Importantly, however, the Court clarified that the absence of a formal dominance requirement in the downstream market did not prevent the firm concerned from putting forward an economic and objective justification for its pricing practices other than exclusion.[51]

7.3.3 The Imputation Test(s)

Overview. The most important element of a margin squeeze concerns the methodology to be applied to identify (or impute) an abuse. This raises several issues. First, what legal test should be applied to determine whether the dominant firm's upstream and downstream prices cause the activities of a downstream rival to be uneconomic, i.e., either loss-making or insufficient to provide a "reasonable profit." The most commonly-applied test is whether the dominant firm's own downstream operations would make a profit if they had to pay the same input price as rivals. A second, related issue is whether a different test based on the costs of a "reasonably efficient entrant" can also be applied. Third, the relevant cost standard to be applied to the dominant firm's downstream operations needs to be identified. Fourth, because margin squeeze concerns the price spread, or margin, one must look not only at costs but also at profitability, and it is necessary to apply a specific methodology in this regard. Finally, it needs to be ensured that the compared inputs, costs, and downstream revenues are truly comparable.

7.3.3.1 The basic legal test

Equally-efficient competitor test. A number of alternative tests could be envisaged in order to ascertain whether the dominant firm's prices would unlawfully exclude downstream rivals: (1) whether the dominant firm's own downstream operations could trade profitably on the basis of the wholesale price charged to third parties for the relevant input; (2) whether the dominant firm's downstream rivals could trade profitably on the basis of the wholesale price charged by the dominant firm; (3) whether some notional or hypothetical "reasonably efficient operator" could trade profitably on the basis of the dominant firm's input prices; or (4) a combination of some or all of the preceding tests.

In practice, the first test—the dominant firm's own costs—has been applied in virtually all instances under Article 102 TFEU and equivalent national laws. In *National Carbonising*, the Commission appeared to suggest a "reasonably efficient operator" test,[52] but in fact only applied a margin squeeze test based on the costs of the vertically

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336/07, *Telefónica and Telefónica de España v Commission*, EU:T:2012:172 and on further appeal in Case C-295/12 P *Telefónica and Telefónica de España v Commission*, EU:C:2014:2062.

[51] Case C-52/09, *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR I-527, para. 88.

[52] *National Coal Board, National Smokeless Fuels Limited and the National Carbonising Company Limited*, OJ 1976 L 35/6, para. 14 ("[A]n undertaking which is in a dominant position as regards the production of a raw material (in this case coking coal) and therefore able to control its price to independent manufacturers of derivatives (in this case, coke) and which is itself producing the same derivatives in competition with those manufacturers, may abuse a dominant position if it acts in such a way as to eliminate competition from these manufacturers in the market for derivatives. From this general principle the services of the Commission deduced that the enterprise in a dominant position

integrated firm, National Carbonising Company (and its subsidiary, National Smokeless Fuels Limited). But since then, the Commission has been explicit that the relevant costs were those of the dominant firm, i.e., a firm at least as efficient as the dominant firm.[53] The Guidance Paper confirms that, in general, Article 102 TFEU is only concerned with conduct that would exclude firms that are *as efficient* as the dominant firm, i.e., with the same or lower costs.[54] Consumer welfare is not generally well-served by allowing firms that are less efficient than the dominant firm to seek protection from price competition under Article 102 TFEU. If an equally-efficient competitor cannot survive because of the dominant firm's pricing practices, the Commission would assume that the conduct has the capability to foreclose and therefore examine the effects on the market.[55]

Thus, in *Deutsche Telekom*[56] the Commission stated that a margin squeeze would occur where the competing services were comparable and "the spread between DT's retail and wholesale prices is either negative or at least insufficient to cover DT's own downstream costs."[57] This would mean that DT would have been unable to offer its own retail services without incurring a loss if it had had to pay the wholesale access price as an internal transfer price for its own retail operations. As a consequence, competitors' profit margins would be squeezed, even if they were just as efficient as DT.[58] This approach was also followed in *Telefónica*, where it was clarified that the test was whether a competitor having the same cost function as the downstream arm of the vertically integrated dominant company was profitable in the downstream market given the wholesale and retail prices levied by the dominant company.[59]

