

The effects of Brand Portfolio Management on brand choice behaviour

Abstract

This working paper exploring ideas relating to my Phd studies.

Double Jeopardy (DJ) says brands with lower market share have far fewer buyers, and these buyers are slightly less loyal (Sharp, 2010). The Dirichlet Model has generally been used to analyse brand buying behaviour for individual brands to reveal levels of brand loyalty and switching. The long and varied pursuit of such analysis led to empirical generalizations such as the Double Jeopardy (DJ) pattern, which can be seen in brand performance metrics (BPM) like repeat buying, SCR and sole brand loyalty. These BPMs are typically viewed at an individual brand level, but this research takes the analysis a step further by analysing BPMs for corporate brand portfolios (all the brands owned by a particular company within a product category) to explore how the common strategy of having several brands within a company portfolio affects core BPMs both within and between company portfolios. The main finding from this initial research on DJ effects is that it is a useful framework for analysing corporate level portfolio performance. The main new finding is that there are indications of raised sharing of customers within portfolios compared to between portfolios.

1. Introduction

How brands are deployed and structured affects the way the company and its products are perceived by consumers. For example, a typical portfolio structure might include premium, smart buyer and low-price groups (Kapferer, J-N, 2008). Such brand portfolio management strategy can have large effects on consumer purchasing, brand choice or long term brand buying propensities.

Most large consumer goods firms own and market more than one brand (Kapferer, J-N, 2008). Firms may build multiple brands under a company umbrella, with each brand having its own positioning. Brand portfolio strategies can be used to group brands together and to lessen consumer confusion in regard to who owns particular brands (Robertson, 2016). Such portfolios may be built from the ground up or as the firm acquires other competitive brands or companies in an effort to consolidate its market position and to limit competitive activity, or to enter foreign markets.

Since firms construct portfolios, can they achieve competitive advantage by owning higher equity/loyalty brands while still covering the sub sections of the market (Aaker 2004)? This begs the question at whom is the corporate branding targeted? Some say it is the city and the firms investors. Others argue it is the consumers, especially corporate identity consultants (Balmer & Gray 2003).

This research demonstrates a method to test portfolio buying across a market, based on the established empirics of consumer choice behaviour etc. But this is only an initial research stage since even if buying is normal we do not know if that is because consumers have not noticed the corporate branding (i.e. it isn't salient) or they are not interested (i.e. it is not targeted at them in any case).

Nevertheless the evidence must firstly be gathered before we proceed. Firstly we describe the empirical laws of marketing and particularly double jeopardy before moving on to describe the modeling procedure and the data which allows us to present the results.

2. The Double Jeopardy Law (DJ)

The definition of double jeopardy (Sharp, 2010) holds that: brands with less market share have far fewer buyers, and these buyers are slightly less loyal. This means that compared with a large brand, the smaller one gets fewer people who buy it and they do so somewhat less often (Ehrenberg & Uncles, 1999, McPhee 1963, Ehrenberg, Goodhardt and Barwise, 1990). The difference between a big and a small brand is not how loyal their customers are (which doesn't differ that much between rivals); the difference is actually how many customers a brand has in the first place.

DJ implies the pattern seen in Table 1; the table shows that DJ applies for individual brand's performance and it means that changes in brand sales will be seen mainly as changes in penetration (b) (East, Wright & Vanhuele 2008). In contrast, purchase frequencies (w) are very similar (Ehrenberg & Uncles, 1999). This is typical of what is found in most packaged goods market (East, Wright & Vanhuele (2008),

The currently study is focused on analysis on a corporate brand level to see whether DJ applies to comparative consumer behaviour towards competing portfolios. DJ has already demonstrated individual brand choice behaviour, now I would like to see whether DJ law fits for analysing corporate level portfolio performance. Corporate brand portfolios often combine both big (high share) brands alongside corporate brands, for example head & shoulders is a well-known brand; however, P&G is a well-known corporate brand. Would this change a consumer's brand choice behaviour?

Table 1: Penetrations, purchase frequency and mean sales in the US instant coffee market

	Penetrations (b) (%)	Purchase frequency (w)	Mean sales (bw)
Maxwell House	24	3.6	86
Sanka	21	3.2	69
Taster's Choice	22	2.8	62
High Point	22	2.6	57
Folgers	18	2.7	49
Nescafe	13	2.9	38
Brim	9	2.0	18
Maxim	6	2.6	16
Mean	13	2.8	48

Source: (MRCA panel data for 48 weeks. 1981)

3. Method - Dirichlet Model:

The Dirichlet Model has been used for over fifty years to generate the Dirichlet-Type patterns we are looking at; these patterns have been found to generalise on over 50 varied product or service categories; ranging from grocery products (Ehrenberg & Uncles, 1999) to prescription drugs (Stern, 1995) and motor cars (Bennett 2005), as summarized in Table 2 (Bennett. D., 2005).

