Recognizing Human Irrationality: Consumer Behaviour and Assessing Commercial Strategies in Digital Markets under Art. 102 TFEU

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Abstract—Maintaining effective competition in digital markets is one of the most serious challenges facing EU competition law. It is crucial for the law to strike the right balance between protecting consumer welfare and encouraging innovation. This article evaluates the changes to the application of Art 102 TFEU to instances of tying and bundling, and refusals to supply, in digital markets affected by network effects. It will argue that the CJEU’s and the Commission’s detailed focus on the actual impact of putative infringements on the irrational consumer has resulted in decisions appropriately protective of the competitive process.

1. Introduction

Analysis of consumer ¹ behaviour is crucial at every stage of

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¹ In accordance with the standard use of the term by the European Commission in the context of competition law, the concept of ‘consumers’ will for the purposes of this article encompass all direct or indirect users of the products affected by the conduct, including intermediate producers that use the products as an input, as well as
assessing the impact that an undertaking’s unilateral conduct has on competition within the internal market. Pursuant to Article 102 TFEU (formerly Article 82 EC), any abuse by an undertaking of a dominant position within the internal market shall be prohibited as incompatible with the Treaties insofar as it may affect trade between Member States. Consumer behaviour is necessary for defining the relevant market from the point of view of demand substitutability which, in turn, helps to establish whether the undertaking enjoys a dominant position in said market. Consumer welfare is taken into account during the evaluation of the object or effect of the undertaking’s practices. Considerations of efficiencies favourable to consumers may serve as an objective justification for conduct which would have otherwise been abusive.

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2 The concept of an undertaking encompasses every entity engaged in an economic activity, regardless of the legal status of the entity and the way in which it is financed. C.f. Joined Cases C-159/91 and C-160/91 Poucet et Pistré [1993] ECR I-637, para 17.
3 Commission Communication ‘Commission Notice on the definition of relevant market or the purposes of Community competition law’ [1997] OJ C 372/03, paras 15-19 explain that demand substitution entails a determination of the range of products which are viewed by the consumers as substitutes – i.e. products to which she would switch in case the price of the original product underwent a small but permanent increase.
4 Commission Communication (n 1) para 10.
5 ibid para 5.
6 ibid para 30.
The extensive analyses of consumer behaviour conducted by the European Commission during its investigations of Microsoft and, more recently, Google, have attracted a lot of attention from the legal profession and the technology industries alike. For example, concerns were raised about the appropriateness of interference with fast-paced, highly innovative markets by competition authorities. Commentators have highlighted that the Commission and – in case of Microsoft – the CJEU, have chosen to adopt a much more interventionist approach than competition authorities in the US.

Of course, simply pointing out that one approach is more interventionist than the other is not particularly helpful. Much more interesting is the question whether the EU’s approach is sound – i.e., whether it corresponds to, and appropriately interacts with, the commercial realities.

The present article will seek to analyse the changes introduced to the interpretation of Article 102 TFEU by the recent digital markets case law. Part 2 of this article comprises an overview of the characteristics of digital markets which have been pertinent to competition law enforcement. It will be suggested that as a result of network effects influencing these markets, they are particularly susceptible to harm by tying and bundling, and refusal to supply. Part 3 and Part 4 will examine the influence of concerns about consumer welfare and the phenomenon of consumer bias on the application of Art 102 TFEU to instances of tying and bundling, and refusal to supply. It will be suggested that the changes are justified insofar as they

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9 Inter alia Case T-201/04 Microsoft Corp. v Commission [2007] 5 CMLR 11; Case AT.39740 Google Search (Shopping); Case AT.40099 Google Android.
protect consumers’ choice and the competitive process in the long-term.

2. Stimulus for change: particularities of the digital markets

In order to ascertain whether an undertaking has abused its dominant position, it is necessary to assess the characteristics of the market in which the undertaking operates. Thus, application of Art 102 TFEU will necessarily entail assessing the number of competitors, the existence of entry barriers and the distinct commercial practices typical on that market. However, in spite of the Article’s broad language, which has allowed for flexible application to different markets, its application to undertakings operating in digital markets has proven to be a challenge.

