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# How small brands grow

## Dirichlet analysis of the small brand syndrome

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Submitted in the partial fulfilment of the award of Doctor of Philosophy

January 2020

Minor corrections August 2020

This dissertation contains no material which has been accepted for the award of any other degree or diploma, and to the best of my knowledge it contains no material previously published or written by another person except where due reference is made in the text.

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Katrin Franke, 31st January 2019

*Here's to the fools that dream.*

# ACKNOWLEDGEMENTS

As I am looking forward to a more settled career pathway after what have been eventful, and at times challenging four years, I would like to reflect and express deep gratitude to those who suffered alongside. This research would not have even started without the scholarship provided by LSBU, the support of the former Ehrenberg Centre of Research in Marketing (LSBU) that provided access to the datasets, Maria and Cathy-Lu for putting together the datasets and all those anonymous reviewers whose comments on my published papers sparked even more ideas.

The whole progress was only possible because of the continuously shown passion both my supervisors, Dr. Dag Bennett and Dr. Charles Graham, have for their subject. Their advice, patience, knowledge, and ongoing nudges have provided me with the framework necessary to express my creativity in research. I am aware of and deeply grateful for the close relationship I have with them, not only as my supervisors, but also as colleagues, as sharers (of offices, wittiness, frog jokes, chocolates, carrots, celery sticks) and daily companions through the more or less entertaining struggles of HE. Thank you, Dag and Charlie, for being there when I discovered there are more people buying *Biscuits* than *Toothpaste*!

At LSBU, especially Nic (First Class B.A. in Charm; M.Sc. in Quality Time; Honorary Dr. in Sarcasm), Emily (the real Doctor) and Helen (The Superwoman aka Rockstar): I blame you … and I am deeply grateful for you prolonging this exercise of sustained suffering with your (honest) encouragement. And those friends outside academia near and far: without you, it is entirely possible that I would have either given up sometime halfway through Chapter 7 or graduated half a year earlier. We will never know. Thank you Vighnesh, Rebecca, Diana, Ela, Ello, the Hanna(h)s, Flosch, Catalina and Tom; because you understood, and that made all the difference.

To my family, Paul, Sybille, Peter and Maria (dutifully sorted in decreasing height), thank you for your tireless patience and forgiveness, for always being there, for your unending support and encouragement, for teaching me how to compete and how to be a decent human being; for your great wisdom, snarky life comments, numerous pictures evidencing your cats have life figured out; for the thoughtfully packed supply parcels with homemade biscuits, cherry liquor and other German delis; and above all for your unconditional love no matter what – there is no luckier daughter/sister in the world.

# ABSTRACT

Until now, too little has been known about how small brands compete. Where conventional marketing advocates segmentation, targeting and positioning (STP) to establish strong relationships with loyal buyers, there is almost no evidence whether this approach works for small brands. Instead, research focus has been squarely fixed on the titanic struggles of the market leading brands. Their small rivals are ignored to the point that there is cast disagreement on what a "small brand" is – let alone on how their customers behave.

To better understand small brand competitiveness, an empirical-generalist approach was adopted using commercial consumer panel data provided by Kantar WorldPanel. The longitudinal analysis demonstrated robust and generalizable buying behaviour patterns from a built-in replication design of over 500 brands in more than 30 product categories. The data include the continuously reported fast-moving consumer good (FMCG) purchase records of 15,000 UK households that were used to generate standard brand performance measures (i.e. market share, penetration, repeat purchases, buying frequency and purchase duplication). The NBD-Dirichlet was utilised as a theoretical foundation – as in prior studies on brand performance (see Kahn *et al.,* 1988; Pare *et al.,* 2006).

Repeat purchasing for small brands was analysed over periods ranging from one to five years. Their brand buying patterns were near-stationary and replicated and generalised over time. They were also similar to earlier results for larger brands. Category buying was mostly as expected, hence (small) brand performance is closely predictable. Loyalty was largely a function of brand size, and the Dirichlet benchmarks were used to document and quantify deviations. It was found that niche brands are rare; and so are change-of-pace brands. In fact, the majority of small brands underperformed Dirichlet loyalty predictions yet they managed to maintain the same size (±1% share) over time. They did this by attracting a large proportion of infrequent buyers, year-on-year. The few small brands that grew, did so through significant increases in penetration – in line with Double Jeopardy expectations.

Altogether, the in-depth analysis provides a comprehensive insight into how small brands compete. This is vital because small brands vastly out-number big ones. Plus, even todays giants started out small.

These findings run counter to dominant marketing beliefs and are therefore a major contribution to knowledge and practice. The key limitations are that this study is restricted to one geographical market (the UK), the industry of FMCGs and a period of five consecutive years. Several future research avenues are revealed and discussed.

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# TECHNICAL TERMS, ABBREVIATIONS & NOTATION

*This section briefly introduces key definitions and frequently used abbreviations in empirical research on brand performance to provide the necessary vocabulary for the chapters to come.*

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| | |
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| ***Absolute share difference*** | Term used to express the size difference between a brand and its immediate precursor. |
| ***'All others'*** | Notation used to refer to the aggregation of the remaining category purchases to a single brand, 'all other'. |
| ***b*** | Size related performance measure (Ehrenberg *et al.,* 2004). Notation referring to a brand's penetration – the proportion of the population that buys the brand at least once in a set period. |
| ***B*** | Notation used to describe the percentage of households buying the category at least once in a set period (Graham *et al.,* 2017B). |
| ***BPMs*** | Brand performance measures. Standard variables analysed to determine a brand's performance (Ehrenberg *et al.,* 2004). |
| ***Brand*** | Aggregation of the products sold under a shared name. Unit used in this thesis to analyse the Dirichlet-described law-like assumptions. |
| ***Brand extension*** | Notation used to refer to established brands extending their offering either within the same product category (also: line extension or line stretching) via the introduction of new flavours or different package sizes or to a new category (also: brand extension, category extension or brand stretching) such as Milky Way ice cream (e.g. Aaker & Keller, 1990; Keller & Aaker, 1992; Loken & John, 1993; Reddy *et al.,* 1994; |

Ambler & Styles, 1997; Erdem, 1998; Keller, 2003, 2008; Walsh & Ross, 2010; Singh *et al.,* 2012; Dall'Olmo Riley *et al.,* 2004, 2015; Kopp, 2019).

***Branded item*** Manufacturer or national brand (e.g. Uncles & Ellis, 1989).

***Brand share*** Size related performance measure. Referred to as market share – the proportional sales of a brand from the total category sales (Ehrenberg *et al.,* 2004).

***Buyer*** A household (unit of analysis in this study) that buys a brand at least once within a reference period.

***Category*** Describes a set of competing yet functionally similar brand own-brand (private label) products. The NBD-Dirichlet as stochastic model assumes that, in theory, to customers a category's brands are largely substitutable; that is, they would not form particular segments based on buying behaviour (Goodhardt *et al.*, 1984; Ehrenberg, 1988).

***Category 'generification'*** Term used to refer to the situation when retailers introduce more and more private labels to a product category to maintain and/or increase power in distribution channels and on control over shelf space. Retailer brands offer *"generic category benefits"* (Barwise & Meehan, 2004, p. 2) and are low-cost alternatives to branded products. The more brands in a category do this, the more 'generic' substitutable options are offered to buyers to choose from which could limit the chances for smaller brands to be bought.

***Change-of-pace brand*** An infrequently purchased brand. The result of the *"tendency for some customers to begin to seek variety in their product consumption"* (Kahn *et al.,* 1988, p. 384) Hardly used in marketing theory. That is, these brands' offering is expected to appeal to many more customers yet *"on*

[just] *some buying occasions"* (Sharp & Dawes, 2001, p. 743) based on intrinsically motivated switching. The brand is bought very infrequently which results in a loyalty deficit. This research adopts Sharp and Dawes' definition to refer to 'true change-of-pace brands'.

***Change-of-pace brand candidate*** Notation used in this research to refer to small brands demonstrating deficit loyalty potentially due to customer's variety seeking behaviour.

***Corporate effects*** Term used to refer to the brand portfolio of (mostly larger) brands that (often) comprise many smaller brands. In theory, the brands under a corporate umbrella share resources, distribution channels, brand names and even buyers (e.g. Sharp, 2010; Romaniuk & Sharp, 2016). Strategies such as a house of brands *("contains independent, unconnected brands"*, Aaker, 2004, p. 48) or a branded house *("uses a single brand to span a set of offerings operating with only descriptive subbrands"*, Aaker, 2004, p. 48) might occasionally allow funds from a large brand to be diverted to support a smaller owned rival. This might not matter unless relatively higher resources for the size of the brand violate the Double Jeopardy assumptions that brands compete as substitutes across the market.

***CPGs*** Consumer packaged goods. Also, fast-moving consumer goods (FMCGs).

***Deficit loyalty*** Purchase frequency under-performance. Notation used in Dirichlet research to address the situation when a brand has significantly lower (e.g. ≤ 10%, see Pare *et al.* (2006) and Scriven *et al.* (2017)) loyalty (compared to its Dirichlet-estimates) for its corresponding (and consequently higher than expected) penetration. Compared to typical brands this size, the brand is bought very infrequently by

many more people than expected (Scriven & Bound, 2004; Li *et al.,* 2009).

***Deviation*** Refers to the discrepancy between observed (*O*) and estimated (*T*) values of BPMs that exceed the typically used ±10% range (Ehrenberg *et al.,* 1990).

***Dirichlet*** Commonly used abbreviation for the NBD-Dirichlet. It is a stochastic model of market behaviour combining purchase incidence (Negative Binominal Distribution – NBD) and brand choice (Dirichlet Multinomial Distribution – DMD). Frequently used to describe and predict many patterns in buyer behaviour (Goodhardt *et al.,* 1984).

***DMD*** Dirichlet Multinomial Distribution. Illustrates how buyers choose between substitutable options within a category following a zero-order Gamma distribution (Goodhardt *et al.,* 1984).

***Double Jeopardy*** Also abbreviated as DJ. Statistical selection effect arising because buyers are asymmetrically aware of and exposed to the different brands in a market (e.g. McPhee, 1963; Ehrenberg, 1972; Uncles *et al.,* 1995; Michael & Smith, 1999; Ehrenberg & Goodhardt, 2002; Romaniuk, 2013B). In any given time period, a small brand typically has far fewer buyers than a larger brand. In addition, its buyers tend to buy it less often (Ehrenberg *et al.,* 1990).

***Duplication of Purchase*** Switching related performance measure (Ehrenberg *et al.,* 2004). Brands share customers in line with their size – more with bigger and fewer with smaller brands (Ehrenberg & Goodhardt, 1970).

***EG*** Empirical Generalisation. Regularity or pattern that repeats over different circumstances and that can be described by mathematical,

graphic or symbolic methods (e.g. Barwise, 1995; Bass, 1995; Uncles & Wright, 2004).

***Excess loyalty*** Purchase frequency over-performance. Notation used in Dirichlet research for a brand with significantly higher (e.g. ≥ 10%, see Pare *et al.* (2006) and Scriven *et al.* (2017)) loyalty (as compared to its Dirichlet-estimates) for its corresponding (and consequently lower than expected) penetration. That is, for its size, the brand is bought more frequently yet by a much smaller proportion of buyers than would be expected (e.g. Scriven & Bound, 2004; Li *et al.,* 2009).

***Failing brand extension*** Research defines a brand extensions as failing if they decline both in the number of customers and repeat purchase rate (Wellan & Ehrenberg, 1988; Ehrenberg & Goodhardt, 2000; Wright & Sharp, 2001; Singh *et al.,* 2012). The current research describes brand extensions (regardless if line or category extension) as failing if they do not demonstrate normal (within the Dirichlet norm) brand performance measures (i.e. either with excess purchase frequency rate accompanied with lower than expected penetration figures or with deficit loyalty rates accompanied with excess penetration values).

***FMCGs*** Fast-moving consumer goods. Also, consumer packed goods (CPG). Referring to products that address a mass market, have mass distribution (Dibb *et al.,* 2005), are frequently bought, packaged and typically low-cost items for end-consumers with (mostly) transactional marketing (Grönroos, 1994; Vickers & Renand, 2003).

***Functional differences*** They are reported to result in market partitions. The brand offers a characteristic designed to appeal to a restricted sector of the market making them a less substitutable option that does not compete directly with its otherwise substitutable competitors (e.g. Scriven *et al.,* 2017).

***Gamma distribution*** Dirichlet assumption on purchase incidence. Individual buyers have different purchase rates which, in aggregate, reflect the population heterogeneity that follows a Gamma distribution (Ehrenberg, 1988).

***Heavy buyers*** Loyalty related performance measure (Ehrenberg *et al.,* 2004). Notation used in this study to refer to the proportion of households that purchase a brand five or more times in a set period.

***Heterogeneity*** Individual transactions do not follow an identical transition rate, i.e. individual buyers have their own buying propensities. In aggregate this reflects the heterogeneity of the population (Bass *et al.,* 1976).

***Household*** Also: HH. Panel data aggregates the reported purchases of all members of a household into this unit (*see* Buyer). Unit of analysis in this study.

***Large brand*** Notation used in this research (interchangeably with big and leading brand) to refer to a brand competing amongst a category's top five (brands are ordered by market share size from large to small).

***Light buyer*** Loyalty related performance measure (Ehrenberg *et al.,* 2004). Notation used in this study to refer to the proportion of households that purchase a brand once in a set period.

***Long-term*** No widely agreed definition: Pare and Dawes (2001) declare a three year period as longer term while Sharp *et al.* (2012) refer to five and twelve yearlong studies. Notation used in this research referring to continuous time periods exceeding three years. Such periods exceed the typical range of household panel data, yet is of managerial importance to support, for example, strategic brand management.

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| ***Loyalty deviation*** | Notation used in this thesis to refer to a brand exhibiting significant discrepancies between its observed (O) and Dirichlet-estimated (theoretical; T) purchase frequency rates. A ±10% range around the estimated values is adopted based on prior literature (e.g. Bhattacharya, 1997; Scriven & Bound, 2004; Pare et al., 2006; Scriven *et al.,* 2017). A brand outside this benchmark is referred to as deviation (e.g. Kahn *et al.,* 1988). Occurrence and recurrence of deviations are of managerial relevance (e.g. Pare *et al.,* 2006). |
| ***MAD*** | Notation used to refer to Mean Absolute Deviation representing the statistical dispersion of the values from their mean (Ehrenberg, 1972). |
| ***Medium term*** | No widely agreed definition. Notation used in this research referring to continuous time periods of up to three years – the extent of standard panel data. |
| ***MSoD*** | Notation used to express the usage of many sets of data (Barwise, 1995). |
| ***Natural Monopoly*** | Larger brands tend to monopolise the lighter category buyers; that is, those that buy the category not very often (McPhee, 1963). |
| ***NBD*** | Negative Binominal Distribution. Dirichlet assumption on purchase distribution. Refers to the propensity of buyer purchase distribution across the category, hence demonstrating each brand's probability of being bought. It follows a Poisson distribution (Goodhardt *et al.,* 1984). |
| ***Niche brand*** | Often used term in marketing theory to describe brands with a functionally differentiated offering (see Kotler, 2003). In behavioural loyalty studies, Sharp and Dawes (2001, p. 743) declare that a brand *"positioned to serve a small number of loyal customers* […] *is preferred* |

[…] *by some customers all of the time"*. That is, a niche brand would have a smaller customer base, yet those are expected to purchase it (the brand) beyond expectations. The expected result is a loyalty surplus (also excess loyalty or loyalty over-performance). This research adopts Sharp and Dawes' definition to refer to 'true niche brands'.

***Niche brand candidate*** Notation used in this research to refer to small brands demonstrating excess loyalty potentially due to customer's preferring these brands based in their functional difference.

***Normal loyalty*** Notation used in Dirichlet research to refer to the situation when observed (O) and Dirichlet estimated (T) loyalty rates are reasonably close. Frequently used is a threshold of ±10% (e.g. Bhattacharya, 1997; Scriven & Bound, 2004; Pare *et al.,* 2006; Pare & Dawes, 2007, 2011; Scriven *et al.,* 2017). Also: Double Jeopardy (DJ) brand.

***O*** Notation used to refer to observed (actual) data (i.e. purchases).

***Overtaker*** A brand that increases its market share to the extent that it moves up the category rank-share order.

***Private label*** Store, retailer or own label; availability-restricted to their host retailer (Uncles & Ellis, 1989).

***Poisson distribution*** Dirichlet described type of distribution for individual purchases. Consumer purchases are spread out irregular over time (as-if-random) and are independent from previous purchase(s) (zero-order) (Ehrenberg *et al.,* 2004).

***Purchase occasion*** Purchase incidence. Unit to analyse brand choice. Is the situation (occasion/incidence) a household buys a brand on (Ehrenberg, 1988).

***Relative market share*** Term used to express the size difference of any brand in a category indexed against the category leader (Farris *et al.,* 2010).

***Restricted in space*** Often used to describe the situation when a brand is somehow restricted in availability in a geographical sense such as local or regional brands (Scriven *et al.,* 2017), private labels or other brands only available in their respective host retailer but not elsewhere (e.g. Uncles & Ellis, 1989; Dawes & Nenycz-Thiel, 2013). These brands are often found to demonstrate lower penetration values accompanied with higher than expected loyalty metrics (e.g. Scriven *et al.,* 2017).

***Restricted in time*** Also seasonal offering. For example, Easter Eggs are only distributed for several months a year. Their typical performance is that of excess penetration values accompanied with lower than expected loyalty metrics if their annual performance measures are analysed (e.g. Scriven *et al.,* 2017).

***Restricted opportunity*** Term used to describe the buying outcome from when a manufacturer's product line available to distributors is not only relatively shorter, narrower and less deep compared to competitors' but the breadth of that brand's products offered to shoppers in most distribution outlet is also relatively narrower. This might not matter unless it results in brands competing differently than would be expected by the Dirichlet norm.

***Restricted penetration*** Term used to address a brand with a limited user base typically the result of characteristics designed to appeal in certain usage situations only (e.g. Kahn *et al.,* 1988), are restricted in space (i.e. private labels or regional brands) or are brands with a functional difference not

appealing to the mass of the market. The brands are mostly found to exhibit deficit loyalty (e.g. Scriven *et al.,* 2017).

***Restricted portfolio*** Term used to describe the buying outcome from when a manufacturer's product line available to distributors is relatively shorter, narrower and less deep compared to competitors. This might not matter unless it results in brands competing differently than would be expected by the Dirichlet norm.

***Repertoire buying*** Purchases are made from a set of brands, meaning a variety of brands but not all available options in a category (e.g. Uncles & Ellis, 1989; Banelis *et al.,* 2013). A natural phenomenon in most markets.

***Repertoire market*** Refers to a repeat-purchase market in which customers tend to buy from a repertoire of brands and typically divide their loyalty amongst these. That is, very few customers are solely loyal to just one brand (i.e. Ehrenberg *et al.,* 2004; Scriven & Bound, 2004; Sharp *et al.,* 2012).

***SCR*** Share of Category Requirements – loyalty related performance metric. Proportion of category purchases a household devotes to a particular brand (Ehrenberg *et al.,* 2004).

***Shoppers*** Description of the entire population of households that has made or might make a category purchase.

***Short term*** No widely agreed definition. Notation used in this research referring to continuous time periods of up to two years. A one year time period is a typical *"length for similar studies into behavioural loyalty"* (Jarvis *et al.,* 2004, p. 3; Uncles *et al.,* 1995).

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| ***Sole brand loyalty*** | Also 100%-loyals. Buyers (households) who purchase solely the same brand within a period (regardless of the number of occasions). |
| ***Small brand*** | Notation used in this research to refer to a brand competing below a category's top five in rank-share order. |
| ***SSoD*** | Single set of data (Barwise, 1995). |
| ***Stationary market*** | Market situation where no brand demonstrates substantial (i.e. more than one percentage point annually) gain or loss in market share (see Ehrenberg, 1988). Typical characteristic of most mature markets most of the time. |
| ***STP Approach*** | "The method by which whole markets are subdivided into different segments is referred to as segmentation, targeting, and positioning" (Baines *et al.,* 2017, p. 213). |
| ***Subscription market*** | Refers to a repeat-purchase market where customers tend to devote much (if not all) of their purchasing to one brand; that is, most buyers are solely loyal (Sharp *et al.,* 2012). |
| ***Successful brand extension*** | Research defines a brand extensions as successful if they achieve comparable brand performance measures to established brands of similar size (Wellan & Ehrenberg, 1988; Ehrenberg & Goodhardt, 2000; Wright & Sharp, 2001; Singh *et al.,* 2012). The current research describes brand extensions (regardless if line or category extension) as successful if they demonstrate normal (within the Dirichlet norm) brand performance measures (i.e. normal loyalty rates accompanied with normal penetration figures). |

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| ***t*** | Abbreviation for time. For example, $t$ = 1 year illustrates that the matters were, for example analysed over the course of one year. This research covered periods from one to up to five consecutive years. |
| ***T*** | Notation used to refer to the Dirichlet-estimated figures based on past purchases. Commonly used to analyse the performance of brands. |
| ***Variety-seeking behaviour*** | Notation used to describe intrinsically motivated brand switching behaviour based on an urge for change (van Trijp *et al.,* 1996) where the "variation is rewarding in itself" (Scriven *et al.,* 2017, p. 10). This behaviour is considered to result in a change-of-pace position (i.e. loyalty under-performance) for the brand in question. |
| ***w*** | Loyalty related performance metric (Ehrenberg *et al.,* 2004). Notation describing a brand's average purchase frequency. |
| ***W*** | Notation used to describe the average rate a category is bought at (Graham *et al.,* 2017B). |
| ***w(1-b)*** | The effect Double Jeopardy has on purchase frequency, *b* representing the proportion of buyers (penetration); *(1-b)* expressing the non-buyer proportion (Kahn *et al.,* 1988). |
| ***Zero-order buying*** | Dirichlet assumption that purchases are independent from past purchases (Goodhardt *et al.,* 1984). |

# PART I - INTRODUCTION

## Chapter 1: Outline of the study

*This chapter outlines the scope, relevance and importance of the current study to scholars and practitioners. The topic is briefly embedded into a framework of prior research. The underlying objectives, aim, used data and methodological approaches are introduced. This is followed by a summary of the key findings and their contribution to knowledge.*

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### 1.1. Overview

Is marketing dominated by big brands? If one looks at textbooks, journal articles and the business press the conclusion would have to be that big brands are the industry rule makers (Sheth & Sisodia, 2002), at the centre of most research attention (e.g. Kennedy *et al.,* 2001; Habel *et al.,* 2005A, B), and they are those about which stories and cases are written. They offer glamorous careers, employ millions, have large funds, can afford the column inches and sell to billions (Hanssens & Pauwels, 2016; Sharp *et al.,* 2017A; Lewis, 2019). It almost seems that size matters so the mantra *"grow to survive"* does not come as a surprise (Romaniuk & Sharp, 2016, p. 2). Sales and marketing departments are therefore increasingly benchmarked against their ability to deliver growth to create shareholder value, develop customer loyalty and secure future income streams (Day, 2002; Sharp, 2010; Hanssens & Pauwels, 2016).

And small brands? They *"are forever being asked to achieve more with less"* (Cuddleford-Jones, 2017, p. 1). And there is a lot less of everything such as reach, distribution, trained staff, scale economies, popularity and long-term prospects (e.g. Donham, 1957; Woo & Cooper, 1982; Prinz, 1988; McGregor, 2005; Armstrong & Green, 2006; Keller, 2008; Ruzzier *et al.,* 2013; Wilbur & Farris, 2014; Revoltella & Kraemer-Eis, 2015; Yoon, 2016). Per definition, most brands are not leaders. Instead, they are smaller, and yet they jointly deliver the majority of any category's sales. Company portfolios often consist of many competing smaller labels contributing to revenues (Hartley *et al.,* 2013), and the economic future of most developed markets depends on healthy competition that rests on the shoulders of independent start-ups and SMEs[1] (McGregor, 2005), which are themselves small brands.

[1] Small and medium-sized enterprises.

We could assume big and small follow the same marketing rules. After all, they face similar challenges such as increasing competitive activities (Lewis, 2019), declining brand loyalty (Kapferer, 2005), habitual buying (Ehrenberg, 1988), market near-stationary (e.g. Bass & Pilon, 1980; Graham, 2009) and retailer power over listing and shelf space allocation (Romaniuk & Sharp, 2016). Yet despite this, and the fact that even large brands had, at some point in history, started out small, it is (almost) fascinating how little is known about:

**How small brands grow.**

This research aims at developing robust knowledge on the growth potential of small brands. It is, to the best of the author's knowledge, among the first to analyse the matter comprehensively within competitive market structures. The following sections outline scope and importance of the current study to marketing scholars and practitioners by embedding the topic in a framework of prior research. Thereby, the gaps in current knowledge and contributions of this thesis to theory and practice are outlined.

