

Agenda

Advancing economics in business

No margin for error: the challenges of assessing margin squeeze in practice

Ensuring that there is an appropriate ‘margin’ between retail and access prices is critical to the success of competition in most regulated network industries. Despite this, regulatory and competition authorities seem to adopt different approaches to assess margin squeeze. What drives these divergent approaches and does it make sense to have a unified approach?

The introduction of competition in formerly monopolistic industries has typically been accompanied by an obligation on the vertically integrated incumbent operator to grant potential entrants wholesale access to the natural monopoly elements of its network. This policy has had varying degrees of success.

In the telecoms industry in Europe, for example, the share of alternative operators in the broadband market—the majority of which are entrants relying on wholesale products from the incumbent—has grown to 54.4% since the introduction in 2002 of a harmonised EU regulatory framework, placing wholesale access regulation at the heart of the regulatory regime.¹ Similarly, since the liberalisation of the UK’s postal sector in 2006, operators such as TNT, UK Mail and DHL have managed to acquire 39% of the bulk mail market by focusing on the collection and outward sortation of business mail, and relying on Royal Mail’s access services for the final delivery of items.²

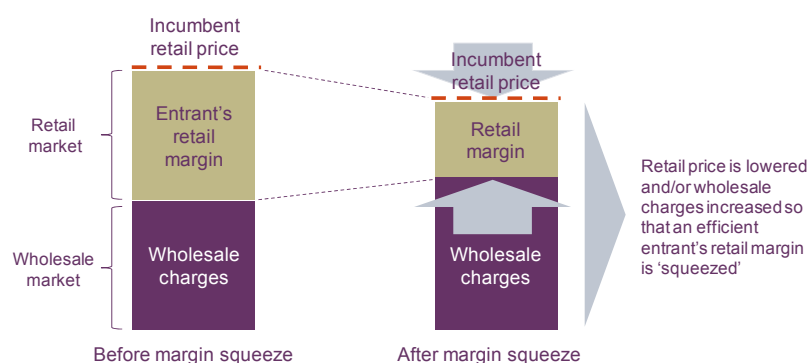
In European energy, the debate has recently focused on the need for separation of network assets and system operation from generation, and also retail access baseload generation, as in the case of France.³ The GB electricity industry underwent significant

restructuring at privatisation, separating out transmission and regional supply monopolies, and subsequently the low-voltage distribution networks from competition in supply. However, concerns are still present where access is required for independent entrants to build and operate network extensions.

One of the key factors behind the success of an access regime lies in the level at which access prices are set relative to the retail prices that entrants will be able to charge in the market. A large enough gap between the two provides sufficient room for profitable entry and expansion, while too narrow a gap ‘squeezes’ entrants’ margins to such an extent that they may not be able to recover their retail costs plus a reasonable rate of return, and would be foreclosed from the market. Indeed, in the water industry in England and Wales, one of the main reasons that competition did not develop as in the telecoms and postal sectors was that access prices, which were based on the efficient component pricing rule (ECP), did not provide sufficient margin for potential entrants.⁴

While the margin squeeze concept is relatively easy to grasp (see Figure 1), the mechanics of margin squeeze tests and their practical application by regulatory and

Figure 1 Margin squeeze mechanics



Source: Oxera.

competition authorities raise many economic issues that are far from straightforward. At the heart of these issues lies the need to balance the regulatory objective of promoting efficient and sustainable entry into the market with a desire to provide incumbent firms with sufficient flexibility and incentives to compete and invest. This is a trade-off that is not easily resolved and one which regulators and competition authorities, as well as the companies under investigation, will have to balance by making appropriate methodological choices in the application of margin squeeze tests.

This article considers the economic principles behind this trade-off and the implications for the methodological approaches that can be adopted in margin squeeze assessments. The stakes for getting the balance right are high. Not only is the margin squeeze concept critical to the success of ex ante access regimes, as mentioned above, but it is also an exclusionary pricing practice prohibited under Article 82 of the EC Treaty when undertaken by a vertically integrated firm that is dominant in the supply of an essential upstream input. Indeed, the European Commission recently fined Deutsche Telekom and Telefónica €12.6m and €151.9m respectively, after they were found to have abused their dominant position in wholesale markets by engaging in a margin squeeze.⁵

Both cases are under appeal, at the European Court of Justice and Court of First Instance (CFI) respectively, but the growing size of fines in such cases emphasises the seriousness of the abuse in the eyes of the European Commission. In the words of Neelie Kroes, the Commissioner for Competition Policy, at the time of the Telefónica decision:

Telefónica's behaviour shows that the Commission's 2003 fines against Deutsche Telekom and Wanadoo for similar behaviour were not a sufficient deterrent. I hope that today's fine has a greater impact. ... I want to send a strong signal to dominant undertakings in all sectors that could be tempted to engage in similar practices that I will not tolerate such behaviour.⁶

