

# Advertising payback – is TV advertising still effective?



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# Authors



Andrew Sharp  
Director  
+44 (0)7725 704 535  
andrew.sharp@uk.pwc.com



David Lancefield  
Partner  
+44 (0)20 721 32263  
david.lancefield@uk.pwc.com



Darren Waterman  
Assistant Director  
+44 (0)20 7213 5023  
darren.waterman@uk.pwc.com



Thomas Hoehn  
Partner  
+44 (0)20 780 40872  
thomas.hoehn@uk.pwc.com

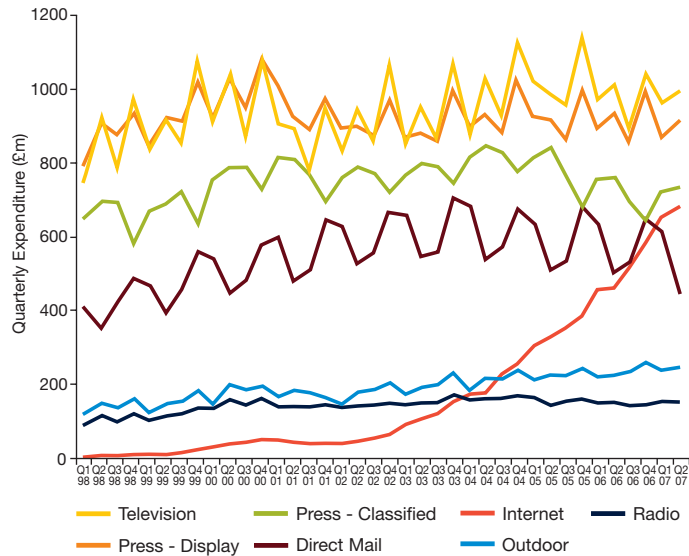
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# Introduction

Advertisers are constantly finding innovative ways to communicate with their target audience, but how effective are they?

There is a vigorous debate in the UK over the effectiveness of marketing communication. It comes at a time when there are significant structural changes in the UK advertising landscape. Figure 1 suggests that some of the increase in internet advertising expenditure over the last few years has occurred at the expense of direct mail, and to a lesser extent, press classified advertising. Other media expenditure appears to have remained relatively stable, with expenditure on TV pulling slightly ahead of press display advertising.

Figure 1: UK quarterly advertising media expenditure (Q1'98 - Q2'07)



Source: PricewaterhouseCoopers / Internet Advertising Bureau / Advertising Association / Radio Advertising Bureau / WARC.

## What is communication 'effectiveness'?

Beliefs and perceptions about communication effectiveness drive this changing landscape. Is new media more effective than old media and thus a substitute, or are they simply complements?

Ultimately, communication 'effectiveness' reduces to payback on investment: advertisers put their money where they believe they will earn the best returns.

The PricewaterhouseCoopers LLP (PwC) study commissioned by Thinkbox, tackles the difficult issue of measuring payback. The study provides an innovative and objective analysis of the relative returns from all the major communication investments by advertisers in the UK. We believe it is unprecedented in its scope and approach.

The following report presents a summary of our findings. We start by defining the term 'payback' and setting out how it should be measured. We then present the results of the analysis of the long-term relationship between marketing communication expenditure and both sales and brand values.



# What, precisely, is advertising payback?

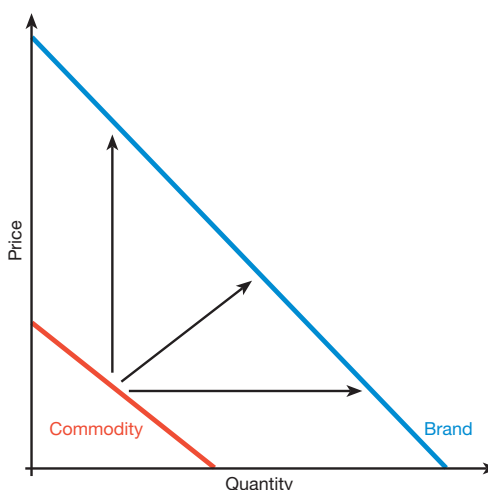
PwC believes true payback is the financial return on brand investment.

