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Agenda

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Switching bundles: the impact of bundling on switching costs and competition

As the prevalence of bundled sales increases in the telecoms, broadcasting and other sectors, is it necessarily the case that the growth in bundles of services will lead to higher switching costs, lower rates of switching and a greater likelihood of competition concerns? Given recent evidence in the pay-TV and financial services sectors, what are the implications of behavioural economics for regulators considering these issues?

Consumers are increasingly purchasing bundles of telecoms services, combining fixed and mobile telephony with broadband, in addition to other services—notably television. If recent observed trends have been maintained during 2009, it is likely that more than half of UK households will now be purchasing such services as part of a bundle.[1] Even greater increases in the proportion of consumers purchasing bundles of services have been observed in Ireland.[2] Developments in the capability of telecoms networks as next-generation technology is rolled out will further enable telecoms operators to compete in the provision of bundles incorporating television services, increasing their potential to develop offerings in the commercial space currently populated by cable operators and those pay-TV operators, such as BSkyB, that offer broadband services.[3]

Consumer behaviour therefore provides evidence of strong preferences for purchasing bundles, with those preferences being driven by a combination of lower prices for bundles and/or the convenience of having a single bill for multiple services. Despite these benefits to consumers, regulators have been cautious when it comes to granting commercial freedom to operators to allow bundling, particularly if suppliers' product packaging effectively restricts consumers to purchasing either the bundle or nothing. For example, it took 25 years following the liberalisation of the UK telecoms sector before BT was allowed to sell bundles including fixed telephony, and some regulators have had to develop specific tools to ensure that existing (single-product) regulation is not undermined by the launch of retail bundles.[4]

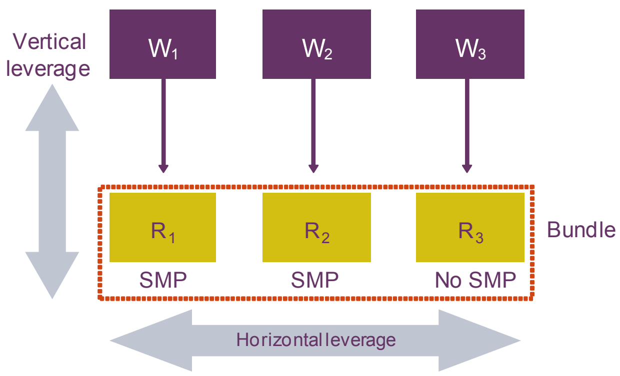
This article considers some of the challenges faced by regulators that have arisen from bundling, and in particular the relationship between bundling and the switching costs faced by consumers.

Bundling concerns: a precis

Bundling can generate significant benefits for consumers, and for operators it can enhance the quality of services that they provide to their customers, thereby generating welfare benefits for society. However, it can also be used as a strategic tool by companies with significant market power (SMP) in one market to leverage that market power into related horizontal markets (eg, from one retail market to another), or between markets at different stages of the supply chain (eg, from a wholesale market to related retail markets or vice versa), or it can be used as a defensive tool to protect the operator's position of SMP. This is illustrated in Figure 1.

A firm with market power in retail market R_1 and/or R_2 could seek to use bundling to leverage that power into

Figure 1 Leveraging through bundling



Source: Oxera.

R_3, or to defend its position in R_1 and/or R_2. Equally, a vertically integrated operator with market power in both R_1 and wholesale market W_1 could offer bundled products at the retail level to prevent competitors in R_1 from developing a sufficiently large customer base that would enable them to justify—using fixed line telephony as an example—making the investments required to unbundle local loops and to climb a rung on the ladder of investment.[5] Since competitors without their own infrastructure would continue just to resell the incumbent's wholesale products, this could limit competition to the dimension of price and prevent it from developing along quality dimensions such as speed of service.

One reason why bundling (and the related practice of tying) generates significant controversy is that there are several ways in which it can be used as a leveraging device. If products are complements, bundling may force competitors to compete bundle against bundle since a single-product entrant would be limited to supplying those customers who value only that product, and the greater the complementarity between the bundled products, the smaller the target pool of single-product customers.[6] This may raise entry barriers if competitors do not have access on equivalent terms to the inputs required to supply the complementary products, which in turn means that those competitors would be able to attract only those consumers who prefer one of the products in the bundle, thereby reducing the profitability of entry. Bundling, and in particular pure bundling (when the products are sold only as a package), can also be used as a commitment device, committing the bundling firm to robust reactions to competitor challenge, and potentially foreclosing the market(s).[7]