## 1.2. Background: What do we & what don't we know about small brands?

A sensible starting point in understanding how small brands grow is to define what *small* is. This implies we know what is large. But so far, little agreement has been reached because methods to define brand size are either too theoretical (e.g. Henderson, 1976; Kotler, 1977), arbitrary (e.g. Pare *et al.,* 2006), of impractical complexity (e.g. Huynh, 2017), or had the primary purpose of identifying what mathematical function describes an industry's rank-share curve[2] best (Kohli & Sah, 2004, 2006) while focussing on a category's top four brands.

An important next consideration is the fact that many perceive loyalty to be most important for (small) businesses' long-term success (i.e. growth) (Mellens *et al.,* 1996; Górska-Warsewicz & Kulykovets, 2020). Classic marketing advice to small brands is to aim for a niche position; that is, to target its existing (already loyal) buyers. The expected outcome is a continuously repeated (purchase) response – an excess in loyalty (Uncles *et al.,* 2003; Romaniuk & Nenycz-Thiel, 2013; Hollebeek *et al.,* 2014; Leckie *et al.,* 2016). This ascribes loyalty the power to define brand size and competitive market structures, yet brand

[2] A graph visualising the relationship between the size (i.e. market share) of a brand and its rank among its category competitors listed in a downward manner from the largest (on rank one) to the smallest.

performance is hereby often measured via purchase intentions or other rather intangible measures which are hardly representable in one or few comparable metrics (Barwise & Farley, 2004). On the other side, over the past eight decades the results of evidence-based research have remarkably contributed to the understanding of marketing as a science. Hereby, the discovery of a number of law-like relationships in brand choice and purchase incidence have demonstrated that big and small brands mainly differ in the size of their customer bases (also penetration or *b*, see Equation 2 in *Chapter 2*) but not so much in how loyal these customers are (also *w*, see Equation 3 in *Chapter 2*) (e.g. Ehrenberg, 1972; Romaniuk, 2013B, 2015; Scriven *et al.,* 2017). This effect is called Double Jeopardy and was first reported in 1963 when William McPhee illustrated that compared to more popular comic strips, those read by fewer people were also less liked by those who read it.

Since its first discovery, Double Jeopardy has been found across varying contexts, markets and periods of time, hence it is suggested that there is *"a common underlying causal factor"* (Ehrenberg *et al.,* 1990, p. 85; Ehrenberg *et al.,* 1995). In fact, "*a parsimonious set of probabilistic arguments*" demonstrates that the pattern will occur when buyers choose between substitutable options that differ in popularity. This means market shares are what they are *because* competing brands are perceived as substitutable (Romaniuk & Sharp, 2004) which shows that Double Jeopardy is a statistical selection effect arising *because* buyers are asymmetrically aware of and exposed to the different brands in a market (McPhee, 1963; Ehrenberg, 1972; Ehrenberg *et al.,* 1990, 1995; Romaniuk & Sharp, 2004; Sharp, 2010; Romaniuk, 2013B). The implication is that loyalty is anything but brand specific (Ehrenberg, 1988; Uncles *et al.,* 1995; Uncles & Wright, 2004) which is not to say that loyalty is not important. Double Jeopardy simply describes loyalty as a by-product of brand size. When ordering a category's brands in a downward manner after market share (from big to small), they differ manifold more in the number of people who buy them – in any period of time. In contrast, over the same length of time brands differ less in the average times they are bought, yet those with fewer buyers (first jeopardy), the smaller brands, tend to be bought somewhat less often (second jeopardy) – hence the suffer twice proposition (e.g. Ehrenberg, 1969A, 1972, 1988; Goodhardt *et al.,* 1984; Michael & Smith, 1999; Sharp *et al.,* 2000, 2012; Habel *et al.,* 2005A, B; McDowell & Dick, 2005). In fact, the variables correlate highly, they decline together, and they are largely a function of size (Uncles *et al.,* 1995). That is, market share is closely predictable from the proportion of people who buy it (cf. Ehrenberg *et al.,* 1990; Ehrenberg & Sharp, 2000; Ehrenberg & Goodhardt, 2002).

Double Jeopardy also links to several other buying regularities observed in consumer behaviour. For example, the average amount bought per purchase occasion varies little

between competitors: most buyers purchase one unit. The majority of buyers purchase any one brand very infrequently, and period-to-period buying is found to be *"much the same for different brands, and it tends to be low"* (Ehrenberg *et al.,* 1995, p. G73), while the number of people that buy a brand increases significantly with the length of the period analysed. Looking at the matter from the angle of buying competitive brands, it has been found that most buyers purchase more than just one brand, and very few are 100% loyal to one brand only. In fact, any brand's customers buy other brands far more often than they purchase the brand itself, but no brand is bought as often as the category is purchased. And which other brands are bought is mostly the same from one brand to the next. The dominant factor in this customer sharing is penetration. This Duplication of Purchase law describes that big and small brands share the same buyers across the whole market, and they share more customers with bigger and less with smaller brands. This allows marketers to evaluate which rivals represent more or less of a threat (Ehrenberg & Goodhardt, 1970; Ehrenberg *et al.,* 1995, 2004). The implication is that clusters of brands (i.e. sub-markets) that compete (duplicate) differently would be considered a deviation from otherwise typical patterns. Yet most markets are largely un-segmented and competition hence between close substitutes (e.g. Goodhardt *et al.,* 1984).

Altogether, these regularities in buyer behaviour demonstrate that the size of a brand (i.e. competition) is determined by how many people buy it (the brand), how often, and what other brands they buy (Ehrenberg, 1988; Ehrenberg *et al.,* 1997, 2004; Ailawadi *et al.,* 2001). Many of the above regularities are correctly described by the NBD-Dirichlet[3] (Sharp, 2010) – frequently referred to as one of the best-known empirical generalisations in marketing (Uncles *et al.,* 1995; Sharp, 2010; Uncles & Kwok, 2013; Kennedy & Hartnett, 2018). The Dirichlet is a parsimonious model: with only four input measures (category-level and brand-level purchase frequencies and penetrations) (Bass *et al.,* 1976; Bass & Pilon, 1980) an array of outputs may be obtained such as the probability distributions for each brand and any aggregation of probabilities (i.e. brand performance measures[4]) for any period of time. It describes competition under the conditions of market near-stationarity and non-partitioning. It ignores the underlying determinants of choice assuming an *as-if-random* process, and it disregards purchase feedback deeming choice to be of *zero-order* (Goodhardt *et al.,* 1984; Uncles *et al.,* 1995). Detached from intrinsic (i.e. differential) aspects, all brands theoretically compete on all purchase occasions with equal chances of being bought illustrating an un-segmented market where choice probabilities are

[3] Thereafter Dirichlet.
[4] Also BPM.

distributed *Dirichlet* across substitutable options. That is, the buying of one brand is independent of the buying of any other brand (Ehrenberg, 1988, 2000). Most importantly, the Dirichlet simultaneously describes and predicts the market response to *all* competitors in a fixed period of time (Bass *et al.,* 1976; Bass & Pilon, 1980) in just one model. And it does so reliably for brands that are many times the size of each other (see Kahn *et al.,* 1988; Kennedy *et al.,* 2001; Pare *et al.,* 2006).

What does this mean for small brand marketing and research? The Dirichlet, and the law-like patterns it describes, provide useful norms and performance benchmarks as well as give insights to buyer behaviour (i.e. habitual buying and divided loyalty). The explanations of the Double Jeopardy pattern are statistical and relate *"to the size structure of the market"* (Ehrenberg *et al.,* 1990, p. 82). That is, no other marketing mix variables are needed to explain the pattern which keep the analysis process simple and standardised, and outcomes quantifiable.

Knowing Double Jeopardy should make marketers look differently at their markets: practitioners (f.e. brand managers) should be more able to recognise Double Jeopardy trends, and they will know that it is *normal* for smaller brands to attract somewhat less loyalty from their buyers and yet still survive. This is meaningful background information for marketing strategies and tactics aiming to defend or increase sales. This also means that a niche brand would be the odd one out. They are thought to be purchased more frequently by relatively few buyers (e.g. Kotler, 2003), which raises issues on the existence of market segments. A niche brand would be considered a deviation from Double Jeopardy and it is rarely reported (see Kahn *et al.,* 1988; Ehrenberg *et al.,* 1995). In fact, all brands are bought by a mixture of consumers that are differently (more or less) loyal. The balance between these is very similar from brand to brand and highly predictable. Yet the feature of having such a benchmark is that it provides a norm against which discrepancies stand out. Most deviations from the pattern tend to be relatively small when considering how different products might be in their formulations, branding, pricing, advertising, maturity, ownership or packaging just to name a few. These factors may overshadow the general Double Jeopardy pattern, so managers need to empirically analyse structure and characteristics specific to their market. In fact, it appears these factors result in brands' different sales levels which in turn reflect in the Double Jeopardy pattern, yet they are rarely found to result in significant loyalty differences (Ehrenberg *et al.,* 1990).

Furthermore, the Dirichlet is about habitual near-steady-state buyer behaviour. While this means it is not dynamic, the model still provides a useful benchmark for more dynamic

situations (Ehrenberg *et al.,* 1995). This supports practitioners (f.e. the manager of smaller brands) in performance monitoring activities on a range of different (loyalty) measures making the Dirichlet a vital tool in (short and long term) marketing analysis. Dirichlet research demonstrates (see *Chapter 2*) that (small) brand performance may only be improved at the expense of competitors which has implications for how the sales of established brands may be increased. It is found that brands grow by selling to more people – and not special (i.e. highly loyal) ones for that matter – coupled with a less significant, but not less important increase in the average number of purchases per buyer (e.g. Anschuetz, 2002; Baldinger *et al.,* 2002). And even when marketers tried to increase purchase frequencies by finding new uses for their brand (f.e. Johnson's baby oil for adults), if successful, the extended usage is likely to carry over to competitors too (i.e. higher purchase frequencies across all substitutable options) with the result of a re-established Double Jeopardy effect. The implication is that Double Jeopardy applies to both situations: before and after the change in sales (e.g. Ehrenberg *et al.,* 1990).

Altogether, perhaps the same marketing laws apply to big and small brands – if only we would knew they behave similarly. Yet despite ever increasing empirical evidence from those who model consumer behaviour and/or competitive market structures, Double Jeopardy is still not widely known among marketing scholars and practitioners, and is rarely featured in literature about small brands. And while the Dirichlet describes the competitive responses to all brands in a market (big and small), to date, it has rarely been used in that matter. Research attention rests firmly on both (1) market leaders (e.g. Fader & Schmittlein, 1993; Pare & Dawes, 2011) – perhaps because are they the likely sponsors of marketing research – and (2) excess repeat buying rates – possibly an outcome of marketing textbooks frequently proposing the alleged benefits of loyalty beyond reason (e.g. Krishnamurthi & Raj, 1991; Jarvis & Goodman, 2005). That is, much is known about the buying of big brands, yet less attention has been paid to the 'lower end' of the Double Jeopardy line. And if attention had been put on smaller brands, it appears that many of them tend to, in fact, under-performed their predicted loyalty rates (e.g. Kahn *et al.,* 1988), persistently (e.g. Pare *et al.,* 2006). Those are often referred to as change-of-pace[5] (e.g. Kahn et al., 1988) or deficit loyalty brands (Pare *et al.,* 2006) which is essentially a brand whose buyers favour them *"on* [just] *some purchase occasions"* (Sharp & Dawes, 2001, p. 743). In theory this makes sense, but who would design a brand that attracts low purchase frequency? And, in fact, the

[5] Based on customers' variety-seeking behaviour (Kahn et al., 1988) in which the search for *"variation is rewarding in itself"* (Scriven *et al.,* 2017, p. 10).

concept of change-of-pace misses a reasonable explanation as a meaningful strategy – it rather describes a failing brand.

Marketing theory often considers loyalty as a driver of brand growth (Fulmer & Goodwin, 1988; Kotler, 1994, 2003, 2005; Aaker, 2001), but the *"secret key to growth"* (Sharp, 2010, p. 16) is heavily debated. If sustained, even small share changes could be worth millions of turnover (e.g. Brenner, 2019). Yet, market and brand stationarity studies report that even over extended periods of time, growth is rare, never dramatic and is mostly determined by how many (*more*) people buy the brand – a regularity found for many larger brands (e.g. Bass & Pilon, 1980; Dekimpe & Hanssens, 1995; Srinivasan & Bass, 2000; Graham, 2009; Romaniuk *et al.,* 2014; Dawes, 2016). Noteworthy is that some have analysed how new brands grow (e.g. Wellan & Ehrenberg, 1988; Ehrenberg & Goodhardt, 2001; Wright & Sharp, 2001; Anschuetz, 2002; Baldinger *et al.,* 2002; Sharp *et al.,* 2012; Singh *et al.,* 2012; Romaniuk & Sharp, 2016). Yet it is unknown whether small brands grow in similar ways; that is, through greater increases in penetration alongside a less significant rise in loyalty. And if not, is Kotler's (2003) niching advice actually evidenced? So just how likely is it for small brands to grow? And if they do, are the mechanics governed by the Dirichlet-described penetration-loyalty relationship? Is growth a result of asymmetric cross-selling with rivals (violating the Duplication of Purchase law) or do small brands compete in a mass-market? Have niche brands better chances to grow, and if they grow, do the extra sales come from their more committed, '*better*' (i.e. more loyal) customers as is implied in the idea of targeting segment buyers? What if small brands do not grow? Are their strategies wrong or what might better growth strategies look like? Also, most studies tended to *imply* strategies (i.e. niche or change-of-pace) of small brands from the loyalty performance outcome (e.g. Kahn *et al.,* 1988). Are all small brands either niche or change-of-pace, and are all niche brands functionally different?

All in all, it seem that, to date, there is still much to learn about how small brands grow. The following sections state the objectives underlying this research, introduce the methodological steps undertaken and the data analysed to address the above discussed gaps in small brand research. This is followed by an outline of the key findings and their contribution to theory and practice. Lastly, the structure of this dissertation is introduced.

## 1.3. Objectives

This research addresses the theory-evidence gap in our understanding on how small brands grow by documenting and quantifying buying regularities in aggregated continuous purchase data in the context of small brands. The research has five main objectives:

I. To systematically define and describe the relative competitive performance of small brands.
II. To describe the regularities in the incidence, scale and nature of loyalty deviations from the Dirichlet norm for small brands in a period such as a year.
III. To determine the persistence of small brand's loyalty deviations over five consecutive years.
IV. To describe the typical characteristics in the BPMs of growing (declining) small brands.
V. To evaluate the extent of strategic positioning accounting for the loyalty deviations of small brands.

## 1.4. Methodology & data

Research that tests the extent to which Dirichlet-described law-like patterns in consumer behaviour apply to small brands is scarce. Therefore, there is a need on both the theoretical and managerial side to look at the lower end of the penetration (Double Jeopardy) curve in more detail to test the reliability of existing empirical generalisations (at this end) to ascertain the characteristics of (small) brand growth. Empirical generalisations (EGs) are regularities or patterns that are repeatedly observed across various contexts. They are simple relationships that may be expressed in a simple mathematical, symbolic or graphical manner (Bass, 1995; Bass & Wind, 1995; Uncles & Wright, 2004).

This study is a differentiated replication of buying regularities described by the Dirichlet aiming to obtain a reliable representation of phenomena (see Bass & Wind, 1995). Similar to prior studies, Dirichlet benchmarks are used to describe competitive market structures and consumer behaviour. Based on the format of the here used data (numerical) and the simple, direct comparison approach (as recommended by Barnard *et al.,* 1994) of systematically measuring the relationships between performance variables to document and quantify emerging regularities across categories and time, the research design is thus of descriptive nature. By following such an inductive empirical-generalist approach, the current study sits within a vast programme of inquiries utilising Ehrenberg's (1993B) empirical-then-theoretical (EtT) manner of extending knowledge in marketing science.

The study has an in-built replication-extension research design to increase the confidence that the results are not one-off happenstances or artefacts of a specific approach to research and provides an empirical insight to the extent to which results generalise and the probable factors affect results. It was decided to treat the findings of this research as derived from two main differentiated studies each followed by a series of close replications (as further discussed in *Chapter* 6). The first study analysed small brand performance over the period of one year in one initial product class followed by 35 close replications to different categories covering the same length of time. This initial study tested whether earlier identified patterns and deviations in small brand performance described by Kahn *et al.* (1988) and Pare *et al.* (2006) also occurred when analysing a greater number of highly dissimilar and more recent product classes with a clear and standardised definition of the typical characteristics of small brands. The close replications aimed to determine whether the initial patterns replicated.

The second study then analysed the year-by-year performance of small brands over five consecutive years starting with one initial category. This is a differentiated replication of the patterns identified in the first study over an extended period of time and followed by fourteen close replications to various product classes over the same length of time. The aim was to document and quantify the patterns, the effects of time (if any) and to analyse whether (non-) stationarity in buying is likely to affect the performance of small brands. This provides an understanding of what factors do (or do not) affect results.

All in all, in the light of Ehrenberg's (1993B) EtT approach (Empirical then Theory), patterns may be developed into empirically grounded theory which in itself is further tested under varying conditions. The ultimate aim was to extent their generalisability (Ehrenberg, 1994), and the developed theory is judged by how well it – after the concept of *significant sameness* – replicates across many sets of vastly different product categories (Barwise, 1995). New conditions (as in not yet described by existing knowledge) do not necessarily refute this existing knowledge but may represent boundary conditions and may develop into new theory (as in addressing a new condition). The results are therefore of descriptive and self-explanatory nature (Ehrenberg, 1995; Ehrenberg *et al.,* 2000). Hunt (1991) noted that linking theory to an empirical-generalist approach aids the development of quantifiable results and strengthens the underlying theory.

The data was provided by Kantar WorldPanel and comprised the fast-moving consumer good (FMCG) purchases of 15,000 continuously reporting UK households geographically and demographically weighted. Over 500 brands were analysed in thirty-six different product categories in periods ranging from one to up to five years.

The Dirichlet is based on the conditions of market near-stationarity and non-segmentation, and while it is a steady-state model, it allows to analyse dynamics (such as market share growth) through time series. Those are essentially snapshots of the respective performance measures to track changes over specified periods of time. Although this research analyses the regularities in the buying of small brands, it does not provide exhaustive explanations as to *why* the behaviour occurred. The aim was to evaluate whether the well-reported Dirichlet patterns for large brands also apply in a small brand context, and not to elaborate on the model of split-loyalty itself.

## 1.5. Key findings of this research

Some of the results in this dissertation have been presented in a preliminary form at the Academy of Marketing Conference in Hull (see Franke *et al.,* 2017) and the Australian and New Zealand Marketing Academy Conference in Adelaide (see Franke *et al.,* 2018). They contributed to a publication in the Australasian Marketing Journal (see Graham *et al.,* 2017B) and provided the corporate sponsors of the Ehrenberg-Bass Institute for Research in Marketing with valuable insights on the nature of competition for small brands (see Franke *et al.,* 2019).

The detailed results can be found in the respective chapters of *PART IV*, and they are further discussed in *Chapter 11*. The key empirical findings are:

1. **The NBD-Dirichlet describes long-term buying (and deviations) of small brands.**
   - Small brands that conformed to the models' two assumptions and fell close to their Double Jeopardy estimates had a one in four chance to grow.
   - The Dirichlet helped to diagnose the symptoms of deficient performance as it provided benchmarks for simple comparisons.

2. **This research provides a quantifiable operational definition of small brands.**
   - The systematic analyses across categories and time revealed a discrete performance gap between any two successive brands.
   - This was closest (0.9) amongst smaller brands.
   - It was concluded all brands competing below a category's top five are small.

3. **Deficit loyalty was the small brand syndrome.**
   - Most small brands suffered *more* than twice – year-on-year. Over 50% of the brands had persistent deficit loyalty.
   - Just two in ten brands exhibited niching performance.

4. **Small brands had near-stable market shares.**
   - Over five years, 97% of the small brands remained within share changes not exceeding ±5%; that is, they were near-stationary, and over 80% were share-stable (±1%).
   - The nature of loyalty deficiencies was not sensitive to brand size or share change: 90% were share-stable and none exceeded a ±3% change.

5. **Market share changes were constrained by Double Jeopardy.**
   - Shares rarely trended – just two out of 66 brands shifted more than five absolute share points over five years, and they remained within the constraints Double Jeopardy puts on the penetration-loyalty relationship.
   - Share dynamics were attributable to category penetration changes or external factors (i.e. mergers), but clearly not the result of loyalty deficiencies other than was expected to come about with changes in penetration.
   - In case of share dynamics, the prominent metric that changed was penetration.
   - The metric correlated highly negative with the proportion of once-only buyers.

6. **Small brand buying was surprisingly light-buyer based.**
   - Small brands were bought once by a joint 60% of their buyers in any one year.
   - Deficit loyalty brands were more dramatic: just under 70% of their buyers purchased them once in any period of time, yet 90% managed to maintain shares by attracting many more light buyers than would be expected – and continued to do so year-after-year.

7. **Niche and change-of-pace were symptoms of stagnation.**
   - Consumer behaviour appears to be less *manageable* than thought. Strategic targeting of segment buyers is not a reliable driver for brand share growth and equally true was that deficit loyalty was not an indicator of share decline.
   - Most small brands had persistent loyalty deficiencies and were share-stable which is unlikely to change unless management action is taken to address this.

## 1.6. Contribution to knowledge

This research contributes six key points to a better understanding on how small brands grow (see *Chapter 11*). First, this research contributes tremendously to our understanding on how small bands compete (and perhaps grow) by providing a relative competitive definition of a typical small brand. For marketing research and practice, this provides a sound basis for benchmarking activities and the development of comparable findings.

Second, the study provides knowledge on FMCG markets by describing patterns in purchasing behaviour of small brands. It is the first time the Dirichlet has been used in such a comprehensive manner in a small brand context. The Dirichlet is found to be a useful 'tool' to describe small brands' long-term buying and identify performance is discussed.

Third, it is important for Dirichlet users to know about the extent to which deviations might be encountered. This allows interpretations of unusual buying patterns. This research therefore contributes to our understanding of the nature of competition for the typical smaller brand – over shorter and longer periods of time. Against popular belief, small brands seldom exhibit niche performance. Instead, most small brands suffer from having fewer customers who are even less loyal than would be predicted by Double Jeopardy. And they maintain such under-performance over the long-term. Managers are provided with knowledge on just how uncommon both niche and change-of-pace performance brands are while knowledge on frequency and persistence of Dirichlet deviations is expanded into the area of small brands, across vastly different product categories and in more than twice the time span of Pare *et al.* (2006) research on the topic. The findings are therefore a useful empirical generalisation (see *Chapter 6* for what is a useful empirical generalisation after Barwise (1995)).

Furthermore, this research lends empirical support on how unrealistic it is for small brands, including niche brands, to grow, and the mechanics behind their growth (and even decline). This is useful knowledge for strategic brand management and the set-up of feasible growth objectives. Most importantly, this work on small brands has documented that, over a period of five years, who the 'most important' buyers in a (small) brands' customer base are. That is, there is little evidence of niche and change-of-pace brands (as the vast majority of small brands did conform to Dirichlet norms). And this is very strong evidence against the commonly held belief that segmentation, targeting and positioning are very important for brands (small and large).

Lastly, further knowledge is contributed to stationary and niching theory. Only a few small brands were exceptions to the rule of share stationarity. Brands with performance

deficiencies were not found to be more prone to share changes. They maintained shares by selling to many more customers than expected, who then did not return to repeat buy as quickly as anticipated. Marketing reality for small brands is extreme light buying, and until management action is taken to address the issue, small brands are unlikely to grow.

## 1.7. Structure of the thesis

This work is organised into five parts with supporting appendices. Following this introduction on the research background, its aims, purpose and the outline of its key contributions, *PART II* contextualises the underlying research objectives. Reviewed is extant literature on a common quantifiable definition of small brands and current theories, relational frameworks and conceptualisations on these brands' purchasing behaviour. This includes critical discussions on the generalisability, track record, appropriate lengths of time, typical BPMs[6] and practical use of methods frequently employed when determining (small) brand performance.

In *PART III* the methodological overview is provided. The approach, design and utilised data of this dissertation are specified; the necessity of basing the analyses on continuous purchase records evaluated and the study's in-built replication-extension method discussed. The analyses were based on the NBD-Dirichlet and its widely-reported descriptions of buyer behaviour. For each objective the investigative procedures are detailed. This research essentially employed two highly unusual approaches for measuring brand performance: not only was the focus on small brand buying, also their longitudinal behaviour was investigated by using time series. The analyses build on a set of comprehensive BPMs available to and frequently used by the typical brand manager.