PwC research has demonstrated that there is considerable confusion as to the definition of payback.<sup>1</sup> It is neither the immediate and accessible short-term sales uplifts nor is it intermediary measures like awareness or click-throughs, which are often the focus of effectiveness studies. PwC believe true payback is the financial return on brand investment and should be measured in two dimensions:

1. Its relationship with a notional 'commodity' product and
2. Over time (the 'longevity' dimension).

The fundamental aim of marketing investment, e.g. through advertising, is to increase the awareness and attractiveness of a product or service so more people buy it (probably at a higher price) than the same product or service offered as a commodity; this is the first payback dimension. The increase in demand is a direct measure of the extra value the brand has added to both sales and prices – see figure 2 below.

Figure 2: Illustrative demand curves – successful brands shift the demand curve to the right

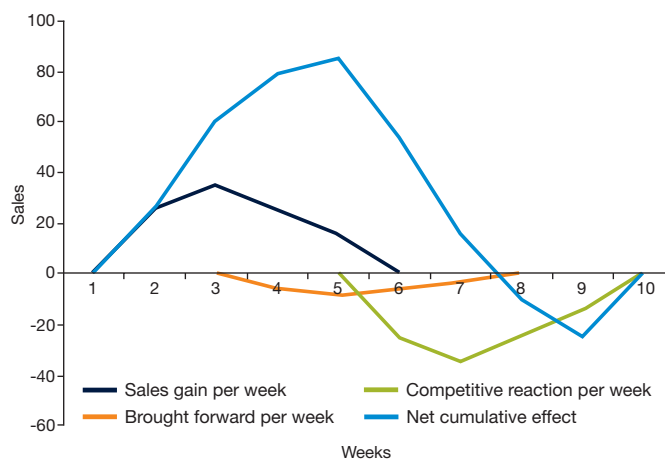


Source: PwC analysis.

The second payback dimension is the duration of the value created from the investment. Typically, brand investments are evaluated using short-term sales effects. This approach overestimates the true financial effect: sales may not be sustained and may not even be profitable. Figure 2 illustrates the problem. Initial positive sales gains following marketing investment can easily be outweighed by brought forward sales and competitor reactions. A simplistic payback analysis would only capture the initial sales gains and therefore lead to erroneous conclusions about what appeared to work and what did not. Many markets exhibit this 'sine wave' promotional sales cycle – and there is little correlation with long-term growth.

Significant brand value depends on longevity based upon stable and sustained incremental cashflows. In practice, this is only achieved for a minority of brands (see Appendix for further discussion).

Figure 3: Illustration of the sales effects of marketing investments over time



Source: PwC analysis.

<sup>1</sup> See Andrew Sharp (2007), IPA Advertising Works 15, IPA.

# What is the impact of marketing investment on brand value?

## Our Approach

PwC undertook two separate analyses in order to measure payback: the first aimed at understanding the 'value added' payback dimension and the second aimed at understanding the 'longevity' dimension.

In both cases we then compared the results with the media investments in order to understand the comparative effectiveness of different media. To determine 'value added' we calculated brand values, or to be precise brand revenue premia, in effect the amount of money people would pay for the brand name over and above an unbranded 'commodity' product or service.

To do this we conducted conjoint research in seven UK product categories:

- Cereals
- Juices
- Haircare
- Lower medium cars
- Upper medium cars
- Executive cars
- Car Insurance.

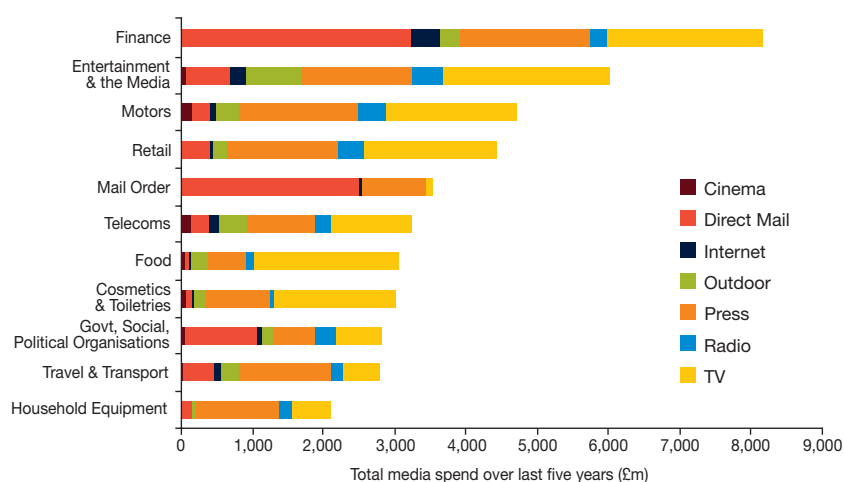
The seven categories were chosen for the following reasons:

- They contained significant marketing expenditure on brands (see figure 4)
- They provided a cross section of price points as well as a variety of product categories
- They had an adequate distribution of different media investments – we did not cherry-pick only categories where TV spend was predominant.

PwC established brand value preferences for a cross section of brands drawn from the seven categories by deploying 41 separate UK brand surveys, contacting over 1600 respondents. The surveys principally used online conjoint questionnaires with an average sample of approximately 230 respondents (post-quality control).<sup>2</sup> The approach involved the following steps:

- For each brand we extracted the price consumers were willing to pay for each of the key preference drivers – e.g for cars, the attributes were engine size/type, price, as well as brand name.
- The brand name value data was then combined with sales data to produce a brand multiple figure. Together they capture both the brand price and volume premium – i.e. the current brand revenue premium.
- We then correlated our dataset of 41 current brand revenue premia with their recent marketing investments.

Figure 4: 5 years' marketing expenditure by sector and media



Source: PwC analysis.

<sup>2</sup> A small number of responses were removed as they were either non-sensical or incomplete.



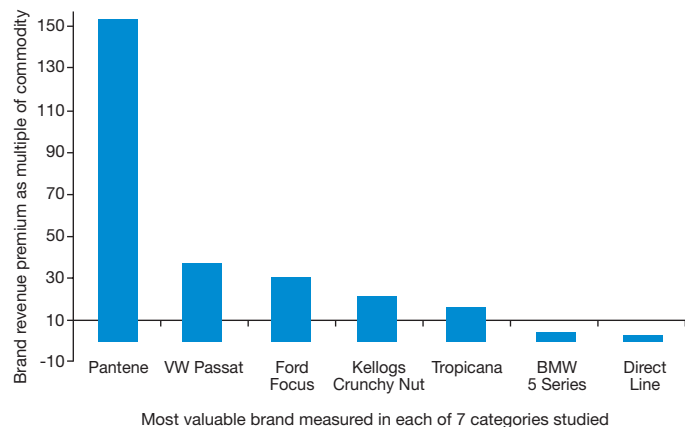
# The results

What is the long-term relationship between marketing communications expenditure and both sales and brand values?

From the conjoint surveys we obtained the current brand revenue premia for all of our 41 brands. This is made up of the brand price premium (or the willingness to pay for the brand), expressed as a percentage of the price of the commodity product, combined with sales data.

In Figure 5 below we provide the brand name of the product with the highest brand revenue premia we measured in each category (e.g. the Ford Focus in the lower medium car segment, and Pantene in the shampoo category).

Figure 5: Brand revenue premia in 7 product categories



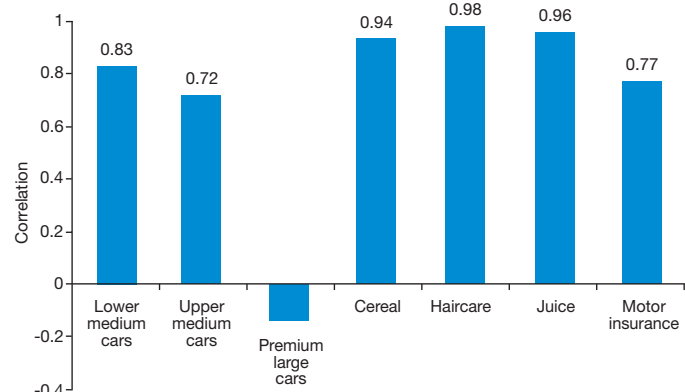
Source: PwC analysis.

Note that the differences between the categories are driven principally by the category characteristics, rather than better or worse branding. The brand revenue premium depends to a significant degree on the smallest viable brand in the category. For example, in the shampoo category the commodity brand has very low sales. This is probably due to differing levels of barriers to market entry, which are presumed to be lower in shampoos than in the car insurance market (the TNS dataset recorded 89 brands and 234 sub-brands in 2006).