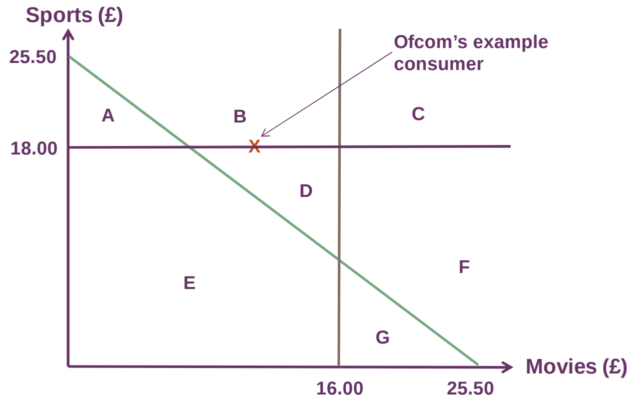
Does bundling necessarily reduce switching?

In its 2010 'Pay TV Statement', Ofcom, the UK regulator, makes clear its view that bundling is likely to reduce switching:

> Bundling of Sky Sports and Sky Movies channels is likely to reduce the willingness of customers who take the bundled service to switch or cancel their service.[8]

To support this view, it provides a numerical example of how a consumer may be a marginal consumer for a stand-alone sports TV service (ie, they would stop purchasing the service if the price increased by a small amount), yet would be willing to pay an additional £2.50 per month (an increase of just under 10% in this example) for a bundle of sports and movies before they would stop purchasing the bundle.

Figure 2 Bundling and marginal consumers



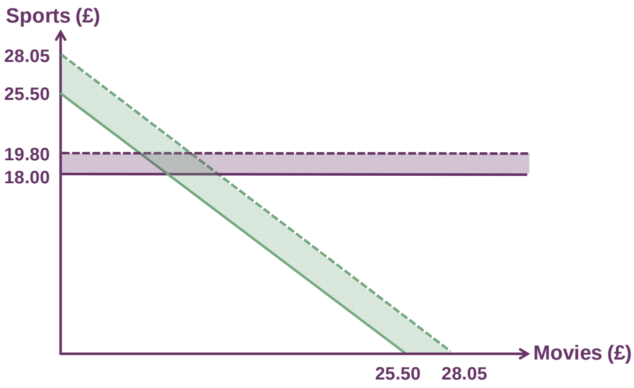
Source: Oxera.

Figure 2 depicts consumers' willingness to pay for the sports and movies services, and highlights the specific consumer that Ofcom uses in its example.[9] The axes represent the amount that consumers are willing to pay for the sports services (vertical axis) and the movies services (horizontal axis). The solid horizontal line at £18 represents the price of the sports service when sold on a stand-alone basis; the vertical line at £16 represents the price of the movies service. The diagonal line represents the price of the bundle of sports and movies, which is £25.50 (at any point on the diagonal line, the sum of the horizontal and vertical values equals £25.50).

Consumers' willingness to pay for the service(s) determines which service or package they will buy. For example, consumers in area A would buy the sports service only as they value sports at £18 per month or more; they do not value movies sufficiently to justify purchasing the movies service on a stand-alone basis The total value of the two services to those customers is less than £25.50, so they do not purchase the bundle. Following identical logic, those in B+C+D+F would buy the bundle; those in G, movies only; and consumers in area E would buy neither type of premium channel.[10]

The valuations of the specific consumer represented in Ofcom's example above are also shown in Figure 2. This highlights the problem of drawing general conclusions from specific examples. Ofcom's statement that bundling is likely to reduce switching may be based on an assumption that consumers' valuations are evenly distributed across the diagram, and is explained in the Pay TV Statement using one example of a consumer at the margin for a stand-alone sports service, yet away from the margin for the bundled service.[11] However, this may not be a valid assumption, and would not be sufficient to enable a general conclusion to be drawn about switching rates for stand-alone services or for bundles.

Figure 3 Empirical tests of switching: identifying marginal consumers following a 10% price increase



Source: Oxera.

What is instead required is to establish the proportion of consumers whose preferences lie in the shaded regions in Figure 3, as these consumers represent those who would stop purchasing the service if the prices of the stand-alone sports service or the bundled service were to increase by 10%. This is an empirical question rather than a theoretical one, and precisely this form of empirical assessment was undertaken in Ofcom's analysis of the boundaries of the relevant markets.[12]

What is the impact of bundling on switching costs?