*PART IV* presents the descriptive results obtained. It starts with a determination of common characteristics that identify small brands, and the ultimate outcome was the final sample of (small) brands the remaining analyses were based on. This is followed by a presentation of the findings from replication-extension analyses on the loyalty performance of small brands; exceptions are documented and (if possible) quantified across *MSoD* (many sets of data) and time. Next, the analytical focus is put on the long-run stability of BPMs to determine differences and similarities in (non-)stationary outcomes; changes in the metrics *as* small brands grew (or declined) are discussed. Lastly, the extent to which the identified

[6] Brand performance measures.

loyalty performance deficiencies of small brand are in fact accounted for by internal (such as targeting strategies) or external (i.e. category 'generification') factors is examined.

*PART V* then provides a summary of the findings, presents the main conclusions and implications drawn. This dissertation closes with a discussion on the limitations of this study and outlines promising areas of future research.

Within the appendices, the detailed outcomes of the rank-size analyses for objective one are presented (*Appendix I*). *Appendix II* shows the in-depths results of the BPM analyses for objectives two to four. *Appendix III* holds comprehensive information on factors frequently related to small brands with loyalty deviations. Lastly, *Appendix IV* lists the publications emerged from the current research.

# PART II – LITERATURE REVIEW

## Chapter 2: Loyalty & small brands – How defined; how analysed?

*This chapter sets out the need to define and analyse small brands. Literature is critically examined to highlight several theory-application conflicts on (1) proposed loyalty outcomes and (2) brand size definitions. Marketing literature and practice broadly agree that loyalty is important. Less agreement is on its meaning and approaches on how to measure it, for example, for smaller brands. Marketing theory believes that survival and long-term profitability of (small) brands depend on their ability to make (current) customers (more) loyal (to the brand). There is, however, little empirical support on effectiveness of loyalty-based strategies for small brands. In fact, clear definitions of brand size are missing. To systematically describe the extent to which loyalty affects competitive market structures and small brands' growth potential, a unified definition of 'small' is needed. This allows to determine whether they compete differently (i.e. have greater brand loyalty).*

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### 2.1. Introduction

While loyalty is considered to be highly important for (small) businesses' long-term success (i.e. growth) (Mellens *et al.,* 1996; Górska-Warsewicz & Kulykovets, 2020), the set-up of feasible growth objectives requires an understanding of how consumers behave, and brands perform. Classic (cognitive) marketing literature suggests small brands to aim for a niche position by targeting their existing (already loyal) buyers. By creating a strong (attitudinal) desire for their brand, the expected outcome is a continuously repeated (purchase) response (Uncles *et al.,* 2003; Romaniuk & Nenycz-Thiel, 2013; Hollebeek *et al.,* 2014; Leckie *et al.,* 2016). In theory, a niche performance (with its focus on segment buyers) lets consumer behaviour (and thus brand performance) appear 'manageable' (Cunningham, 1956; Baldinger *et al.,* 2002) which has undoubtedly spurred the interest in loyalty-focussed research and business thinking (e.g. Rosenberg & Czepiel, 1983; Aaker, 1991; Bhattacharya, 1997). This ascribes loyalty the power to define brand size and competitive market structure – which is, however, yet to be evidenced. In fact, cognitive marketing literature scarcely defines brand size and describes brand performance based on purchase intentions or other rather intangible measures which are hardly validly representable in a single or few comparable metrics (Barwise & Farley, 2004). Quantifiable benchmarking activities are therefore near-impossible questioning the extent to which the outcome represent (buying) reality (Mellens *et al.,* 1996).

On the other side, science has remarkably transformed the marketing discipline. Over the past eight decades the results of evidence-based studies have led to the discovery of a

number of law-like relationships in brand choice and purchase incidence. This knowledge is derived from extensive replication-extension research and helps to inclusively and reliably analyse, describe and predict the performance of brands that are many times the size of each other (Uncles *et al.,* 1995). Among other things it is demonstrated that a key difference between larger and smaller brands goes down to the size of their customer bases: small brands have fewer buyers, and small brands are purchased a little less often than big brands (f.e. McPhee, 1963; Ehrenberg, 1972; Sharp, 2010). Yet the loyalty values between competitors do not vary much. The implication is that a niche brand (with highly loyal customers) would be the odd one out. The real power of this knowledge is that it is applicable: it can be taken away to determine the efficiency of (loyalty-based) marketing activities (Ehrenberg-Bass Institute for Marketing Science, 2019). And while results are found to persist across countries, industries, categories and time, this stream of literature again surprisingly enough lacks a clear divide to systematically separate large from small brands. In addition, most research attention is on category leaders. They are the likely sponsors of marketing research, and perhaps there is no need to categorise brands by size after all – if only we would knew they behave similarly. A sensible starting point for a better understanding of how small brands grow is therefore by determining what a small brand is. It implies we know what is large. But current approaches are either too theoretical (e.g. Henderson, 1976; Kotler, 1977), arbitrary (e.g. Pare *et al.,* 2006) or impractical (Huynh, 2017). And while Kohli and Sah (2004, 2006) identified some regularities in categories' brand share distributions, they did not (intent to) arrive at a quantifiable relative competitive divide between large and small.

Being left without a clear benchmark and *"little or no prior theory to guide us"* (Ehrenberg, 1995, p. G21), the current research follows the spirits of Barwise (1995) and Ehrenberg (1972) and aims to build a solid ground for comparable findings that are of scope, precision, usefulness, parsimony and theory based (see *Chapter 6* for further discussion) – the foundations for empirical generalisations (EGs). As such, this study is a starting point towards identifying and describing quantifiable characteristics of the typical smaller brand. The first objective was therefore:

**To systematically define and describe the relative competitive performance of small brands.**

The subsequent sections discuss the empirical evidence of the loyalty-success correlation traditional marketing literature frequently suggests to small brands. This includes evaluations of the concept's key measurements. It is aimed to determine the extent to which buyer segmentation and targeting (the strategies underlying niche positions) reliably describe the typical nature of competition for smaller brands. This inevitably leads to the question of what is a small brand. The second part of this chapter therefore critically examines the common ground of (to date) scattered definitions and approaches in identifying smaller brands – a crucial basis for the development of comparable findings in small brand research.

## 2.2. Loyalty measures in (small brand) marketing: A critical review

Small brands suffer from a number of constraints including limited reach, distribution, resources and popularity (see *Chapter 1*). The idea of increasing profits by transforming mere buyers into loyals is hence understandably tempting (Worthington *et al.,* 2010; Leckie *et al.,* 2016; Górska-Warsewicz & Kulykovets, 2020). After all, loyals are perceived as more profitable than non-loyals (Helgesen, 2006). Yet while there is more agreement on the concept's multi-dimensionality, less consensus on how to define and measure loyalty (Sheth & Park, 1974; Jacoby & Chestnut, 1978; Dick & Basu, 1994; Mellens *et al.,* 1996; Stern, 1997; Bowen & Chen, 2001; Bennett & Rundle-Thiele, 2001; Back & Parks, 2003; Worthington *et al.,* 2010; Batra *et al.,* 2012; Dawes *et al.,* 2015). Also unclear is the potential of loyalty-based strategies and to what extent loyal behaviour defines brand size (or success). This hinders the systematic analysis and inclusive benchmarking of small brands against smaller and (far) larger rivals.

Loyalty is understood to be the process by which brands capture long-term superior value from their customers (Amine, 1998; Kotler *et al.,* 2008). On a functional basis, loyalty may guide customers in distinguishing between competitors (Park *et al.,* 1986), and strategies to attract superior loyalty largely aim to (1) encourage the existing heavy buyers to buy even more, (2) convince infrequent buyers to become heavy users and (3) persuade possible switchers not to do so (Smith, 1956; Levitt, 1960; Jacoby & Chestnut, 1978). Loyalty is therefore not just the sum of perceptions about a particular brand (Keller, 1993), loyal customers are seen as a guarantee for future earnings (Day, 2002; Ambler *et al.,* 2004; Schultz, 2010), provide trade leverage (Aaker, 1991) and increase the effectiveness of brand extension strategies (e.g. Aaker & Keller, 1990) thereby pleasing shareholders. Loyalty has therefore also an economic function (Ruzzier *et al.,* 2013) often referred to as brand equity; a concept Keller (1993, p. 1) defined as *"the differential effect of brand knowledge on*

*consumer response"*. Positive (strong) equity results in greater numbers of highly loyal customers, and over time, the (small) brand is believed to increase in profitability and market share (Farquhar, 1989; Ambler, 1995; Cobb-Walgren *et al.,* 1995; Agarwal & Rao, 1996; Steenkamp & Dekimpe, 1996; Keller & Lehman, 2003; Oliveira-Castro *et al.,* 2008). Dawes *et al.* (2017) analysed whether price variation could create deviations from the Double Jeopardy pattern, and demonstrated that while Double Jeopardy holds for spend in thirteen of their analysed product classes (i.e. additional to having fewer buyers, the buyers of smaller brands also spend less on them), but could not conform a brand share to average price or average price and performance i.e. excess or deficit loyalty) deviations. Yet, the benefits of loyalty hinge on the definition of the concept itself which is found to lack a unified perspective despite going back for over ninety years (Copeland, 1923). Mellens *et al.* (1996) stressed the difference yet interdependence of both conceptual and operational definitions: the construct validity of measures (i.e. the operationalisation of loyalty) can only be effectively assessed with precise abstract descriptions (concepts) of the phenomenon itself. So, to meaningfully analyse and interpret (and perhaps manage) loyal behaviour, a standardised definition of the concept and the units it is represented by is needed.

### 2.2.1. What is loyalty?

Loyalty has so far been described as anything between brand insistence (Copeland, 1923), a positively biased, emotive, evaluative and/or behavioural response (e.g. Sheth & Park, 1974), a positive attitude (Amine, 1998; Jacoby & Kyner, 1973), a deep psychological commitment to re-buy despite differing situational and/or marketing effort influences (Dick & Basu, 1994; Mellens *et al.,* 1996; Oliver, 1999), the proportion of purchases (Cunningham, 1956), purchase sequence (Brown, 1952; Guest, 1964; Sheth, 1968), repeat purchase (e.g. Ehrenberg, 1988) and purchase probability (Massy *et al.,* 1970). It is also considered a function of trust and customer satisfaction (Kotler, 2003; Jaiswal & Niraj, 2011); thus, a (small) company's performance would be a reflection of the loyalty levels found within its customer base (Kapferer, 2012; Ruzzier *et al.,* 2013). This implies switchers are not fully satisfied (Buzzle & Gale, 1987; Jones & Sasser, 1995) – which is a rather complex (Zeithaml *et al.,* 1996) and difficult to observe matter (Mittal & Kamakura, 2001).

Loyalty is further claimed to be the consequence of 'brand love' (Batra *et al.,* 2012) – a powerful affect-laden brand-consumer connection described as *"the next evolution in branding"* (Roberts, 2004, p. 56). It aims to create (lovemark) brands (see Fournier & Yoa, 1997) that customers *"just can't live without"* (Saatchi & Saatchi, 2018). But such an evolution-like development from *new* through to *dating*, *love*, *boredom* and finally *divorce*

(Barker *et al.,* 2015) implies that by adjusting brand strategies, the break-up stage may be postponed or prevented altogether – given we know the state of the 'relationship'. This asks for clear measurements for each stage yet empirical evidence on the connection between brand love, increased profitability and market share growth is scarce. This questions whether it is appropriate to use such an emotion-based term in a business management context (Romaniuk, 2013B).

The perhaps most widely known if rather complex definition of loyalty was given by Jacoby and Chestnut (1978). It comprises many of the above discussed aspects. In short, Jacoby and Chestnut described loyalty as *"(1) a biased, (2) behavioural response, (3) expressed over time, (4) by some decision-making unit, (5) with respect to one or more alternative brands out of a set of such brands, and (6) it is a function of psychological (decision-making, evaluative) processes"* (p. 80). The implication is that the success of small brands is frequently measured against their ability to induce a favourable (i.e. loyal) response (a behaviour) – yet the scope of this behaviour is debated.

***Table 1: Definitions of loyalty***

| **Study** | **Loyalty definition** |
|---|---|
| Copeland (1923) | Loyalty is brand insistence. |
| Guest (1944) | Loyalty is an expressed consistent preference over time. |
| Brown (1952);<br>Guest (1964);<br>Sheth (1968) | Loyalty is the sequence of purchases devoted towards a brand. |
| Cunningham (1956) | Loyalty is the proportion of purchases. |
| Morrison (1966)<br>Sharp & Sharp (1999) | Loyalty according to the number of occasions the brand was bought in a specific time period. |
| Day (1969) | Loyalty consists of repeated purchases prompted by strong internal disposition. |
| Massy *et al.* (1970) | Loyalty is the purchase probability. |
| Jacoby & Kyner (1973) | Loyalty is a positive attitudes towards a brand. |
| Sheth & Park (1974) | Loyalty is a positively biased emotive and/or behavioural response. |
| Jacoby & Chestnut (1978) | Loyalty is *"the (a) biased, (b) behavioral response, (c) expressed over time, (d) by some decision-making unit, (e) with respect to one or more alternative brands out of a set of such brands, and (f) is a function of psychological (decision-making, evaluative) processes."* (Jacoby & Chestnut, 1978, p. 80) |

**(Table continued on next page)**

**(Table 1 continued)**

| Study | Loyalty definition |
|---|---|
| Bass (1974);<br>Ehrenberg et al. (1990);<br>Uncles *et al.* (1994);<br>Sharp *et al.* (1999);<br>Cegniz & Cegniz (2016) | Loyalty according to the number of occasions the brand was bought in a specific time period. |
| Ehrenberg (1988);<br>Fader & Schmittlein (1993);<br>Colombo *et al.* (2000) | Loyalty according to the number of occasions the brand was bought in a specific time period. |
| Uncles & Ehrenberg (1990);<br>Banelis *et al.* (2013) | Loyalty according to the number of occasions the brand was bought in a specific time period. |
| Farquhar (1990) | Loyalty is *"the added value with which a given brand endows a product."* (p.7) |
| Keller (1993) | Loyalty is *"the differential effect of brand knowledge on consumer response"* (p. 1). |
| Dick & Basu (1994) | Loyalty is a commitment to re-buy despite differing situational and/or impacts by marketing efforts. |
| Uncles *et al.* (1994);<br>Bhattacharya *et al.* (1996);<br>Ehrenberg (2000);<br>Jung *et al.* (2010);<br>Pare & Dawes (2011) | Loyalty according to the number of occasions the brand was bought in a specific time period. |
| Cobb-Walgren *et al.* (1995) | Loyalty is *"the added value that a brand name gives to a product"* (p.26). |
| Ambler (1995) | Loyalty is *"the sum of the habitual behaviours of those in the marketing channel"* (p.338). |
| Bhattacharya (1996) | Loyalty according to the number of units bought in a specific time period. |
| Agarwal & Rao (1996) | Loyalty is the added value of the brand. |
| Hammond *et al.* (1996) | Loyalty is a concept used to describe human relationships. |
| Dyson *et al.* (1997) | Loyalty if the strength and resilience of intangible mental brand associations. |
| Amine (1998) | Loyalty is the process by which brands capture long-term superior value from their customers. Loyalty is also a positive attitude towards a brand. |
| Oliver (1999) | Loyalty is a deep psychological commitment. |
| East *et al.* (2000) | Loyalty represents a customer's commitment to a brand, shop or supplier. |
| Srinivasan *et al.* (2000) | Loyalty the part of brand preference not explained by the multi-attribute model. |
| Bennet & Rundle-Thiele (2001) | Loyalty is the result of deliberate and pre-determined reasons. |
| Keller & Lehmann (2003) | Loyalty is the value created by brands through the brand value chain. |
| Kotler *et al.* (2008) | The process by which brands capture long-term superior value from their customers |
| Oliveira-Castro *et al.* (2008) | Loyalty is the marketing effects that are uniquely attributable to the brand itself. |
| Jaiswal & Niraj (2011) | Loyalty is a function of trust and customer satisfaction. |

Altogether, the apparent absence of a clear definition of loyalty suggests that approaches on how to measure its outcomes (i.e. how it defines brand size and compete market structures) is equally difficult. So, how to measure loyalty inclusively and comparably for *all* competitors? Many marketing tools used when analysing consumer behaviour focus on the relationship between market factors with the purpose of *"pedagogy--teaching us how the real-world works"* (Eliashberg & Lilien, 1992, p. 165; Lazer, 1962). They are often applied with the aim *"to pop out an answer that completely solves the managerial problem"* (Ehrenberg & Sharp, 2000, p. 296). But this can hardly produce generalizable results.

The following sections evaluate advantages and disadvantages of frequently used approaches of measuring loyalty. The aim is to determine whether loyalty has the 'power' to define brand size, and if so, how to measure loyalty inclusively (for all competing brands) to allow the development of comparable results on how differently small brands compete (and possibly grow).

### 2.2.2. Typical measures of brand loyalty

Given the importance ascribed to loyalty, the great variety in measures is not surprising.

***Table 2: Definitions of loyalty***

| Study | Loyalty measure |
|---|---|
| Guest (1944) | Purchase intentions |
| Morrison (1966);<br>Sharp & Sharp (1999) | Interpurchase intervals |
| Day (1969) | Stated attitudes, purchase intentions and purchases |
| Jacoby & Chestnut (1978) | Strength of attitude, stated commitment, or evaluation of brand features |
| Bass (1974);<br>Ehrenberg et al. (1990);<br>Uncles et al. (1994);<br>Sharp et al. (1999);<br>Cegniz & Cegniz (2016) | Purchase frequency |
| Ehrenberg (1988);<br>Fader & Schmittlein (1993);<br>Colombo et al. (2000) | Purchase frequency |
| Uncles & Ehrenberg (1990);<br>Banelis *et al.* (2013) | Repertoire size |
| Farquhar (1990) | Strength of attitudes, awareness, continued preference |

**(Table continued on next page)**

**(Table 2 continued)**

| Study | Loyalty measure |
|---|---|
| Hafstrom *et al.* (1992) | Personality traits of customers |
| Keller (1993) | Consumer perception, preference and behaviour |
| Dick & Basu (1994) | Stated attitudes and purchases |
| Uncles *et al.* (1994); Bhattacharya *et al.* (1996); Ehrenberg (2000); Jung *et al.* (2010); Pare & Dawes (2011) | Share of category requirements |
| Cobb-Walgren *et al.* (1995) | Attitude, perception, salience, preference, purchase intention |
| Ambler (1995) | Brand relationship strength |
| Baldinger & Rubinson (1996) | Stated attitudes, purchase intentions and purchases |
| Agarwal & Rao (1996) | Perception-preference-intention-choice. |
| Dyson *et al.* (1997) | Rational, emotional and salience-based drivers |
| East *et al.* (2000) | Strong favourable attitude manifested in consistent patronage |
| Srinivasan *et al.* (2000) | Changes in individual preferences |
| Bennet & Rundle-Thiele (2001) | Brand preference |
| Keller & Lehmann (2003) | Preferences *"prevailing customer mindset"* (p.29) |
| Oliveira-Castro *et al.* (2008) | Perception, attitudes and intentions |
| Dawes *et al.* (2017) | Average spend per buyer |

Early on, Cunningham (1956) classified frequently-used metrics to measure loyalty into *what* (which brand) was purchased and *why* (the reason) this particular brand was chosen. In their *Review of Brand-Loyalty Measures in Marketing*, Mellens *et al.* (1996) concluded that the four most-widely used types of loyalty measures may be grouped in (I) attitudinal versus behavioural measures (also Jacoby & Chestnut, 1978; Bennett & Rundle-Thiele, 2001; Cengiz & Cengiz, 2016; Górska-Warsewicz & Kulykovets, 2020), and (2) brand-oriented versus individual-oriented measures (also Dick & Basu, 1994).

The current research aims to determine whether small brands compete (and grow) differently than larger ones which requires that (small) brand performance is to be measured inclusively. The following sections evaluate strengths and weaknesses of the above mentioned loyalty measure dimensions, and uses Jacoby and Chestnut's (1978) six conditions as theoretical orientation for aspects typically related with the concept of loyalty.

## Individual-oriented vs brand-oriented measures of loyalty

The terms brand and customer loyalty are often used interchangeably. Implied in Jacoby and Chestnut's (1978) sixth condition (i.e. loyalty as function of psychological processes), brand loyalty may be seen as the outcome of customers evaluating the features of one or few brands (Mellens *et al.,* 1996). As a result, brand loyalty may be considered as inherent to the brand (brand loyalty); that is, loyalty is perceived as a property of the brand (Rossiter & Percy, 1987; Aaker, 1991; Dick & Basu, 1994).

***Table 3: Advantages & disadvantages of brand- & individual-oriented measures***

| | Advantages | Disadvantages |
|---|---|---|
| Brand-oriented | **(1)** Between-brand comparison possible;<br>**(2)** evaluation of marketing strategy on brand loyalty possible;<br>**(3)** use of aggregated data;<br>**(4)** assumes population heterogeneity. | **(1)** Difficult to show loyalty of decision-unit;<br>**(2)** difficult to pick right decision unit. |
| Individual-oriented | **(1)** Each respondent's specific loyalty can be calculated;<br>**(2)** easier to pick right decision unit. | **(1)** Hard to evaluate between-brand differences;<br>**(2)** situation-dependent outcomes;<br>**(3)** data often aggregated across individuals;<br>**(4)** evaluation of marketing strategy on brand loyalty not possible;<br>**(5)** assumes population homogeneity. |

Source: Mellens *et al.* (1996)

Customer loyalty on the other side is considered a characteristic of the decision-making unit; that is, a feature of the people who buy the brand representing the monetary worth the brand has for the buyer (Hafstrom *et al.,* 1992; Sproles & Kendall, 1986). The implication is that loyalty measures may be classified in brand-oriented and individual-oriented approaches respectively although Mellens *et al.* (1996) stressed the distinction between the two operationalisations is not always clear cut across studies.

Individual-oriented measures (bottom part of Table 3, prior page) allow to evaluate each respondent's specific loyalty whereby it is less important which brand the person is loyal to. While this is useful to segment the population itself, little attention goes towards

individual brands. The approach is hence less suitable for between-brand comparisons as is the aim of this thesis. Also, since perceived loyalty differences between individuals are considered less important, data is frequently aggregated across individuals. Hence, using brand-oriented measures (upper part of Table 3, prior page) helps to derive a loyalty value for each brand which allows between-brand comparisons (i.e. inclusive method of analysing brand performance). This is also useful to evaluate effects of marketing strategies on brand loyalty (Mellens *et al.* 1996).

## Attitudinal, behavioural & multi-domain measures of loyalty

Bennett & Rundle-Thiele (2001) reported that much of marketing literature perceive loyalty from either an attitudinal, a behavioural or a multi-domain (a combination of attitudinal and behavioural measures) viewpoint (also Mellens *et al.,* 1996; Cengiz & Cengiz, 2016). The approaches differ in their ability to develop quantifiable outcomes.

***Table 4: Advantages & disadvantages of attitudinal & behavioural measures***

| | Advantages | Disadvantages |
|---|---|---|
| Behavioural measures | **(1)** Based on actual behaviour;<br>**(2)** non-incidental;<br>**(3)** easy to collect. | **(1)** Repeat buying not distinguished from brand loyalty;<br>**(2)** more sensitive to short run fluctuations;<br>**(3)** difficult to pick right decision-unit. |
| Attitudinal measures | **(1)** Repeat buying separated from brand loyalty;<br>**(2)** less sensitive to short-run fluctuations;<br>**(3)** easier to pick right decision unit. | **(1)** Valid representation of reality not guaranteed;<br>**(2)** incidental;<br>**(3)** harder to collect. |

Source: Mellens *et al.* (1996)

Cengiz and Cengiz (2016) found that many authors employ attitudinal measures of loyalty (see for example Bennett *et al.,* 2005; Lam, 2007; Chang, 2010; Kim *et al.,* 2010; Lee, 2011; Park *et al.,* 2011; Srivastava & Prakash, 2012; Laroche *et al.,* 2012; Laroche *et al.,* 2013; Lam & Shankar, 2014; Krystallis & Chrysochou, 2014; Kang *et al.,* 2015; Lee *et al.*, 2015; Guido & Peluso, 2015; Ahn *et al.,* 2015, Cheng *et al.,* 2015; Hosseini *et al.,* 2015). As summarised in Table (overleaf) attitudinal aspects (bottom of part) focus on the cognitive component where purchases are seen as the result of deliberate and pre-determined reasons (Lilien *et*

*al.,* 1992; Mellens *et al.,* 1996; Bennett & Rundle-Thiele, 2001). Loyalty is here an explanation of brand preference and claimed to fluctuate less in the short term. Attitudes are thus suggested to have great *"explanatory and predictable"* power (Amine, 1998, p. 307) and give insight on the motivations that underlie brand choice (Mellens *et al.,* 1996). Brand loyalty may hence be distinguished from 'simple' repeat buying.

