

Appendix B: Comparative pricing

- B.1 This appendix provides further detail on the analysis of loyalty prices compared with other supermarket selling prices which is set out in Chapter 8 of this report. It sets out in more detail how we have derived the results that are summarised in the Findings from our analysis section.
- B.2 There are three sections to this appendix: Section A sets out our analysis on the variation in non-promotional prices; Section B sets out our comparisons of loyalty prices with the cheapest price available without a loyalty card; and Section C sets out our comparison of non-loyalty prices with the cheapest non promotional prices.

Section A: Variation in non-promotional prices

- B.3 To assess the levels of variation in non-promotional prices across supermarkets, non-promotional prices have been expressed as a percentage of the cheapest non-promotional price for that product. A value of 100 represents the cheapest (or equal cheapest) non-promotional price – all the other values for that product will be above 100 as they are higher than the cheapest non-promotional price for that product. For example, a value of 150 means that the non-promotional price at a particular supermarket for a given product is 50% higher than the lowest non-promotional price that the product is being sold for in the sample.
- B.4 For 8% of the sample (33 products) there was only one non-promotional price across all supermarkets. Of the remaining products that were sold by more than one supermarket on a non-promotional basis, 66 products showed no variation in prices. This meant that for 77% of the sample (330 products), some level of price variation was observed.
- B.5 The scatter plot (Figure X(a)) below plots these indexed non-promotional prices. Figure X(b), presents the same data in the form of a histogram to provide a clearer representation of the distribution of prices. Whilst the vast majority of non-promotional prices tended to be clustered between 100 to 125 (83%), a notable minority exceed this range, including cases where prices were more than 100% greater than the lowest non-promotional price. Although these outliers are small in number, they highlight the significant price differences that can exist between supermarkets for some products.

Figure X(a): Non-promotional prices with reference to the cheapest non-promotional price.

