April 2017

RBB Brief 53

RBB Economics

Passing judgment on passing-on

Introduction

The harm suffered by a firm as a result of a competition law infringement that increases its purchase costs may be reduced if it can pass on some or all of this overcharge to its own customers. At the same time, such passing-on will lead to harm, and provide the basis for claims, further down the supply chain. The possibility of passing-on was considered recently by the UK Competition Appeal Tribunal (CAT) in its judgment on a damages claim brought by supermarket retailer Sainsbury's against payment card scheme operator MasterCard ("the CAT Judgment"). That case revolved around the Multilateral Interchange Fees (MIFs) set by MasterCard for credit and debit card transactions. The CAT found that the setting of MasterCard's UK MIFs was a restriction of competition by effect that had caused Sainsbury's to be overcharged. It also rejected MasterCard's pass-on defence to Sainsbury's consequent damages claim.[1]

In this Brief we offer an economic perspective on passing-on, highlighting in particular some of the issues raised by the CAT Judgment. In doing so, we have drawn on insight and analysis from the Study on the Passing-On of Overcharges recently written by RBB Economics and lawyers Cuatrecasas, Gonçalves Pereira for the European Commission. The Study is intended to provide judges and other practitioners who are not economists with practical guidance on obtaining and assessing economic evidence in relation to pass-on claims arising from competition law infringements.[2]

Economic insight into the extent of passing-on

Passing-on occurs when a firm responds to an increase in its costs, such as results from of an anti-competitive overcharge affecting an input it uses, with price increases of its own. The firm has an incentive to do this whenever such a price increase can be sustained and the overcharge affects costs that can be avoided by reducing output (notably, per unit variable costs). Economics indicates that the magnitude of such passing-on will depend, inter alia, on how widespread the impact of the overcharge is and on the intensity of competition on the affected (downstream) market.[3] In particular, it will be easier for a firm to pass-on a cost-raising overcharge to its own prices if the overcharge is market- or industry-wide than if it is limited to that firm, or to only a sub-set of competitors. Indeed, whilst economics predicts that passing-on of industry-wide overcharges is likely to be substantial when competition is intense, passing-on of an overcharge that is firm-specific will be limited in these same circumstances.

The CAT Judgment noted that "the UK MIF was an industry-wide cost" and also that "Sainsbury's operated in a highly competitive market". Economics points towards substantial passing-on in these circumstances, unless there are additional, offsetting factors also at work.[4] Whilst some features of the market could conceivably have served to limit the extent of passing-on, the evidence set out in the CAT Judgment does not establish that this was the case.[5] Nevertheless, the CAT decided to reject MasterCard's pass-on defence entirely.

Two considerations appear to have motivated the CAT's approach. First, it appears to have been particularly concerned not to allow a pass-on defence if claims for damages further down the supply chain would not materialise.[6] In that scenario, rather than avoiding double-payment of damages, allowing the pass-on defence would have resulted in MasterCard paying out less than the total damages caused. As a matter of public policy, and if the objective is to punish the wrong-doer rather than to compensate the claimant for the harm it has suffered, this concern is

1. See the judgment of 14 July 2016 in Sainsbury's Supermarkets Ltd v MasterCard Incorporated & Ors. A different conclusion on the legality of MasterCard's UK MIFs was reached in a judgment on a parallel case brought by a different group of retailers in the English High Court. (See the judgment of 30 January 2017 in Asda Stores Ltd & Ors v MasterCard Incorporated & Ors.) Pass-on issues were not addressed in that judgment, however.

2. EU Directive 2014/104 calls on the European Commission to produce guidelines to assist judges and courts with the evaluation of passing-on effects. The Study is intended to inform the preparation of those guidelines, and can be found at: http://ec.europa.eu/competition/publications/reports/KD0216916ENN.pdf

3. Other relevant factors include the type of costs that are affected, and the relationship between price and the quantities demanded and supplied.

4. The CAT appears to have accepted the economic logic that at least some passing-on of overcharges was to be expected.

5. See, for example, the discussion of pricing rigidities in the context of small cost effects below.

6. Thus, at paragraph 484(5) of the CAT Judgment: "[W]e consider that the pass-on "defence" ought only to succeed where, on the balance of probabilities, the defendant has shown that there exists another class of claimant, downstream of the claimant(s) in the action, to whom the overcharge has been passed on". A downstream collective action for damages has also been launched against MasterCard before the CAT. At the time of writing, judgment on the application for a collective proceedings order in that case is still pending. It will be interesting to see how that progresses in light of the CAT Judgment.

understandable. However, it raises significant questions regarding the role of damages actions and the appropriate response to the possibility of a claimant being over-compensated. Second, the CAT says that "[n]o identifiable increase in retail price has been established, still less one that is causally connected with the UK MIF".[7] That view raises important issues regarding economic evidence, causality, and standard of proof. These are considered further below.