The center of a successful business is “Knowing your customers”, which means understanding what they do, and why? (Ehrenberg & Uncle, 1999). For example how do consumers respond to brands? What do they actually buy? How often do they buy? The Dirichlet Model observes every individual brand’s market share, penetrations and purchase frequencies. There are two patterns that work together; Dirichlet (purchase frequencies and DJ) and Duplication of purchase (how brands share customers). The current research, deals with the Dirichlet is relevant and later research will examine duplication of purchase.

Table 2: Varied conditions for Dirichlet-Type Patterns

Products and Services	Time Space and People
Food, Drink, cleaners and personal care	Different point in time, 1950-2014
OTC medicines, Prescription drugs	Different-length analysis periods
Petrol, Aviation fuel, Cars, PCs	Britain, USA, Europe, Australia, etc.
Retail Shops, Chains	Light and heavy buyers, subgroups
TV episodes, Programs and Channels	Household or individual purchases
Brand and Product Variants	Market Conditions
Large and small brands	Near steady-state markets
Pack-sizes; flavours, forms, formats	Dynamic markets (for loyalty measures)
Private labels	Non-partitioned markets
Price bands	Partitioned sub-markets

Source: Bennett. D. (2005), Ehrenberg, Uncles and Goodhardt (2004)

3.1 Data & Table

I am using the consumer purchase panel data provided from TNS/Kantar, numbers are created and then supported by Powerview (data analysis software). Table 3 shows the Deodorants UK market in 2007 with typical Dirichlet patterns for annual penetration and average purchase frequencies. It shows the top 6 brands in order of market size. In the table figures labelled “O” is observed values from the data and “T” are theoretical figures generated by the Dirichlet model.

For example: Sure, is the top brand with a 16% market share; and a market penetration of 22% or about 3% less than the predicted penetration of 25% shown in the “T” column; the table shows the brand actually achieved -3% of its expected figure. Kahn, Kalwani and Morrison (1988) pointed +/- 10% cut off point to use in the analysis of brand purchase loyalty, if the deviation is +10%, the brand is recognized as a niche brand which means the brand has less buyers who frequently purchase more. However if the deviation is -10%, the brand is recognized as a change-of-pace brand meaning the brand has more buyers but they purchase much less. The deviation of Purchase frequency of Sure is 12%¹, Sure is therefore recognised as a niche brand, brand choice behavior shows more loyalty than other brands. The data shows that 13% of Sure’s buyers purchase 5+ times a year Adidas is recognised a change-of-pace brand with -14% of deviation, the situation is opposite, and there are 71% of the total buyers who buy this brand once a year. Adidas figures show less loyal behavior when compared with Sure’s. (Further study on this will be done in the future)

Table 3: Deodorants, UK 2007 (a section of top 6 brands)

(O=Observed, T=Theoretical)

Range	Market Share %	Penetration %		Purchase per buyer		% Buying			
		O	T	O	T	Once		5+	
		O	T	O	T	O	T	O	T
Total (based on top 20 brands)	100	71		5.5					
Sure	16	22	25	2.8	2.5	52	49	13	13
Lynx	15	21	24	3.0	2.5	51	50	13	13
Dove	7	14	13	2.1	2.3	62	54	8	11
Soft And Gentle (Ddmts)	7	12	13	2.3	2.2	57	55	9	11
Rightguard	7	12	12	2.4	2.2	57	55	7	10
Adidas	5	10	9	1.9	2.2	71	56	3	10
.....									
(rest of 14 brands)									
Average	5	9	9	2.1	2.2	63	59	13	9

Source: TNS/Kantar

The Dirichlet analysis explains what the brand market actually looks like, the brands are ordered by market size from big to small and penetration follows along with market share; however, purchase frequency does not quite follow in line with market share, small brands have more infrequent buyers (who buy once) and big brands have more loyal buyers (who buy 5+ times); this data explains that big brands enjoy two distinct benefits when compared to smaller brands: (1) high share brands have more

¹ The calculation is (O-T)/T= (2.8-2.5)/2.5= 12%

buyers than less popular brands, (2) consumers of high-share brands purchase these brands products more often than the consumers of smaller brands who notably purchase these smaller brands less frequently (Fader and Schmittlein, 1993) which means managers can consider each of their individual brand's strategies based on its own separate performance. Using Dirichlet in this way shows that managers can have a clearer understanding of each of their product's performances within their brand portfolios.