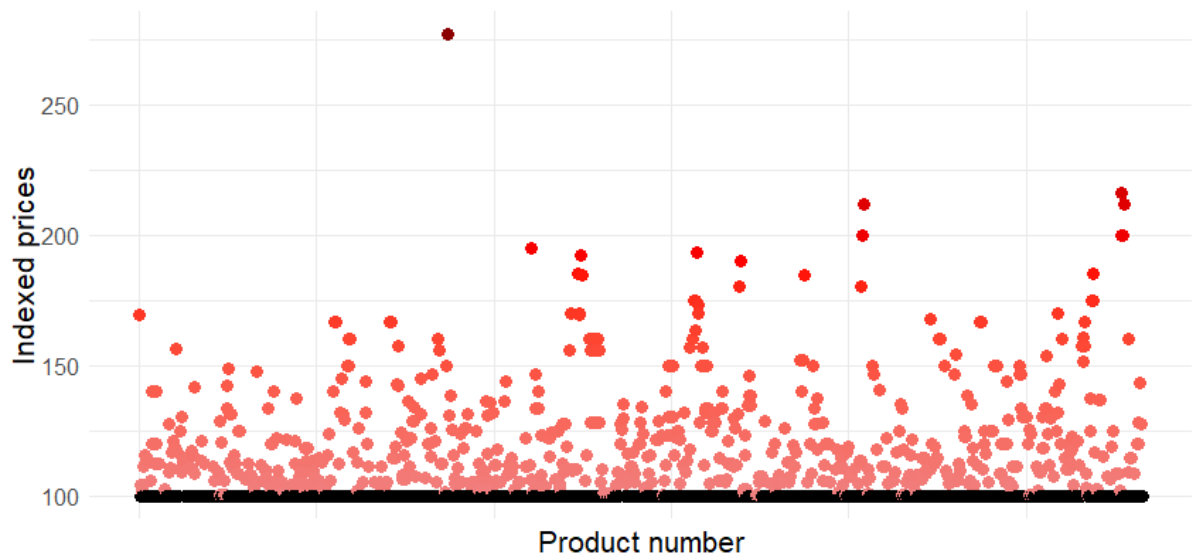
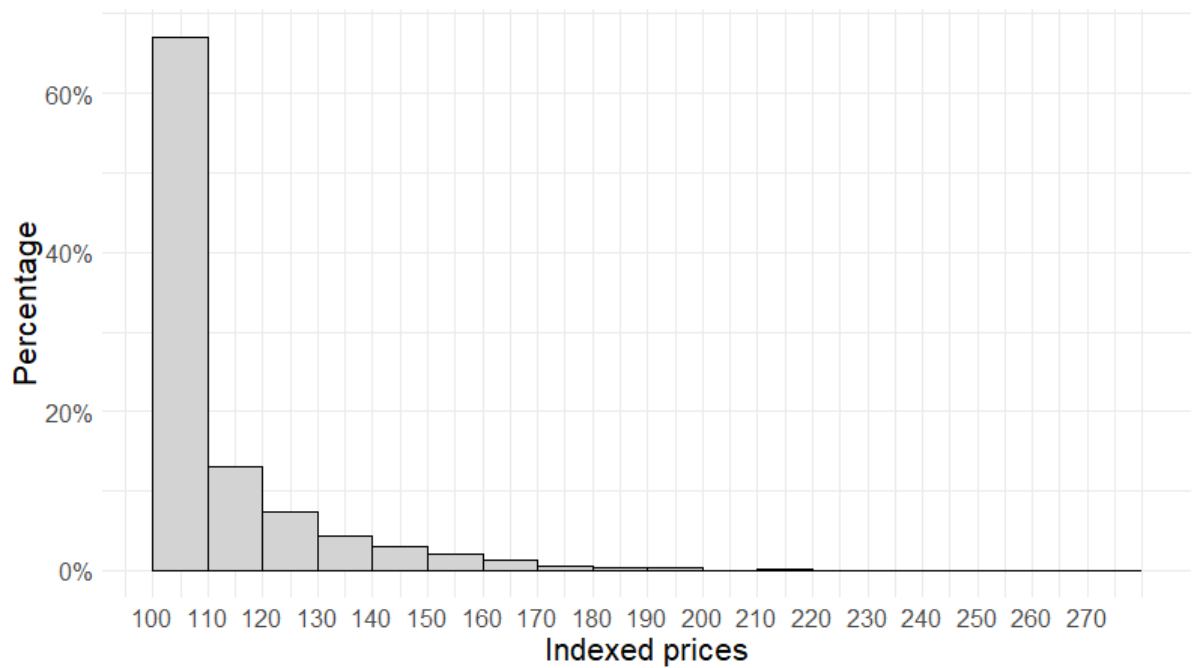


Figure X(b): Non-promotional prices with reference to the cheapest non-promotional price.



Section B: Comparison of loyalty prices with the cheapest price available without a loyalty card

- B.6 To assess the magnitude of the difference between loyalty prices and other prices, we expressed loyalty prices as a percentage of the lowest price in the sample that did not require a loyalty card i.e. the lowest price available to all shoppers. These 'indexed' loyalty prices are presented in the scatterplot and histogram shown in Figures X(a) and X(b) respectively below.
- B.7 The lowest price that did not require a loyalty card, to which the loyalty prices are indexed in Figures Y(a) and Y(b), could be either a non-promotional price or a was/now promotional price. The data points (in the scatterplot) and the bars (in the histogram) are colour-coded; grey data points or bars represent instances where the loyalty price is compared to a non-promotional price, while green data points or bars indicate that the comparison is made to a was/now promotional price.

Figure Y(a): Loyalty prices with reference to the cheapest 'other' price.