The Commission has expressed concern over consumers’ tendency to disproportionately prioritise easily visible and accessible products over products of higher or equal quality in the context of digital markets. This phenomenon is just one of many manifestations of consumer irrationality – i.e. behaviour on the market which does not maximize their economic welfare. The essential question that needs to be answered is this: when does profiting off consumer’s irrationality, which is a typical corporate strategy, cross the line between legal marketing techniques and the realm of anti-competitive practices? Before we go on to assess where the Commission and the CJEU have seen

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10 Commission Communication (n 1).
12 Case AT.39740 Google Search (Shopping) 124.
it fit to draw this line, it may be helpful to consider the typical consumer-affecting characteristics of digital markets, so as to gain a preliminary understanding of why these markets have become an area of special concern.

Digital technology has quickly become an important staple in the life of an average European. For instance, in 2018 over 82% of the UK population owned a smartphone, 14 89% used the Google Search engine, 79% had a Facebook account, 79% used YouTube, and 41% used Instagram. 15 Search engines and social media are a good example of digital software which involves and encourages data sharing with third parties. Indeed, the entire point of such software is that the more users contribute data to the software, the more attractive services the software can provide. Yet, the implications of data sharing are lost on many consumers. 16 Many more may feel uneasy about the extent of data sharing but may not understand how to monitor or prevent it. 17

Furthermore, the diffusion of digital technology and a ‘culture’ of data sharing has led to the development of more pervasive and aggressive advertisement. While in the past a person could expect their home to provide some reprieve from commercial pressures, today most people carry in their smartphone a portable collection of advertisements everywhere they go.

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17 ibid.
The European Union has reacted to these market realities with distinct instruments including an increasingly complex and demanding legislation on data protection and consumer protection. Competition law is therefore just one of the methods of ensuring consumer welfare, yet its role cannot be dismissed. The Director-General of Competition’s predominant concern has been the risk that abuse of dominance by the few successful undertakings will paralyse innovation in the long-term, making new entry into the market exceedingly difficult. Digital markets have been flagged up by both academic commentators and the Commission as strongly influenced by network effects, whereby the benefit of the offered product or service increases with the number of users and the amount of data about users. For instance, the value that Facebook can offer to its users increases as more people create accounts.

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20 COM (2018) 482, Report on Competition Policy 2017 from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 4


22 Google Search (n 9) 62.

23 ibid.
Edelman’s examination of different practices of Google shows us that: 1) network effects are a powerful incentive for undertakings to engage in more aggressive marketing schemes; and 2) in the case of dominant undertakings, this may sometimes result in them disregarding their ‘special responsibility’ not to abuse their dominant position by engaging in self-preferencing conduct. While trying to make their products visible is the goal of any undertaking, Dolman and Graf rightly remind us that increasing visibility will be particularly profitable in markets affected by network effects, since any product sold will have an impact beyond the immediate customer. Whereas non-dominant undertakings and/or undertakings operating on only one market will have no choice but to increase the visibility by way of ordinary advertising, undertakings which operate in several markets and are dominant in at least one of them may therefore feel particularly tempted to harm competition by leveraging market power and/or self-preferencing.

The leveraging theory of harm is associated with tying and bundling, whereby an undertaking uses its dominant position in market A to strengthen its position in market B.

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25 Dolman (n 21).
27 For a period of time it remained deeply controversial whether tying and bundling is at all capable of harming competition: e.g., according to the Chicago school’s one-monopoly-profit theorem, a dominant undertaking could never earn more than a single monopolistic price because it can already charge it on the market in which it is dominant, and would therefore never have the incentive to engage in market power leveraging. However, subsequent commentators have noted that the Chicago school vision was too simplistic, limited to short-term effects of leveraging and only operable within the confines of an artificial, strictly defined market – and, crucially, failing to take note of network effects. Should the reader be interested in reading more
Self-preferencing is a dominant feature in cases of refusal to supply, whereby the dominant undertaking promotes its own downstream product at the expense of downstream products marketed by competitors.  