Overall, we found that:

- TV investment has very high correlations (over 0.90) with brand values in the three Fast Moving Consumer Goods (FMCG) categories (see Figure 6)
- Across all seven categories, TV has the highest correlations in four out of seven categories (FMCG and motor insurance)
- In the two medium car categories, TV had the second largest correlation after press (upper medium) and direct mail (lower medium) and in the premium car category the correlation is close to zero and negative.

Figure 6: Correlation between brand value and TV share of voice by category

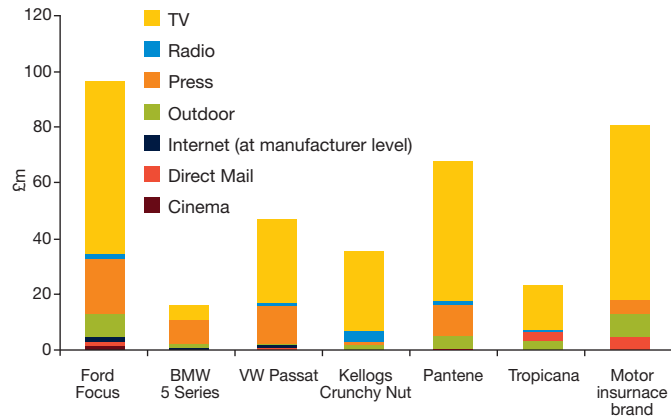


Source: PwC analysis.

The brands that have generated the most brand value in their categories use disproportionately more TV than their competitors.

The results are even starker for brand leaders. In simple terms – as Figure 7 illustrates – the brands that have generated the most relative brand value in their categories use disproportionately more TV than their competitors. They also use other media too, which suggests that optimum communication mixes exploit potential cross-media synergies.

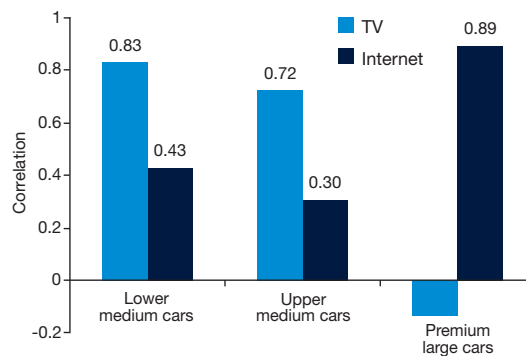
Figure 7: 5-year advertising spending by the most valuable brands



Source: PwC analysis.

We only had comparable internet data for the three car categories. In the two larger volume car categories (upper and lower medium cars), the relationship between advertising spend and brand value is weaker for internet than TV.

Figure 8: Correlations between brand value, TV and internet shares of voice



Source: PwC analysis.

# What is the impact of marketing investment on long-term sales performance?

To understand the effects of different investments on brand longevity we conducted a long-term brand revenue analysis.

We acquired sales, price and advertising data for between nine and 13 years for all of the brands in our seven chosen categories (706 brands).

Fortunately such datasets were available in the UK from:

- Taylor Nelson Sofres (TNS) for FMCG data
- Society of Motor Manufacturer and Traders (SMMT) and Glass's guide for the car market
- Financial Services Authority (FSA) for the Auto insurance market
- Marketing spend data was supplied by Ad Dynamix. This listed brand-level marketing investment expenditure in TV, print, radio, outdoor, cinema, and direct mail media
- For the three car categories, we collected internet investment data, but only at the manufacturer-level.

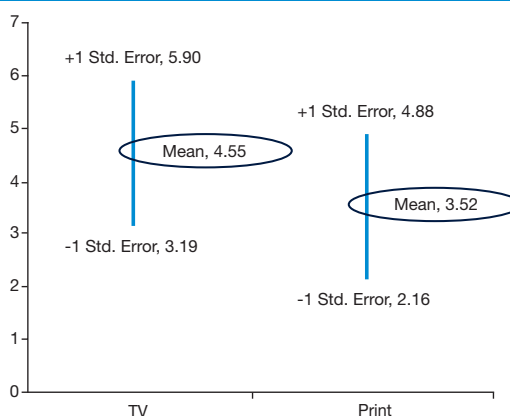
Assembled together they allowed us to collate complete volume sales data, pricing data and advertising data which was analysed via econometric modelling.