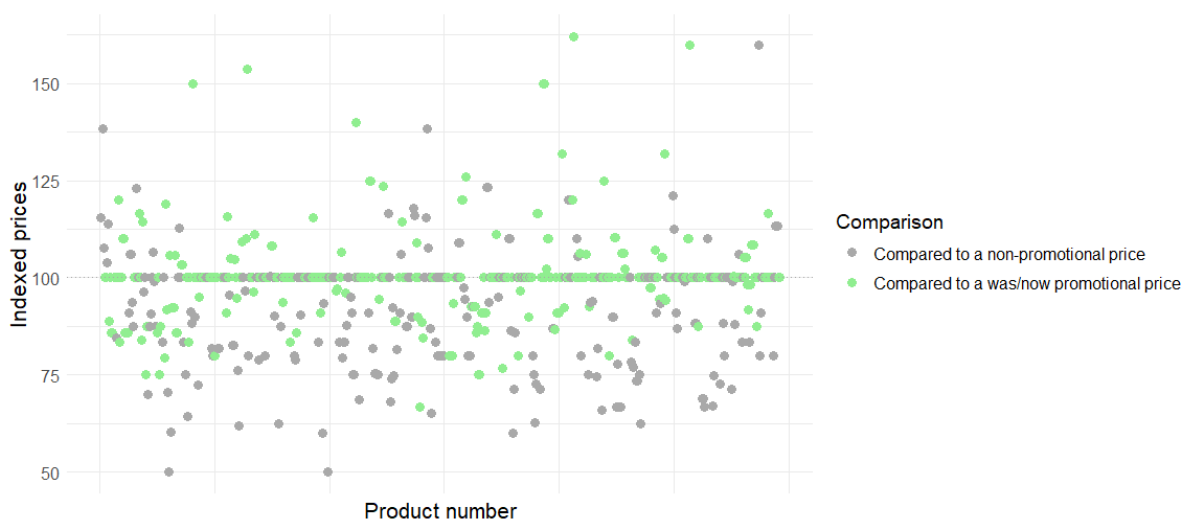
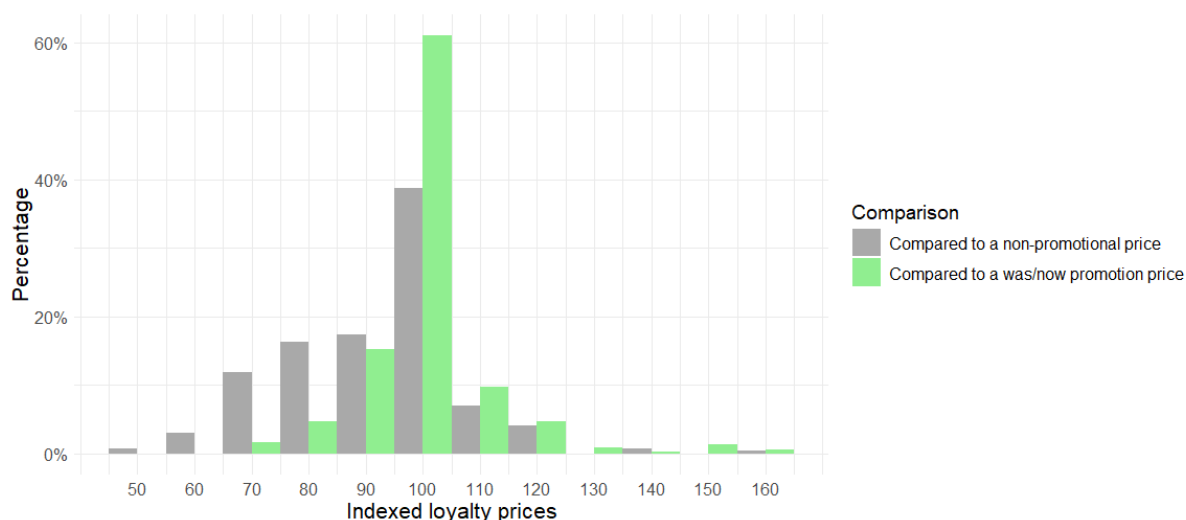


Figure Y(b): Loyalty prices with reference to the cheapest ‘other’ price.



- B.8 An indexed loyalty price of 100 signifies that the loyalty price matches the lowest price that does not require a loyalty card (which for brevity is referred in the rest of this section as the cheapest ‘other’ price). Values below 100 signify that the loyalty price is lower than the cheapest other price (for example, an indexed loyalty price of 80 means that the loyalty price is 20% lower than the cheapest other price). Similarly, a value of 120 means that the loyalty price is 20% more expensive than the cheapest other price.
- B.9 Looking at the overall trend in Figure Y, indexed loyalty prices are generally higher when compared to a was/now promotional price than when they are compared to non-promotional prices as shown in the distribution of the grey and green bars above.
- B.10 Where loyalty prices are compared (indexed) to was/now promotional prices, the majority (56%) are equal to 100 (i.e. loyalty prices and was/now promotional prices are identical). A high proportion (78%) of indexed loyalty prices are between 90 and 110. This pattern is consistent with loyalty promotions typically offering a similar level of discount to other promotions.
- B.11 Where loyalty prices are compared (by indexing) to non-promotional prices the vast majority (87%) are 100 or less. While for a not insignificant proportion (35%) of these the loyalty price was equal to the cheapest non-promotional price, the majority were less than 100 (52%), mostly in the range of 74 to 89. This pattern is consistent with loyalty promotions typically offering a discount relative to non-promotional prices.