The following parts 3 and 4 will examine the changes that innovation and the corresponding changes in consumer behaviour have brought to the application of Art 102 TFEU as regards tying and bundling and refusal to supply, respectively.

## 3. Tying and Bundling

Tying and bundling may be anti-competitive when it falls within the ambit of Art 102(d) TFEU which prohibits the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. Instances of tying and bundling encompass:

1. pure bundling, where goods A and B are sold together fixedly, and neither can be purchased without the other;
2. mixed bundling, where goods A and B remain available as standalones, but the bundle is offered at a discount;
3. tying, where the offered goods are either just A or the bundle A-B (the tying and the tied product).  

A special form of bundling particularly common in digital markets is technical bundling, where two goods are incorporated into one another in a way which makes it impossible for an ordinary consumer to either dismantle or to assemble in the first


29 Langer (n 26) 4-5.
place. Somewhat confusingly, the term ‘technical bundling’ has been used by the CJEU and the Commission regardless of whether the conduct in question consists of pure or mixed bundling, or a tie. The terms address two different issues. The terms ‘pure bundling’, ‘mixed bundling’ and ‘tie’ refer to the combinations of goods offered for sale. In comparison, ‘technical bundling’ refers to the manner in which the goods are integrated at the production stage (as opposed to merely packaged together).

A common non-digital instance of ‘healthy’ technical bundling is the assembly of car parts to make up a single car. In that particular case, the specialized market for car parts will continue to exist, for instance, for the purposes of car repairs. However, the market for cars will exist as a distinct one, since the car itself is valuable for the consumer precisely because it has been assembled and thus offers many functions that separate car parts do not. Indeed, without the existence of a car as a distinct product, the market for car parts would be non-existent – no one would have the incentive to participate in it except with the vision of eventually starting to produce cars.

The precise test for assessing whether technical bundling infringes Art 102 TFEU was articulated by the Commission in Microsoft:

1. the tying and tied goods must be separate and;
2. the undertaking concerned must be dominant in the tying product market and;
3. the undertaking concerned must not give customers the choice of obtaining the tying product without the tied product and
4. the tying arrangements must foreclose competition. 31

This article will further focus on the criteria of ‘separateness’ (1) and ‘customers’ choice’ (3) insofar as these have proved

30 ibid.
especially controversial and problematic in the context of digital markets.

A. Separate products

As tying and bundling requires the existence of (at least) two separate products, the question arises how to tell apart two tied products from what has always been or has become a single product. Without separate products, the conduct falls outside Art 102(d) which requires that a supplementary obligation be undertaken aside from the one that the consumer primarily wanted to undertake. Defining the products is also the first step towards establishing whether the second Microsoft criterion of ‘dominance in the tying market’ is fulfilled, since dominance can only be assessed by reference to a particular product. Separateness of products can therefore be considered a gateway into abuse by tying and bundling.

This issue of products’ differentiation is not particular to digital markets, but is especially pertinent to them, as innovation will often consist of combining several products into a new one to increase the value it brings to the consumer. 32 As Yu notes, technical bundling will often occur during product design and can be considered a product design method. 33 Other than design features, it will often offer consumers entirely new functionalities. For instance, at the beginning of the 2000s, a mobile phone had two main functions: making phone calls and sending text messages. In comparison, today a leading mobile phone manufacturer could not possibly issue a smartphone without, at the very least, Internet access, a camera, a music player, an app-

store and several pre-installed applications like an Internet browser and a range of social media applications.

