



# **Sky/Vodafone – review of economics reports**

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## 1. Introduction and executive summary

1. We have been asked to review the economics reports of Castalia,<sup>1</sup> Covec,<sup>2</sup> Plum Consulting,<sup>3</sup> and Axiom Economics,<sup>4</sup> filed with the Commerce Commission in response to its statement of preliminary issues on the proposed merger of Sky and Vodafone. The key issues raised by these reports relate to bundling and the counterfactual.
2. The proposed merger is likely to provide the merged entity with an improved ability to create bundles that are attractive to consumers. This would make the merged entity a stronger competitor. The Castalia, Covec and Plum reports appear to equate this outcome with a competition problem. However, if a merger provides the parties with a competitive advantage, this is on its face a good outcome for consumers. The three reports fail to apply the appropriate economic framework for analysing anticompetitive bundling, and do not demonstrate why the competitive advantage for the merged entity would lead to worse outcomes for consumers.
3. The Castalia, Covec and Plum reports posit a counterfactual in which Sky would be an “enthusiastic” wholesaler, unbundling its content and allowing RSPs to repackage and rebrand it. However, actual behaviour reveals this as being an unlikely counterfactual.
4. The Axiom counterfactual is quite different, and indeed is inconsistent with the counterfactual posited in the other three economics reports. It would involve Sky entering the broadband market (e.g., as a reseller) and Vodafone entering the pay TV market (e.g., partnering with Fetch TV).
5. The key rationale for this counterfactual is that the “economics of offering a triple-play remain just as compelling” (Figure 2.8 of the Axiom report). But if the economics of offering a triple-play are that compelling, the Axiom report overlooks the most obvious counterfactual, which is the existing arrangements between Sky and Vodafone, i.e., Vodafone resells Sky, and Sky resells Vodafone.<sup>5</sup> Under these or similar arrangements, both firms would be able to offer triple-plays.
6. Indeed, we think this is the most likely counterfactual.

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<sup>1</sup> Castalia (2016), “Analysis of the Competition Effects of the Proposed Sky-Vodafone Merger”, Report for Spark, August.

<sup>2</sup> Covec (2016), “Economic Analysis of Sky-Vodafone Proposal”, Report for 2degrees and TVNZ, 11 August.

<sup>3</sup> Plum Consulting (2016), “Assessing the proposed merger between Sky and Vodafone NZ”, Report for 2degrees and TVNZ, August.

<sup>4</sup> Axiom Economics (2016), “Economic Analysis of Proposed Sky/Vodafone Merger”, Report for Fetch TV, August.

<sup>5</sup> To be accurate, we note that Sky refers customers to Vodafone, rather than technically reselling Vodafone. Still, the upshot is a bundle discount for customers, funded by both companies, albeit that the customer needs to deal with both companies.

## 2. Bundling

7. While some of the details might differ, each of the Castalia, Covec and Plum reports makes the same key arguments:
  - A. Sky has market power today, in respect of premium sports content in New Zealand;
  - B. Using that market power, the merged entity would have more incentive and ability to foreclose telecommunications (particularly mobile and fixed broadband) markets than Sky would under the counterfactual, through anticompetitive bundling; and
  - C. Therefore the merger would substantially lessen competition in these telecommunications markets.
8. However, none of the reports sets out or even applies the correct competition economics framework for considering anticompetitive bundling. That framework is explained in the following paragraphs.
9. First, bundling is generally regarded as efficient: for example, by allowing economies of scale/scope to be achieved, by lowering prices or by expanding the market.<sup>6</sup> This is even illustrated by Castalia's Table 3.1 example, which shows that bundling allows for three units to be sold rather than two. Similarly, Covec at [20] states that bundling can benefit consumers when it expands the market. Despite this, all three reports appear to treat bundling pejoratively.
10. Second, for bundling to be anticompetitive, the following conditions would need to hold:
  - A. The merged entity would need a high degree<sup>7</sup> of market power in one of the products in the bundle. This is sometimes characterised, including by the Commerce Commission,<sup>8</sup> as requiring the merged entity to include in the bundle a "must-have" product. However, the evidence suggests Sky Sport is not a must-have in New Zealand. As noted in the clearance application, Spark (the largest broadband supplier – see Figure 3 of the clearance application) exited its Sky reseller arrangement, and has since developed Lightbox, which does not include any sports content. Indeed, most RSPs do not bundle Sky Sport.<sup>9</sup> These facts probably reflect that most New Zealand households do not buy