In attitudinal-oriented studies, loyalty may be measured via brand preference, stated commitment and/or purchase intension, all of which puts the emphasis on its cognitive component (see Jacoby and Chestnut's (1978) aspects five and six (i.e. with respect to one or more alternative brands and loyalty as a function of psychological processes). A typical instrument for determining respectively brand and individual-based attitudinal aspects are surveys to investigate either (1) purchase intentions (cf. Guest, 1944) or (2) personality traits of customers (Hafstrom *et al.,* 1992). Surveys permit the selection of the 'right' decision-making unit behind the behaviour (see Jacoby and Chestnut's (1978) aspect four), making loyalty a property of the brand (Guest, 1944). Processes are, however, less standardised and tend to use (comprehensive) measures that often lack clear definitions (Ehrenberg, 1988). The outcomes are of incidental nature, frequently suffer from a rationalisation bias and may be true for a specific buyer, in a specific situation at a single point of time. It is thus rather difficult to verify results beyond the initially used data (Farley & Ring, 1970) which is a matter of financial support available for conducting research. Attitudinal measures are also less accurate as they are not based on actual purchases. And while being surveyed, respondents may rationalise their choice which hardly represents buying reality. In addition, other variables may influence brand choice such as available disposable income despite expressing positive attitudes towards the brand. The implication is that the validity of attitudinal measures greatly depends on the strength of the attitude-behaviour relationship. The reduced ability to represent buying (i.e. competition) in a quantifiable manner means (pure) attitudinal metrics are not suitable for the current research that aims to determine how small brands grow.

In contrast, behavioural measures (upper part of Table 4) emphasise that motives are not as directly measurable as, say, a purchase. Behavioural loyalty metrics therefore focus on the *what* (Bass, 1974; Cengiz & Cengiz, 2016; Sharp *et al.,* 1999) expressed by, for example, purchase frequency (Ehrenberg, 1988; Fader & Schmittlein, 1993; Colombo *et al.,* 2000), interpurchase intervals (Morrison, 1966; Sharp & Sharp, 1997), share of category requirements (Bhattacharya *et al.,* 1996; Jung *et al.,* 2010; Pare & Dawes, 2011) or repertoire size (Uncles & Ehrenberg, 1990; Banelis *et al.,* 2013). This puts the focus on Jacoby and Chestnut's (1978) first, second and third aspect (i.e. a biased, behavioural

response, expressed over time). Yet, behavioural measures are criticised for their static nature that does not account for the individuality of separate buying situations (Bhattacharya *et al.,* 1996). The measures are also limited in the sense that repeat buying cannot be distinguished from brand loyalty (Day, 1969). Also as behavioural measures are concerned with past activities, there is dispute in their relevance to determine future brand choice – especially when considering every purchase occasion is different (Day *et al.,* 1979). The measures are also said to be susceptible to short-term fluctuations, for example, when the preferred brand is out of stock, not on sale or else. It is also hard to select the right decision unit (i.e. the purchaser) as information on the underlying *why* of the purchase is not collected (Mellens *et al.,* 1996). Purchase records alone would hence conceal the nuances in loyal behaviour and hinder customer segmentation activities (Wheeler, 1974).

Nonetheless, behavioural measures have the advantage to be based on actual behaviour (i.e. purchases) which links directly to the existence of the brand and its performance. They are most likely non-incidental, easier to collect than attitudinal data (Mellens *et al.,* 1996) and allow between-brand comparisons. It is hence not surprising that many authors utilsed behavioural approaches when measuring loyalty (see for example Knox & Walker, 2001, 2003; Arcella *et al.,* 2003; Bennett, 2008; Jang *et al.,* 2008; Ko *et al.,* 2009; Uncles *et al.,* 2010; Vander Schee, 2010; Kuenzel & Halliday, 2010; van Steenburg & Spears, 2011; Wu, 2011; Allender & Richards, 2012; Bianchi *et al.,* 2014; Dawes, 2014; So *et al.,* 2014; Alnawas & Altarif, 2015; Dawes *et al.,* 2015; Demirbag-Kaplan *et al.,* 2015; Drennan *et al.,* 2015; Empen *et al.,* 2015; Raïes *et al.,* 2015; Lee & Workman, 2015; Stocchi *et al.,* 2015; Dawes *et al.,* 2017; Dawes, 2020).

Lastly, it is said that the multidimensionality of loyalty is best understood by determining the effect a positive attitude has on brand choice making attitudes the *proxy* of behaviour. The idea of a linear attitude-behaviour relationship rests on the understanding that brand associations are stored within consumer memory. Changes in associations should then translate into behaviour. Several researchers have attempted to determine the scope behind this linear connection (e.g. Jacoby & Kyner, 1973; Mellens *et al.,* 1996; Chaudhuri & Holbrook, 2001; Bristow & Sebastian, 2001; Oh & Fiorito, 2002; Reich *et al.,* 2006; Van den Brink *et al.,* 2006; Russell-Bennett *et al.,* 2007; Li & Petrick, 2008A, B; Li, 2009; Lin, 2010; Chahal & Bala, 2010; He *et al.,* 2012; So *et al.,* 2013; Bruwer & Buller, 2013; Greve, 2014; He & Lai, 2014; Bianchi, 2015; Chung & Park, 2015; Huang *et al.,* 2015; Kwon *et al.,* 2015; So *et al.,* 2015). However, several studies appeared to struggle when attempting to demonstrate the linear attitude-behaviour relationship: for example, by collecting attitudinal and descriptive variables from 955 households, Day (1969) could only find a positive

attitudinal-behavioural relationship for one in three buyers, but nonetheless concluded the validity of the linear relationship. Yet his one-brand focus limits the generalisability of the results. He further acknowledged regression analyses (such as he used) tend to be impacted by external factors; he also noticed greater opportunities for switching, the longer the investigation period.

Baldinger and Rubinson (1996) re-contacted 2,261 (56%) participants of an initial study to determine to what extent attitudes *predict* the behaviour towards 27 brands. They classified buyers into 'real loyals' who have high attitudinal *and* behavioural preferences for the brand, whereas for 'vulnerables' these do not link as strongly. Buyers with high favourable attitudes towards *competitor* brands are 'prime prospects' for switching. The authors noticed a universal feature in all customer bases: there are far more lower-level loyals (including non-buyers) and surprisingly few 'real loyals'. The figures are proportionate to brand size, and brands do not necessarily retain the buyers over time. This regression to the mean reflects that some highly loyal buyers become moderate or low loyals (or vice versa) from one period to the next, yet Baldinger and Rubinson nonetheless drew the link to attitudes, saying buyers with high positive attitudes stay loyal while those with lower levels tend to switch.

Derived from an extensive literature review, Dick and Basu (1994) classified buyers into no, latent, spurious and true loyals, the latter exhibiting both attitudinal and behavioural loyalty. Aiming to step away from a mere operationalisation of the concept, the authors arrived at a two-dimensional construct similar to Day's but did not *"provide empirical evidence of its predictive ability"* (Garland & Gendall, 2004, p. 81), and East *et al.* (2000) found support in only one of six cases on supermarket preference indicating true loyalty is anything but a 'manageable' association between attitudes and behaviour. This suggests that choices of individual customers across subsequent purchases with interval lengths varying from a few minutes (Holmes, 1974) to more than a year, are not as stable as expected (also East & Hammond, 1996; Ehrenberg & Uncles, 1997; Ehrenberg & Scriven, 1997). In fact, Bass *et al.* (1972) observe a *"substantial amount of switching"* (p. 541) despite unchanging attitudes and report a positive attitude-behaviour link in just about 50% of the cases; the nature of the two variables' relationship may therefore be rather described as probabilistic.

Dall'Olmo Riley *et al.* (1997) confirmed the instability of expressed attitudes: only half of the participants had the same attitudinal response at different times (also Scriven, 1997). Additionally, descriptive attributes do not vary much between non-buyers and buyers, further weakening attitudes' ability to adequately predict future brand choice behaviour

(East *et al.,* 2008; Stocchi, 2014). And in fact, the argument that attitudes precede behaviour implies that customers know all brands, and that it is possible to separate negative associations (would not buy) from simply not knowing the brand (Romaniuk & Nenycz-Thiel, 2013). It also implies each individual's underlying situational purchase habits are known (e.g. time length between purchases) and that customers rationally evaluate brand substitutability (cf. Simon, 1957). Yet, there is little agreement on *why* specific brands are bought or used, concluding attitudes are a consequence of behaviour inasmuch that buyers choose what they know (Dall'Olmo Riley *et al.,* 1997). That is, familiarity breeds liking (Romaniuk & Sharp, 2016) and liking therefore follows behaviour (Barnard & Ehrenberg, 1997). The more associations we have for a brand (i.e. strength of attributes), the greater the chance of recall from memory. As such, brand retrieval is found to be a stimuli-based yet probabilistic process. Brand information is stored using a network of attributes, and in aggregate, the network cues and purchase weights of a population are heterogeneous – a typical characteristic of any brands' customer base (Stocchi *et al.,* 2015). Thus, brand associations (i.e. mental market share) are a reflection of sales, and smaller brands simply have fewer people who buy them (Hoek *et al.,* 2000; Romaniuk & Wright, 2009; Sharp, 2010; Romaniuk, 2013A; Romaniuk & Nenycz-Thiel, 2013).

Altogether, the variability of the attitude-behaviour link makes such a combined approach of determining future purchases rather inaccurate. In addition, early on Jacoby and Chestnut (1978) state that attitudes may be affected by numerous other variables making the prediction of behaviour appear *as-if-random*. And *because* of the conceptual nature of the abstract (i.e. the broad definition of loyalty), no fixed *"empirical referent"* could serve as a meaning (Sharp *et al.,* 1999, p. 2). Yet the activity of measuring loyal behaviour becomes more standardised if a benchmark of *normal* is available. One solution is to measure the outcomes of consumer actions – their behavioural loyalty towards (small) brands (Bass, 1974). In fact, period-to-period buying is found to be reliably described by past behaviour alone (Sharp *et al.,* 2002) by using behavioural metrics. They are, as discussed above, easy to collect which allows the use of large samples to develop generalizable results – a key aim of the current study. The following section discusses frequently used behavioural measures of loyalty on the extent to which they allow (small) brands to be analysed inclusively to determine whether small brands compete (and perhaps grow) differently than larger ones.

### 2.2.3. Useful loyalty measures in small brand research: A discussion

As outlined above, Mellens *et al.* (1996) classified frequently-used approaches after their focus on either the brand or the individual (the buyer) (see Table 5). On the brand-level, loyalty may be examined using brand switching, repeat buying proportions or market share; on the individual level, measures such as purchase proportions (e.g. share of category requirements), sequence of purchase or first-brand loyalty are commonly used. Important to understand is while many (marketers) attempt to determine how to influence certain consumers (i.e. segment buyers) most cost-effectively, the outcomes also reflect into comparative (small) brand performance measures and aggregated market data.

***Table 5: Categories of brand loyalty measures***

| | Attitudinal | Behavioural |
|---|---|---|
| Brand-oriented | **A1:** stated purchase intentions/ preference measures<br>**A2:** commitment measures. | **C1:** measures based on aggregated data.<br>**C1a:** measures based on aggregated switching matrices.<br>**C1b:** measures based on market share.<br>**C2:** measures based on individual-level data. |
| Individual-oriented | **B1:** measures on product category level.<br>**B2:** general measures. | **D1:** proportion-of-purchase measures.<br>**D2:** sequence-of-purchase measures. |

Source: Mellens *et al.* (1996)

As discussed above, behavioural measures of loyalty seem most appropriate for the aim of the current study. In general, behavioural measures often rely on scanner or consumer panel data most effectively analysed by stochastic modelling. This gives insights on brand choice and purchase incidence (Massy *et al.,* 1970, p. xi). Many stochastic models mathematically describe market structures as an approximation of the mechanics of choice (Lilien, 1974; Givon & Horsky, 1985; Lilien *et al.,* 1992; McCabe *et al.,* 2013; Eryigit, 2017). Learning (e.g. which brands satisfy customers' needs 'good' enough) has already occurred; that is, choice reflects attitudes.

Often utilised are Markos processes They imply that sequential purchases are statistically dependent, and allow the determination of what customers did (and did not) purchase on prior shopping trips[7]. But their usefulness and flexibility is limited due to their underlying assumed population homogeneity and emerging learning effects. And while learning models

[7] First-order Markov models assume the next purchase to be dependent on the last. In higher-order processes, choice depends on the *n* last purchases, yet such models are rarely operationalised (Ehrenberg, 1965).

may effectively describe competition in two-brand markets, their analytical complexity is unattractive in multi-brand situations (Bass, 1974; Lilien *et al.,* 1992) such as the current research. Also, population homogeneity implies each individual has the same conditional probability – a rather theoretical deduction and in need of empirical support (Ehrenberg, 1965, 1988).

This is in contrast to studies that treat brand choice as Poisson distribution, and in fact, many frameworks that model multi-brand buying stochastically are built on assumptions of market share stationarity and zero-order choice (e.g. Bass *et al.,* 1976; Goodhardt *et al.,* 1984). For example, Ehrenberg (1959) illustrated that purchases are closely described in a Poisson-Gamma Negative Binomial Distribution (NBD); that is, household-level purchases are Poisson (*as-if-random*), and their parameters distributed Gamma across the population. Purchase incidences are therefore statistically independent (zero-order) (Massy *et al.,* 1970; Lilien *et al.,* 1993). Ehrenberg's research was, however, limited to the stock-keeping units (SKUs) of one brand at a single point of time. Later, Ehrenberg and Goodhardt (1970) discovered that the viewing of TV Channel 1 (buying of one brand) is independent from viewing TV Channel 2 (buying of another brand) but depends on the latter's rating (penetration). That is, the buyers of one brand (watchers of one channel) spend less time buying (watching) this specific brand (channel) than on acquiring other brands (watching other TV channels), implying brands are substitutable and markets non-partitioned. This Duplication of Purchase (representing a Dirichlet Multinomial Distribution (DMD)) and the described zero-order buying incidence (Negative Binomial Distribution (NBD)) were later combined into one parsimonious model: the NBD-Dirichlet or either NBD or Dirichlet in short (Goodhardt *et al.*, 1984). Since (loyal) buyer behaviour is a central part of marketing thought, there is a need to understand how this behaviour affects (small) brand performance and competitive market structures. By using aggregate consumer behaviour that comprises zero-order purchases, the NBD-Dirichlet permits to analyse brand switching and loyalty. The model acknowledges that individuals do not purchase randomly, but have in fact their own steady propensities for buying different brands (Sharp *et al.,* 1999). In aggregate, consumer data can then be interpolated as if the process is considered 'as-if-random' (Ehrenberg, 1972; Bass, 1974; Sharp *et al.,* 2012). Allowing for this heterogeneity (for when individual transactions do not follow an identical transition) when analysing unknown and vastly dissimilar product categories, remedies the drawbacks of assumed homogeneity (Bass *et al.,* 1976). Assuming fixed transaction transition rates (homogeneity) implies future purchases depend on the past when, in fact, such a dependence may not exist (Givon & Horsky, 1985; Ehrenberg, 1965, 1988; Uncles *et al.,* 1995). Heterogeneity helps to

evaluate the 'how did we do' compared to last year, while the Dirichlet's stationary condition gives insights to the 'how can we do' (Ehrenberg *et al.,* 2000; Sharp *et al.,* 2012).

By combining purchase incidence and brand choice parsimoniously, the NBD-Dirichlet has been found to describe the competitive responses to brands that are many times the size of each other across categories and time making it a useful diagnostic tool to examine the growth potential of small brands relative to their competitors. But despite its long history of replication-extension, the model has hardly been used in a small brand context (further discussed in *Chapter 3*). The subsequent sections introduce the Dirichlet, its performance measures, predictive accuracy and stochastic assumptions with the aim to highlight its usefulness for determining how small brands grow.

## 2.3. The NBD-Dirichlet & regularities in brand buying

The NBD does not explain *why* consumers favour some brands over others (Wright *et al.,* 2002), but reliably describes and predicts *that* they do (Goodhardt *et al.,* 1984; Keng *et al.,* 1998). The model's produced BPMs aid this by revealing the norms of competition in typical multi-brand and non-segmented markets in any given period (Uncles *et al.,* 1995).

### 2.3.1. Dirichlet performance measures & its predictive accuracy

The Dirichlet describes a wide array of typical BPMs simultaneously for competing brands regardless their size including penetration, purchase frequency and the proportions of light and heavy buyers (Bound, 2009). They can be classified into metrics of size, loyalty and switching (Ehrenberg *et al.,* 2004).

Table 6 (overleaf) presents the typical BPMs for the top ten *Male Deodorants*. The brands are ordered after market share (column two) – the proportional sales of a brand from the total category sales (Li *et al.,* 2009) – a commonly used measure of brand size (Equation 1).

***Equation 1: Brand market share***

$$Market\ share\ (\%) = \frac{total\ sales\ of\ the\ brand}{total\ sales\ of\ the\ category}$$

Another size related metric is penetration ($b$, column three, Equation 2) (Ehrenberg, 2001; Ehrenberg *et al.,* 2004), representing the proportion of households that buy the brand at least once in a set period of time (Bass *et al.,* 1976; Kahn *et al.,* 1988).

***Table 6: Comparison of O & T annual buying measures (Male Deodorant)***

| Brand range | Market share (%) | Penetration (b) % | | Purchase per buyer (w) | | Buyers purchasing Once | | Buyers purchasing 5+ | | Category buying Purchase | | Category buying SCR (%) | | 100% loyals Penetration | | 100% loyals Av. purchase | | Switching (annual)* % who also bought (selection) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | O | **T** | O | **T** | O | **T** | O | **T** | O | **T** | O | **T** | O | **T** | O | **T** | Lynx | Adidas | Sanex |
| Total | 100 | 51 | | 4.4 | | | | | | | | | | | | | | | | |
| Lynx | 28 | 19 | 23 | 3.2 | 2.7 | 53 | 47 | 13 | 15 | 6 | 6 | 57 | 47 | 42 | 32 | 3.3 | 2.1 | 100 | 14 | 4 |
| Rightguard | 14 | 12 | 13 | 2.5 | 2.4 | 56 | 53 | 8 | 12 | 6 | 6 | 41 | 39 | 25 | 25 | 2.5 | 1.9 | 27 | 21 | 7 |
| Sure | 13 | 12 | 12 | 2.4 | 2.4 | 58 | 53 | 9 | 12 | 6 | 6 | 40 | 39 | 29 | 25 | 2.6 | 1.9 | 28 | 16 | 7 |
| Adidas | 7 | 7 | 7 | 2.0 | 2.2 | 71 | 56 | 5 | 10 | 7 | 6 | 29 | 35 | 18 | 23 | 2.0 | 1.8 | 36 | 100 | 7 |
| Gillette | 5 | 6 | 5 | 1.8 | 2.2 | 70 | 57 | 4 | 10 | 6 | 6 | 30 | 35 | 24 | 22 | 2.0 | 1.7 | 30 | 20 | 7 |
| Tesco | 4 | 4 | 4 | 2.4 | 2.2 | 63 | 57 | 9 | 10 | 7 | 6 | 35 | 34 | 23 | 22 | 2.4 | 1.7 | 28 | 21 | 8 |
| Nivea | 4 | 5 | 4 | 1.6 | 2.2 | 76 | 57 | 3 | 10 | 6 | 6 | 26 | 34 | 23 | 21 | 1.6 | 1.7 | 28 | 17 | 11 |
| Sanex | 2 | 3 | 2 | 1.7 | 2.1 | 75 | 58 | 4 | 9 | 7 | 6 | 25 | 33 | 20 | 21 | 1.8 | 1.7 | 25 | 18 | 100 |
| Asda Essential Care | 2 | 2 | 2 | 2.0 | 2.1 | 69 | 58 | 6 | 9 | 8 | 6 | 27 | 33 | 15 | 21 | 1.9 | 1.7 | 30 | 18 | 6 |
| Vaseline | 2 | 2 | 2 | 1.6 | 2.1 | 76 | 58 | 3 | 9 | 6 | 6 | 25 | 33 | 21 | 21 | 1.8 | 1.7 | 24 | 18 | 16 |
| Other brands | 21 | 19 | 18 | 2.4 | 2.5 | 59 | 50 | 8 | 13 | 5 | 6 | 44 | 43 | 34 | 28 | 2.2 | 2.0 | 30 | 15 | 6 |
| Average | 9 | 8 | 8 | 2.2 | 2.3 | 66 | 55 | 7 | 11 | 6 | 6 | 34 | 37 | 25 | 24 | 2.2 | 1.8 | 29 | 18 | 8 |
| MAD | | 1 | | 0.3 | | 11 | | 4 | | 0.4 | | 5 | | 3 | | 0.4 | | | | |
| Correlation | | 0.99 | | 0.88 | | 0.86 | | 0.81 | | 0.66 | | 0.97 | | 0.94 | | 0.85 | | | | |

t = 1 year; *Male Deodorant* (N = 10 individually listed brands)
* Market share order.

Source: Kantar WorldPanel
(rounded figures)

***Equation 2: Brand penetration (b)***

$$b\ (\%) = \frac{n\ of\ HHs\ buying\ the\ brand\ at\ least\ once\ in\ t}{total\ n\ of\ HHs\ in\ the\ population}$$

How often a brand is bought, its purchase frequency (column four, *w*, Equation 3), is a behavioural expression of loyalty (Kahn *et al.,* 1988). Households that buy a specific brand repeatedly are 'deemed' to be loyal to said brand.

***Equation 3: Brand purchase frequency (w)***

$$w = \frac{total\ purchases\ of\ the\ brand}{total\ households\ buying\ that\ brand}$$

Together, penetration and purchase frequency determine brand sales (Equation 4); that is, brand size (market share) is a function of how many people buy it (Equation 2), how often (Equation 3) (Uncles & Ellis, 1989; Singh *et al.,* 2000; McDonald & Ehrenberg, 2003).

***Equation 4: Sales equation***

$$Sales = b\ X\ w$$

Managers might be interested in the proportions of heavy buyers, the customers most loyal to the brand. Yet, fundamental to all customer bases is that the repeat buying distributions comprise many more infrequent and few heavier buyers (Romaniuk, 2013B, 2015; Scriven *et al.,* 2017). Column five of Table 6 reveals the proportions of light[8] (Equation 5) and heavy[9] (Equation 6) buyers that represent another two loyalty metrics (e.g. Ehrenberg *et al.,* 2004).

***Equation 5: Proportion buying once***

$$(\%) = \frac{total\ number\ buying\ X\ once\ in\ the\ period}{total\ buyers\ of\ X\ in\ the\ period}$$

***Equation 6: Proportion buying 5+ times***

$$(\%) = \frac{total\ number\ buying\ X\ 5 + times\ in\ the\ period}{total\ buyers\ of\ X\ in\ the\ period}$$

*"Many people consistently buy more than one brand over time"* (Ehrenberg & Goodhardt, 1970, p. 78) without changing their choice patterns. They habitually choose from the few suitable options in their repertoires (Ehrenberg, 1988; Uncles & Ellis, 1989; Dowling &

[8] Buying once in a set period.
[9] Buying five times or more in a set period.

Uncles, 1997; Sharp & Driesener, 2000). Column six in Table 6 reveals that on average buyers purchased six deodorants in a year; about one-third of the purchases are dedicated to any one brand. The proportion of purchases households devote to a brand is referred to as share of wallet or SCR[10] (Equation 7); another loyalty metric (Bhattacharya *et al.,* 1996).

***Equation 7: Share of category requirements (SCR)***

$$SCR = \frac{Number\ of\ purchases\ of\ a\ brand}{Total\ category\ purchases\ by\ buyers\ of\ that\ brand}$$

The split-loyal nature of markets does not imply that loyalty does not exist. Nor does it mean there are no buyers who prefer only one brand over all others. There are simply fewer such sole buyers (column seven) as traditional marketing thinking has us believe (Ehrenberg *et al.,* 1990, 2004; Uncles *et al.,* 1995). They typically buy that brand as often as the average buyer purchases the category (2.2 times in Table 6) – so they cannot be heavy brand buyers. Instead, they are light category buyers, purchasing so infrequently that chances of disloyalty are low (Dowling & Uncles, 1997; Ehrenberg *et al.,* 2004).