Pre-Microsoft, the Court focused, inter alia, on the lack of functional interchangeability between the different products sold by the undertaking as the test for separateness. However, as Langer noted, such an approach would mean that complementary products could never constitute an integrated product, since they are by definition intended to be used alongside each other rather than interchangeably. The ‘lack of functional interchangeability’ test was therefore liable to generate false negatives.

In Microsoft the test for distinctness of products was reassessed. The case was concerned with Microsoft’s practice of incorporating its Windows Media Player into the Windows Operating System (‘OS’). From a technical standpoint it could reasonably be argued that the two products were merged into one. However, the Commission determined that the relevant question to ask is whether there exists consumer demand for the tied product (i.e. the media player) on a stand-alone basis. In addition, it took into account the existence of undertakings specialized in the manufacture of the tied product without the tying product and the dominant company’s own conduct in regard to the product(s) in question. Its method was subsequently accepted on appeal by the Court of First Instance (‘CFI’).

Dolman and Graf pointed out that the criterion of separate products functions as a proxy for the efficiencies defence: the tie will be efficient from the consumer’s perspective and therefore preferred over separate products if it saves them substantial costs. As a consequence of its efficiency, the demand for the tied product as a standalone will disappear and the bundle will ‘transition’ into a single product. In case of WMP

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35 Langer (n 26) 146.
36 Microsoft (n 31) recitals 802-804.
37 Microsoft (n 9) para 916-932.
38 Dolman (n 21) 230.
and Windows OS, this did not happen: Microsoft was unable to prove that any substantial efficiencies were generated by the tying itself, the CFI having taken a sceptical view on the argument that efficiencies arising from standardisation unilaterally imposed by a dominant undertaking should be taken into account. 39

Mariotti and Holzweber have highlighted possible concerns with the consumer demand test.

Firstly, consumer demand changes, which makes it crucial to pinpoint a time at which we want to assess it. 40 Secondly, the demand test does not resolve the dilemma concerning bundles which enjoy demand independently of the integral products, and thus may allegedly produce false-positives. 41 Thirdly, the demand test may lead to the counter-intuitive results where there would be no demand for the tying product without the tied product. 42 It will be proposed that neither of these critiques is sufficient to abandon the consumer demand test.

The first concern is not as urgent as it may first appear. The threshold for separateness of products is very low: demand for the tied product as a stand-alone might be dwindling; and it is not required that competitors who offer the tied product exclusively as a stand-alone are effective competitors, merely that the number of consumers who accept such offers is ‘not insignificant’. 43 Fluctuations of demand are thus unlikely to be a significant obstacle to applying the test. The only remaining problem is the scenario where the competition has already been eliminated and there is no longer any demand for the tied product as a standalone product, which might necessitate a historical analysis on the part of the Commission. However, seeing that one of the Commission’s enforcement priorities is prevention of

39 Microsoft (n 9) para 1152.
41 Holzweber (n 11) 357.
42 ibid, 17.
43 Microsoft (n 9) para 932.
foreclosure, rather than reaction to historical foreclosures, the test is well in line with the Commission’s actual practice. 44

As to the second concern, Holzweber gives an example of a painkiller which, when combined with a soporific, results in an antidepressant, which is a drug that operates in an entirely distinct market. 45 Notably, Holzweber’s argument is that such tying should not be considered harmful because no changes in market power of the tying and the tied product occur. However, it is respectfully suggested that Holzweber’s objection would only be relevant in jurisdictions where tying and bundling are considered per se harmful. In EU law, the assessment of separateness does not in any way prejudice the later assessment of the ability of the bundle to foreclose competition. 46

On a similar note, the third concern is also a non-issue at this stage of the inquiry. Under the second Microsoft criterion, an ‘anti-competitive bundle’ by definition requires the manufacturer to be dominant in the tying product market. If there is no demand for the tying product without the tied product, then there is no competition issue, as it is impossible to be dominant on the market for a product for which there is no demand.