We expressed all marketing spend as a share of total industry market spend (i.e. a 'share of voice') – in line with industry practice. Our econometric results calculated the average annual change in product market share associated with a change in share of voice for each media type over the preceding years. We then converted the 'share of voice' and market share changes back into monetary values by applying the values of the investments and returns (in monetary terms) in the respective markets.

We found:

- On average, a £1m increase in TV investment yields a £4.5m increase in sales. This varies considerably by category and brand.
- Print investment also delivered increased sales as well. The TV model was more significant – and directionally superior, as shown in figure 9.
- Other media did not appear significant in this analysis. Several explanations are possible: the data may not be comparable or perhaps the good investments were cancelled out by an equal number of poor investments.

Figure 9: Econometric estimates of sales effect TV and press advertising investment (additional sales per £1 marketing investment)

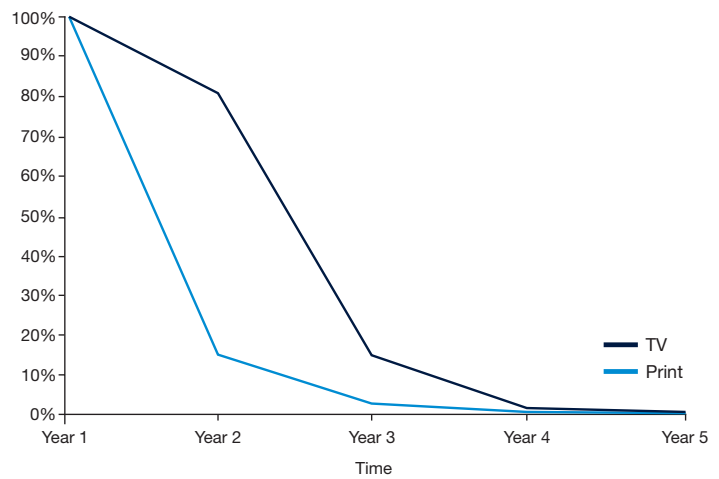


Source: PwC analysis.



The econometric analysis further showed that TV delivers its impact on sales over a much longer time frame (45% of the total impact on sales occurred after year 1) than press where most of the effect happened in year 1, as shown in figure 10.

Figure 10: Estimated sales effect of TV and press advertising over time



Source: PwC analysis.



# Conclusions

On average, a £1m increase in TV marketing investment yields a £4.5m in sales; out of all media, TV has the strongest correlation with large brand values...

The larger the brand value, the more likely the business made non-TV investment, suggesting 'synergy effects'.

The combination of the two analyses provides both a snapshot of significant UK brand values in August 2007 and a long run UK historical analysis of drivers of revenue growth.

A number of features distinguish this overall study:

- The innovative approach of measuring the fundamental economic value of brands and their relationship to marketing investments.
- The objectivity of the analysis – we have deliberately analysed a wide cross section of branded markets in the UK with purchase price points ranging from pounds to thousands of pounds.
- The length and scope of the analysis – we have analysed not just a few brands but all brands in the seven categories for over 13 years.

From the analysis of the relationship of marketing expenditure and brand values for product categories over the period we find that:

1. TV investment has, overall, the strongest correlation with large brand values;
2. TV is the core medium for most leading brand owners; and
3. The larger the brand values the more likely the business is to have made non-TV investments as well, which suggests synergy effects, between investments

From the long-run sales analysis of marketing effectiveness we find that:

1. On average, a £1m increase in TV investment yields a £4.5m increase in sales. This varies considerably by category and brand.
2. TV is the most significant driver of revenues across a wide range of products.
3. TV delivers its value over a much longer time frame (45% of its total sales effect is delivered after year One)
4. The key driver of channels is 'share of voice'.

When we look at the car categories separately, for which internet advertising data are available, we find that internet advertising has a very high correlation with brand values in the low-volume premium car category but that in the medium car categories TV and other more traditional marketing investment categories correlate more strongly with brand values.

# Appendix

The danger of misleading short-term sales results can be made starkly clear with this quick excerpt from a set of studies PwC has supervised on the effective life of brands.<sup>3</sup>

This in effect gives us the distribution of probability of long-term sales success for UK FMPCG products.