The last column of Table 6 shows a switching matrix[11] for three of the deodorants. Most switching in split-loyal markets is not permanent, happens for many reasons, and yet the Dirichlet predicts its outcomes closely. Switching, also called purchase duplication or the extent to which buyers are shared between competing brands, demonstrates that the purchases of any one brand are independent of buying another, but moderated by brand size (Ehrenberg & Goodhardt, 1970; Bass *et al.,* 1976; Bogomolova & Romaniuk, 2009; Sharp *et al.,* 2012). That is, brands share more of their customers with their larger and less with their smaller rivals.

***Equation 8: Duplication of Purchase***

$$b_{y/x}/x = Db_y$$

The (observed) purchase records of how customers buy *Male Deodorant* brands are shown in the *O* columns of Table 6. One of the many things the Dirichlet stands out for is its ability to predict BPMs (see *T* values) for brands of any given size (Keng *et al.,* 1998; Romaniuk, 2013B). Dirichlet-based benchmarking therefore helps to understand what is possible and what would be *"bucking the empirical odds"* (Jarvis & Goodman, 2005, p. 293). The fit

[10] Share of category requirements.
[11] Brands are ordered after market share. Typical duplication matrices follow a penetration order since switching proportions depend much more on how many people buy the brand (Ehrenberg & Goodhardt, 1970).

between *O* and *T* metrics tends to be close and Table 6 demonstrates that the model's predictive accuracy is within a maximum of two points for the majority of the size-related metrics; the Mean Absolute Deviations (MAD) are generally small, and correlations high (Fader & Schmittlein, 1993; Ehrenberg, 1994; Keng *et al.,* 1998; Ehrenberg & Sharp, 2000; Ehrenberg *et al.,* 2004; Bound, 2009: Driesener *et al.,* 2017Singh *et al.,* 2000).

Where the fit is less close, for example, $r = 0.66$ for category buying, this might be due to a decreased variability across the category despite the close prediction of the overall category buying (Scriven & Bound, 2004). In addition, the high correlations between the loyalty figures demonstrate that metrics such as purchase per buyer or SCR measure the same phenomenon (e.g. Ehrenberg & Sharp, 2000; Scriven & Bound, 2004). The implication is that buying of *Male Deodorants* appears to be normal – at least within the presented twelve-month period. Similar patterns have been frequently reported across various industries, markets and points and length of time (e.g. Uncles *et al.,* 1995; Ehrenberg *et al.,* 2004).

Lastly, Table 6 also illustrates some well-known Dirichlet deviations e.g. the shortfall in heavy buyers (Ehrenberg, 1988; Uncles *et al.,* 1995) and the under-prediction of sole-buying rates. Light buyers are also under-predicted, as the greater MAD figure reflects.

### 2.3.2. The Dirichlet's stochastic assumptions

The NBD-Dirichlet combines the distributions of purchase incidence (NBD) and brand choice (DMD) thereby describing competition under market near-stationarity and non-segmentation conditions (Goodhardt *et al.,* 1984). The current study acknowledges the model's five assumptions, respecting it as one of marketing's true scientific generalisations (Uncles *et al.,* 1995). Its output on market structure for any given period of time is based on five assumptions about how buyers buy (Goodhardt *et al.,* 1984; Ehrenberg, 1994; Uncles *et al.,* 1995; Bassi, 2011). The first two relate to brand choice showing what is bought (BC); another two are concerned with the when and how much of the purchase incidence (PI); assumption five describes the BC-PI relationship.

The following sections discuss these assumptions, their interrelationships and the model's usefulness for determining brand performance in general and that of small brands in particular.

## Assumptions on brand choice (BC)

BC I: On successive occasions, individual households choose brands habitually from a set of options each has in their mind; that is, households buy irregularly but with a stationary frequency summing up to 1.0 (Ehrenberg, 1988). The probabilities of choosing any one brand over time are fixed. Yet choice is deemed independent across occasions and modelled with a Multinomial Distribution inferring a zero-order mode (Goodhardt *et al.,* 1984). Empirical evidence supports the fixed probabilities, as over time brands tend to have stable shares despite switching occurring across successive occasions (e.g. Bass & Pilon, 1980; Dekimpe & Hanssens, 1995A).

BC II: The probability at which brands are chosen varies amongst the population (of households) as expressed by the Multivariate Beta Distribution (the Dirichlet). Brand choice is assumed independent; the mathematical expression of a market's non-segmentation. A violation would occur if choices were not between close substitutes resulting in sub-markets with asymmetrically spread probabilities (Ehrenberg, 1988; Sharp & Driesener, 2000). Yet, even functionally different options (e.g. powder, liquid and capsule detergents) are found to perform close to the Dirichlet norms (Ehrenberg & Goodhardt, 2002).

Altogether, brand choices across households follow a Dirichlet distribution with a mixture of multivariates (DMD). That is, the underlying market has a non-segmentation condition where a category's brands are seen as close substitutes (Ehrenberg, 1988). This means brands compete on the number of customers which goes against the loyalty-boosting strategies smaller brands are often suggested to take up.

## Assumptions on purchase incidence (PI)

PI I: Incidences of successive purchases are assumed to be independent (zero-order) from buying history with a constant mean inter-purchase interval. That is, the irregular spread of purchases is distributed Poisson across the full length of the investigated period (Goodhardt *et al.,* 1984).

PI II: Average purchase rates of individual households are near-steady yet vary greatly amongst them. In theory, each household has its own individual purchase rate, independent of both other households and the total purchases made. In aggregate, the result is population heterogeneity that follows a Gamma distribution (Ehrenberg, 1988).

Altogether, households' category purchases follow Negative Binomial Distributions (NBD) where brands are chosen in a no-trend (as-if-random) stationary manner (Ehrenberg *et al.,* 1990, 2004; Uncles *et al.,* 1995). As such, both over and under-preference of specific (small) brands, the claimed results of *managing* consumer behaviour, are empirically not accommodated.

### The relationship of brand choice (BC) & purchase incidence (PI)

BC+PI: The fifth assumption aggregates the considerations on brand choice and purchase incidence and assumes both are independently distributed across the population (Ehrenberg *et al.,* 2004). Hence, any one brand achieves the same market share amongst both its more and less frequent category buyers. This goes against widespread belief. Attracting a disproportionate number of heavy category buyers to drive sales, profitability and market share (see Ambler, 1995; Keller & Lehman, 2003) is empirically unlikely.

## 2.3.3. Benchmarking activities using the NBD-Dirichlet

The NBD-Dirichlet is a standardised model to systematically determine the performance of brands relative to their competitors. In other words, the Dirichlet describes competition from the viewpoint of any brand in the market. This supports the current research in its aim to develop empirical findings that are of parsimony, scope, usefulness, precision and theory-based – the building blocks of empirical generalisations (cf. Barwise, 1995).

With only four input measures (category-level and brand-level purchase frequency and penetration), just one model is needed to simultaneously analyse many aspects of buying (Bass *et al.,* 1976; Bass & Pilon, 1980). Many of these aspects have been developed into law-like and simple patterns that are much *"the same for different brands and products and different marketing conditions"* (Ehrenberg, 1988, p. 17). And many of the patterns have been confirmed across various CPG categories (Ehrenberg *et al.,* 1990), geographical areas,

repertoire and subscription markets (Ehrenberg *et al.,* 2004; Sharp *et al.,* 2012), length of time (Graham, 2009; Pare & Dawes, 2011) and contexts such as forestry products (Michael & Smith, 1999), television viewing (Barwise & Ehrenberg, 1987), radio listening (McDowell & Dick, 2005), political polls (Ehrenberg, 1991), FMCGs (e.g. Ehrenberg, 1988), consumer memory (Stocchi *et al.,* 2015) or the mental market share of brands (Romaniuk, 2013A).

The empirical description of competition between big and small brands is found to depend on buyer numbers but less on their levels of loyalty. In other words, brand size is what it is *because* consumers perceive available alternatives as mostly substitutable yet are differently aware of them (Goodhardt *et al.,* 1984; Ehrenberg, 2000; Bassi, 2011). Buyers choose brands habitually from the suitable options in their repertoires (Uncles & Ellis, 1989; Dowling & Uncles, 1997; Sharp & Driesener, 2000), which in aggregate results in near-steady purchase propensities for the population as a whole (Uncles *et al.,* 1995). Thus, brand buying tends to follow regular patterns *despite* customer base heterogeneity (Sharp, 2010) offering *"reliable prediction, insight and explanation"* of competitive market structures (McCabe *et al.,* 2013, p. 296).

The condition of non-segmentation allows the identification of partitions or clusters for when a group of brands competes differently amongst itself. It further permits the evaluation of competition in more dynamic situations such as price promotions, sales trends, the introduction of new brands (Ehrenberg, 1988; Keng *et al.,* 1998; Ehrenberg & Goodhardt, 2002; Ehrenberg *et al.,* 2004; Uncles & Kwok, 2008) or situations that comprise feedback or variety-seeking (Sharp & Driesener, 2000). By providing performance estimates for any given brand size (Keng *et al.,* 1998; Romaniuk *et al.,* 2014), the Dirichlet does not predict dynamics; instead, the *"static equilibrium"* (Bass & Pilon, 1980, p. 486) of choice gives insights to the changes in the underlying consumer behaviour that account for the dynamic. By demonstrating how the composition of sales increased (or decreased), managers may understand cause and effect (Ehrenberg & Sharp, 2000) thereby demonstrating both the scope of and the limits to competitive activities (Wright & Sharp, 2001; Sharp, 2010).

The Dirichlet does not aim for statistical significance, but to accommodate patterns approximately across *MSoD* (Uncles *et al.,* 1995). And because of its overall close fit (Uncles & Ellis, 1989), the benchmarks show how brand choice works in the *absence* of market factors, marketing variables and their execution (Ehrenberg, 1969A, 1988; Sharp & Sharp, 1997; Sharp *et al.,* 2000, 2012; Ehrenberg *et al.,* 2004; Driesener *et al.,* 2017). As such, the

Dirichlet is highly useful for the current study because it permits a standardised and inclusive approach to analyse (small) brand performance and deviations from its provided benchmarks (Uncles *et al.,* 1995; Sharp & Driesener, 2000; Ehrenberg *et al.,* 2004).

Interestingly, the aforementioned outcomes of loyal behaviour do not seem to be limited to or triggered by brand size but are claimed to result in growth (e.g. Steenkamp & Dekimpe, 1997). But brands overly preferred by some may be of any size, even if the idea is often connected with a small brand (Sharp, 2010). On the other hand, when pursuing an under-preference behaviour (as in brands appealing on special occasions only), Kahn *et al.* (1988, p. 384) declared such a strategy can *"capture only a limited share of the market"*. All this leaves open as to what the actual relationship between high loyal behaviour and brand size is. Managers of smaller brands need to know whether loyalty strategies respect or even accommodate brand size, and whether such business approaches are at all desirable. This implies we know what a small brand is – in relative terms.

Acknowledging that competition is between big *and* small brands, the definition of one without considering the other loses the comparator to the category and lacks face validity. The current research aimed to develop a general benchmark to describe small brand's relative position. A simple description of the emerging patterns is hence adequate for the here applied inductive empirical-generalisationist approach.

## 2.4. When is a brand *'small'*?

Despite the fact that smaller entities make up the numerical majority of any market (Woo & Cooper, 1982; McGregor, 2005), there is little agreement on what defines a small brand (Prinz, 1988) to then determine whether it competes differently. As a start, it implies that we know what is large. A widely applicable and consistent definition of small brands helps to analyse and interpret their performance in a competitive perspective. A standardised definition is also essential if findings are to be comparable between the current and future replication-extension studies.

The following sections review key definitions and approaches taken up in literature to discuss their extent of agreement on a unified perspective on what is a small brand.

### 2.4.1. Entrepreneurial definitions of brand size

Entrepreneurship literature mainly draws on payroll and balance sheets (European Commission, 2017) – data types the current research did not use. The former helps to classify businesses into micro, small, medium and large (Rhodes, 2017), yet can hardly be a valuable determinant of success.

Balance sheets allow the evaluation of how the business is doing compared to adjacent periods, but the significance of revenues differs across categories which might mislead interpretations and distorts generalisability of the outcomes (Prinz, 1988). Payroll and balance sheets are therefore not appropriate data formats to determine the relative performance of (small) brands.

### 2.4.2. Industry structure: Generalists vs. specialists

Literature on the evolution of industry structure reveals rather arbitrary definitions on the sizes of market players. Henderson (1976) proposed that markets are stable (in equilibrium) when its three major brands (the generalists) follow a 4:2:1 share ratio while Kotler (1977) suggested the shares of the top three brands to be close to 40%, 30% and 20% respectively. All others (fringe competitors) are presumably small since they jointly occupy the remaining 10% of the market.

Building on Henderson, Sheth and Sisodia (2002) published their rule of three. They too divided the market into generalists (leaders) and specialists (fringe players); the former volume-driven, serving the mass market thereby achieving a share minimum of 10% each with a cumulative size of well above 50% for most markets. Specialists on the other side, are margin-oriented, do not exceed a share of 5% and are said to offer differentiated products that appeal to more narrow segments. Uslay *et al.* (2010) confirmed this by reporting the rule of three fits most of their 160 observed industries, and further described an increased 'death' rate of generalists with increased market maturity (Carroll (1985) in Uslay *et al.,* 2010). The dying of big brands (generalists) is, however, empirically not confirmed (Sharp *et al.,* 2017A).

The studies agree that market share describes the interdependence of competitors (also Khantimirov, 2017). With a ceiling of 100% share is an indicator of (relative) performance. Brand shares, in descending order by size follow a highly skewed distribution: a few bigger and very many smaller players compete for customers regardless if markets, industries or

more narrowly defined categories are investigated (Donham, 1957; Simon & Bonini, 1958; Henderson, 1976; Caves & Porter, 1978; Uslay *et al.,* 2010; Buendía & Reynoso, 2013).

The studies further agree on the number of large brands: there are three in any one market. Anything beyond that is, however, largely ignored and summarised as "all the rest" or "fringe". It is also unclear what to do with the brands that have share points between the proposed five (small) and ten (large) percent. While Henderson's 4:2:1 share distribution structure might occur, it is not clear at what scope it generalises across product classes that differ in purchasing style and level of fragmentation. Furthermore, dividing the market into generalists and specialists directs the debate towards mass versus target marketing, and thus implies we know a firm's strategy: for example, all smaller brands are then specialists (targeting). But Rhoades (1985) suggested the positive share-power correlation through *"inherent product differentiation"* (p. 343) is *"only available to* […] *leaders"* (p. 350) which is in contrast to the aforementioned generalist-specialist propositions.

Altogether, the approaches leave open many questions that would hinder achieving the aim of the current research to produce generalizable results across varying *MSoD* and time.

### 2.4.3. Approaches in choice behaviour studies

Prominent choice behaviour studies covering the last 30 and more years, using hundreds of datasets across various industries and lengths of time, agree with the general skewedness of share distributions made up of few bigger and many smaller brands. Two more things are evident: first, most academic and practitioner attention is on the few category-leading brands (e.g. Ehrenberg & Goodhardt, 1970; Fader & Schmittlein, 1993; East & Hammond, 1996; Kennedy *et al.,* 2000; Scriven & Bound, 2004; Habel *et al.,* 2005B). The size differences between those at the top are usually more significant (Kohli & Sah, 2006) and rank changes therefore due to major events or interventions. Further down the curve the *"absolute and relative size differential* […] *is observed to decline rapidly"*. Rank changes for smaller, more closely matched competitors tend to be based on chance and are thus considered as less meaningful (Heggestad & Rhoades, 1976, p. 446; Sheth & Sisodia, 2002; Uslay *et al.,* 2010).

Second, studies that included more than a category's *"ten or so leading brands"* (Kennedy *et al.,* 2000, p. 1), or even focussed on smaller-share labels do not agree on a threshold to divide large and small (Kahn *et al.,* 1988; Bhattacharya, 1997). Fader and Schmittlein (1993) and Jarvis *et al.* (2003) arbitrarily (and inconsistently) defined a category's top one and two as

big; Scriven and Bound (2004) only the leading brand. Pare and Dawes (2011) set more detailed requirements: the category leader is always considered large; the second brand only when it is 1.25 times bigger than its immediate follower. In categories where the top three achieve very similar penetration figures, all of them are considered large. Pare and Dawes attempted to avoid defining a brand as large when it is just slightly bigger than its immediate follower. But the more complex process results in differing numbers for large and small labels across categories. The calculations are also done separately for each dataset, all of which reduces generalisability and comparability of the developed findings, and all these studies fail to determine whether the rest (of the category) is then to be considered small.

Lastly, with a focus on smaller labels, Pare *et al.* (2006, p. 4) considered *"brands other than the top two* […] *to be* [of] *medium or low share"* which offers a clearer proposition of what is a big brand. But it remains unknown as to where the line between medium and low is.

### 2.4.4. Approaches in economic literature: Rank-share distributions

Brand share and rank are monotonically linked (Kohli & Sah, 2004, 2006). Rank-size distributions permit systematic descriptions of the relative competitive relationship (in terms of share or rank) between brands. Often used are, for example, the power law (Buendía, 2012; Buendía & Reynoso, 2013), two of its specialist cases being Zipf plots (e.g. Riemer *et al.,* 2002; Nota & Song, 2012) and the other describing Pareto style curves (e.g. Yuji & Simon, 1964), log-normal or semi-logarithmic slopes (e.g. Henderson, 1976; Buzzel, 1981; Uslay *et al.,* 2010) or a combination of these (see Simon & Bonini, 1958). The general difference is that some describe fixed relative ratios between successive brands whilst others describe descending relative ratios.

In the class of distributions that consider the ratios between successive brands as constant, exponential and semi-logarithmic plots (mathematically equal to the former) are frequently used (Lilien *et al.,* 1992; Kohli & Sah, 2006). Buzzel (1981), for example, reported a constant 0.6 as typical share[12] ratio of the neighbouring four major businesses. An important contribution also highlighting the large brand focus. It is not clear whether the rest of the market is to be considered small, let alone what their ratios might look like.

[12] Buzzel (1981) calculated share from dollars and not from units sold, as the current research does.

Studies that report descending share ratios often utilise the power law to define relative size. The power law itself describes a wider class of distributions; Pareto and Zipf being two. The law is derived from Hill (1974) who based brand choice assumptions on a Dirichlet Multinomial Paradigm, typically used in cases when the relationship of neighbouring brands is unknown (Lilien *et al.,* 1992; Kohli & Sah, 2004, 2006). A Pareto curve implies that (the top) 20% of a category's brands occupy a combined 80% of the market; the bottom 80% then divide the remaining 20% amongst them. Using such an 80/20 Pareto rule, Huynh (2017) analysed the matching law of demand between big and small brands in four product categories derived from the purchases of 10,000 individuals. The results, however, showed vastly different numbers for large and small brands per category: he reported, for example, seven large and nineteen small brands of Baked Beans, while 62 large Biscuit labels compete with 248 small ones. By the time Huynh arrived at the bottom 80%, the Biscuit brands were down to a 0.16% volume share, which offers some indication as to what is small (or big) but results in different brand numbers per grouping per category limiting the generalisability of findings.

Zipf plots, as another special form of the power law, collapse into the rank size rule if the power is assumed 1.0 (Nota & Song, 2012). Riemer *et al.,* (2002) applied Zipf's law to over 70 different industries to report a good-enough fit; that is, the biggest competitor in an industry is double the size of the second and three times the third and so on, giving fixed yet decreasing size ratios for successive brands. Most research considers a category at a time. Kohli and Sah (2004, 2006) were the first to apply the law across various cross-sectional datasets. They investigated 1,171 brands in 91 categories with varying characteristics and demand style. The authors compared the fit of both exponential curves and the power law and found share distributions to be best represented by the latter. Despite covering the 120 weeks to May 1995, Kohli and Sah did not infer on share changes or the long-term persistence of the rank-size ratio pattern. The law might therefore not ultimately account for when new brands enter the market – incidences that are expected to impact the share distribution inasmuch that purchase probabilities and share points are re-distributed over a larger number of rivals (Johnson, 1984). Equal impacts are expected for when brands withdraw from the market. Both cases are not of prior interest for the current study that investigates continuously listed brands only, yet a re-distribution of shares might result in changed rank-size ratios from one period to the next. It is further reported that many power law studies are not able to conclusively rule out other distributions (cf. Chung & Cox, 1994; Ademic & Huberman, 2000). And in fact, the primary objective of the discussed studies has

been to identify which plot type offers the best fit for the underlying data (deductive) (e.g. Buzzel, 1981; Kohli & Sah, 2006) going against the inductive nature of this study.

To conclude, the power law resulted in the most promising findings. What makes the *idea* behind the power law so interesting is that the ratios between successive brands decrease the further down one progresses in the ranks. *Idea* meaning here that Kohli and Sah (2006) clearly followed a theory-first approach of fitting the slope *onto* the data. Nonetheless, this offers potential to evaluate whether relative ratios are meaningful to systematically identify where to draw the line between large and small and whether ratios remain stable over time and hence result in predictable relative gaps between brands.

## 2.5. Summary

Small brands are often found to be a fraction of the size of their larger rivals (see f.e. Ehrenberg, 1988; Scriven *et al.,* 2017). Yet while the majority of brands in a market are smaller, it is somewhat surprising that they have been ignored up to the point that there is neither a unified definition of the term *small* nor much agreement on how to analyse them.

The key to small brand survival (and growth) is knowledge on how consumer behaviour defines competitive market structures. This task is complicated by competitive effects, delayed responses and the usage of complex often hard to compare metrics (Lilien, 1992). Yet surprisingly *"even in a field supposed to be dominated by people's impulses to buy* […] *there are striking regularities"* on buyer behaviour (Ehrenberg, 1993A, p. 385). Marketing science comprises a body of knowledge that analyses, describes and predicts much of this behaviour for competing brands inclusively and parsimoniously in one framework – the NBD-Dirichlet (Sharp *et al.,* 1999). And while the model time and time again provided reliable results for brands that vary many-fold in size, it has hardly ever been used in that matter. Few studies focus on much more than large brands (Fader & Schmittlein, 1993; Pare & Dawes, 2011) or private labels (Uncles & Ellis, 1989). But before attempting to understand how to manage (maintain or even grow) a small brand, we need to be clear on what small (or large) is (see Prinz, 1988). So far attempts to divide rival brands by size (as small or large) have not resulted in quantifiable outcomes.

Kohli and Sah's (2004, 2006) power law-based rank-size study puts each brand into its relative competitive position, but the relationship may take various shapes across categories. The authors suggest this to be a reason for the disagreement on what

mathematical function best describes competitive market structures (i.e. exponential, logarithmic or else). Yet if a similar pattern would occur, the relative divide between competitors might, in fact, be predictable. By seeking a new empirical generalisation despite share ratios of successive brands being unknown, the current study utilised Kohli and Sah's (2004, 2006) *idea* behind the power law approach. This research is different in that it applied an inductive method to capture patterns emerging *from* data (data-first) independent of brand size. In doing so, the first exploratory steps taken towards empirically quantifying the nature of the relative competitive relationship between any two successive rivals are reported. This is the basis to identify a reliable performance divide between smaller and larger brands. The aim is to arrive at a unified definition of the term *small*. The result represents a valuable benchmark for managers and academics that may be used to systematically determine how (differently) the buyers of small brands behave. Therefore, the first research objective was:

**To systematically define and describe the relative competitive performance of small brands.**

After having identified the usefulness of the NBD-Dirichlet to analyse, describe and predict the performance of (small) brands, the following chapter discusses several of its law-like buying regularities frequently reported for large brands. Evidence on how the regularities are different for small brands are of particular interest. Further evaluated is the extent to which often suggested loyalty-based management strategies define brand size or market structure. In other words, the purpose of the following chapter is to examine whether there is empirical proof that small brands' success comes about differently than by using mass market-oriented strategies.

# Chapter 3: Regularities & deviations in small brand buying

*The NBD-Dirichlet reliably describes many aspects of buying and provides estimated values for typical BPMs. This allows standardised and systematic benchmarking of observed purchases against what would (in theory) be expected to happen. This chapter reviews the extent to which the buying regularities often-described for category leaders are applicable for smaller brands. The focus is on deviations from the Dirichlet norm – the expected results of niching and change-of-pace strategies. It is aimed to provide an understanding of how consumer behaviour empirically describes competitive market structures and the performance of small brands.*

……

## 3.1. Introduction

While some authors emphasised higher loyalty (in effect a niche performance) as key to small brand success (e.g. Kahn *et al.,* 1988), others find limited support for this claim (e.g. Pare *et al.,* 2006). The Dirichlet has been found to reliably describe and predict numerous regularities in buyer behaviour, and many of these aspects have been developed into law-like patterns that are much *"the same for different brands"* (Ehrenberg, 1988, p. 17). It seems astonishing for one framework to capture performance measures across brands regardless of their size, and its parsimony makes the existence of marginal discrepancies not come as a surprise. But every so often brands go significantly beyond the widely used ±10% range around the Dirichlet norm (e.g. Kahn *et al.,* 1988; Bhattacharya, 1997; Scriven & Bound, 2004; Pare *et al.,* 2006; Pare & Dawes, 2007; Scriven *et al.,* 2017).