Looking inside the test

Until recently, there was little guidance on how to assess margin squeeze, let alone whether it constituted a distinct form of abuse under Article 82, separate from predation or excessive pricing, for example. Early EU cases (*National Carbonising*, 1976, *British Sugar/Napier Brown*, 1988, and *Industrie des Poudres Sphériques*, 1996), while providing useful pointers, left many economic and legal questions unanswered.⁷

In the telecoms sector, a Commission Notice on the applications of competition rules to access agreements shed some light on the nature of margin squeeze assessment by identifying two tests that could be applied:⁸

- **the 'equally efficient operator test' (EEO)**—a margin squeeze could be demonstrated by showing that the dominant company's own retail operations could not trade profitably on the basis of the access price charged to its competitors by the wholesale operating arm of the dominant company. In competition law, this is also known as the 'as-efficient competitor' test; and
- **the 'hypothetical reasonably efficient operator test' (REO)**—a margin squeeze could also be demonstrated by showing that the margin between the price charged to retail competitors for access and the price which the dominant operator charges in the retail market is insufficient to allow a reasonably efficient service provider in the retail market to obtain a normal profit.

Nevertheless, the Notice does not provide guidance on how to apply these tests, or when one would be more appropriate than the other.

In April 2008, the CFI's judgment in the *Deutsche Telekom* case provided much-needed clarity and guidance, at least in relation to ex post competition policy assessment of margin squeeze.⁹ It confirmed that margin squeeze was a distinct pricing practice which constituted an abuse under Article 82. Furthermore, from an economic perspective, the CFI's judgment is important because it fully endorsed the conceptual and practical approach followed by the Commission in assessing the existence of a margin squeeze, which has formed the basis of the analysis in the *Telefónica* case.

The Commission's approach, as articulated in the *Deutsche Telekom* and *Telefónica* cases, is based on the following principles.

Vertical integration and wholesale dominance—the investigated company must be vertically integrated and active in both wholesale and retail markets. Furthermore, it must be dominant in the provision of products and/or services in the relevant wholesale market(s), although it does not need to be dominant in the relevant retail market(s) affected by the alleged margin squeeze.

EEO test—for an ex post investigation, the existence of a margin squeeze will be assessed on the basis of

the EEO test, using the company's own retail costs and its retail and wholesale charges in order to assess the profitability of its retail operating arm.

Long-run average incremental cost (LRAIC)—retail costs will be estimated according to the LRAIC of providing the relevant product(s) under investigation.

Aggregated products approach—the margin squeeze test will be applied across the full range of products offered by the investigated company in the relevant retail market.

Approach to profitability analysis—the two available methods—period-by-period approach and discounted cash flows—have pros and cons, and their application will depend on the circumstances of the case. The former is better suited to mature and stable markets where year-by-year profitability measures are relatively stable and a good guide for economic profitability. The latter may be better suited to growing markets where initial investments are expected to be recovered by a future stream of profits, and where the risk of accounting distortions (eg, the use of straight-line depreciation) present in period-by-period analyses may be high, even though assets may not be fully utilised during the early years following the investment. In the *Telefónica* case, the Commission applied both approaches and reached the same conclusion under each.

Sector regulation does not exempt the incumbent from competition law—the fact that the retail and or wholesale prices of the vertically integrated company are subject to price regulation by their national regulators does not exempt them from the application of competition law.

These principles represent a significant step forward in providing vertically integrated incumbents that are dominant in wholesale markets with some clarity over how the relationship between their retail and wholesale prices will be assessed under competition law. At the same time, however, a number of these principles are at odds with the approach adopted by various sector regulators in the determination of ex ante margin squeeze rules (particularly in the telecoms sector where such ex ante rules have been more commonly adopted).

For example, in the context of setting prices for wholesale broadband access products, both Ofcom in the UK (2004) and ComReg in Ireland (2005) applied the REO test, estimated retail costs on the basis of fully allocated costs (FAC), and undertook the analysis at the level of each individual product offered by BT and eircom, respectively, in the market under

investigation.¹⁰ The outcome of such methodological choices is usually a significantly more onerous test from the perspective of the vertically integrated incumbent operator since they have the effect of increasing the required margin between retail and access prices, thereby providing greater room for entry into the market. This gives rise to the following question: can these two apparently contradictory approaches co-exist, giving authorities whose powers are applied ex ante and ex post the flexibility to 'pick and choose' the nature of the test, or is there a need for a unified approach in the interests of legal and commercial certainty for market participants?