Section C: Comparison of non-loyalty prices with the cheapest non promotional prices

- B.12 We expressed non-loyalty prices (prices paid by those without a loyalty card for a product on a loyalty promotion) as a percentage of the cheapest non-promotional price in a similar way to above. Values of 100 represent non-loyalty prices that were equal to the cheapest non-promotional price, while values below (above) 100 represent non-loyalty prices that were cheaper (more expensive) than the cheapest non-promotional price.
- B.13 Figure Z(a) presents a scatter plot of the indexed non-loyalty prices and Figure Z(b) presents a histogram of this data, shown in green, alongside the data presented in Figures X(a) and X(b), shown in grey.
- B.14 Figure Z(a) shows that a small proportion (13%) of non-loyalty prices in the sample were below 100 (the green dots) and a larger minority (36%) were exactly 100 (the black dots). While the remaining 51% of non-loyalty prices in the sample exceeded the cheapest non-promotional price (shown by the red dots), as can be seen more clearly from the histogram in Figure Z(b), the distribution of non-loyalty prices (the green bars) is very similar to that of non-promotional prices (the grey bars). This is consistent with non-loyalty prices being typically similar to non-promotional prices.

Figure Z(a): Non-loyalty prices with reference to the cheapest non-promotional price.

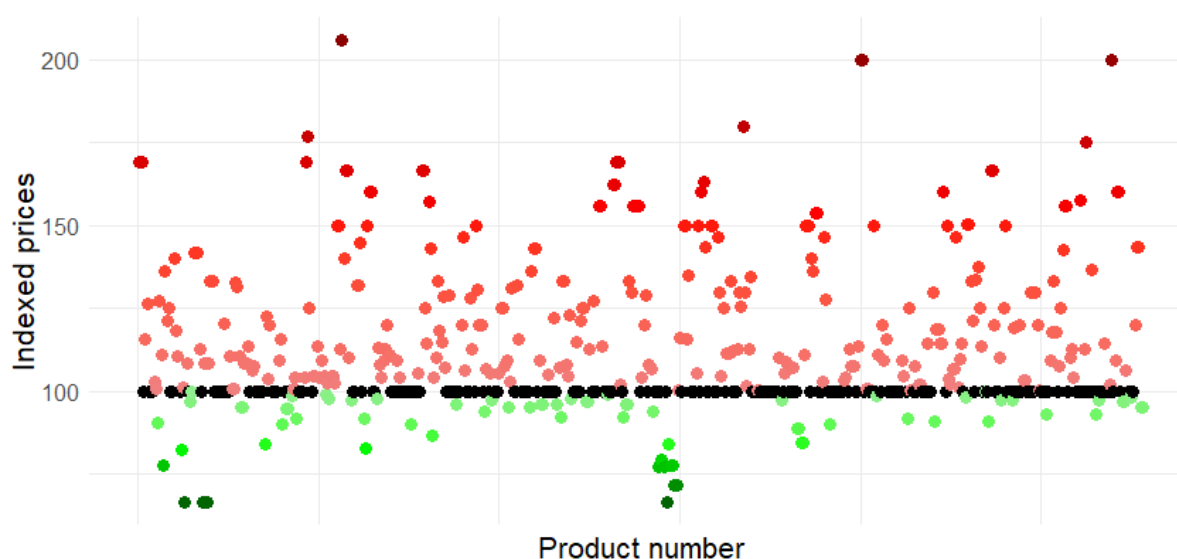


Figure Z(b): Non-loyalty and non-promotional prices with reference to the cheapest non-promotional price.