The EU Courts have endorsed this "as-efficient competitor" test based on the dominant firm's own costs, at least as a general rule in margin squeeze cases. In *Deutsche Telekom* the General Court held that "although the Community judicature has not yet explicitly ruled on the method to be applied in determining the existence of a margin squeeze, it nevertheless follows clearly from the case-law that the abusive nature of a dominant undertaking's pricing practices is determined in principle on the basis of its own situation, and therefore on the basis of its own charges and costs, rather than on the

may have an obligation to arrange its prices so as to allow a reasonably efficient manufacturer of the derivatives a margin sufficient to enable it to survive in the long term.").

[53] *Napier Brown/British Sugar*, OJ 1988 L 284/41, para. 65. See also para. 66 ("[M]aintaining…a margin between the price which it charges for a raw material to the companies which compete with the dominant company in the production of the derived product and the price which it charges for the derived product, which is insufficient to reflect that dominant company's *own costs of transformation* (in this case the margin maintained by BS between its industrial and retail sugar prices compared to its own repackaging costs) with the result that competition in the derived product is restricted, is an abuse of dominant position.") (emphasis added).

[54] Guidance Paper, para. 23.

[55] *Ibid.*, para. 66.

[56] *Deutsche Telekom AG*, OJ 2003 L 263/9, upheld on appeal in Case T-271/03, *Deutsche Telekom AG v Commission* [2008] ECR II-447 and further upheld in Case C-280/08 P, *Deutsche Telekom AG v Commission* [2010] ECR I-9555.

[57] *Deutsche Telekom AG*, OJ 2003 L 263/9, para. 140.

[58] *Ibid.*, para. 102.

[59] *Wanadoo España v Telefónica*, OJ 2008 C 83/ 5, para. 315 (upheld on appeal in Case T-336/07, *Telefónica and Telefónica de España v Commission*, EU:T:2012:172 and on further appeal in Case C-295/12 P *Telefónica and Telefónica de España v Commission*, EU:C:2014:2062).

basis of the situation of actual or potential competitors."[60] It reasoned that the dominant firm's own costs were used in the *AKZO* predatory pricing case.[61] It further reasoned that there was indirect confirmation of the as-efficient competitor test in *Industrie des Poudres Sphériques* since the General Court stated that the rival's lack of competitiveness due to its own higher processing costs could not justify characterising the dominant firm's pricing policy as abusive.[62] Finally, and perhaps most convincingly, the General Court held that an approach based on anything other than the dominant firm's own costs would be contrary to legal certainty since the dominant firm cannot—and strongly arguably *should not*—be expected to know its rivals' costs.[63] The same basic reasoning and conclusions were subsequently confirmed by the General Court in *Telefónica*[64] and, more importantly, by the Court of Justice in *TeliaSonera*.[65]

7.3.3.2 "Reasonably efficient" competitor test

References in the decisional practice and case law. Reliance on tests other than the dominant firm's own costs has been suggested in certain limited instances under Article 102 TFEU and equivalent national laws. The earliest formal reference was the Commission's Access Notice in the telecommunications sector which put forward a second test, in addition to the dominant firm's own costs: where the margin is "insufficient to allow a reasonably efficient service provider to obtain a normal profit."[66] In a later Open Network Provision document,[67] however, the Commission confirmed that it uses the dominant firm's costs as the benchmark for a "reasonably efficient service provider:"[68] Then, actually what is means is "equally efficient"

> "The suspicion of a 'price squeeze' arises when the spread between access and retail prices of the incumbent's corresponding access services is not wide enough to reflect *the incumbent's own downstream costs*. In such a situation, alternative carriers normally complain that their margins are being squeezed because this spread is too narrow for them to compete with the incumbent. [...] Provided access and retail services are strictly comparable, *a situation of a price squeeze occurs where the incumbent's price of access combined with its downstream costs are higher than its corresponding retail price.*"

Decisions by national competition authorities (NCAs) or national regulatory authorities (NRAs) applying competition law have, however, focused to some extent on whether the margin between the dominant firm's wholesale and retail prices would be insufficient based on downstream rivals' costs or those of a "reasonably efficient