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<sup>6</sup> For a summary of the economics literature on the efficiency of bundling see sections 7.3.2.1 and 7.3.2.2 of Massimo Motta (2004), *Competition Policy: Theory and Practice*, Cambridge University Press; and pp.598-599 of Dennis W. Carlton, Patrick Greenlee and Michael Waldman (2008), "Assessing the anticompetitive effects of multiproduct pricing", *Antitrust Bulletin*, 53(3), 587-622.

<sup>7</sup> In a 2005 report for the UK Office of Fair Trading, RBB Economics points out that (paragraph 4.39), "Economic theories of foreclosure are better developed for what might be deemed 'super dominant' firms. Foreclosure theories would appear to be less well developed (and hence less robust) in situations where dominant firms face some, albeit not fully effective, competition". RBB Economics (2005) "Selective price cuts and fidelity rebates", report for the Office of Fair Trading.

<sup>8</sup> Commerce Commission (2014), "Bluescope Steel (NZ) Limited and Pacific Steel Group", NZCC 8, 15 April, at [90.1]. See also OECD (2008), "Fidelity and Bundled Rebates and Discounts", DAF/COMP(2008)29.

<sup>9</sup> The four economic reports all make the claim that the fact only Vodafone resells Sky implies that Sky's wholesale pricing is too high (Castalia at s.6, Covec at [85], Plum at s.2.4 and Axiom at s.3.1.3). Yet this fact could equally be explained as reflecting that RSPs do not need to resell Sky to compete. (To be precise, the Axiom report does not make an economic

Sky Sport, meaning that Sky Sport is not a necessary component to allow fixed/mobile telecommunications companies to effectively compete for them.<sup>10</sup> Indeed, Castalia's use of the term "bottleneck" is not appropriate – in light of consumer behaviour and market conditions in New Zealand, premium sports content is not an essential requirement of providing mobile or fixed broadband services in the same way as, for example, the copper local loop (to which the term "bottleneck" is often applied) is for providing fixed telecommunications services.

- B. The merged entity would then need to leverage its market power by foreclosing competitors in the telecommunications markets. In other words, the merged entity would need to first undermine the competitiveness of its rivals (for example, by reducing their market share to the point they are sub-scale or their marginal costs rise),<sup>11</sup> and then exercise market power (for example, by raising price).<sup>12</sup> However, the Castalia, Covec and Plum reports do not explain how this could happen – they simply assert it would occur (e.g., Plum at section 5.3, Castalia at section 6). This is not surprising, as it is difficult to see how foreclosure could occur. For example:
- i. As already noted, most households do not buy Sky Sport, and so it would be difficult for the merged entity to foreclose phone/broadband competitors to such a level that they would be below minimum scale;<sup>13,14</sup>
  - ii. The evidence shows New Zealand telecommunications markets are competitive and contestable: fixed access is purchased on a variable basis from the structurally separated Chorus, there are numerous competitors (some of which are strong players, such as Spark), prices are falling (across fixed-line calling, fixed broadband and

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claim that the price is too high, but instead notes it is instructed by its client, Fetch TV, that the price is too high. It is not clear to us how Fetch TV could form a view on this, given it is not a telecommunications provider in New Zealand.)

<sup>10</sup> Based on Sky FY15 data, [REDACTED] of its customers include Sport or Sport and Movies in a bundle of Sky's pay TV products, compared to 1,682,200 households in New Zealand (Statistics New Zealand household estimates as at 30 June 2015).