It is suggested that Dirichlet users know about the extent to which deviations might be encountered. After all, it allows interpretations of unusual aspects of buying. But much attention is on a category's top three to ten brands (e.g. Ehrenberg & Goodhardt, 1970; Fader & Schmittlein, 1993; East & Hammond, 1996; Kennedy *et al.,* 2000; Jarvis *et al.,* 2004; Scriven & Bound, 2004; Habel *et al.,* 2005B) – the supposedly successful ones in a market (Prinz, 1988; East *et al.,* 2008). And even when deviations are studied, there is a focus on excess loyalty (when a brand's purchase frequency rate exceeds the Dirichlet expected value by +10% or more).

As discussed in *Chapter 2*, increased loyalty is supposed to be beneficial (e.g. Krishnamurthi & Raj, 1991), thus justifying research attention and resource commitment (Jarvis & Goodman, 2005). If, however, such a segmented customer base (as would be the result of loyalty-boosting strategies) are the norm for small brands, the Dirichlet assumption on

zero-order buying is violated (e.g. Goodhardt *et al.,* 1994). As such, there is still much to learn about how small brands compete and what role loyalty plays in there. Thus, the second research objective was:

**To describe the regularities in the incidence, scale and nature of loyalty deviations from the Dirichlet norm of small brands in a period such as a year.**

Some Dirichlet deviations are found to recur but most studies covered periods of just one (cf. Kahn *et al.,* 1988) to up to two years (cf. Pare *et al.,* 2006). Time series, however, provide context to long term marketing decisions and play a vital role in Dirichlet theory building. To investigate how long-term brand performance mechanics described by the Dirichlet are governed by the assumption of Double Jeopardy, the third objective of this research aimed to analyse small brand performance by using time series:

**To determine the persistence of small brand's loyalty deviations from the Dirichlet norm over five consecutive years.**

This chapter starts with introducing the several Dirichlet-described buying patterns from the viewpoint of small brands to determine their expected empirical behaviour. This aims to reveal what their nature of competition would empirically look like. This is followed by a discussion on marketing expectations traditionally linked to small brands on the background of acknowledged Dirichlet deviations.

## 3.2. The buying of small brands

*Chapter 2* indicated a brand's performance may only be improved at the expense of competitors: the performance metrics closely correlate, they decline together, and they are largely a function of size (Uncles *et al.,* 1995). In other words, market share is closely predicted by the proportion of people buying a brand. Both brand share and penetration are therefore *"worth trying to make decisions about"* (Ehrenberg, 2001, p. 36). Loyalty, on the other hand, evidently does not vary much between competitors (cf. Ehrenberg *et al.,*

1990; Ehrenberg & Sharp, 2000; Ehrenberg & Goodhardt, 2002), and is thus anything but brand specific (Ehrenberg, 1988; Uncles *et al.,* 1995; Uncles & Wright, 2004). That is, the above introduced loyalty metrics are "*not in fact decision variables"* but givens, not varying by yet another marketing action (Ehrenberg, 2001, p. 36). This is not to say that loyalty is not important. Double Jeopardy states that larger brands are bought by more people, slightly more often, and when looking back at the sales equation (Equation 4), under equilibrium conditions similar sales might be achieved with varying combinations of *b* and *w*. Loyalty is therefore a defining factor for penetration (e.g. East & Hammond, 1996).

Table 7 (overleaf) summarises the key Dirichlet patterns of buying to demonstrate their (different) meaning for small brands as opposed to their larger rivals. The buying regularities for the big brands are listed in column two; that for brands with a smaller share in column three. Starting with Double Jeopardy, which is a statistical selection effect that occurs when buyers choose between substitutable options. It arises *because* customers are asymmetrically aware of and exposed to the different brands in a market (McPhee, 1963; Ehrenberg, 1972; Uncles *et al.,* 1995; Michael & Smith, 1999; Ehrenberg & Goodhardt, 2002; Romaniuk, 2013B). This demonstrates that most brands are in fact undifferentiated in customer's minds[13]: sales levels differ *because* of variations in flavour, price, pack size, formulation and distribution strategies (Ehrenberg *et al.,* 1990). The law of Double Jeopardy describes loyalty as a by-product of brand size inasmuch that smaller brands do not only have fewer buyers (first jeopardy), they also buy them less often (second jeopardy), hence the suffer twice proposition (e.g. Ehrenberg, 1969A, 1972, 1988; Goodhardt et al., 1984; Uncles et al., 1995; Michael & Smith, 1999; Sharp et al., 2000, 2012; Habel et al., 2005A, B; McDowell & Dick, 2005).

The penetration-loyalty link is also illustrated by the Double Jeopardy constant (see Equation 9). Since the size of the customer base (b) plays a bigger role when determining market share as opposed to how loyal those buyers are (Hall & Stamp, 2003), 1-b represents the proportion of non-buyers (Kahn et al., 1988). Equated to a constant (w0), the proportion of non-buyers increases with decreasing loyalty (Graham et al., 2017A) making the penetration-loyalty link mathematically predictable. More tellingly, small brands have bigger proportions of category buyers who do not buy them.

[13] Of course, it might be assumed that smaller brands may not be able to match all products in competitor's lines (see Bhat & Fox, 1996; Sharp & Riebe, 2005), hence might in fact be different inasmuch that their offer is limited. As such, they could be considered not 'close enough' substitute, making them less competitive. A thought further developed in *Chapter 5*.

### *Table 7: Buying regularities for large and small brands*

Regularities from brand to brand

| Regularities & BPMs | Application to brand size (compared with what) | |
|---|---|---|
| Market Share | High in share. | Low in share. |
| Double Jeopardy | Higher penetration with slightly higher purchase frequency. | Lower penetration with slightly lower purchase frequency (suffer twice). |
| $w_0 = w_x(1 - b_x)$ | Higher no. of buyers; lower no. of non-buyers. | Lower no. of buyers; higher no. of non-buyers. |
| Duplication of Purchase | Accumulate higher numbers of switching customers. Small brands share more customers with larger | Accumulate lower numbers of switching customers. Larger brands share less customers with smaller |
| Natural Monopoly | Monopolise the lighter category buyers. | Are bought by those who buy the category more often. Tend to be boght less by lighter category buyers. |
| Share of Category Requirements | More category purchases devoted to large brands. | Less category purchases devoted to smaller brands. |
| Light Buyers (buying once) | Greatest proportion of the customer base buy once, yet reversed Double Jeopardy: lower proportion of those buying once compared to small | Greatest proportion of the customer base buy once, yet reversed Double Jeopardy: greater proportion of those buying once compared to large |
| Heavy Buyers (buying 5+ times) | Greater proportion of heavy buyers compared to small brands. | Lower proportion of heavy buyers compared to large brands. |
| Sole Buyers | Higher proportions of sole buyers; their category buying rates are also | Lower proportions of sole buyers; their category buying rates are also |

Adapted after Ehrenberg *et al.* (2004)

### *Equation 9: Double Jeopardy constant*

$$w_0 = w_x(1 - b_x) = w_y(1 - b_y)$$

Choices are made from a repertoire of brands[14], *not* constituting all the available options in a market (Uncles & Ellis, 1989; Bound & Ehrenberg, 1997; Jarvis *et al.,* 2006; Banelis *et al.,* 2013). Choice is hereby described as habitual (Ehrenberg, 1988); that is, learning has occurred long ago (Bass *et al.,* 1984; Ehrenberg & Uncles, 2000). As loyalty between competing options does not vary much, switching or purchase duplications ($b_{x/y}$) heavily depend on brand penetration ($b$). In other words, brands share many more buyers with

[14] On any purchase occasion, buyers choose from a portfolio of brands in mind which is a much smaller number than often expected: Sampson (1994), for example, reported that UK radio listeners switch on average between two options. Australian beer drinkers have a maximum of three alternatives (Dawes, 2008). And the numbers are similar for FMCGs, also varying little across categories (Banelis *et al.,* 2013).

larger rivals simply because smaller brands accumulate a lower proportion of switchers (Uncles *et al.,* 1995; Ehrenberg *et al.,* 2004; Scriven & Danenberg, 2010).

Larger brands also tend to monopolise more of the lighter category buyers, with these buying less of the smaller brands – a phenomenon referred to as Natural Monopoly (McPhee, 1963; Romaniuk & Wright, 2009). In addition, smaller brands make up lower proportions of category purchases, as represented by their lower SCRs. Small brands have slightly higher proportions of lighter and lower proportions of heavier buyers (Dowling & Uncles, 1997) leading to their greater sales-dependence on the former (Goodhardt *et al.,* 1984; Ehrenberg *et al.,* 1990). The small brands' sole buyers patterns show that their market penetrations follow a Double Jeopardy effect while the reverse is reported for the category purchases of these buyers (Ehrenberg, 1988; Ehrenberg *et al.,* 2004; Jarvis & Goodman, 2005). In other words, the more often a household buys a category, the higher is the chance that they purchase smaller brands due to increased purchase incidences. The proportions of sole buyers also evolve inversely over time as buyers have more opportunities to shop around (Uncles & Ellis, 1989; Ehrenberg, 1969A, 1988; Uncles *et al.,* 1995; Dawes *et al.,* 2015).

To sum up, from an empirical viewpoint, competition for small brands reveals itself in that they (1) have a lower market share, (2) are bought by fewer people, (3) at lower rates and they (4) have greater proportions of people not buying them. Smaller brands also (5) compete more (share more buyers) with their larger competitors as with their smaller rivals, and (6) tend to be bought by those with higher category purchase rates, even though (7) less of these category purchases are devoted to small brands. Lastly, (8) the customer bases of smaller brands are made up of many more lighter buyers, (9) much lower heavy buyers and (10) even lower sole buyer proportions as compared to their larger rivals.

Knowing how the Dirichlet-described buying regularities reveal themselves for small brands helps to understand competition from their viewpoint. It also provides the context for when brands deviate from the norm as in, for example, succeeding to drive higher than expected repeat purchase rates as niche marketing strategies propose.

## 3.3. Dirichlet deviations & small brands

The Dirichlet provides both useful and well-established performance benchmarks to quantify deviations (Ehrenberg, 1988; Jarvis *et al.,* 2003). Given how many different product formulations, branding and advertising strategies are out there, most discrepancies (benchmarking *O* against *T* values) are *"small and irregular"*[15] (Bound, 2009, p. 5). A ±10% range around the estimated values is considered reasonable (e.g. Bhattacharya, 1997; Scriven & Bound, 2004; Pare *et al.,* 2006; Pare & Dawes, 2007, 2011; Scriven *et al.,* 2017). A brand outside the benchmark is referred to as deviation (e.g. Kahn *et al.,* 1988) and is by definition a case where one or another assumption underlying the Dirichlet is breached (Goodhardt *et al.,* 1984).

Extensive replication-extension efforts have documented a number of frequently occurring deviations. Some enjoy more research attention and are better known (e.g. excess loyalty for high share brands) than others (e.g. deviations for small brands). Marketing scientists are especially interested in recurring deviations: if they replicate across datasets and/or time, they help build relevant theory that may develop into empirical generalisations to aid managerial insight (Scriven *et al.,* 2017).

Dirichlet deviations are broadly classified into systematic and more isolated cases with varying importance for the smaller brand. The former indicates that the performance metrics of *all* competitors tend to be affected *systematically*. *Isolated* cases, affecting the metrics for individual or groups of brands, show that within the penetration-loyalty relationship described by Double Jeopardy, the observed values are *"at variance with Dirichlet predictions for brands of that size"* (Scriven *et al.,* 2017, p. 296). But they rarely disrupt the performance stability of brands, and are also far from universal (Habel *et al.,* 2005B; Jarvis & Goodman, 2005; Pare & Dawes, 2007).

The following sections first outline several systematic deviations to set the context of what is to be expected for a typical brand (of any size but especially the smaller ones) in a typical category, before moving to the cases of frequently acknowledged isolated deviations. The aim is to provide a critical insight into the most common deviations for small brands. By evaluating their scope and level of recurrence, contributions to a better understanding of choice behaviour in the context of small brands can be made.

[15] Usually within a percentage point or two (Sharp & Driesener, 2000).

### 3.3.1. Systematic deviations

Slight systematic discrepancies in the expected metrics across all brands become evident at the aggregate level of brand buying and might occur due to a failure in the Dirichlet's stationarity assumption (Scriven *et al.,* 2017). Four of such (systematic) discrepancies have been frequently documented.

The first two cases are: the model is known to under-predict both the annual repeat purchase rate (by about one or two purchases) and penetration of sole-loyals. The reasons are not fully understood as the Dirichlet strictly assumes that no one can be 100% loyal. Scriven and Bound (2004, p. 3) argued that already *"a small number of such people could produce this"* effect without much impact on other buying metrics. Their repeat purchase probabilities are so low, they seem to not buy any other brand. The issue has attracted only some attention, as the sales contribution of sole buyers is limited due to their low proportions and tendencies to buy the category very infrequently (Ehrenberg, 1988; Uncles *et al.,* 1995; Ehrenberg *et al.,* 2004). In other words, when comparing observed and theoretical values for these two metrics, small brands should not instantly assume they excelled at sole buyer retention. In addition, over time, as more purchase incidences afford more chances of multi-brand buying, small brands should expect the proportions of sole buyers to decrease.

The other two systematic discrepancies are even lesser known: the over-prediction of period-to-period buying (Ehrenberg *et al.,* 2004) and the so called 'leaky bucket' (Ehrenberg, 1988). The former has led some authors to apply a Poisson-Log-Normal instead of the NBD, resulting in a much steeper curve (e.g. Li *et al.,* 2009; Trinh *et al.,* 2014). But the process is somewhat rarely used as the estimations are built on simulations (greater statistical effort) while the NBD distributions are estimated from the model's parameters.

The 'leaky bucket' demonstrates the erosion of repeat purchase loyalty, especially when observing two non-adjacent periods. Across periods, lost buyers are usually replaced by others (who had not bought in the last period or for a longer while or ever). The general category buying stationarity despite the typical split-loyal nature of purchasing reflects this regression to the mean (Ehrenberg *et al.,* 2004; Romaniuk & Wight, 2015). The 'leaky bucket' or law of buyer moderation shows that customer churn is normal (Ehrenberg, 1988; Dowling & Uncles, 1997) emphasising the hazards of buyer segmentation (Graham *et al.,* 2017A, B). East and Hammond (1996) also reported a Double Jeopardy effect in erosion: small brands have higher erosions, but purchase weight had no effect on erosion. In other

words, heavy buyers also erode and are not necessarily a guarantor for future sales. This is especially interesting for small brands and their often given advice to follow loyalty-based strategies that by definition target highly loyal customers.

However, the context of most systematic Dirichlet deviations is not always entirely clear, and their occurrence seldom curtails the application and practical usefulness of the Dirichlet itself. Deviations should, nonetheless, be documented to provide context for any variations caused by marketing interventions, and to better understand situations for when the model's underlying assumptions are breached (Ehrenberg *et al.,* 1990, 2004).

### 3.3.2. Isolated deviations

Double Jeopardy may be graphically illustrated using penetration (*b*; x-axis) and purchase frequency (*w*; y-axis) as can be seen in Figure 1 (below). Other metrics frequently utilised to visualise Double Jeopardy are, for example, market share and repeat purchase probability (Dowling & Uncles, 1997), *r* (repeat rate) and market share (Jarvis *et al.,* 2003), average spend per consumer (Dawes *et al.,* 2017) or voters' opinions on knowing the politician ('Known') and whether they are assets to their party (Kooyman & Wright, 2017). The analytical procedure is similar and patterns easy to spot. But quantitative details are better communicated via tables (Ehrenberg, 1982). Thus, the current research expresses Double Jeopardy not as a graph but in a percentage fashion (in tables) which has rich tradition (e.g. Ehrenberg, 1969B, 1988; Kahn *et al.,* 1988; Scriven & Bound, 2004; Pare *et al.,* 2006; Pare & Dawes, 2007, 2011). Graphs are useful for illustrating simple results – or in case of Figure 1 – to visualise key terms used in penetration-loyalty analyses. Typical of most repertoire markets[16] is the low y-axis intercept reflecting the split-loyal nature of buying. Subscription markets naturally have lower levels of switching and thus higher y-axis intercepts. The low (high) intercepts are said to relate to there being many (few) brands in the customers' brand repertoires (Allsopp & Jarvis, 2003).

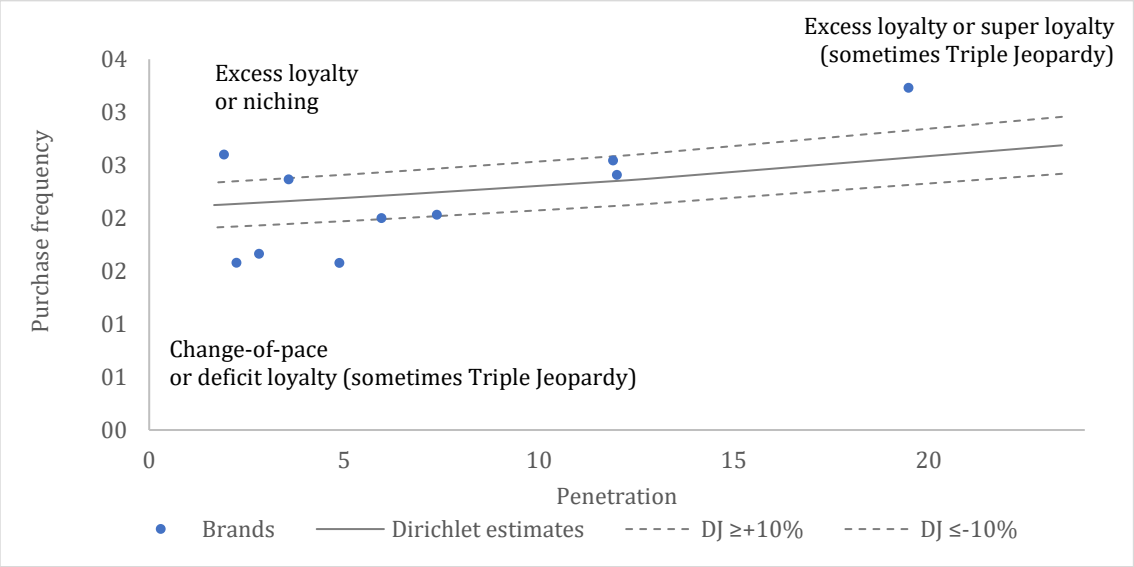
Since Double Jeopardy says bigger brands have more buyers, who buy some a little more often, the graph is a positive, upwards sloping curvilinear (Habel *et al.,* 2005B; Cohen *et al.,* 2012; Sharp *et al.,* 2012). Smaller brands would be located more to the left of Figure 1; larger brands on the right. The theoretical line (solid grey) that visualises the Dirichlet estimated reach-loyalty figures, is relatively flat. If extending the plot to accommodate category

[16] As were used in this research.

penetration and loyalty as equivalent to a brand with 100% share, the plot will curve upwards at the top, not to be mistaken for excess loyalty (Habel *et al.,* 2005B).

***Figure 1: Double Jeopardy curve with ±10% deviation boundaries example category***

(adapted from Dowling & Uncles, 1997)




Around the Double Jeopardy line, the dotted grey lines portray the ±10%-benchmark of normal performance. Since the Dirichlet's introduction in 1984, several deviations within the penetration-loyalty relationship of Double Jeopardy have been regularly acknowledged. For example: Ehrenberg *et al.* (1990) found UK doctors excessively prescribed one specific heart drug over others when given an incentive (a PC). Barwise and Ehrenberg (1988) reported US Hispanic and religious TV channels *sometimes* enjoyed higher than expected viewing rates, Singh *et al.* (2000) found some SKUs of US fabric conditioners are more preferred while others showed loyalty deficits, and Kooyman and Wright (2017) confirmed that some politicians may be widely known but are not as well regarded.

By definition, a loyalty deficit (under-performance) is a situation when a brand reveals ≤-10% (e.g. Kahn *et al.,* 1988; Pare *et al.,* 2006) repeat purchase rates below its Dirichlet estimates for its corresponding (and consequently higher than expected) penetration. That is, the brand is bought by many more but so infrequently that its loyalty is atypically low for a brand of that size (Scriven & Bound, 2004; Li *et al.,* 2009). These brands would be located below the bottom dotted line in Figure 1, and studies differ in terminology used to address these cases as is discussed later in this chapter.

Cases where brands show ≥+10% repeat purchase rates above Double Jeopardy expectations demonstrate so called excess loyalty (over-performance). The brands typically have a lower than estimated reach; that is, they are bought very often but by fewer people than expected for a brand of this size. These brands would be located above the upper dotted line; and again, studies differ in their used terminology, which is discussed later.

Both deviations may indicate breaches either on the Dirichlet's non-partitioning condition of the market or its assumption of independence in brand choice. As such, the Dirichlet theory implies that variations in either direction (over or under-performance) are not commonplace (Morrison & Silva-Risso, 1995) and should occur at equally low frequencies (Ehrenberg, 1988). In fact, each would be an individual sub-market competing differently from the rest (Fader & Schmittlein, 1993; Jarvis *et al.,* 2003).

Year-long replication-extension effort shows that some deviations do in fact recur. Acknowledging that the Dirichlet reliably describes and predicts the buying of brands that are many times the size of each other, it might be expected that deviations also occur for small brands. But empirical evidence is scarce as most attention is on large brands. So to set the context of what deviations might be expected for small brands, the following section briefly introduces what has been so far reported for their larger rivals. The few but important empirical findings on deviations for small brands are discussed thereafter.

#### 3.3.2.1. Excess loyalty of high share brands

The occurrence of excess loyalty for high share brands enjoys much attention in choice behaviour research (e.g. Fader & Schmittlein, 1993; Scriven & Bound, 2004; Pare & Dawes, 2011). In theory, a loyalty surplus compared to rivals (the desired outcome of loyalty-oriented strategies) aims to increase customer retention (Reichheld & Sasser, 1990) and would come about through selling to the same people more often than would be the norm (Sharp & Sharp, 1997). That is, these large brands behave like even bigger ones (see Figure 1) also referred to as premium loyalty (Fader & Schmittlein, 1993), Triple Jeopardy[17] (Habel *et al.,* 2005B; Sharp & Riebe, 2005; Jung *et al.,* 2010), reinforcing (Ehrenberg *et al.,* 1990; Jarvis & Goodman, 2005), partitioning (Jarvis *et al.,* 2006) or super loyalty (Dowling & Uncles, 1997).

[17] A term further discussed in *Section 3.3.2.4.*

### *Table 8: Studies on deviations of high-share brands*

| Authors | Incidence | Data & markets | Time frame | Large brand definition | Term used |
|---|---|---|---|---|---|
| **Excess loyalty** | | | | | |
| Fader & Schmittlein (1993) | 68 - 79% (19/31 out of 67) | 67 categories; FMCG; US & Japan | 1 year (Japan: 1990; US: 1989) | Top 2 | Excess |
| Bhattacharya (1997) | 26%* (95 out of 372) | 34 categories; 372 brands FMCG; 27 markets | 1 year (1988) | N/A | Niche |
| Danaher *et al.* (2003) | 68%** (12 out of 19) | 19 cat.; 128 brands (online); 96 brands (offline); FMCG; NZ | 1 year (1997 - 1998) | N/A | Excess |
| Jarvis *et al.* (2003) | 6% (2 out of 33) | 2 categories; 33 brands Wine; Australia | 1 year (1999/2000) | N/A | Reinforcing |
| Scriven & Bound (2004) | 40% (8 out of 20) | 20 categories; 334 brands FMCG; UK | 1 year (1999 - 2001) | Leader | Excess |
| Habel *et al.* (2005B) | 90% | 2 superbrands; Antidepressant prescriptions | 2 snapshots (1989 - 1998) | N/A | Triple Jeopardy /excess |
| Pare *et al.* (2006) | 67% persistent (4 out of 6)*** | 4 categories; 60 brands FMCG; UK | 2 years (2004 - 2005) | Top 2 | Excess |
| Pare & Dawes (2007) | 42% persistent (5 out of 12) | 6 categories; 95 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Excess |
| Pare (2008) | 42% persistent (10 out of 24) | 12 categories; 193 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Excess |
| Jung *et al.* (2010) | 86% (361 out of 422) | 422 categories; 5126 brands FMCG; US | 1 year (2000) | N/A | Triple Jeopardy /excess |
| Pare & Dawes (2011) | 38% persistent (12 out of 32) | 20 categories; 300 brands FMCG; UK | 3 years (2002 - 2004; 2005 - 2007; 2008 - 2010) | Large: top 1 or 2 & 1.25 times larger than imm. follower. | Excess |
| **Deficit loyalty** | | | | | |
| Fader & Schmittlein (1993) | 21 - 32% (8/9 out of 67) | 67 categories; FMCG; US & Japan | 1 year (Japan: 1990; US: 1989) | Top 2 | Significantly lower performance |
| Scriven & Bound (2004) | 10% (2 out of 20) | 20 categories; 334 brands FMCG; UK | 1 year (1999 - 2001) | Top 1 | Deficit |
| Jung *et al.* (2010) | 14% (61 out of 422) | 422 categories; 5126 brands FMCG; US | 1 year (2000) | N/A | Significantly lower performance |
| Pare & Dawes (2011) | 6% persistent | 20 categories; 300 brands FMCG; UK | 3 years (2002 - 2004; 2005 - 2007; 2008 - 2010) | Large: top 1 or 2 & 1.25 times larger than imm. follower. | Deficit |

* Bhattacharya (1997) stated many of the brands were market leaders yet did not further specify numbers.