As made apparent by the discussion above, the current separateness criterion is characterized by a low threshold and a tendency to relegate a lot of substantive issues towards the more advanced steps of the analysis. This is commendable: in case of innovative products, the presence on the market of which we have little experience with, it will be difficult to understand at first glance why the demand for the standalone tied products offered by competitors is decreasing. If the threshold is set too high, it may produce unjustifiable overall results, as the Commission will never get around to assess whether the demand for the tied product, insofar as it has dwindled, has done so because the tied

44 Commission Communication (n 1) para 19-20.
45 Holzweber (n 11) 358.
46 See 4th Microsoft criterion in Part 1.2 above.
product is no longer considered as an efficient standalone, or because of an abusive practice that may cause market foreclosure. On the other hand, the low separateness threshold itself is not capable of harming competition by freezing innovation because it does not in the least prejudice the finding of anti-competitive effects.

B. Coercion/inducement

The big novelty brought forth by the developments on the digital markets is the acknowledgement by the CJEU of a different, less exacting concept of consumer coercion.

In TetraPak II, the CJEU insisted on coercion in its narrower sense: a consumer was considered coerced if they were given no choice but to buy A-B or to go without one of the products they needed. This concept of coercion will sometimes be sufficient in the context of digital markets as well, as exemplified by the recent Commission’s decision in Google Android – it would appear from the Commission’s press conference statement that its main issue with Google’s commercial practices in relation to Android smartphones is that it made the licensing of Google Play to OEMs conditional on the purchase of other Google applications. In such a case, insofar as Google Play is considered a ‘must-have’ software and the sale of Android smartphones without it would not be commercially viable, the OEMs can be considered coerced.

However, in Microsoft, the Commission, subsequently endorsed by the CFI, developed a wider approach to coercion, holding that mere inducement of consumers may, in certain

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circumstances, leave them with no choice but to accept the tied product. 49

What does inducement mean and how intensive does it have to be to constitute abuse? The CFI established no precise threshold. It based its judgment on the facts that 1) Microsoft only sold Windows 98 with WMP to OEMs; 2) WMP was made immune from uninstallation via the standard Uninstall function; 3) market analysis showed that the abovementioned state of facts led the vast majority of consumers to use WMP as opposed to other media players available on the market, even though there was no obvious difference in quality between WMP and the competing products. 50 Hence, it would appear that the test of inducement is now three-fold: 1) a dominant undertaking must adopt a practice of tying or bundling; 2) the practice must make the tied product more attractive to consumers; 3) the consumers must actually be influenced by this commercial practice at the expense of competing products.

On one hand, such an approach is intrusive. It raises an urgent question: to what extent should competition law seek to protect consumers? If they wilfully opt to remain inert and use whatever it is that dominant undertakings choose to offer them, should that decision be theirs to make?

The CFI seemed to place significant emphasis on the fact that back in 2007 when Microsoft was decided, the market research compiled by the Commission indicated that a large number of consumers felt uncomfortable about downloading software from the internet. 51 However, more recent research indicates that not all of these concerns are still relevant. According to the Office for National Statistics, in 2017 almost all persons aged 16 to 35 (99%) used internet. Internet use by retired adults has dramatically

49 Microsoft (n 9) para 960-975.
50 ibid.
51 Microsoft (n 31) recital 865.
increased from 61% in 2011 to 86% in 2017. The revenue generated by UK businesses from e-commerce has nearly doubled between 2009 and 2017, suggesting that internet purchases are no longer something that the majority of the population fears or avoids.

Perhaps reflecting these changes, the Commission in *Google Search (Shopping)* focused on a different issue: the fact that consumers are not willing to spend time researching the options that are not readily visible. But should the dominant undertaking bear responsibility for what some might dismiss as laziness of consumers? If yes, why and under what conditions?

If the consumer lazily chooses to purchase goods on the basis of little to no research on available competing offers, then the consequences of her decision are her own to bear. It would be unpracticable to force each consumer to spend a determined amount of time researching before making a purchase. If they are adults and have capacity for independent judgment, then their freedom to determine their market behaviour ought to be respected, even if said behaviour is not always rational.