<sup>11</sup> See Carlton, Greenlee and Waldman (2008), *op cit.*, who state (at p.611) that "For a pricing strategy to have an anticompetitive effect on rival firms, the strategy must alter the ability of rival firms to compete. This can be accomplished by denying a rival firm sales which otherwise would insure its survival or reduce its marginal costs". Similarly, Murphy, Snyder and Topel (2015, p.102) state that bundling practices that "do not impair the rival's ability to compete – that is, do not drive the rival from the market or raise its marginal costs – do not impinge the rival's ability to discipline market prices" (Kevin M. Murphy, Edward A. Snyder, and Robert H. Topel (2015), "Competitive Discounts and Antitrust Policy", in Roger D. Blair and D. Daniel Sokol (eds.), *The Oxford Handbook of International Antitrust Economics*, vol 2, Oxford University Press).

<sup>12</sup> For example, Carlton and Waldman (2008) state (at p.1237) that "the key issue is whether the price of [the competitive good in the bundle] can ultimately be elevated above the competitive level as a result of the competitive impairment of the rival" (Dennis W. Carlton and Michael Waldman (2008), "Safe Harbors for Quantity Discounts and Bundling", *George Mason Law Review*, 15(5), 1231-1239). Carlton, Greenlee and Waldman (2008), *op cit.*, make a similar point at p.613.

<sup>13</sup> Vodafone estimates that the merged entity's revenue share of broadband will only increase by [REDACTED] and mobile by [REDACTED] by FY19/20. See 4.1 of "Vodafone's interim response to Commission information request of 15 July 2016".

<sup>14</sup> Of course, the key scale risk in fixed networks has been handed to Chorus – RSPs simply purchase inputs from Chorus.

- mobile calling and data), and fixed broadband speeds and data allowances are rising;<sup>15</sup> and
- iii. There are no impediments to expansion, and the evidence of Plum and Castalia that bundling would raise switching costs is weak (we return to this below).
11. Without an ability to foreclose and then exercise market power, consumers would simply enjoy the benefits of bundling. Indeed, the real focus of the Castalia, Covec and Plum reports appears to be the welfare of the merged entity's rivals, rather than that of consumers. Faced with more attractive offers from the merged firm, the competitive response of rivals would be to improve their own offers in order to attract and retain subscribers – again to the benefit of all consumers. The economics reports do not put forward any evidence to show that doing so would in some way undermine rivals' economic viability or competitiveness.
12. Regarding switching costs, both Plum (at section 6.4) and Castalia (at section 7) assert that the merged entity would reduce consumers' ability to switch providers, due to increased consumer "hassle" of switching and lock-in by length of contracts. However, neither provides any persuasive evidence to this effect.
13. Plum argues that a larger bundle would raise the "hassle" of switching, and refers as evidence to a recent Ofcom consultation on consumers' views about switching providers of bundled services.<sup>16</sup> However, Plum omits to mention the study finding that 81% of those who switched initially said they found the process easy, and only when prompted did they select any minor or major difficulties they found with the process.<sup>17</sup>
14. Castalia asserts that bundling enables longer-term contractual lock-in. As the sole evidence provided, Castalia refers to Vodafone's offer of 12 months of Sky Basic and free Sky Sport with a 24-month Vodafone contract. This is obviously not rigorous evidence of a systematic relationship between bundling and longer-term contracts, and furthermore is no longer relevant – a similar offer is currently available on a 12-month Vodafone contract.<sup>18</sup> Moreover, we observe similar contract lengths in the market with the offer of a greater discount, completely unrelated to bundling (for example, 2degrees currently offers a 24-month contract of unlimited broadband for a better deal than its 12-month contract).<sup>19</sup>
15. Also, Castalia does not support its position with any evidence that customers feel less satisfied with longer contracts – customers are likely to select longer contracts if there is

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<sup>15</sup> See Commerce Commission's 2015 Annual Telecommunications Monitoring Report.