The studies used a 13-year dataset provided by TNS and analysed the brands that were tracked in their super-panel consumer survey of ca 15,000 households in Britain during that period.

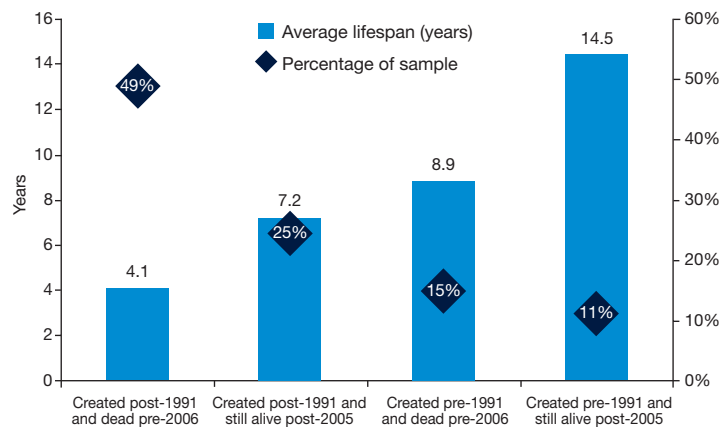
In the example of the cereal category shown in Figure 11, which is typical of other FMCG categories, about half the brands only lasted on average just over four years.

In particular:

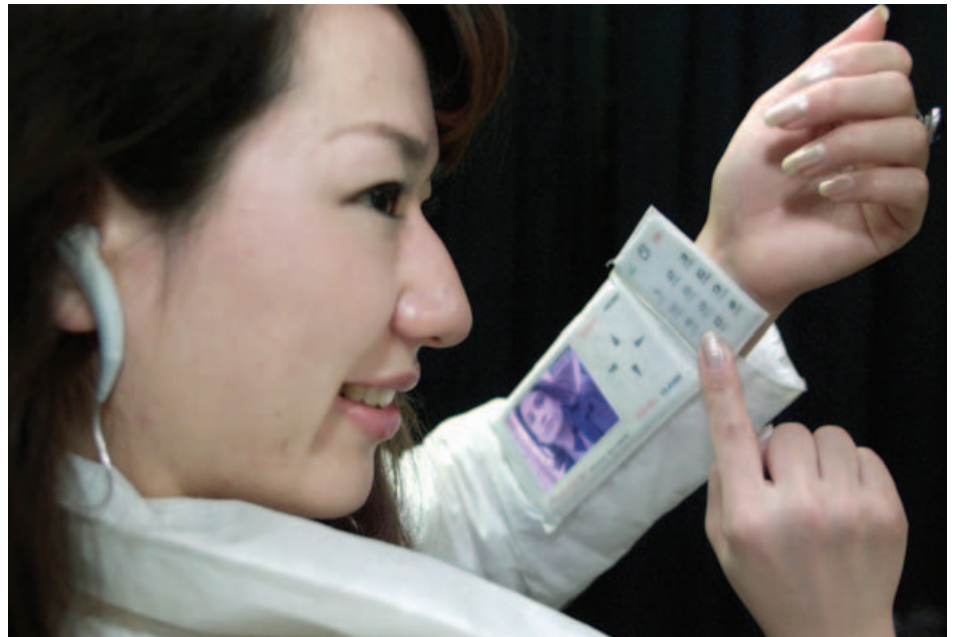
- The brands we remember – the large famous ones that have lasted for a long time only constitute about 11% of all the brands that have been distributed in that period
- In between, we find the brands that were created before our dataset started (1991) but died at some point in time before 2006. These brands make up 25% of the sample
- Brands that were put on the shelves of UK supermarkets between 1991 and 2006 and were still present in 2006 make up another 15% of the sample.

This evidence of significant entry and exit of brands serves as a salutary reminder that brand lives can be short – and thus of limited financial value. Significant value and thus significant payback only occurs in a minority of cases.

Figure 11: Effective life of cereal brands in the UK



Source: TNS.



<sup>3</sup> These studies were in the form of an MBA Project by Henry Tsang at the Tanaka Business School Imperial College London (2005), and an MPhil Thesis of Toni Vainio at Oxford University (2007). We are grateful to Taylor Nelson Sofres Plc for providing the raw datasets.

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