However, the fact that consumers sometimes act lazily should not distract us from the crux of the issue: the behaviour of the dominant undertaking. It is a principle underpinning the entirety of EU competition law that dominant undertakings have a special responsibility to refrain from damaging competition. If a dominant undertaking deliberately presents a consumer with

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54 *Google Search* (n 9) 124.

55 Commission Communication (n 1) para 1.
two products, one of them popular and desirable, and the other unknown and/or unpopular, and tells her that she cannot have one without the other, then it is the dominant undertaking who has made the first step towards harming the competitive process and has disregarded its special responsibility.

Does the consumer have to use the tied product? No. However, the marketing team of the dominant undertaking is well aware that she is likely to use it — it is why they chose the marketing strategy which involves bundling. While all marketing strategies are designed to induce particular consumer behaviour, in these circumstances it is the undertaking’s dominant position in the tying market which is used to induce the consumer and which allows the tied product to bypass competition. Perhaps the tied product is just as good as the competing products and the consumer is acting perfectly reasonably in continuing to use it. We will never know because the tied product, by virtue of the bundle, has never had to compete with its substitutes on merit. Hence, by taking into account the way consumers actually behave in the market, the Commission in cases like in Microsoft and Google Android strives to better protect the competition process itself, and in so doing enhance the consumer’s opportunity to make a rational economic choice. Whether she ultimately makes use of that choice or not is then for herself to decide.

4. Refusal to supply

In Oscar Bronner, 56 the CFI held that for refusal to supply to be abusive, the following conditions would have to be made out:

1. the product marketed in market A needs to be indispensable for the entry of a new product for which there is a potential consumer demand in the separate market B;

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2. the refusal must be incapable of being objectively justified; and

3. the refusal must be likely to eliminate all competition.

Just like in cases of tying and bundling, refusal to supply cases related to digital markets have also generated some controversy. The terms ‘new product’, ‘separate market’, and ‘indispensability’, as well as the requisite degree of remaining competition have all undergone developments and will be considered in turn below.

**A. Entry of a new product in a separate market**

In the early refusal to supply case law such as *Magill*\(^{57}\) or *Bronner*,\(^{58}\) the complainants’ projects of introducing a new product to the market were clearly defined. However, with the development of technology, the concept of a ‘new product’ became difficult to pin down.

If we consider *Magill*, the product at issue was a novel type of TV programme guide which would have been broader in scope than pre-existing guides and would have allowed consumers to plan their weekly TV schedule.\(^{59}\) In comparison, the more recent *Microsoft* decision\(^{60}\) was concerned with novelty in a broader sense. There was no single product that was about to be introduced. Rather, the Commission and the CFI were concerned about a multitude of potential future products which might be developed and might be valuable to consumers. Hence, the new criterion for ‘new entry’ fixed by the CFI was that of a new product or technological innovation. Interestingly, no indication was given by the Commission or the CFI as to the likelihood that these products would be developed or that they

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\(^{58}\) Oscar Bronner (n 56).

\(^{59}\) *Magill TV Guide* (n 57) para 10.

\(^{60}\) *Microsoft* (n 9), para 632; in relation to software interoperability, *not* to the Windows-WMP tie assessed in Part 1.2.
would actually enjoy any consumer demand. This raises a question whether competition law should be protecting hypothetical products and the general idea of innovation, without any clue as to what that innovation might look like.

A similar question arises in relation to the criterion of separate markets. First, in IMS Health, the Court accepted as sufficient the existence of a potential or a hypothetical market. It remained determinative that two different interconnected stages may be identified and that the upstream product be indispensable for the supply of the downstream product, but it was no longer required that the upstream product be marketed as such. 61 In Microsoft, the CFI did make a finding of separate markets for operating system (‘OS’) and for software using the OS as a platform. However, IMS Health was cited with approval and to that extent remains good law. 62 Hence, we are now in a situation where Art 102 TFEU appears to be invokable for the protection of hypothetical products on hypothetical markets.