A further relevant issue to consider in the context of bundling is its effect on the costs that consumers face when switching suppliers. The presence of such switching costs can enable suppliers to charge prices above the competitive level to their existing customers, or to raise the cost of entry to rivals.

In this regard, recent research undertaken for the European Commission in relation to retail financial services reached the conclusion that:

> Tying and pure bundling practices … reduce customer mobility, price transparency and the comparability of providers on the market, increase switching costs and negatively affect consumer confidence.[13]

Ofcom also presents the following evidence in its Pay TV Statement:

> Qualitative research on consumers that purchase bundles 'implied that the more services that were bundled, the less interest in switching—triple-play customers were largely averse to switching because there were few alternative suppliers for their entire bundle and they were happy with their package … There were indications that the largest potential barrier to future switching was that the more services were bundled together, the higher the value the consumer placed on the bundle. This led to a lower inclination to switch and perceptions of an increasingly complex switching process, particularly if there was a need to unbundle.' Further 'There was some evidence to suggest that bundlers' perceptions of the switching process were a barrier to switching—but not exclusively and in varying degrees'[14]

Furthermore, Ofcom reported that a greater proportion of customers taking bundles regarded switching supplier as 'fairly' or 'very difficult' than was reported by customers of stand-alone products.[15] This finding should also be considered in the context that Ofcom had previously found that consumers purchasing bundles were more engaged in terms of their past switching behaviour and awareness of current offers (ie, those consumers considered to be 'the most active group in terms of past behaviour and current interest') than consumers of stand-alone products.[16]

These quotes highlight three relevant issues that are considered below:

- the role of bundle-on-bundle competition;
- the cumulative value of bundled services;
- the complexity of switching.

Bundle-on-bundle competition

If few equivalent bundles are available in the marketplace, this may increase the difficulty of switching. This is particularly likely if, for example, consumers value the simplicity of having a unique contact point for customer services, or a single bill.

However, incorporating the degree of bundle-on-bundle competition into the analysis potentially introduces circularity, as non-availability of bundled offers from competing suppliers may be the result of anti-competitive behaviour by the bundling firm—eg, through restricting access to inputs that are necessary in order to compete. Equally, it may be as a result of a greater degree of retail innovation by the bundling firm, and regulatory intervention could generate a dampening effect on the incentives to innovate. Prior to taking regulatory action in such circumstances—eg, in obliging a bundling firm to provide competitors access to wholesale inputs to the bundled services—it would be essential for a regulator to analyse fully the conditions of competition at both the wholesale and retail stages of supply.

An example of where bundling does not appear to have impeded switching (possibly due to the availability of similar bundles from several competitors) is in the energy sector, where bundled ('dual fuel') offers have become widespread. Ofgem, the GB energy regulator and competition authority for the sector, has expressed no particular concern about bundling—indeed, it has identified that one reason that switching rates are lower in Scotland and Wales than in England is the relatively high proportion of electricity-only consumers, thereby preventing them from benefiting from 'attractive dual fuel offers'.[17]

The cumulative value of bundled services

An implication of Ofcom's findings quoted above is that when several products are bundled together, consumers' valuation of the bundle is higher than the sum of their valuations of the component products. This could be due to the savings that consumers can make in transactions costs, through having, for example, a single bill for multiple services.

This raises an interesting question about the relationship between the magnitude of the switching costs, the value of the combined services and the value of the savings that consumers might expect to achieve from switching.

There is increasing awareness among the competition law and regulatory community that consumers are not necessarily characterised as *homo economicus*—able to assimilate, analyse and respond rationally to all the information that they receive. For example, as highlighted in a recent UK Office of Fair Trading (OFT) report, consumers may assess the savings that they can achieve *relative* to the value of the underlying good or service, rather than as an *absolute* measure of saving:

> Behavioural biases may exacerbate existing problems for consumers in accessing information. For example consumers tend to look at relative costs rather than absolute search costs. This means a consumer may be willing to travel an hour across town for a half price offer on a £20 pen, but would not travel an hour across town for £10 off of a £500 television even though the amount saved (£10) would be the same.[18]

The implication is that consumers may be unwilling to switch to save £5 on a £60 quad-play deal, but may switch for £5 off a £15 broadband deal. As prices for bundles of services are (by definition) lower than the sum of the component prices, the biggest savings may be made at the point when the customer first takes a bundle of services. Achieving subsequent similar savings relative to the total value of the bundle may not be possible, even if competing bundles are available. On this basis, the findings of the OFT's report would indicate that, all else being equal, switching rates would be lower when consumers are purchasing bundles than when purchasing component services. This could impede the effectiveness of competition.