Measuring passing-on

Outside the textbook paradigm of perfect competition, an assessment based on formal economic models – "abstract" economic analysis in the CAT's description – can usually only go so far in pinpointing the magnitude of the price increase that is likely to result from passing-on an overcharge. This is because the exact predictions of those models generally depend on parameters that are not readily observed in practice.[8] More directly empirical approaches are needed instead if more precise estimates are to be obtained.

To estimate the relevant price increase, a measure of the prices that would have prevailed "but for" the infringement is required. By definition, such counterfactual prices cannot be observed directly. In most cases, therefore, measures of these counterfactual prices must be constructed from available information, notably data on relevant price benchmarks. Moreover, other factors may cause a firm to adjust its prices at the same time as an input cost increase that is caused by a competition law infringement. For example, legitimate changes in the costs of other inputs as well as in demand conditions would also encourage a pricing response. To quantify the pricing consequences of a cost-raising infringement, the price increase due to that infringement must be isolated from these other, extraneous influences. If sufficient data are available, the use of multivariable regression analysis is likely to provide the most effective means of controlling for the effects of these other factors, which may otherwise bias estimates of the passing-on effect.

The supermarket pricing that is at the heart of passing-on considerations in the Sainsbury's/MasterCard case provides a good illustration of the challenges faced. There are likely to be a whole raft of influences simultaneously affecting those pricing decisions, including promotional activity and responses to competitors' pricing initiatives, which will make it more difficult to isolate any pass-on effect.[9] Indeed, the CAT appears to have regarded the task as insurmountable, stating that "[i]t is quite simply impossible to say that of the price for Sainsbury's Loose Fairtrade Bananas – which at the time of this Judgment sell for 68p per kilogram – 0.1p (or any other amount) is attributable to the UK MIF and is the means by which Sainsbury's recovers the cost of the UK MIF".[10]

However, it is not clear why a measure of the specific impact of the MIF on the price of each and every product sold by Sainsbury's should be required to establish a reasonable estimate of the overall pass-on effect.[11] Moreover, the counterfactual nature of the quantification exercise means that (as with estimation of the overcharge itself) exact measures of any pass-on effect cannot be expected, as the results of any statistical data analysis are bound to involve some margin of uncertainty.[12]

As noted above, the CAT declared that it was unable to identify an increase in retail prices that was causally connected with the UK MIF.[13] Even if the available data would not allow the price effects of changes in the MIF specifically to be identified, in principle it would seem that information on the price responses to more general cost changes across Sainsbury's portfolio of products might have been usefully exploited (using suitable econometric techniques) to isolate a measure of the pass-on rate in practice. It is not clear from the CAT Judgment, however, whether the failure to identify such a measure occurred because no such analysis was attempted, because analysis that was undertaken failed to establish a robust link between cost changes and changes in prices generally, or because the relevance of a general measure of passing-on to an appraisal of the specific consequences of a MIF overcharge was rejected. This is a critical issue, which merited further explanation in the CAT Judgment.

7. See paragraph 485 of the CAT Judgment.

8. Absent such information, the use of specific models will rely on assumptions which may not fit well with market realities.

9. Those challenges are especially acute in the face of very small unit overcharges, as discussed further below.

10. CAT Judgment, paragraph 469.

11. The CAT acknowledges that a "broad axe" has been deployed in arriving at its own damages estimates. (See, e.g., para. 423(3) of the CAT Judgment.)

12. One of the main advantages of adopting more formal statistical approaches to quantification is that they also provide quantitative measures of this uncertainty.

13. CAT Judgment, para 485.

The challenges of identifying small pass-on effects

Sainsbury's interchange fee claim against MasterCard highlights the particular challenges that may arise if an infringement results in only a very small change in unit costs. In those circumstances, any pass-on effect is likely to be very small too, and potentially difficult to detect against the background of other influences. The CAT estimated that, absent the infringement it identified, the MIF in respect of MasterCard credit card transactions would have been around 0.50% rather than 0.90%, whilst the equivalent rate for MasterCard debit card transactions would have been 0.27% instead of 0.36%.[14] In other words, the CAT estimated that the infringement of competition law had increased the unit costs associated with Sainsbury's sales by only a small fraction of 1% of unit revenues on average.

Nevertheless, even small price effects may equate to substantial sums of money if affected volumes are large. In Sainsbury's case, overall sales were such that the CAT's estimate of the overcharge suffered exceeded £100 million.[15] Any pass-on effect could also have been substantial in monetary terms for the same reason, even if the proportional impact on unit prices would have been extremely small. Hence, the possibility of passing-on in such circumstances cannot (or, at least, should not) be nonchalantly ignored.

Further, the fact that the pass-on effect may be small does not necessarily mean that it cannot be identified reliably, provided sufficient data/information is available to develop a precise-enough empirical analysis. However, if such direct evidence cannot be obtained, the expert will have to rely either on guidance from "abstract" economics or on adopting a measure of the pass-on rate observed in response to a different manifestation of cost change. In this case, a vital practical consideration is whether such estimates can reasonably be taken to provide an appropriate measure of the pass-on rate that is relevant to the case at hand.