** This figure is derived only from the online data used by Danaher *et al.* (2003).

*** Pare *et al.* (2006) have not further detailed the nature of their 50% of brands persistently deviating, yet they revealed the data of three out of their four used categories.

The upper part of Table 8 reveals that excess loyalty for high share brands occurs, but the pattern is far from universal. While, Fader and Schmittlein (1993) and Jung *et al.* (2010) reported incidences for an average of seven to eight in ten brands, Jarvis *et al.* (2003), Sharp and Sharp (1997) and Scriven and Bound (2004) identified the pattern respectively for only about 6%, 30% and 40% of the cases. Others confirmed similarly low occurrence rates:

Bhattacharya (1997) found that some of the 26% of brands with excess loyalty were in fact high-share – without further specifying how many might have been smaller brands.

In an exploratory study to test the Dirichlet assumptions in more dynamic situations (with e.g. purchase feedback), Sharp and Driesener (2000) reported several of the higher share (restaurant) locations were frequented above expectations. And this loyalty over-performance, if occurring at all, is found to persist: by combining[18] several antidepressant labels into two 'superbrands' (each with about 50% share), Habel *et al.* (2005B) confirmed the persistence of excess loyalty in 90% of the times; Pare *et al.* (2006)[19] found two-thirds of their high-share brands with persistent excess loyalty over two years; Pare and Dawes (2007, 2011) and Pare (2008) confirmed this for about 40% of the analysed big brands over three years. It seems that excess loyalty for large brands is either persistent or non-existent (Pare & Dawes, 2011) limiting insights into the causal relationship of high-share-high-loyalty (Scriven *et al.,* 2017).

The lower part of Table 8 (and to the lower-right side of Figure 1) reveals that there are leaders with loyalty deficits: by analysing the top and bottom two brands in 24 categories, Li *et al.* (2009) provided evidence of deficit loyalty for some of the high share brands. Jung *et al.* (2010) found one, and Fader and Schmittlein (1993) mentioned eight (Japan) and nine (US) product classes with negative coefficients on share. Others (e.g. Scriven & Bound, 2004; Pare & Dawes, 2011) confirmed the general if rare occurrence of the pattern, and again others *"certainly found no leaders with a deficit of loyalty"* (Pare & Dawes, 2007, p. 1721). Interestingly, when referring to a *"high share* [together with a] *lower than expected loyalty"*, McCabe *et al.* (2012, p. 5) use the term change-of-pace. While Kahn *et al.* (1988) acknowledge that a deficit in loyalty may only be (over time) financially bearable for larger brands as the effect needs a wider reach as compensation yet state that change-of-pace *"will only capture a limited share of the market"* (p. 384).

Despite a lack of agreement in frequency, excess loyalty for high share brands occurs and often persists. It is unclear, however, whether loyalty deficits are in fact rare or simply not mentioned as marketing is also about success stories (Prinz, 1988). And the success of small brands is often measured against their ability to attract customers, with retention regarded as financially more efficient if marketing has to be done on a shoestring. It might, therefore,

[18] Such a combination of brands is often done to shorten category lists to few (typically three to ten) individual labels and one (maximal two) 'all others' superbrand(s), in aggregate still representing the total competitive set of the market (Ehrenberg, 2000).
[19] Although their study was mainly small brand focussed.

be expected to see many more small brands with excess than deficit repeat purchase rates. The subsequent section discusses the evidence on Dirichlet deviations for small brands.

### 3.3.2.2. Loyalty deviations of small brands

### How frequent; how persistent?

Few studies explicitly analyse loyalty deviations for brands that capture a smaller market share (Table 9). Among the first were Kahn *et al.* (1988) who examined 18 brands in four FMCG categories over a one-year period. They found five brands that over-performed their loyalty estimates while another five under-performed and termed them niche and change-of-pace respectively (as seen in the upper and lower left-hand parts of Figure 1). Both deviations from 'normal' repeat purchase rates can be identified when comparing their performance *"to an average brand in the product class"* (Kahn *et al.,* 1988, p. 385) – a term not further explained by the authors. The study implies the focus is on small brands, as both niche and change-of-pace can, by definition, only result in a lower share; either in being bought by some or sometimes. However, Kahn's analysed brands ranged in share from 3-18% without explicitly specifying what is small. The authors did also not investigate the persistence of the loyalty deviations or their impact on brand share.

***Table 9: Studies on small brand performance deviations***

| Authors | Incidence | Data & markets | Time frame | Small brand definition | Term used |
|---|---|---|---|---|---|
| **Excess loyalty** | | | | | |
| Kahn *et al.* (1988) | 28% (5 out of 18) | 4 categories; 18 brands FMCG | 1 year (1981 - 1982) | N/A | Niche |
| Pare *et al.* (2006) | 14% persistent (3 out of 22)** | 4 categories; 60 brands FMCG; UK | 2 years (2004 - 2005) | Other than top 2 | Excess |
| **Deficit loyalty** | | | | | |
| Kahn *et al.* (1988) | 28% (5 out of 18) | 4 categories; 18 brands FMCG | 1 year (1981 - 1982) | N/A | Change-of-pace |
| Pare *et al.* (2006) | 55% persistent (12 out of 22)** | 4 categories; 60 brands FMCG; UK | 2 years (2004 - 2005) | Other than top 2 | Deficit |
| **General loyalty deviations** | | | | | |
| Pare *et al.* (2006) | 51% persistent (out of 52) | 4 categories; 60 brands FMCG; UK | 2 years (2004 - 2005) | Other than top 2 | Excess/deficit |

** Pare *et al.* (2006) do not further detail the nature of their 50% of brands persistently deviating, yet they demonstrate the data of three out of their four used categories.

By focussing on over time buying of small and medium brands in four CPG categories, Pare *et al.* (2006) noted persistent deviations for more than half of the brands over two years. The authors did not exclude store labels and (arbitrarily) declared the top two as large. Yet there is no information as to where to draw the line between medium and small. In addition, Pare *et al.* did not specify the nature of the deviations (excess or deficit). From their provided data (three of the four categories) the proportions of deviating lower share manufacturer brands were calculated. Unexpectedly, only one in ten exhibited excess loyalty. Just over 50% had a deficit in any one year, and 46% under-performed persistently in both years. This suggests that higher than expected loyalty rates are not in fact the norm for smaller brands. The impact on market share (change) over time was not analysed.

Others confirmed the general pattern of smaller labels *"away rather than toward, a niche position"* (Fader & Schmittlein, 1993, p. 479). Table 10 (below) lists selected studies for when clearer percentages were provided[20]. Clearly the phenomenon of deficit loyalty for small brands is anything but rare: early on, Fader and Schmittlein (1993, p. 491) analysed the top four to eight brands in 67 FMCG categories to report that *"small brands* […] *have the distinct tendency to* […] *low penetration with particularly low purchase frequency"*.

Bhattacharya (1997) reported loyalty deficits for just over one third of their smaller brands. Testing the Dirichlet assumptions in purchase feedback situations, Sharp and Driesener (2000) found that some of the smaller share (food) outlets were visited much less often than expected. Jarvis *et al.* (2003) highlighted four deviations concerning smaller red and white Australian wine brands, and three of them with lower than expected repeat purchase rates. Jarvis *et al.* (2004) later confirmed deficit loyalty for one (the '31-50' group) of their four Australian wine groups and Singh *et al.* (2008) support the findings by identifying that some small-share brands suffered from lower than expected loyalty. By analysing the top and bottom two brands in 24 categories, Li *et al.* (2009) found the majority of the latter under-performed, and Pare (2008) and Pare and Dawes (2007, 2011) identified the phenomenon for several smaller brands over three consecutive years, thereby confirming the finding of Pare et al. (2006) on the persistence of loyalty deficits.

It seems that, apart from Jarvis *et al.* (2004)[21] who proposed markets that comprise more than just the top three to ten brands would tend towards niche performance, choice

[20] Please note small brands were not the focus of these studies.
[21] Three ('top 10', '11-30', '31-50' and '51+) of Jarvis *et al.'s* (2004) four share tiers of Australian red wine over-perform their loyalty estimates.

behaviour studies find that small brands rarely have excess loyalty (e.g. Fader & Schmittlein, 1993; Jarvis & Goodman, 2005; Singh *et al.,* 2008). Tables 9 and 10 revealed a loyalty surplus occurs only in about 4% and 26% of the cases (Kahn *et al.,* 1988, Bhattacharya, 1997; Jarvis *et al.,* 2003), and most studies listed in Table 10 did not exhaustingly clarify whether the over-performance was exhibited by either small or large labels.

***Table 10: Selected studies mentioning loyalty deviations of small brands***

| Authors | Incidence | Data & markets | Time frame | Small brand definition | Term used |
|---|---|---|---|---|---|
| **Excess loyalty** | | | | | |
| Bhattacharya (1997) | 26%* (95 out of 372) | 34 categories; 372 brands FMCG; 27 markets | 1 year (1988) | N/A | Niche |
| Jarvis *et al.* (2003) | 6% (2 out of 33) | 2 categories; 33 brands Wine; Australia | 1 year (1999/2000) | Other than top 2 | Niche |
| Pare (2008) | 4% persistent (4 out of 101) | 12 categories; 193 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Excess |
| Pare & Dawes (2011) | 7% persistent (10 out of 152) | 20 categories; 300 brands FMCG; UK | 3 years (2002 - 2004; 2005 - 2007; 2008 - 2010) | Large: top 1 or 2 & 1.25 times larger than imm. follower. | Excess |
| **Deficit loyalty** | | | | | |
| Bhattacharya (1997) | 33% (121 out of 372) | 34 categories; 372 brands FMCG; 27 markets | 1 year (1988) | N/A | Change-of-pace |
| Jarvis *et al.* (2003) | 10% (3 out of 33) | 2 categories; 33 brands Wine; Australia | 1 year (1999/2000) | Other than top 2 | Change-of-pace |
| Pare (2008) | 32% persistent (32 out of 101) | 12 categories; 193 brands FMCG; UK | 3 years (2003 - 2005) | N/A | Deficit |
| Pare & Dawes (2011) | 8% persistent | 20 categories; 300 brands FMCG; UK | 3 years (2002 - 2004; 2005 - 2007; 2008 - 2010) | Large: top 1 or 2 & 1.25 times larger than imm. follower. | Deficit |
| **General loyalty deviations** | | | | | |
| Pare & Dawes (2007) | 55% persistent (22 out of 40) | 6 categories; 95 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Excess/deficit |

* Bhattacharya (1997) stated that many of the brands were market leaders yet did not further specify numbers.

## Acknowledged terms for deviations

Figure 1 (*Chapter 3.3.2.*) and the last columns of above Tables 9 and 10 gave an insight to the different terms used when referring to small brands that deviate from their Dirichlet estimates. While several authors persistently used excess or deficit to describe a surplus or a lack of loyalty respectively (e.g. Sharp & Driesener, 2000; Pare *et al.,* 2006; Pare, 2008; Dawes *et al.,* 2017), Kahn *et al.* (1988) coined change-of-pace and variety-seeking to describe brands that aim to be appealing on certain purchase occasions and hence are

bought very infrequently. Others utilised the same terms (see Fader & Schmittlein, 1993; Bhattacharya, 1997; Dowling & Uncles, 1997; Jarvis *et al.,* 2003, 2006; Jarvis & Goodman, 2005) while for McCabe *et al.* (2012, p. 5) change-of-pace relates to brands with *"high share* [and] *lower than expected loyalty"*, and Kahn *et al.* (1988) and Jarvis and Goodman (2005) emphasised the financial unsuitability for a loyalty deficit for small brands. It is also stated that most small brands with a change-of-pace performance may be in a transient position as they evolve (Dowling & Uncles, 1997; Jarvis & Goodman, 2005). But empirical evidence for this statement is scarce. Lastly, few authors describe low share brands with deficit loyalty as Triple Jeopardy (Bhat & Fox, 1996) as is further detailed in *Section 3.3.2.4*.

Smaller brands with exceptionally higher loyalty are often referred to as niche or excess loyalty brands (Kahn *et al.,* 1988; Fader & Schmittlein, 1993; Ehrenberg *et al.,* 1990; Dowling & Uncles, 1997; Sharp & Driesner, 2000; Jarvis *et al.,* 2003, 2006; Jarvis & Goodman, 2005). A niching strategy aims to appeal to the heavy purchasers of a brand (e.g. Kotler, 2003). The thought behind a more loyal customer base is, however, mostly found to be just that: wishful thinking (Ehrenberg, 1988; McDowell & Dick, 2005; Sharp, 2010).

It should be noted that the current chapter aimed to give an empirical view on competition between brands and provides relevant terminology frequently used in prior research. By definition, niche and change-of-pace are not accommodated by the Dirichlet inasmuch that being highly valued by some (niche) or sometimes (change-of-pace) rather links to a brand's strategy. The parsimonious inputs to the model do not include such information, nor are they necessary as the Dirichlet aims to describe buying in the absence of marketing factors inherent to brands. Those ideas are, however, further picked up in *Chapter 5.*

Isolated variances in the loyalty-penetration relationship are also frequently acknowledged for store brands. They are an important aspect of (small brand) competition particularly in the UK, where every second product sold in FMCGs is a store brand (Marketline, 2014). The store-owned labels dominate the shopping basket, with more than two-thirds of customers buying them (Mintel, 2018). Retailers leverage their own labels as a strategic weapon to maintain power in distribution channels and to remain in control of shelf-space. Thus, private labels should be part of considerations in strategic marketing and brand portfolio management (Juhl *et al.,* 2006; Dawes & Nenycz-Thiel, 2013). Their frequently acknowledged deviations are briefly introduced in the following section.

### 3.3.2.3. Excess loyalty of private labels

The main difference between manufacturer and store labels is availability; the latter can only be purchased at their respective retailer. Differences may also lie in price and advertising: private labels rarely drive out-of-store advertising contributing to a disproportional exposure of the audience to commercials for manufacturer brands which could result in limited brand associations building up for store labels.

***Table 11: Studies on deviations of store brands***

| Authors | Incidence | Data & markets | Time frame | Large brand definition | Term used |
|---|---|---|---|---|---|
| **Excess loyalty** | | | | | |
| Pare *et al.* (2006) | 55% persistent (6 out of 11)* | 4 categories; 60 brands FMCG; UK | 2 years (2004 - 2005) | Top 2 | Excess |
| Pare & Dawes (2007) | 82% persistent (14 out of 17) | 6 categories; 95 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Excess |
| Pare (2008) | 38% persistent (26 out of 68) | 12 categories; 193 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Excess |
| Pare & Dawes (2011) | 37% persistent (43 out of 117) | 20 categories; 300 brands FMCG; UK | 3 years (2002 - 2004; 2005 - 2007; 2008 - 2010) | Large: top 1 or 2 & 1.25 times larger than imm. follower. | Excess |
| **Deficit loyalty** | | | | | |
| Pare & Dawes (2007) | 18% persistent (3 out of 17) | 6 categories; 95 brands FMCG; UK | 3 years (2003 - 2005) | Top 2 | Deficit |
| Pare & Dawes (2011) | 11% persistent | 20 categories; 300 brands FMCG; UK | 3 years (2002 - 2004; 2005 - 2007; 2008 - 2010) | Large: top 1 or 2 & 1.25 times larger than imm. follower. | Deficit |

* Pare *et al.* (2006) do not entirely separate private labels from manufacturer brands. Eleven store brands were clearly identifiable of those competing below the top two.

Whether own labels are bought differently compared to branded items, and the role of store choice was researched by Uncles and Ellis (1989). Being restricted to their host retailer, store labels have a literal zero share outside the chains they are sold in. But analysed at retailer level they are bought in *"virtually the same way as* […] *other brands"* (p. 60). That is, customers buy them as they buy manufacturer brands. They also purchase other chain's labels, and the typical customer chooses the store prior to the brand and tends to refrain going the extra mile in case of brand non-availability (Bound & Ehrenberg, 1997). Analysed on a national level, store labels are often found to have loyalty rates higher than the Dirichlet would warrant for their size: the restriction to their host lets the labels' share appear smaller on a national level, even if they are big within their chain. As such, the higher loyalties are an artefact of limited distribution (Uncles & Ellis, 1989; Bound & Ehrenberg, 1997; Singh *et al.,* 2000; Ehrenberg & Goodhardt, 2002).

Table 11 (above) lists several studies that have analysed the performance of store brands. It is found that a loyalty surplus persists (over years): from half of the private labels investigated over two years (Pare et al., 2006), to a near 40% (Pare, 2008) and even 80% over three consecutive years (Pare & Dawes, 2007, 2011). What can also be seen: some retailer brands did not deviate while others suffered from persistent loyalty deficits thereby opposing the idea that a restricted availability automatically inflates loyalty rates.

#### 3.3.2.4. What is Triple Jeopardy?

Double Jeopardy is reported for various competitive situations (cf. Ehrenberg *et al.,* 1990). Its occurrence links to *"probabilistic arguments based on the popularity of items in competitive markets"* but not situational factors, as has been proposed for Triple Jeopardy (Bhat & Fox, 1996, p. 130). In their investigation of the buying of individual coffee stores, Bhat and Fox found that not only were smaller stores less popular and less frequented, their customers also spent less per visit. They termed the pattern Triple Jeopardy – a triple disadvantage. Its occurrence is, however, debated. Even Bhat and Fox (1996) admit that correlations supporting its existence are not entirely conclusive. In fact, it seems that jeopardy two and three are not fully independent.

Others report a Triple Jeopardy pattern in correlation with higher market share. That is, some large brands do not only have more buyers purchasing them a little more often, the buyers do so even more than expected resulting in excess loyalty for large brands (Bhattacharya, 1997; Habel *et al.,* 2005B; Fader & Schmittlein, 1993, p. 479; Jung *et al.,* 2010). Leaders might benefit from increased visibility and promotion, which then comes at the expense of small brands' sales. But empirical evidence is scarce: many authors such as Keng and Ehrenberg (1984), Sharp *et al.* (2000) and Sharp and Riebe (2005) did not find a third jeopardy. The asymmetry in familiarity (the statistical selection effect that occurs when choosing amongst close substitutes) does not explain a third jeopardy. In fact, it would illustrate that the Dirichlet may not fully capture the heterogeneity of the market. Sharp and Riebe (2005) argued that looking at individual stores, like Bhat and Fox (1996), is equivalent to analysing the SKUs of a single brand, perhaps with a distinct pack size, and could increase the likeliness of interpreting distinct features as a third jeopardy. The authors arrive at explanations based on relatively narrower selection or offerings in smaller stores or *"idiosyncratic brand differences of average store size and pricing policy"* (Bhat &

Fox, 1996; Sharp & Riebe, 2005, p. 1). Altogether, a third jeopardy seems rather *"an empirical question"* (p. 8) than a law-like pattern in small brand buying.

## 3.4. Summary

The Dirichlet captures competition between large and small brands and provides a comprehensive set of observed BPMs which closely correlate and decline with brand size. One important implication for small brands is expressed by the law of Natural Monopoly: they are systematically bought by heavier category buyers – and the smaller the brand the heavier the category buying of its customers (McPhee, 1963; Romaniuk & Wright, 2009). Another implication is that being bought somewhat less often by fewer people (Double Jeopardy) is the normal empirical description of small brand performance. This stands in contrast to strategic marketing literature advising small brands to induce a desire (for their brand) that can be *managed* to achieve unnaturally high repeat sales (niche strategy).

In Dirichlet analysis the traditional definition of small brand success (as in attracting more sales from a rather narrow but highly committed customer segment) labels the deviation of excess loyalty. The pattern has been reported at varying frequency for both large (e.g. Fader & Schmittlein, 1993; Scriven & Bound, 2004; Habel *et al.,* 2005B; Jung *et al.,* 2010) and store brands (e.g. Uncles & Ellis, 1989; Uncles *et al.,* 1995; Dawes & Nenycz-Thiel, 2013, 2014). But few studies focus on smaller brands and even less have identified excess loyalty for them. In fact, brand choice studies found several small brands with a loyalty under-performance and often refer to it as deficit loyalty (e.g. Pare *et al.,* 2006) or change-of-pace. This describes the case when a brand attracts far fewer sales as expected for the size of its customer base. But despite the evidence, strategic marketing literature falls short in the pursuit of change-of-pace performance (e.g. Jarvis *et al.,* 2006)

To comprehend the typical nature of competition for small brands, marketers need to understand the extent to which deviations might be encountered, and perhaps leveraged. The Dirichlet's well-grounded theory provides useful benchmarks offering managerial insights on lesser known purchase patterns (Sharp *et al.,* 2000), for example, in the context of small brands. Hence, objective two was:

**To describe the regularities in the incidence, scale and nature of loyalty deviations from the Dirichlet norm of small brands in a period such as a year.**

Several studies have confirmed that some Dirichlet deviations persist but the extent to which the laws of marketing govern the long-term performance of small brands is hardly researched. Time series analyses allow reliable insights on market structures over time despite competitive marketing activities. The current research aims to quantify the extent to which deviations are peculiar to small brands in general, and/or specific for particular product categories or time periods. Time series also permit Dirichlet theory development. Thus, the third research objective was:

**To determine the persistence of small brand's loyalty deviations from the Dirichlet norm over five consecutive years.**

If the scattered Dirichlet-based research on small brands is believed, loyalty plays a different than expected role when describing their performance. If small brand maintenance and growth is less dependent on high loyalty, what are typical regularities in their long term buying? As growth is an important part in business planning, research is needed to identify any possible link in persistent loyalty deviations and market share changes. The following chapter therefore takes the in *Chapter 2* reviewed Dirichlet assumptions as a context to discuss longitudinal brand choice behaviour. This includes the evaluation of appropriately long periods for analysing (small) brand performance. The outcomes help to critically infer on the potential of loyalty-boosting strategies that are to drive growth for small brands.

# Chapter 4: (Non-)stationarity & small brand performance

*Against popular belief (and hope), there is no guarantee for brand growth. In fact, the near-stationary nature of category structures is a well-established empirical generalisation and a key assumption of the Dirichlet. The few brands with sustained share change provide insights to what happens to and among the typical BPMs as share changes. But the focus is hardly ever on small brands. This chapter reviews equilibrium literature on variables and techniques to identify exceptions to said stationarity and the appropriate length of time to measure change. Empirical studies evaluating the potential of brand growth strategies are discussed at the end of the chapter. It is aimed to provide an understanding of the extent to which near-stationarity defines how small brands compete (and possibly grow).*

……

## 4.1. Introduction

*"Grow to survive is a marketing mantra"* (Romaniuk & Sharp, 2016, p. 2), and many of the disciplines' activities justified against their potential to deliver the same (Buzzel *et al.,* 1975; Shipley, 1985; Dawes, 2016). A whole industry of market research agencies, strategy consultants and econometric modellers have emerged who offer (or even promise) to maximize business growth when, if fact, discussions on *"the secret key to* [it]*"* (Sharp, 2010, p. 16) mainly agree on disagreement. If sustained, even small share changes could be worth (or result in the loss of) millions in turnover. But studies frequently report that brand sales and market shares are fairly stable even over extended periods of time (e.g. Bass & Pilon, 1980; Dekimpe & Hanssens, 1995; Srinivasan & Bass, 2000, Graham, 2009; Romaniuk *et al.,* 2014; Dawes, 2016). Interestingly, most research attention is on (1) share growth, (2) leading brands or (3) attempts to determine the cause and effect of growth using success stories (Rosenzweig, 2007; Dawes, 2016). What is unclear is whether the empirical generalisation of share near-stationarity found for many larger brands and if it also applies to their smaller rivals – a finding that runs counter to many traditional marketing assumptions.