This development is to be welcomed, though it may at first glance appear strange. As noted in Part 2, digital markets are particularly influenced by network effects. The trouble is that where a platform technology affected by network effects – such as an OS or a general search – becomes dominant and then chooses to refuse access by competitors’ products to the platform, it becomes impossible for any products, other than those created by the dominant undertaking, to enter the market. Closely related is the fact that no related new downstream markets can be developed now or in the future – or they can only be developed with the dominant undertaking as the monopolist fulfilling the entirety of the consumers’ demand. This is actually a much graver situation than in Magill where the dominant undertaking would only have control over a very specific (and on the facts of that case quite niche) product and product market. Therefore, a test that can detect threats to hypothetical markets is

62 Microsoft (n 9) para 335.
essential for preserving the possibility of entry into digital markets.

B. Indispensability of product and effective competition

While indispensability of the upstream product and the existence of effective competition started out as two distinct criteria, it is suggested that they have become closely intertwined and that their interpretation has been influenced by identical concerns. In particular, it will be shown that the Court has moved away from the concept of ‘indispensability for the creation of a new product’ and towards ‘indispensability for commercial viability of the product’, where this viability is necessary to maintain effective competition.

Let us begin by analysing the Oscar Bronner decision and its indispensability criterion. In Bronner, the CFI was adjudicating on a case concerned with distribution of daily newspapers. The question was whether access to a home-delivery scheme operated by the dominant undertaking was indispensable for a new entrant to the daily newspapers market. The Court refused to recognise access as indispensable, as there existed other means through which the seller of newspapers could reach its customers – e.g. through sale in shops and kiosks or delivery by post. The CFI emphasized that while these options may be less advantageous than home-delivery, their existence and their actual use for the purpose of newspaper delivery precluded the finding of indispensability of access. The threshold that the CFI used was that refusal to supply must not make it impossible or unreasonably difficult for the competing undertaking to enter and operate on the relevant market. 63

In comparison, the Commission and the CFI in Microsoft chose to interpret indispensability as a test based on commercial viability rather than the practical possibility of an alternative

63 Oscar Bronner (n 56) para 43-44.
access route. The Court recognized that different OS such as Linux do exist on the market and could be relied on by software manufacturers to provide a platform on which their software might function and might be used by consumers. It also recognized that the data about Windows that was publicly accessible did provide a limited possibility for ensuring interoperability between Windows and non-Microsoft software. These opportunities for market access were less favourable for software manufacturers than the one demanded by Commission. However, it is indisputable that there were alternative means through which competitors could enter into the relevant market, and therefore there is a strong argument that, on orthodox application of Oscar Bronner the Commission’s case should have failed.

On a similar note, Microsoft dispensed with the Oscar Bronner criterion of elimination of all competition, holding instead that elimination of all effective competition would suffice for an Art. 102 TFEU violation. Having considered the market shares of the different OS and the potential for development of software without disclosure of interoperability data, the CFI concluded that while some competition would remain possible, it would be so niche as to be incapable of countervailing Microsoft’s dominant position.

An analogous approach was taken by the Commission in Google Search (Shopping). The Commission’s decision addressed Google’s practices in marketing its specialized shopping search. At the time the Commission began its investigation, Google Shopping used to be positioned above normal search results in a special unit alongside other specialized Google products such as Google Maps, which made it more visible to users than competing specialized search engines. Furthermore, Google Shopping was exempt from the influence of an algorithm that Google Search used to rank websites according to relevance to

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64 Microsoft (n 9) para 632.
65 Microsoft (n 9), para 563.
the search query, which resulted in Google Shopping offers being consistently displayed at the top of general search page, in contrast with competing offers, which would typically be displayed around page 4. 66