<sup>16</sup> Ofcom (July 2016), "Making switching easier and more reliable for consumers: Proposals to reform landline, broadband and pay TV switching between different platforms" Consultation Paper  
<http://stakeholders.ofcom.org.uk/binaries/consultations/making-switching-easier/summary/condoc.pdf>

<sup>17</sup> The Axiom report refers to evidence that bundles reduce churn. However, the Axiom report does not appear to make any claim that this would create a material barrier to a firm expanding in the event that the merged entity attempted to exercise market power.

<sup>18</sup> <http://www.vodafone.co.nz/freesky/>. Accessed 25 August 2016.

<sup>19</sup> <https://www.2degreesmobile.co.nz/broadband/>. Accessed 25 August 2016.

some benefit in doing so, e.g., lower prices. Furthermore, the atomistic nature of demand means there would be a continual expiring of contracts, enabling rivals to capture customers.

### 3. Counterfactual

16. The other key argument of the Castalia, Covec and Plum reports is that the counterfactual is Sky being an “enthusiastic” wholesaler – see for example Covec at [82], Castalia at section 10, and Plum at section 4.3 (we return to Axiom’s counterfactual later in this section). The justifications for this counterfactual are slightly different across these three reports, and we address each of them in the paragraphs below.
17. Covec’s argument (e.g., at [43] and [82]) is that it would be profit maximising for Sky (under the counterfactual) to drop its wholesale prices and expand its wholesale business. However, if that was the case, it would have done so already. It has to be assumed that Sky has already considered the trade-off between lowering its wholesale margins and increasing volume in this way, and determined that its existing wholesale pricing approach (based on ECPR<sup>20</sup>) is profit-maximising.<sup>21</sup>
18. Plum’s slightly different argument is that the consumer demand for non-linear television and broadband (OTT) distribution will result in (counterfactual) Sky wholesaling its content in ways that suit the resellers. Castalia’s argument is similar, in that it suggests Sky would wholesale its content so as to access the growing proportion of the market that prefers to access content via OTT platforms.
19. We note that the dynamic of increasing demand for non-linear programming and OTT distribution would apply under both the counterfactual and factual, so it is not discerning. Moreover, in the counterfactual Sky could market its services in an OTT manner, independent of whatever wholesaling goes on – Sky’s Neon and FanPass services are examples of this strategy. The growth of Netflix in New Zealand is also suggestive of the ability to access OTT customers without wholesaling via an RSP. The economics reports do not explain why Sky would need to rely on resellers as opposed to Sky’s own OTT channel. An OTT offering can be made over any broadband provider’s network, and Sky currently does so with its Sky Go, NEON, and FanPass offerings.
20. Regarding Plum’s argument that in the counterfactual Sky would wholesale its unbundled content, and “allow retailers to repackage and rebrand its content” (at section 4.3), we note this would be precisely the opposite of Sky’s status quo strategy. Sky’s contracts with RSPs contain provisions designed to protect its content and brand, which have been investigated by

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<sup>20</sup> In the Commission’s 8 October 2013 “Investigation report on Sky TV contracts”, the Commission reported (at [157.1]) that Sky calculates its wholesale price so that it is indifferent between whether a subscriber is a direct Sky customer or a customer via an RSP, which is the efficient component pricing rule (ECPR) approach.

<sup>21</sup> The Covec report builds up its counterfactual from an assumption (at [45]) that Sky-Vodafone intends to gain most revenue synergies through “upselling” Sky to Vodafone’s existing customer base. However, this is not correct— [REDACTED] See “Vodafone’s interim response to Commission information request of 15 July 2016”, section 4 and “Project Double Rainbow: 19 April 2015. Revenue Synergies.” pp 2 and 12.



the Commission.<sup>22</sup> Any rational firm would be concerned about a wholesaling strategy that failed to reflect the underlying value of its investment. Accordingly, a wholesaling strategy that undermined this value (as the Plum and Castalia counterfactual would – see the second bullet point under the heading of “In the counterfactual” on page 19 of the Castalia report) would seem unlikely.