[60] Case T-271/03, *Deutsche Telekom AG v Commission* [2008] ECR II-447, para. 188.
[61] Case C-62/86, *AKZO v Commission* [1991] ECR I-3359, para. 74.
[62] Case T-5/97, *Industrie des Poudres Sphériques SA v Commission* [2000] ECR II-3755, para. 179. The General Court also cited *Napier Brown – British Sugar* OJ 1988 L 284, p. 41.
[63] See Case T-271/03, *Deutsche Telekom AG v Commission* [2008] ECR II-447, para. 188-192.
[64] Case T-336/07, *Telefónica and Telefónica de España v Commission*, EU:T:2012:172, paras. 190-192.
[65] Case C-52/09, *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR I-527, paras 42-44. See also Case C-209/10 *Post Danmark A/S v Konkurrencerådet*, EU:C:2012:172, para. 25.
[66] Notice on the application of the competition rules to access agreements in the telecommunications sector framework, relevant markets and principles, OJ 1998 C 265/2, para. 118.
[67] See European Commission, "Pricing Issues in Relation to Unbundled Access to the Local Loop," *ONPCOM* (2001), p. 1–17.
[68] *Ibid.*, p. 5 (emphasis added).

operator." For example, in rejecting a margin squeeze allegation under competition law, the United Kingdom NRA, Ofcom, partly relied on the fact that the margin was positive overall taking into account a cost disadvantage faced by downstream rivals that the incumbent did not suffer from.[69] Whether this should be read as a general endorsement of a "reasonably efficient operator" test for margin squeeze under competition law, however, seems doubtful. In the first place, Ofcom only relied on downstream rivals' costs as one of a series of tests to show that, on any view, there was no abuse. It does not seem therefore that Ofcom was proposing that an abuse would be found where the *only* test suggesting a margin squeeze is one based on rivals' costs or those of a hypothetical "reasonably efficient operator." Indeed, in all other cases in the United Kingdom, only the dominant firm's costs have been used as the relevant test for a margin squeeze.[70]

Limited situations where reasonably-efficient competitor test may apply. While the EU Courts have, as noted, confirmed that the general test in margin squeeze cases is the costs of the dominant firm, they have also identified a few exceptions. In *TeliaSonera*, the Court of Justice held that the dominant firm's own charges and costs may not be an appropriate benchmark if: (1) the cost structure of the dominant undertaking was not precisely identifiable for objective reasons; (2) the service supplied to competitors consisted in the use of an infrastructure the production cost of which had been written off so that access to such infrastructure would not represent a cost for the dominant undertaking which would be economically comparable to the cost which its competitors have to incur to have access to it; or (3) the particular market conditions of competition dictate it, by reason, for example, of the fact that the level of the dominant undertaking's

[69] Case CW/00760/03/04, *Investigation against BT about potential anticompetitive exclusionary behaviour*, Ofcom Decision of 12 July 2004. See also Decision 2012-P/K-29 *Belgacom/Tele2* of the Belgian Competition Council of 29 November 2012 (rejecting a margin squeeze abuse by Belgacom but adopting, in part, a reasonably-efficient competitor test).

[70] See, e.g., CA98/20/2002, *BSkyB*, OFT Decision of 17 December 2002 (hereinafter "*BSkyB*"), para. 356 ("The Director considers that the correct test…should determine whether an undertaking as efficient in distributing as BSkyB can earn a normal profit when paying the wholesale prices charged by BSkyB to its distributors, and that this should be tested by reference to BSkyB's own costs of transformation."); Case CW/00760/03/04, *Investigation against BT about potential anticompetitive exclusionary behaviour*, Ofcom Decision of 12 July 2004; *Investigation by the Director General of Telecommunications into alleged anticompetitive practices by British Telecommunications plc in relation to BTOpenworld's consumer broadband products*, Ofcom Decision of 20 November 2003; and Case CW/00615/05/03, *Suspected margin squeeze by Vodafone, O2, Orange and T-Mobile*, Ofcom Decision of 21 May 2004. Margin squeeze allegations have also been rejected in several decisions by the UK competition authorities. See, e.g., CA98/19/2002, *The Association of British Travel Agents and British Airways plc* (2002) (reduction in travel agents' booking payments found not to give rise to a margin squeeze *vis-à-vis* British Airways' own on-line booking services); Case CP/1139-01, *Companies House* (2002) (no evidence of Companies House cross-subsidising its competing activities so as to allow it to engage in predatory pricing, or impose a margin squeeze on its competitors); *British Telecom/UK-SPN*, Oftel Decision of 23 May 2003 (margin squeeze rejected for loss-making new telecommunications service on grounds, *inter alia*, that BT's predictions of future profits were not implausible); Case CA98/01/2004, *Albion Water/Dwr Cymru*, Ofwat Decision of 26 May 2004 (Dwr Cymru prices for water access found not to give rise to a margin squeeze); and Case CA 98/07/2004, *TM Property Services Limited/Transaction Online*, OFT Decision of 18 August 2004 (allegation of margin squeeze by Transaction Online in the market for property searches rejected).