The Commission did not announce the theory of harm on which it based its Google Search (Shopping) decision. 67 Notably, it distinguished Oscar Bronner on the facts as a case involving mere refusals to supply, whereas Google was found to have taken active steps to prevent equal access, such as algorithm modification. 68 However, that is not the only ground of divergence. There are elements in the Commission’s decision which clearly relate to indispensability of access, and which equate indispensability with commercial viability. For instance, the Commission took into account the existence of other search engines such as Yahoo or Bing. 69 It also considered Google’s argument that no competitors were completely excluded from the general search – in other words, supply was never per se refused. 70 Yet, it finally concluded that these facts could not preclude a finding of indispensability. The market shares of other search engines across Europe were so small that any provider of specialized shopping search who wanted to operate on more than a niche market, would have to advertise on Google. 71 Moreover, Google would have to subject its own services, and services provided by competitors, to the

66 Google Search (n 9).
68 Google Search (n 9) recital 650.
69 ibid recital 306.
70 ibid 35.
71 ibid recital 306.
same processes and methods for positioning and display in its search results pages.  

As a matter of evidence, particular importance was attributed by the Commission to analyses which showed that the majority of traffic is distributed between the first three general search results, with only very few users actually perusing the links at the bottom of the first page and little to no users ever reaching page 4. Furthermore, the traffic enjoyed by Google Shopping increased dramatically since Google exempted it from the algorithm and adorned it with appealing design features (including prominent positioning on the page and images of offered items).

The move from strict differentiation between indispensability and presence of any competition towards a more unified concept of indispensability of new products/innovation for the maintenance of effective competition is commendable for its coherence with the broader logic of competition law: competition law is concerned with dominance affecting the market as a whole, not small groups of consumers with niche preferences. It will be of little solace to a non-dominant undertaking if it can reach a thousand consumers if it needs to be reaching hundreds of thousands in order to develop a strong enough network and survive on the market. Similarly, it will not be enough to maintain effective competition if the non-dominant undertaking is only granted access, due to a biased algorithm, to page 4 of a search engine. Although access to the platform will not have been technically refused in such a scenario, what is truly indispensable in digital markets is not access to an advertising platform such as Google Search per se, but rather access to a visible place on the platform – for which the downstream

\[72\text{ ibid, recital 699-700.}\]
\[73\text{ ibid 124.}\]
\[74\text{ ibid 123.}\]
undertakings must be allowed to compete on merit if effectiveness of competition is to be preserved.

5. Conclusion

This article sought to assess the changes brought to the interpretation of Art 102 TFEU by the emergence of novel digital markets. It has been suggested that these markets, influenced as they are by network effects, are particularly susceptible to abuse by tying and bundling, and refusal to supply, necessitating the Commission and the CJEU to re-assess the interpretation of Art 102 TFEU, so as to better protect the irrational consumer.

The legal approach to both types of abusive conduct has undergone considerable developments, with consumer behaviour playing an increasingly central role in the interpretation of Art 102 TFEU. Notably, the gateway criteria for both tying and bundling, and refusal to supply, have been lowered: low levels of consumer demand will suffice for satisfying that ‘separate products’ limb of the anti-competitive tying and bundling test; hypothetical products and hypothetical markets will suffice for satisfying the ‘new product’ and ‘separate market’ limbs of the anti-competitive refusal to supply. These indicate, on the part of the CJEU, the willingness to explore the potential of each instance of allegedly abusive conduct to harm the competitive process and, by necessary implication, the consumer, even when the conduct is entirely novel and would not have easily fit into the old interpretations of Art 102 TFEU.

In addition, the limbs of the test that do directly address the potential for harming competition – coercion in case of tying and bundling; indispensability in case of refusal to supply – have also been interpreted to become more sensitive to consumer behaviour and to consumer irrationality in particular. These developments are to be welcomed insofar as they accurately represent the market realities and better preserve the competitive process, which enables the consumer to choose between products competing on their merits.