The complexity of switching

Finally, there may be reasons to expect that the absolute costs of switching a triple-play bundle may be higher than the sum of the costs of switching the three underlying services when purchased individually. For example, if competing bundles are available, there may be higher search costs for consumers in identifying which competing bundles best fit their requirements due to the combination of product characteristics and dimensions that can be incorporated into a bundled set of services.

Therefore, even if an authority were concerned about the effectiveness of competition for just one of the services in the bundle, an absolute increase in switching costs as a result of bundling would appear likely to have an adverse impact on the rates of switching for that one product.

Mitigating any increase in the absolute costs of switching could be the fact that consumers of bundles may not be representative of the population as a whole. As shown in Ofcom's analysis, consumers of bundles tend to be more engaged in the market in terms of their past switching behaviour and their awareness of current offers. This greater engagement could make that group of customers more likely to switch, thereby reducing any adverse effects of an absolute increase in switching costs.

This combination of factors means that it is increasingly important that any conclusions are based on robust evidence. Such evidence would need to be collated by means of well-designed surveys in order to overcome the potential bias that may exist when consumers are asked about their willingness to switch, which can overstate their likelihood of switching.[19]

Conclusions

An understanding of the implications of bundling for switching should form a significant element in the demand-side assessment of markets where bundling is prevalent or on the increase. This applies across the economy, from financial services to energy to telecoms and broadcasting (a sector where development of next-generation technologies is likely to increase the potential for multi-product bundles being made available to consumers). In making such assessments, regulators and competition authorities must seek to understand the complex interplay between bundling and switching costs, taking into account the impact of the characteristics of consumers of bundles, the prevalence (or otherwise) of bundle-on-bundle competition, and, increasingly, the lessons from behavioural economics.

[1] Ofcom (2009), 'Communications Market Report', August, p. 20.
[2] ComReg (2010), 'Residential ICT Services Survey Q4 2009', Reference Number: 10/22, March, p. 61.
[3] Current suppliers of IPTV services include BT Vision in the UK, which currently offers a range of on-demand services, and Belgacom in Belgium, which provides over 70 channels, including high-definition services, delivered over its VDSL network.
[4] See, for example, ComReg (2010), 'Consultation and Draft Direction: Further Specification of the Obligation Not to Unreasonably Bundle Pursuant to D07/61', Reference Number: 10/01, January.
[5] Cave, M. and Vogelsang, I. (2003), 'How Access Pricing and Entry Interact', *Telecommunications Policy*, **27**, pp. 717–27.
[6] Nalebuff, B. (2003), 'Bundling, Tying, and Portfolio Effects', DTI Economics Paper No. 1, p. 44.
[7] For a discussion of the many ways in which bundling can generate regulatory or competition concerns, see OPTA (2004), 'Bundling', Economic Policy Note Number 4.
[8] Ofcom (2010), 'Pay TV Statement', March, para 5.127.
[9] Ibid., para 5.128.
[10] Note that the availability of the bundle increases output since it enables consumers in area D to purchase the bundle, whereas if no bundle were available, those consumers would purchase neither sports nor movies.
[11] In this example, the consumer is a marginal consumer of the sports channels, but an infra-marginal consumer of the bundle.
[12] Ofcom (2010), 'Pay TV Statement', March, Appendix 3 to Annex 4.
[13] Centre for European Policy Studies and Van Dijk Management Consultants (2009), 'Tying and Other Potentially Unfair Commercial Practices in the Retail Financial Service Sector', Final Report, submitted to the European Commission, DG Internal Market and Services, ETD/2008/IM/H3/78, November 24th, p. 21.
[14] Ofcom (2010), 'Pay TV Statement', March, Annex 4, p. 12.
[15] Ibid.
[16] Ofcom (2008), 'The Consumer Experience 2008', p. 6. This metric is created using information on whether consumers have switched, have considered switching, or have negotiated more favourable terms with an existing supplier, and whether they keep informed about developments and offers in the market.
[17] Ofgem (2008), 'Energy Supply Probe: Initial Findings Report', Consultation, October, p. 47.
[18] Office of Fair Trading (2010), 'What Does Behavioural Economics Mean for Competition Policy?', OFT1224, March, p. 12.
[19] See, for example, Ofcom (2010), 'Pay TV Statement', March, para 5.4, which highlights the risks that, in answering survey questions, consumers often overstate their willingness to switch.

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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