costs is specifically attributable to the competitively advantageous situation in which its dominant position places it.[71]

Unfortunately, neither the Court of Justice nor the Advocate General elaborated on the reasoning said to underpin these exceptions, and the relatively terse wording leaves a number of issues unanswered. First, it is not entirely clear in what circumstances the cost structure of the dominant firm would not be "precisely identifiable for objective reasons." One situation may be where the company's own accounts do not include the types of economic costs that usually form part of the assessment of margin squeeze. Many companies do not record their costs in the incremental costs measures often used by the Commission. Accounting costs do not always correspond with the economic costs used in competition law cases. But it seems preferable in such situations to allow the dominant firm the opportunity to develop cost estimates and to use such estimates in conjunction with figures derived from rivals or other sources (e.g., market experts). Another example might be where the dominant firm's accounts were so lacking in transparency as to make an understanding of its costs difficult if not impossible. A *force majeure* type event might also make accounts unavailable—a self-evidently rare event.

The second exception is curious. The fact that the dominant firm has written off its infrastructure investment costs should on the face of it represent a legitimate efficiency on the dominant firm's part. If competitors have higher costs, this, too, would normally reflect their relative inefficiency—something that the General Court in *Industrie des Poudres Sphériques* said could not justify characterising the dominant firm's pricing policy as abusive.[72] The only legitimate role for this exception would appear to be where the dominant firm charges its own downstream operation a zero or near-zero transfer price—reflecting the fact that the infrastructure cost is written off—while charging rivals a higher amount (and ignoring the fact that the costs are written off). But this would likely be a case of discrimination under Article 102(c) TFEU so it is difficult to see why an exception is needed. By contrast, where the dominant firm has not *caused* its rivals to bear higher costs, it is difficult to see why the dominant firm's pricing must allow for their relative inefficiency. Finally, the stage of the dominant firm's investment cycle or depreciation policy should in any event not materially affect the analysis. If the dominant firm's costs are assessed on the basis of long-run average incremental cost (LRAIC), as the Commission and EU Courts now routinely do, this should include all product-specific fixed and variable costs over a reasonable investment cycle.[73]

The final exception—that the dominant firm's costs are lower because they are attributable to the competitively advantageous situation in which its dominant position places it—is also difficult to understand. The EU Courts have consistently held that a finding of dominance in itself is not a recrimination.[74] If a dominant firm has

[71] Case C-52/09, *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR I-527, paras, 45-46.

[72] Case T-5/97, *Industrie des Poudres Sphériques SA v Commission* [2000] ECR II-3755, para. 179.

[73] To make this point good, LRAIC should be calculated using replacement values rather than historical/depreciated values.

[74] Case 322/81, *NV Nederlandsche Baden-Industrie Michelin v Commission* [1983] ECR 3461, para. 10 ("[A] finding that an undertaking has a dominant position is not in itself a recrimination.").

advantages such as economies of scale or scope due to its activities, if it difficult to see why the possession of those advantages should lead to the dominant firm's pricing having to accommodate rivals' reduced levels of economies (unless, as noted, the dominant firm has caused them or they arise only or mainly because of abusive conduct).