Ex ante versus ex post margin squeeze assessments

At the heart of the divergence between the two approaches lies a perceived difference in the regulatory objectives of ex ante regulation and ex post competition policy. Unlike competition authorities, sectoral regulators often have a statutory duty to promote competition in the markets they regulate. In setting the ex ante margin for BT's wholesale broadband access product, Ofcom described this difference as follows:

... in terms of a margin squeeze analysis ex post competition law would tend to start from a presumption that the appropriate standard against which the dominant firm should be assessed is one of equally efficient competitors i.e. analysing the margin such that an equally (or more) efficient competitor to BT could enter and compete effectively with BT in the relevant downstream services markets. **However, ... the context for the setting of a margin for [wholesale broadband access] is one of ex ante regulation which has as its objective the promotion of competition.** Given this objective, Ofcom has concluded that a modification of this conceptual approach is warranted.¹¹

Hence, relying largely on the objective of promoting competition, Ofcom decided to uplift BT's costs to capture the impact of a reasonably efficient entrant's lower market share; to employ FAC as the relevant cost standard to account for an entrant's reduced ability to benefit from the same economies of scale as BT; and to implement an ex ante margin squeeze test on each individual product supplied by BT in order to avoid an entrant having to replicate BT's product mix in order to be viable. These adjustments therefore had the effect of providing potential entrants with a sufficiently large margin on a product-by-product basis to ensure that they would have the incentives and ability to enter the market and operate viably.

The methodological approach adopted by Ofcom in this case could be regarded as a form of entry assistance. From a market liberalisation perspective, this may arguably be justified during the early stages of competition in a market, but would be expected to be rolled back as soon as competitors are established in the market. Consistent with this view, in May 2008 Ofcom withdrew ex ante price control obligations from BT's wholesale broadband access products.

However, there is a risk in taking the entry assistance argument too far. By definition, the full suite of adjustments required to implement the REO test involves modelling a hypothetical operator that is less efficient than the vertically integrated incumbent. The regulator should be able to articulate fully the pro-competitive benefits of promoting 'less efficient' entry so that these benefits can be assessed against the risk of diminishing the investment incentives and pricing freedom of the incumbent operator.

Indeed, there is a sound pro-competitive and welfare-enhancing rationale underpinning the principles adopted in the *Deutsche Telekom* and *Telefónica* cases. For example, the EEO test is consistent with the principle that competition should take place on the merits, and this is therefore compatible with the exclusion of less efficient rivals. In addition, by using the incumbent's own retail costs and charges, the EEO test satisfies the principle established by the CFI in the *Deutsche Telekom* case, which states that the incumbent cannot be expected to know what its rivals' costs are, and, hence, the ex post lawfulness of its activities can only be assessed on the basis of its own costs and revenues.

Similarly, the use of LRAIC as a cost floor for the retail activity is consistent with the principle that, in the long run, a rational profit-maximising firm would have no economic reason to provide a service below its LRAIC. Furthermore, prices above LRAIC provide maximum flexibility to the incumbent operator to recover true common and joint costs based on demand differences,

which may lead to an increase in welfare through an output-expanding effect.

Furthermore, the Commission argues in the *Telefónica* case that the application of an aggregated products approach—where the degree of aggregation corresponds to the full range of products offered in the relevant retail market—can be consistent with a new entrant's internal decision-making process, in that its assessment of the profitability of its investment takes into account the complete range of products that it is able to offer in the relevant retail market. In addition, the aggregated approach is consistent with the competition policy principle that the existence of anti-competitive effects should be tested at the level of a relevant market. Indeed, from an economic perspective, it would be difficult to argue that anti-competitive foreclosure leading to consumer harm could be successful in a narrow segment of a relevant market when an aggregate margin squeeze test is showing healthy margins overall. From the supply side, entrants would be able to switch production to other segments of the market; from the demand side, consumers would have a range of products from which to choose other than the products that may be subject to a squeeze.

A balancing act

So far, ex ante and ex post margin squeeze tests have been generally portrayed as lying at two opposite extremes of the implementation spectrum (see Figure 2). In practice, however, sufficient methodological levers exist such that the practical application of these tests may be able to converge (slightly) towards the middle. As discussed above, there are risks in taking the strict REO, FAC, product-by-product ex ante approach too far, and that, in any case, it would need to be in place on a temporary basis until competition develops.

Similar arguments could be made about the ex post approach. For example, entrants may argue that the

Figure 2 Margin squeeze test: a spectrum of implementation



Notes: ¹ OFT (2002), 'BSkyB Investigation: Alleged Infringement of the Chapter II Prohibition', CA98/20/2002. ² Different levels of aggregation to reflect differences in entrants' business models. Source: Oxera.

'pure' aggregated products approach (using the incumbent's product mix in the relevant market) gives too much flexibility to the incumbent to cross-subsidise losses in some products with profits in others, thereby foreclosing potential rivals in the loss-making products.