One potential issue with using such comparisons is that the magnitude of the pass-on rate may itself depend on the size of the overcharge. The economic logic for why a profit-seeking firm would want to increase its prices in response to an increase in per unit costs holds irrespective of the size of the cost increase in question. At the same time, there are sound reasons why a retailer such as Sainsbury's might choose not to adjust its prices in response to every small increase in its costs. For example, so-called "menu" costs, incurred each time prices are modified, will tend to discourage frequent, small price changes. A retailer may also be keen to avoid adjusting prices away from attractive "focal" price points.

Even in the short-run, the implications for the size of the pass-on effect of factors that discourage frequent price adjustments are ambiguous however. On the one hand, pass-on of a small overcharge may be delayed until cumulative upward pricing pressures have reached a critical threshold. A pass-on effect may not be discernible in these circumstances, because it has not (yet) occurred. On the other hand, a small cost increment may provide the tipping point which leads to a much more substantial price increment. Even if small price changes are discouraged, it does not follow that pass-on effects are absent, therefore, or that obtaining a meaningful estimate of those effects (especially on an aggregated basis) is impossible. Careful analysis of the case-specific factual evidence is required. The CAT Judgment does not appear to be founded on such evidence.

Volume effects

Whenever "passing-on" results in an increase in a firm's prices, it will typically cause a loss of sales volumes too – and the profits associated with these volumes – all else being equal.[16] Such a volume loss will add to the damages resulting from the overcharge. Thus, the passing-on and volume effects will have opposing influences on the overall harm suffered by a claimant, with the latter offsetting at least some of the damage-reducing impact of the former.[17]

14. CAT Judgment, para 266(3).

15. CAT Judgment, para 431. The damages were then reduced to account for the benefits from the illegal MIF obtained by Sainsbury's Bank. (See paras 503-504 of the CAT Judgment.)

16. In principle, a firm's sales could increase with an increase in its prices if rivals' price increases were even more pronounced.

17. Since the CAT rejected pass-on arguments in the Sainsbury's/ MasterCard case, volume effects were not "in play".

Disregarding any volume loss will, therefore, cause damages to be under-estimated. Indeed, when the affected purchaser is a monopolist on the downstream market, the volume effect will exceed (and, therefore, more than offset) the passing-on effect. Hence, in this (extreme) case, taking account of all the effects of passing-on in the damages estimate will cause that estimate to be increased rather than decreased. Outside monopoly, however, the balance of the passing-on and volume effects in imperfectly competitive settings will depend on the strategic interactions with rivals and can impact on the overall extent of damages positively or negatively, depending on the exact circumstances.

The magnitude of the volume effect is computed by multiplying the volume loss that results from passing-on of the overcharge by the gross profit margin that the purchaser would have earned on those sales "but for" the infringement (i.e. the counterfactual margin).[18] If the expert already has an estimate of the passing-on effect on price, this can be combined with a measure of the relevant elasticity (or price sensitivity) of demand to obtain an estimate of the resulting volume loss.[19] Estimates of the passing-on and overcharge can be used to derive the counterfactual margin.

The key issue then is what measure of demand elasticity to use. The extent of the sales loss suffered by a firm will depend not only on how its own prices change, but also on how rivals' prices are also affected by the overcharge. A measure of the firm's own-price elasticity of demand, i.e. by how much its sales would fall if only its own price were to be increased, will tend to over-state the volume loss if competitors' prices would also increase. Indeed, when all firms in a market are similarly affected by an overcharge, a measure of the price elasticity of aggregate market demand, i.e. the sensitivity of overall market demand to a market-wide price increase, provides a better measure of the proportionate impact of passing-on on any one firm's sales.

Conclusions

Economics provides relevant insight into the factors shaping passing-on of anti-competitive overcharges. For example, if an industry-wide overcharge increases the variable costs of the firms in a downstream market that is highly competitive (as the CAT appears to accept is the case in the Sainsbury's/MasterCard setting), then economics suggests that it is appropriate to start from the position that passing-on is likely to be substantial. In the Sainsbury's case, however, the CAT appears to have disregarded the best predictions of passing-on that could be inferred from the available evidence.

In general, the exact passing-on predictions of economic models often depend on details of the market environment which will typically not be readily observable in practice. Empirical analysis is therefore likely to be needed if more precise/refined estimates of the magnitude of any passing-on effect are required. Econometric methods are likely to be especially useful in this respect.

Nevertheless, the inherent uncertainties associated with this counterfactual exercise mean that it is unrealistic and unreasonable to expect exact estimates of any passing-on effect. Moreover, as with the other components of a damages estimate, the costs of obtaining increasingly precise answers to the passing-on question may escalate quickly. A careful appraisal of the likely benefits of such analyses, as well as the associated costs, is therefore appropriate to ensure quantification exercises that are proportionate, taking account of the magnitudes of the claims in question.

18. If the pass-on rate is less than 100%, i.e. the increase in price is less than the magnitude of the overcharge to unit costs, then the observed margin will be smaller than the counterfactual margin, potentially by a substantial amount.

19. Alternatively, comparator-based techniques can be deployed to obtain direct estimates of the volume loss.