Strong reasons to prefer equally-efficient competitor test over reasonably efficient competitor test. Notwithstanding the comments in *TeliaSonera*, there remain compelling reasons why a margin squeeze should be based on the dominant firm's own costs in all but wholly exceptional circumstances (which, as noted, in practice seem highly unlikely to arise).[75] In the first place, the test based on the dominant firm's costs has the strongest—and most clearly analysed and articulated—pedigree in the case law.[76] Under competition law, the important question is whether the rival is as efficient as the dominant company's downstream operations. If it is, and if the dominant company's operations are profitable, the rival should be able to be so. The fact that they are both unusually efficient, or that neither is efficient, is irrelevant for this purpose. The *Post-Danmark* judgment of the Court of Justice—rendered after *TeliaSonera*—makes this point forcefully.[77]

Accordingly, the equally-efficient competitor standard guarantees that interventions aimed at preventing a margin squeeze do not open the door to the entry of inefficient rivals or enable inefficient existing competitors to survive. By contrast, the "reasonably-efficient competitor standard may distort the competitive process and, therefore, is difficult to reconcile with unfettered competition. First, application of this standard risks shifting volume from productively efficient competitors towards inefficient rivals. Second, while the introduction of a "reasonably-efficient" competitor standard may facilitate an increase in the number of competitors, it is debatable that this would have a positive effect on long-run efficiency. The reason is that such a policy reduces competitors' incentives to become efficient as it protects the relatively inefficient and prevents their exit. Note that unfettered competition enhances long-run welfare by rewarding efficient firms while forcing inefficient firms to leave the market.

Second, a "reasonably efficient service provider" test is not capable of *ex ante* application by a dominant firm, i.e., at the time when it formulates its pricing policy. The lawfulness of its prices should not depend on its rivals' costs, which it cannot know, or on those of a hypothetical entrant. This would be contrary to the general principles of legal certainty and the rule of law: the law must provide a precise test or tests which a dominant company can use without the need for confidential information

[75] All Commission and EU Court Article 102 TFEU margin squeeze cases have in fact been based on the dominant firm's own costs. This is also true of national margin squeeze decisions and judgments, with apparently very limited exception. See C Veljanovski, *Margin Squeeze: An Overview Of EU And National Case Law*, e-Competitions No. 46442, www.concurrences.com, p. 6 and footnote 43 (suggesting that the equally-efficient test has been followed in all national decisions except for three decisions rendered in Belgium, Lithuania, and Hungary).

[76] See most recently Case T-271/03, *Deutsche Telekom AG v Commission* [2008] ECR II-447, para. 188, upheld on appeal in Case C-280/08 P, *Deutsche Telekom AG v Commission* [2010] ECR I-9555, paras. 195-204. See also, Case C-52/09, *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR I-527, para. 73.

[77] Case C-209/10, *Post Danmark A/S v Konkurrencerådet*, EU:C:2012:172, paras. 22, 38.

about its downstream competitors' costs, and before it adopts the pricing policy the lawfulness of which is under consideration.

Third, there would be difficult operational questions about how a reasonably-efficient competitor test would work. It would first be necessary to specify what degree of efficiency (or inefficiency) it is reasonable to assume. Further, it is unclear which rival(s) would matter. For example, most cases would need to accommodate situations where there are heterogeneous rivals, and in particular with some rivals being more efficient than others. This problem would be particularly acute in network industries—which have accounted for most margin squeeze cases—where firms with different infrastructure strategies or "ladders of investment" would have heterogeneous costs.

Fourth, a test based on the dominant firm's costs takes into account any relevant advantages or disadvantages arising from its vertical integration. Using the dominant company's downstream profits automatically takes into account its competitive advantages, including any advantages due to vertical integration, and any disadvantages which its rivals may be under. Any other advantages or disadvantages suffered by either the dominant firm or its rivals are irrelevant under competition law.

Finally, a reasonably efficient competitor test might encourage dominant firms to try to obtain information on their rivals' costs or profits—which could be illegal and undesirable.