This risk could be minimised by implementing ex post margin squeeze tests at different levels of aggregation, reflecting different entry strategies that competitors could adopt. Such an approach was adopted by Ofcom in 2008 when it investigated an ex post allegation by Cable & Wireless that BT had engaged in a margin squeeze by raising its wholesale prices for number translation services (NTS).¹² While rejecting the application of the margin squeeze on the individual products that Cable & Wireless contended were subject to a squeeze, Ofcom applied three different margin squeeze tests at different aggregation levels corresponding to the most commonly observed business models of BT's retail competitors. Despite not formally defining a relevant retail market, the smallest level of aggregation that Ofcom used in this case corresponded to what it considered to be the narrowest plausible relevant retail market: a bundle of local calls, calls to mobiles and NTS calls. It did not find evidence of a margin squeeze under any of these tests.

The use of LRAIC as a cost benchmark in the presence of significant joint costs between the investigated products and other products falling outside of the relevant market may raise similar concerns. In such circumstances, some level of mark-up on the LRAIC may be warranted in order to minimise the risk of cross-subsidisation.

Concluding remarks

This article raises questions about whether regulators and competition authorities should assess margin

squeeze on an ex ante and ex post basis using the same methodological approaches, or whether multiple approaches should co-exist and be applied according to the circumstances of each case.

The discussion has highlighted that, from an ex post competition perspective, a set of common principles applied by the European Commission and endorsed by the CFI has been established which, from both a legal and economic perspective, provide sufficient clarity and certainty for market participants to assess the lawfulness of their pricing practices. In addition, from an economic perspective, these principles appear to provide sufficient flexibility to competition authorities to vary the nature of the test (eg, different aggregation levels to reflect viable business strategies within a relevant market, and different profitability approaches and time horizons) in order to undertake a sensitivity analysis of its conclusions.

If regulators are particularly concerned with the promotion of competition in a market, relying on the application of ex post competition powers to achieve this objective could be a blunt tool. Indeed, the ex post application of margin squeeze tests based on methodological approaches which require the incumbent to know what its rivals' costs or entry strategies are (eg, the REO test or a highly disaggregated product-by-product approach) may provide investigated companies with grounds for appeal.

In these circumstances, explicit ex ante margin squeeze rules may need to be devised in order to pre-empt the foreclosure of emerging competition. However, the onus would still have to fall on the regulator to show why a departure from the ex post competition principles would be warranted in a particular case.

¹ European Commission (2009), 'Commission Staff Working Document Annex to the "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Progress Report on the Single European Electronic Communications Market 2008 (14th Report)"', COM(2009) 140, March 24th, p. 109.

² Postcomm (2008), 'Competitive Market Review', p. 60.

³ European Commission (2009), 'Antitrust: Commission Market Tests Proposed Commitments by EDF to Increase Competition in the French Retail Electricity Market'.

⁴ The ECPR sets access prices by reference to the retail prices of the vertically integrated incumbent minus the avoidable costs of providing access to third parties. See *Albion Water Limited v Water Services Regulation Authority*, Case no: 1046/2/4/04, Summary of Judgment and Conclusions, October 6th 2006, para 34.

⁵ *Deutsche Telekom AG v Commission of the European Communities*, Case T-271/03, Judgment of April 10th 2008, and *Wanadoo España v. Telefónica*, COMP/38.784, Commission Decision of July 4th 2007.

⁶ Kroes, N. (2007), 'Introductory remarks', press conference on Telefónica decision, Brussels, July 4th.

⁷ *National Carbonising*, OJ 1976 L35/6. *Napier Brown v British Sugar*, Case no. IV/30.178, Commission Decision of July 18th 1988 relating to a proceeding under Article 86 of the EEC Treaty, OJ L284, October 19th 1988, pp. 41–59. *Industrie des Poudres Sphériques*, Case T- 5/97 [2000], ECR II-3755, Judgment of the Court of First Instance of November 30th 2000.

⁸ Notice on the application of the competition rules to access agreements in the telecoms sector, OJ 1998 C 265/2, paras 117 and 118.

⁹ *Deutsche Telekom AG v Commission of the European Communities*, Case T-271/03, Judgment of April 10th 2008.

¹⁰ See Ofcom (2004), 'Direction Setting the Margin between IPStream and ATM Interconnection Prices', August 26th, and ComReg (2005), 'Consultation on Retail Minus Wholesale Price Control for the WBA Market', Consultation Paper 05/67, August 19th.

¹¹ Ofcom (2004), op. cit., para 2.4, p. 15. [Emphasis added].

¹² Ofcom (2008), 'Complaint from Energis Communications Ltd about BT's Charges for NTS Call Termination', August.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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