21. Another way to think about this is to note that Sky is an aggregator of content – this is effectively its *raison d'être*, particularly now that Sky’s traditional delivery channel is facing greater competition from alternative platforms. It would seem odd to invest in aggregating content at the acquisition level, and to then permit resellers to disaggregate that content. At the very least, Sky would want to control any disaggregation/repackaging, and keep the rents (judging by past behaviour).
22. Plum rules out the counterfactual of Sky vertically integrating into broadband (at section 4.2) on the basis that wholesaling to all broadband retailers would be more profitable than relying on a “single, Sky owned, channel”, and that the strategy would not give Sky access to mobile distribution. But these seem strange arguments for the following reasons:
  - A. It is unclear why vertically integrating and wholesaling to RSPs (whether fixed or mobile) should be considered mutually exclusive;<sup>23</sup>
  - B. Sky has already developed its own OTT products; and
  - C. From Sky’s perspective, the merger is simply an accelerated form of developing its own broadband offering, and the fact that Sky has pursued a merger deal with Vodafone reveals that Sky expects this strategy to be more profitable than the counterfactual posited by Plum.
23. The Axiom counterfactual is quite different, and indeed is inconsistent with the counterfactual posited in the other three economics reports. It would involve Sky entering the broadband market (e.g., as a reseller) and Vodafone entering the pay TV market (e.g., partnering with Fetch TV) – see Figure 2.8 of the Axiom report. The Axiom argument is that under this counterfactual, Sky and Vodafone would compete against each other in offering triple-play bundles, and so the merger could result in unilateral effects in the future (page 21).
24. The key rationale for this counterfactual is that the “economics of offering a triple-play remain just as compelling” (Figure 2.8). But if the economics of offering a triple-play are that compelling, the Axiom report overlooks the most obvious counterfactual, which is the existing arrangements between Sky and Vodafone, i.e., Vodafone resells Sky, and Sky resells Vodafone.<sup>24</sup> Under these arrangements, both firms would be able to offer triple-plays.

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<sup>22</sup> Commerce Commission (2013), “Investigation report on Sky TV contracts”, 8 October, at [223].

<sup>23</sup> And while it is unclear how much of it is commercially versus regulatory driven, Plum’s own analogue, Sky UK, both wholesales and is vertically integrated into broadband.

<sup>24</sup> To be accurate, we note that Sky refers customers to Vodafone, rather than technically reselling Vodafone. Still, the upshot is a bundle discount for customers, funded by both companies, albeit that the customer needs to deal with both companies.

25. Indeed, we think this is the most likely counterfactual, or more explicitly, the counterfactual would be:
- A. Sky continuing to wholesale its pay TV bundle on similar terms to those existing at the moment, even if the only taker is Vodafone (this would give Sky the same access to consumers over fixed and mobile networks as would be the case if the merger proceeds, albeit that the allocation of control and rents might be different);
  - B. Sky continuing to resell Vodafone;<sup>25</sup> and
  - C. Sky continuing to develop in parallel its own OTT products.
26. For completeness, we also note that even if the Axiom counterfactual was a likely counterfactual, a substantial lessening of competition would still be unlikely, because:<sup>26</sup>
- A. As already noted, the broadband market is competitive; and
  - B. Any of the other major telecommunications companies could similarly partner with a firm like Fetch TV (the Axiom report states that “Fetch TV’s IPTV product is now offered as part of ‘triple-play’ bundles by all three of the major ‘non-Telstra’ ISPs [in Australia]” (page 20)).<sup>27</sup>

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<sup>25</sup> Perhaps under a slightly altered arrangement, enabling customers to deal with just Sky.

<sup>26</sup> We also note that on the Axiom report’s logic, even the existing arrangements between Sky and Vodafone would result in unilateral effects.

<sup>27</sup> There also appears to be a fundamental inconsistency in the Axiom report. On the one hand it argues that the counterfactual would involve Vodafone entering the pay TV market and competing against Sky, but on the other hand (see section 3) it argues that it is actually very difficult to enter this market, and that SVOD would not be a strong competitor to Sky.

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