Possible hybrid cases? A complex issue arose in *Slovak Telekom*[78] about the use of the dominant firm's costs. Slovak Telekom (ST) was a former State monopoly. For historic and regulatory reasons, its accounts were based so-called UCN ("účelové členenie nákladov") internal spread sheets. These UCN data were based on top down, fully allocated historical costs and, therefore, included some common cost allocation. ST did not have any ready-made LRAIC data (which was the Commission's favoured cost standard). The Commission acknowledged that the UCN cost data based on fully allocated historical costs methodology to some extent differed from LRAIC based on current cost accounting.

Because ST did not have any ready-made LRAIC data for the period of the alleged abuse, it was obliged to estimate, *ex post*, the relevant LRAIC figures, and submitted these figures to the Commission (which for some unexplained reason had not developed a LRAIC model of its own). In undertaking this exercise, ST relied upon estimates based on current costs, namely the cost to build a network scaled to satisfy (then) current and future demand. In this way, the LRAIC was based on an "optimised" modern network configuration, and not an outdated historic one.

The Commission rejected these "optimised" figures on the basis that they reflected the costs of a *more* efficient competitor, and not those of an as efficient competitor. ST challenged the Commission's rejection of its adjustments on appeal. Its argument was essentially one of consistency and pragmatism. The period of the alleged infringement

[78] Case AT.39523, *Slovak Telekom*, Commission Decision of 16 October 2014, on appeal Case T-851/14, *Slovak Telekom a.s. v Commission*, EU:T:2018:929. The case is currently on a further appeal to the Court of Justice.

spanned 2005-2010. By the time the Commission was considering ST's LRAIC in 2014, LRAIC data for network costs were only available for 2011. As a result, ST's 2005-2010 LRAIC data were based on ratios stemming from ST's 2011 LRAIC analysis. Thus, if the Commission's criticism was that the data put forward by ST were not based on ST's relevant costs at the time of the alleged abuse, the same was true of several other items of the LRAIC data submitted by ST, which the Commission *accepted*. In particular, the Commission accepted ST's asset re-evaluation based on a modern network but then rejected its network cost optimisation adjustments on the basis that a modern network did not fully reflect ST's network. ST argued that the Commission should have been consistent in this regard.

At first instance, the General Court essentially agreed with the Commission on this point. It held that:[79] (1) there was no inconsistency between the Commission on the one hand accepting an asset re-evaluation based on a modern network but on the other hand rejecting ST's optimisation adjustments on the basis that the latter were based on a modern network equivalent, since the two exercises had "different objectives;" (2) ST's optimisation adjustments would have involved the costs incurred by ST during the period of the alleged infringement being "disregarded;" and (3) ST's optimisation adjustments were based on a "perfectly efficient operator," not an equally efficient operator.

This issue remains on appeal to the Court of Justice. But irrespective of the outcome of the appeal, the General Court judgment does not appear to dispute in principle that if, for practical or other understandable reasons, the relevant cost data for the dominant firm are not available (or are in some respects incomplete), it would be legitimate to reconstruct the relevant data by relying on estimates, or proxies, for the dominant firm's relevant costs, even if those costs were not, in fact, the "actual" costs incurred by the dominant firm at the time of the alleged abuse. The critical point appears to be that those (reconstructed) costs should reasonably approximate to the dominant firm's network elements or other relevant costs. Whether this involves the application of an equally-efficient competitor or reasonably-efficient competitor standard may be a semantic point once this underlying principle is understood.

7.3.4 The Relevant Costs In A Margin Squeeze Case

Overview. The correct imputation test in a margin squeeze case—a test based on the dominant firm's own costs and those of firms who are at least as efficient as the dominant firm—requires the identification of all product-specific costs that the dominant firm faces in the relevant downstream market, treating the cost of the input supplied by the dominant firm to rivals as given (whether or not the dominant firm's own internal transfer price is actually lower or higher). This imputation test broadly assesses whether, given the dominant firm's total product-specific costs in the downstream market, it would remain profitable on the basis of the input price that it charges to rivals. If it would, a margin squeeze can be dismissed. If not, there is a suspicion of a margin squeeze and the emphasis then shifts to seeing whether there are

[79] Case T-851/14, *Slovak Telekom a.s. v Commission*, EU:T:2018:929, paras. 226, 233, 234.