without such a definition, to determine whether the agreement and/or concerted practice under investigation has as its object or effect the appreciable prevention, restriction or distortion of competition*".[73]

While it is usually necessary to define the relevant market when an infringement is 'by effect' in order to ascertain the effects of the agreement, this is not the case in relation to 'by object' infringements. Therefore, a UK competition authority will form a view of the relevant market only in order to calculate the relevant turnover of the infringing parties in the relevant market. For these purposes, it is not necessary to carry out a formal analysis. The relevant market may properly be assessed on a broad view of the particular trade affected by the infringement in question.[74]

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[70] Wouter P.J. Wils, *World Competition, Volume* 30, No. 2, June 2007, The European Commission's 2006 Guidelines on Antitrust Fines: A Legal and Economic Analysis'.

[71] This is also consistent with the CMA's position that "*To constitute an effective deterrent in this context, any penalty imposed should also exceed an undertaking's likely gains from an infringement by a material amount*". CMA Fining Guidance, CMA73, Paragraph 2.22 16 December 2021.

[72] Restriction by object covers classic infringements of TFEU Article 101 (1) or Chapter I Competition Act 1998, such as agreements on prices, output and sharing of markets and customers. As the European Commission has noted, "*Restrictions of competition by object are those that by their very nature have the potential of restricting competition.*" Recital 21, *Guidelines on Article 101 (3).*

[73] CMA, *Decision of the Competition and Markets Authority*, Paragraph 5.1, 17 December 2019, Residential estate agency services.

[74] Argos and Littlewoods v OFT and JJB Sports v OFT [2006] ECWA Civ 1318, paragraphs 169 to 173 and 189 and the CAT judgment on penalty, Argos and Littlewoods v OFT [2005] CAT 13, paragraph 178.

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In a 'by object' infringement, there is no need to show that the infringing parties had high market shares or that the infringing agreements affected a large proportion of the products/services sold in the market. This type of evidence might typically be useful in establishing the likelihood of anticompetitive effects. However, with an agreement considered anticompetitive by object, the anticompetitive effects may be presumed.

However, a tension may arise if the definition of the relevant market shows that the proportion of the total products in the market which are affected by the anticompetitive agreement is small. If the market shares of the infringing parties are relatively low, then they will argue that the agreement could not have a presumed anticompetitive effect.

Therefore, if an authority pursuing an object infringement seeks to define a broader relevant market than the Focal Products, this may reduce the market shares of the infringing parties and the share of the products which were subject to the infringing agreement. The authority may, then, be concerned that this could weaken its case for finding the agreement to be an infringement by object rather than by effect. This may particularly be the case when there is some contention over whether the nature of the agreement falls clearly within the definition of an object infringement. Not wishing to introduce additional risk around its finding of an infringement by object, the authority may then take a conservative and narrow approach to defining the relevant market. For this reason, there may sometimes be a tension between defining a broader market and finding an infringement by object.

For example, in the CMA's case on the supply of precast concrete drainage products, one of the infringing parties argued for a broader relevant market than the Focal Products.[75] The party considered that its arguments on market definition were relevant to the assessment of whether it is 'obvious' that there was an arrangement or agreement that could have or did prevent, restrict or distort competition. It argued that the relevant market included drainage products of other materials, including clay and plastic and that the CMA "*fails to show that any discussion on or exchange of prices between the parties was ever capable of being implemented especially having regard to price competition from clay, plastic and steel drainage pipe products*".[76] The CMA did not concur that any competition between the Focal Products and other products meant that it could not rely on finding the infringement to be 'by object'. However, while the CMA found the evidence on market definition to be mixed, it ultimately concluded that the product market was the same as the Focal Products. This meant that any tension between a broader relevant market and the presumed competitive effects of the conduct did not arise in the decision.

More generally, while infringing parties may wish to argue for a narrower relevant market in order to minimise the size of the fine, they may alternatively wish to argue for a broader relevant market in order to demonstrate that the alleged anticompetitive effects should not be presumed.

VIII. CONCLUSION

The role which market definition may play in setting the level of fines for antitrust infringements in the UK, particularly for anticompetitive agreements, may be underappreciated. The PSR decision has put down a marker for the impact which the inclusion of substitutes supplied by the infringing firm may have on the size of the fine imposed. Infringing anticompetitive agreements in a business area

[75] A broader market definition could, of course, lead to this party facing a higher level of fine if it supplies some of the demand or supply side substitutes in the broader market definition.

[76] CMA, *Decision of the Competition and Markets Authority* , Case 50299, 23 October 2019, Paragraph 3.52, Supply of products to the construction industry.

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which gives rise only to small revenues could still lead to large fines where businesses produce demand or supply side substitutes which give rise to large revenues. The potential inclusion of supply side substitutes could be particularly relevant to firms which use largely the same assets to serve a range of products or services and, therefore, may have the capacity to expand into new markets without incurring large additional sunk costs due to the ability to leverage off existing strengths.

It is notable that the UK is unusual, relative to European counterparts, in explicitly including in the fine revenue which the infringing firm receives from substitutes. However, there are good reasons for taking this approach and other competition authorities should consider following a similar approach. Not including turnover from substitutes risks the fine not reflecting the enrichment the infringing firm receives, and the harm to consumers, from the anticompetitive conduct. The inclusion of turnover from substitutes may also enhance the flexibility of the authority in setting a proportionate fine.

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