4. Findings

I have used the Dirichlet model to do the analysis between corporate brands for both deodorants and Shampoo categories, I found that the module fits the analysis perfectly; this shows that Dirichlet can be used for analysing individual brands as well as for analysis at a corporate brand level.

Table 4: Deodorants, UK 2007 (a section of top 6 brands)

(O=Observed, T=Theoretical)

Range	Market Share %	Penetration %		Purchase per buyer		% Buying			
		O	T	O	T	Once		5+	
		O	T	O	T	O	T	O	T
Total (based on top 20 brands)	100	42		4.9					
Unilever Home + Personal Cr	43	26	27	3.3	3.2	45	42	16	20
Schwarzkopf – Henkel Ltd	8	7	7	2.4	2.2	62	57	7	10
Colgate-Palmolive Ltd	8	7	7	2.2	2.2	62	57	7	10
Sara Lee H/H&P/Cr UK Ltd	7	7	6	2.0	2.2	66	57	6	10
Tesco Food Stores Ltd	5	5	5	2.4	2.2	62	58	9	10
Coty Inc	5	5	5	2.0	2.1	72	58	4	9
..... (rest of 14 brands)									
Average	5	4	4	2.1	2.2	69	59	7	10

Source: TNS/Kantar

Table 4 shows the UK Deodorants market in 2007, the analysis has been done between different corporate brands; as we can see brands can differ greatly in penetrations (Sharp, 2010); purchase frequencies are not that much different. The biggest corporate brand in this category is Unilever with 43% of the total market share within the Deodorants market, and the smallest brand in this section is Coty Inc with 5% market share. Use the 10% cut-off point to recognize brand loyalty, the deviation of purchase frequency for Unilever is 3%, Coty is -4%, the difference between the two brands is that Unilever has more loyal buyers than Coty, but Coty on the other hand has more buyers who purchase only once a year ,this result supports DJ law.

The same results occurred in table 5; it shows the UK Shampoo market in 2010. Table 5 shows that the big corporate brand is P&G and the smallest corporate brand is Johnson & Johnson Ltd; brands still differ in penetration although purchase frequency rates are still very similar, the purchase deviation of P&G is 0, and for Johnson & Johnson it is -18%, both figures can tell us that P&G have developed normally. Johnson & Johnson is far from the cut -off point and this shows that is a change-of- pace brand. The data shows that more people buy this brand only once a year (79% of the total buyers buy it only once a year). The figures support DJ theory and show that the Dirichlet model is useful for analysing corporate level portfolio performance.

Table 5: Shampoo, UK 2010 (a section of top 6 brands)

(O=Observed, T=Theoretical)

Range	Market Share %	Penetration %		Purchase per buyer		% Buying			
		O	T	O	T	Once		5+	
		O	T	O	T	O	T	O	T
Total (based on top 20 brands)	100	37		3.7					
Procter & Gamble Ltd	33	20	20	2.3	2.3	53	53	9	11
Alberto-Culver (UK) Ltd	15	11	11	2.0	1.9	64	61	5	7
Unilever UK	11	8	9	1.9	1.8	64	63	6	6
L Oreal Garnier	9	7	7	1.8	1.8	67	64	4	6
Tesco Food Stores Ltd	5	4	4	1.9	1.7	66	67	5	5
Johnson & Johnson Ltd	4	4	3	1.4	1.7	79	67	3	5
..... (rest of 14 brands)									
Average	5	4	4	1.6	1.7	75	67	5	5

Source: TNS/Kantar

5. Conclusion and Discussion

Current findings support DJ law, the Dirichlet Model can be used to predict corporate level portfolio performance and Double Jeopardy can be used for corporate brand health checking by comparing the brands performance between theoretical and observed. As we can see bigger brands have greater penetrations and slightly greater purchase frequencies, changes in brand sales will be seen mainly as changes in penetration (East, Wright & Vanhuele, 2008).

The findings will also help managers to have a clearer understanding of the brands in their portfolio and judge brand loyalty; this in turn can help them then decide on efficient strategies and help the company to develop in new directions.

6. Research limitations

This research is only going to select a limited range of FMCG categories, it is not going to cover all product and brands' variants, however if the theories have been demonstrated, this may support all brands.

The Dirichlet theory tends successfully to predict aggregative measure of buying behavior without explicitly allowing in the model either for differing consumer attitudes to particular brands or for any deeper "commitment" to them (Ehrenberg & Uncle, 1999, Mc William 1997). For shampoo, the questions like "shampoo or dry shampoo?", "shampoo or shampoo + conditioner (2+1)?", but questions like "would you like P&G or Johnson & Johnson?" will not be answered.

This research only can tell us a rough market trend based on normal market behavior, it requires a normal brand and to be within a normal market environment, if the product is special or the market is unusual, then the model cannot be measured properly.

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