The previous chapter discussed the few studies on the regularities in small brand buying and indicated how surprisingly rare niche brands are and the empirical evidence of their increased growth probability. How likely are they to grow, and if they do, how much do their purchase frequency values change in comparison to the size of their customer bases? Marketing theory expects that proportions and purchase frequencies of the existing buyers would accelerate significantly. But little research has been done to demonstrate how the

distribution of purchase frequencies change *as* small brands grow. If a niche brand grows, does it draw more buyers from a specific rival as opposed to all of its rivals – a result violating the Dirichlet condition of market non-segmentation. Do under-performing small brands tend to decline in share, and what are common regularities in their composition of sales, purchase frequency distributions and cross-purchasing with other rivals?

Altogether, we do not know the chances for small brands in ever getting bigger (or smaller for that matter), and whether this is in relation to their loyalty performance (excess, Double Jeopardy or deficit). If deviating small brands had increased propensities to either grow or decline, the Dirichlet-assumed independence of brand choice and purchase frequency is violated (Fader & Schmittlein, 1993; Bhattacharya, 1997). If this is the case, many laws in marketing science would be broken suggesting that small brands compete somehow differently.

On the other hand, the wide-spread understanding of niching as a suitable strategy to grow a (small) brand is immediately limited in scope if the relationship between high loyalty and share growth does not quantify. And if excess (deficit) loyalty is not key determiner of brand growth (decline) then what is? Are there any commonalities to non-deviating small brands? The answers provide managers with valuable insights on how to achieve (stave off) share growth (decline). The fourth objective of this research was therefore:

**To describe the typical characteristics in the BPMs of growing (declining) small brands.**

The chapter starts with a critical review on market and brand buying stationarity literature. By discussing appropriate variables, tools and length of time, the aim is to determine the extent to which stationarity is a rule in the long-term performance of small brands. This also provides the context to the definition of *change*. Since growth may be the result of a variety of strategies (often employed simultaneously (cf. Lodish & Mela, 2007)), the current chapter discusses how to empirically measure the *outcomes* of such strategies in a standardised and inclusive manner. In other words, the Dirichlet-provided explanatory theory is discussed against frequently-proposed growth strategies and their potential to grow (as measured by typical BPMs) a small brand.

## 4.2. Rules & causes of stationarity & share equilibrium

Dirichlet outputs are near-stable average probabilities on brand choice and purchase incidence. *"Such stability on the surface however covers highly variable and quite complex patterns of individual purchasing behaviour"* (Ehrenberg, 1988, p. 12). In other words, the steady state is the result of aggregating households' heterogeneous buying probabilities that are deemed fixed *"during the relevant time period"* (p. 12). The appropriate length of that period is frequently discussed, and frankly marketers are employed to disrupt the status quo (Goodhardt *et al.,* 1984) raising the question: what is a meaningful base period to measure the performance of small brands?

### 4.2.1. Time frames & trend analyses

The appropriate length of time for analysing brand performance is a discussion between managerial relevance and a meaningfully long period to investigate (here used) aggregate data. The length definitions are affected by predispositions on what is observable and the ambiguity relating to time dimensions themselves (Dekimpe & Hanssens, 1995B; Hanssens & Dekimpe, 2012).

Sales figures are often communicated on a quarterly basis making *"brand management* [seem] *like driving a car by looking only a few feet ahead"* (Lodish & Mela, 2007, p. 112). Such a *temporary* nature of marketing research lacks strategic relevance and may even result in implausible forecast. Quarterly data may highlight striking peaks (or troughs), yet due to the time-lagged nature of responses to, for example, promotions or advertising, results may comprise outcomes of other earlier employed activities (Givon & Horsky, 1985; Dekimpe & Hanssens, 1995B). It has also been found that the effects of said activities weakly translate into sustained performance changes since competitors follow suit (Bass & Pilon, 1980; Ehrenberg *et al.,* 2004; Graham, 2009).

It needs to be noted that interpurchase time may depend on the product class (Ehrenberg, 1988). Typical intervals for cigarettes, milk and gasoline stay within a few days; many household products are bought once a week at most (Uncles & Ellis, 1989), others less often; some items tend to be stocked such as tinned or frozen products; some are used up in one go (yoghurt) others in smaller amounts (cereal, soap). Thus, although shorter periods seem observable (from a management point of view), they may consist of significant fluctuations.

Instead buying should be monitored over longer times, not at least since the performance of marketing management aims to have long-term effects.

Consumer panels, as have been used in this thesis, record purchases week-by-week (or day-by-day). The data is then collapsed into quarterly, six-month, yearly or longer spreadsheets (Ehrenberg, 1988). Measures such as penetration and purchase frequency have been found to evolve over time while shares remain unchanged. Longer periods allow normal purchase intervals to be exceeded (Sharp *et al.,* 2012). This affords more purchase occasions and the opportunity for more buyers to purchase, more often, and perhaps switch brands (Uncles & Ellis, 1989; Uncles *et al.,* 1995; Ehrenberg *et al.,* 2004).

Some of the discussions in *Chapter 2* suggested that repeat purchase deviations seem to relate to idiosyncratic features of the brand (e.g. the restricted availability of store brands) unlikely to change over the years (Pare & Dawes, 2011). Investigating the over time persistence of such effects helps to rule out one-off chances or sampling errors (Scriven & Bound, 2004) and to quantify any emerging change (Dekimpe & Hanssens, 1995B). Prominent work on performance deviations of (small) brands tend to utilise a standard period of a year (e.g. Kahn *et al.,* 1988; Fader & Schmittlein, 1993; Bhattacharya, 1997; Jarvis *et al.,* 2003, 2004; Jarvis & Goodman, 2005). Pare *et al.* (2006) extended this to two (small brand focus), and later to three successive years (large brand focus) (Pare & Dawes, 2007, 2011; Pare, 2008).

The Dirichlet's near-stationary assumption and the fact that most of a brand's customers buy infrequently over a period such as a year show that shorter term purchase records would miss the customers that have not yet bought the brand: their repertoire had not (yet) fully evolved (Uncles & Ellis, 1989). The implication is that metrics like penetration or the proportions of once-only and heavier buyers are specific to a particular length of time while brand share is not (Graham *et al.,* 2017A). This emphasises both the dangers in customer segmentation and the need to use appropriately long periods to detect trends. Long-run studies are also less sensitive to the selected snapshot of time chosen to analyse the brand. Investigating year-on-year data smoothens fluctuations (Dekimpe & Hanssens, 1995A, B). It has, however, been noted that extended time frames may result in trends being missed while there is evidence that in the medium term, households buy at a near-fixed average rate (Goodhardt *et al.,* 1984; Ehrenberg, 1988; Keng *et al.,* 1998), and mid-length may still be shorter than some strategic planning frameworks (Lodish & Mela, 2007).

Drawing on this discussion, the current research arrives at the following standardised definitions of base periods: short-term refers to phases of up to two years; medium up to three years, and more than three years is long-term.

Remembering that brand building may take years (Lodish & Mela, 2007) and that most BPMs reference a particular length of time, the aim of this dissertation is to determine incidence and persistence of loyalty deviations and their effect on brand growth (or decline) over periods ranging from one to up to five years. With this base period in mind, the next section discusses what the Dirichlet-assumption of market near-stationarity might mean for the nature of competition of small brands.

### 4.2.2. What is stationarity?

Individual purchase behaviour follows near-steady yet habitual propensities as consumers are experienced; that is, learning occurred long ago (Bass & Pilon, 1980; Dekimpe & Hanssens, 2000; Sharp *et al.,* 2012). In aggregate, these propensities represent the heterogeneous nature of buying (Massy *et al.,* 1970; Goodhardt *et al.,* 1984). Market structure is as much described by average choice probabilities not influenced by *"yet another advertisement"* (Ehrenberg *et al.,* 2004, p. 1311).

This does not mean buyers do not switch. In fact, they choose from a repertoire of brands, but much fewer than marketers expect (Uncles & Ellis, 1989). This creates a *"just random wobble around steady loyalties"* (Sharp *et al.,* 2012, p. 205). Drawn back and forth between competitors' retaliation actions, competitive success comes at the expense of others. Near-stationarity is facilitated inasmuch that little systematic trends beyond *"a few points up or down"* arise (Ehrenberg, 1988, p. 12). The fact that marketing effects rarely result in sustainable performance improvements does not imply all markets behave that way, yet evidently most show little trends (Bass & Pilon, 1980; Lal & Padmanabhan, 1995; Ehrenberg *et al.,* 2004; Graham, 2009).

Analysing the change in BPMs of 'dynamic' brands over different time snapshots allows the identification of how the changes might have come about (cf. Dawes 2016). Knowing that most brand metrics (apart from share) reference a particular length of time demonstrates the importance of appropriately long analysis periods to see past (usually short-term) fluctuations (Graham *et al.,* 2017A). Hereby, the Dirichlet's near-stationarity assumption

provides the framework to understand what it takes for small brands to compete in multi-brand markets.

### 4.2.3. Is share equilibrium the rule?

The empirical generalisation of the near-stability of mature markets over adjacent periods has been frequently confirmed across countries, markets, points or lengths of time and methodological approaches. Competitive pressure typically results in shares fluctuating around their means. This is not to say there is no growth. But short-term gains are found to rarely persist *because* the oligopolistic interdependence of rivals leads to equilibrium over extended periods (Bass & Pilon, 1980; Dekimpe & Hanssens, 1995A; Srinivasan *et al.,* 2000; Pauwels *et al.,* 2002, Graham, 2009).

Prominent studies determining the extent of share stability have had striking results: by investigating purchase occasions within one category, Bass *et al.* (1976) confirmed share stability despite buyers switching between brands; Johnson (1984) reported an average share change of maximum 3% over ten years; Ehrenberg (1988) found share equilibrium in more than 100 categories for periods of up to two years; Lal and Padmanabhan (1995) described stationarity for 60% of their brands over nine years; Baldinger *et al.* (2002) identified just 30% of their investigated brands exhibited an at least 50% share change in five years, and Trinh and Anesbury (2015) confirmed that, over an equally long period, only 14% of their brands shifted more than 5% in market share. The studies also pinpoint what information is needed from the datasets to gain insights into (non-)stationary behaviour. On one hand, retailer scanner data as used by Lal and Padmanabhan (1995), Dekimpe and Hanssens (1995A), Srinivasan *et al.* (2000), Nijs *et al.* (2001) and Pauwels *et al.* (2002) reveal information on price, store environment and sales volume. This is useful to measure the effects (and their persistence) of, for example, advertising. But few insights into the changes in consumer behaviour are given (Nijs *et al.,* 2001). The data comprises the reports of participating retailers only (Brown, 2018), leaving out e.g. Aldi, Lidl or corner shops, and small brands with often-limited distribution may not be part of this.

Consumer panel data on the other hand (as utilised by Bass & Pilon, 1980; Johnson, 1984; Ehrenberg, 1988; Ehrenberg *et al.,* 1994; Baldinger *et al.,* 2002) uses home-scanning techniques to capture the underlying patterns of repeat buying across a wide range of outlets, making it a useful source of information against which to compare the intentions of

small brands' marketing activities (Dekimpe & Hanssens, 2000). Consumer purchase records are thus meaningful to achieve the objectives of the current thesis.

### 4.2.4. A definition of change

In order to confirm equilibrium, there needs to be a benchmark to detect non-stationarity on levels that are also of relevance for practitioners. Drawing on the above discussion, the current dissertation employs Ehrenberg's (1988) definition of approximate stationarity which is defined as the absence of *"short term change in the aggregate sales or penetration level"* (p. 12). It considers an annual share change of ≤±1% as *within* the boundaries and stresses the Dirichlet's usefulness to descriptively analyse and interpret the performance of small brands.

## 4.3. Empirically, how do small brands grow (or decline)?

The ubiquitous desire for growth, be it in sales, revenues or share, has resulted in growth-oriented business thinking (Romaniuk *et al.,* 2014; Trinh *et al.,* 2014). *Chapter 3* has shown that smaller brands have many more non-buyers[22]. This offers great growth potential if business strategies were to focus on increasing penetration (Ehrenberg, 2000). Near-stationarity is a common characteristic of many mature markets but often seen as a constraint to (marketing) creativity (Kennedy & McColl, 2012). Yet, some brands do grow which offers valuable marketing lessons to be learned to understand these occurrences and perhaps infer on how to disrupt the demand equilibrium.

The current research does not aim to explain *how* to grow a (small) brand. Instead, the focus is on the changes in the key performance metrics *as* brands grow (or decline[23]). The following sections review prior work on that matter. As each performance metric may link to a separate growth strategy they are of interest for small brands.

[22] The term non-buyer does not necessarily mean they have never purchased the brand, but at least not in the previous period, although perhaps in earlier ones (Ehrenberg, 2000).
[23] Noteworthy is that share decline is rarely reported, perhaps due to the general focus of marketing on success stories (Prinz, 1988; East *et al.,* 2008).

### 4.3.1. Changes in category demand

Against the background of share equilibrium, marketers may attempt category expansion (adding new users, Equation 11) to grow their brand. Increased category demand offers similar chances (and risks) to all players in the market. Yet the topic is not well researched. This may be due to the fact that a category is defined as a *"set of products judged to be substitutes"* with *"similar* […] *benefits"* to *"customers for whom such* [benefits] *are relevant"* (Day *et al.,* 1979, p.10).

***Equation 10: Category purchase frequency (W)***

$$W = \frac{total\ purchases\ of\ the\ category}{B}$$

***Equation 11: Category penetration (B)***

$$B\ (\%) = \frac{n\ of\ HHs\ buying\ the\ category\ at\ least\ once\ in\ t}{total\ n\ of\ HHs\ in\ the\ panel}$$

But, attempts to grow category are a fifty/fifty chance of success at best (Nenycz-Thiel *et al.,* 2018). Pare and Dawes (2011) reported a category penetration growth of just about 1% (1.4% maximum) across twenty datasets. High-penetration categories (>21% average *B*) are mostly near-stationary while those with <10% can be more volatile. But generally, chances of growth and decline are equally 'high', and most demand dynamics are driven by innovations creating a functionally different sub-category such as frozen pet food (Nenycz-Thiel *et al.,* 2018).

New players in the market, be it a new rival[24], a disruptive innovation or a product or brand line extension, may violate the existing competitive structure. In theory, choice probabilities are newly distributed among rivals. In practice, line extensions quickly adopt the regular loyalty patterns of the market referred to as near-instant loyalty (Ehrenberg & Goodhardt, 2001). New brands tend to take some time to build penetration (Singh *et al.,* 2008) yet competitive advantage, if at all sustainable, is quickly copied, resulting in choice equilibrium after a little while (Ehrenberg *et al.,* 1997).

Most newly attracted category buyers purchase the brands in line with the size of the brands; that is, smaller brands share most customers with their larger rivals and are bought by fewer people a little less often just as the Double Jeopardy and Duplication of Purchase

[24] Gort (1963) argued that a high concentration of shares at the top of the industry may serve as source of stability to prevent rivals from entering.

predict. Effects from category demand changes on small brands need careful interpretation. An increase in category buyers (*B*) in theory means that purchases are to be re-distributed across more people. If then brand shares decline, this may be considered performance maintenance rather than decreasing performance. On the other hand, decreased proportions of category buyers result in purchases being re-distributed across fewer purchasers. If shares grow this is arguably performance maintenance rather than improvement (e.g. Nijs *et al.,* 2001; Trinh *et al.,* 2014).

### 4.3.2. Composition of sales

According to Equation 4 (*Section 2.3.1.*), brand sales depend on how many people buy it (the brand), how often (Ailawadi *et al.,* 2001; Ehrenberg *et al.,* 2004). That is, purchase behaviour directly links to sales and market share (Dawes, 2016). Individual consumers switch habitually between the substitutable options in their repertoires (e.g. Uncles & Ellis, 1989; Bound & Ehrenberg, 1997; Banelis *et al.,* 2013); and competitive retaliation actions balance out (in the long term) as customers (experienced switchers) are likely to be drawn back and forth (Bass *et al.,* 1976; Bass & Pilon, 1980; Ehrenberg, 1988).

Keller (2013) suggested brands can grow through cross-selling, selling more to their existing buyers or by being innovative. These strategies are similar to those proposed by, for example, Ansoff (1965) and Keller and Lehman (2003) who recommended market penetration, market development and product development to grow sales. Others advised strong customer relationship management to maintain and build share. For small brands with often limited resources, targeting the existing buyers might seem less expensive (Reichheld & Sasser, 1990). Yet empirical evidence is rare. Research on price promotions repeatedly confirmed their rather weak long-term effects (e.g. Ehrenberg *et al.,* 1994; Baldinger *et al.,* 2002). Srinivasan *et al.* (2000) compared tactical with permanent price promotions to find that the latter does in fact result in some share growth, but the response emerged slowly and also reduced the overall margin of the company. One may conclude that price promotions are unprofitable (Ehrenberg *et al.,* 1994) but preserve the equilibrium (Nijs *et al.,* 2001). This is not to say they do not attract sales. But few of these customers are new to the brand. Targeting the existing customer base with their fixed buying propensities results in little extra sales let alone increased loyalty (Lal & Padmanabhan, 1995; Pauwels *et al.,* 2002; van Heerde *et al.,* 2003; Trinh *et al.,* 2014).

Advertising is traditionally believed to attract new buyers but its disruptive impact on the equilibrium is low: advertisements tend to nudge existing customers instead of persuading new ones to buy. After all, we see what we expect and buy what we know. It is further argued that, when it comes to advertising, brands spend what they can afford, and Equation 4 revealed budgets depend on sales which are a function of market share of which smaller brands have less. In other words, advertising is unlikely to increase share, but is useful to maintain it – referred to as the *"running hard to stand still"* (Ehrenberg *et al.,* 1997, p. 14).

Double Jeopardy assumes that loyalty (*w*) between rivals does not vary much. Instead, brands differ more in the proportion of people who buy them (*b*). The expectation is that when brand share changes, *b* changes much more than *w* – reflecting the typical split-loyal nature of markets. Baldinger and Rubinson (1997) found that loyalty correlates with market share inasmuch that its values increase slightly when brands increase in size. While this represents Double Jeopardy, it led the authors to conclude that loyalty is a predictor for future sales and brand growth. This effect has strong empirical opposition: Baldinger *et al.* (2002), Sharp *et al.* (2012), Riebe *et al.* (2014), Romaniuk *et al.* (2014) and Dawes (2016) reported that for the few brands that grew at all, customer acquisition was key, and for Riebe *et al.* penetration growth made twice the impact on share change compared to loyalty. Uncles *et al.* (1994) confirmed that when brands grow, penetration had superior changes over loyalty at a 10.5:1 ratio; Ehrenberg (1990) reported a 1.6:1 and Anschuetz (2002) even a 23:1. Allsopp *et al.* (2004) concluded that a brand gains one percentage point of loyalty for every three in penetration: as loyalty leverages an increasing customer base, growth is difficult to achieve by making current customers buy more (Dowling & Uncles, 1997; Scriven 1997).

This is in line with research on new brands: although brand extensions grow quickly in repeat purchase *and* penetration to meet figures similar to established brands of their size, the growth comprises a proportionally greater increase in reach (Dawes, 2009; Singh *et al.,* 2012), accompanied by a less significant, but not less important rise in loyalty (Anschuetz, 2002; Baldinger *et al.,* 2002; Sharp *et al.,* 2012).

Surprisingly, few have researched share decline. Kapferer (2008) argued declining share is the result of customers becoming less loyal but he fails to supply empirical evidence. Ailawadi *et al.* (2001) and Baldinger *et al.* (2002) found that penetration values change more significantly compared to loyalty just as Double Jeopardy expects.

Acknowledging the normality of smaller brands to command somewhat lower loyalty (Ehrenberg, 1993A), Double Jeopardy gives a realistic perspective on competition. The 'anything goes' idea of some marketing planning is constrained in the same way as sales increases are: if occurring at all, they are largely driven by bigger gains in penetration (Ehrenberg & Goodhardt, 2002) by mostly infrequent buyers (Romaniuk, 2013, 2015). In other words, even share shifts are unlikely to break the Double Jeopardy law (Baldinger *et al.,* 2002; Anschuetz, 2002; Dawes, 2009).

Although the Dirichlet assumes market (sales) near-stationarity and non-segmentation (Goodhardt *et al.,* 1984), when a deviating (excess or deficit loyalty) brand grows or declines, the penetration-loyalty relationship might not necessarily hold. It is assumed that the loyalty values of a just grown brand may not yet have caught up in the current year (perhaps due to excess trialling by light buyers (Pare, 2008)). So its loyalty figure may temporarily be lower. But the implications for deviating brands are rarely understood (Dawes, 2016). Are brands with deficit loyalty in fact just growing brands in transient positions (Dowling & Uncles, 1997; Jarvis & Goodman, 2005)? On the other hand, an excess loyalty effect for growing brands is reported by McCabe *et al.* (2012). They investigated the top three suppliers of surgical consumables over three years and identified that the one growing supplier secured sales (and hence its growing share) by taking over the former sole-buyer of the then category leader. The result was excess loyalty for the second year; yet, rates normalised in the third.

To conclude, much remains unknown for how small brands grow, the effects of loyalty deviations and how growth is reflected in the underlying consumer purchase behaviour.

### 4.3.3. Distribution of purchase frequency

Literature suggests that brand success (growth) can be achieved by segmentation and targeting (e.g. Dibb & Simkin, 1997; Kotler, 2003) implying that the correct positioning in the minds of the targeted customer group is a key to grow. Marketing teams therefore spend much money, effort and time to understand their brand's buyer base with the aim of identifying the most valuable customers (Banelis *et al.,* 2013). This follows the idea of not 'wasting' resources on 'less profitable' buyers, thereby also improving profitability and share size (Anschuetz, 2002). This implies that marketers know *all* their customers and that

a buyer's future sales contribution[25] equals their current. Such a classification of customers is focussed on the *current* buyer base, and its effectiveness enjoys little empirical support. Graham *et al.* (2017A) revealed that half of any brand's buyers do not buy it within a year and Anschuetz (2002) demonstrated that just about one fifth of any brand's buyers acquired it three or more times in the same period. Traditional marketing would then categorise the remaining 80% as not valuable enough to target, almost a waste of resources.

There is much evidence that category (Ehrenberg, 1988) and brand purchase rates (Ehrenberg, 2000; Anschuetz, 2002; Sharp *et al.,* 2012; Graham *et al.,* 2017A) follow a reversed J-shaped Negative Binomial Distribution (NBD). That is, the typical characteristic of any customer base is a much larger proportion of infrequent buyers. The NBD thus illustrates *"the relative incidence of purchase rates in a time period"* (Dawes, 2016, p. 480). The breakdown into lighter and heavier buyers reveals their contribution to the bottom line (Ehrenberg, 1959, 1988; Uncles *et al.,* 1995). This is a useful tool to investigate loyalty in the customer base of small brands that goes beyond the aforementioned sales equation.

According to Double Jeopardy, the customer base of a small brand comprises even larger proportions of infrequent buyers. They contribute significantly to sales volume and offer great growth potential simply *because* there are so many of them. Nonetheless, the spotlight of marketing attention is on the heavy buyers. They deliver huge sales volume despite being a much smaller proportion, and *because* of this, a focus on the heavy buyers rarely leads to sales growth. They are necessary for brand health but insufficient to drive growth (Anschuetz, 2002). The Dirichlet's distributions of purchase frequency allows comparisons of the buyer distributions for the same brand at different points in time to reveal how share maintenance or even change might have come about (Ehrenberg, 1988; Romaniuk, 2011). Remembering the proposition that loyalty drives growth, we would expect most changes to happen to the proportions of heavy buyers. Buyer frequencies are, however, found to change across the board (Dawes, 2016): the entire purchase frequency distribution shifts, but most significantly the proportion of light buyers.

Anschuetz (2002) further demonstrated heavy buyers are important but insufficient to drive growth. While brands grow, the numbers of households buying increases significantly, with a smaller rise in frequency, yet customers buy at near-steady volume. Targeting a narrow segment of 'higher frequency buyers' would then mean missing the customers who

[25] The focus is on purchase volume as opposed to occasions (Twedt, 1964).

buy the brand infrequently, but who come in vast numbers. Their sales contribution makes the lighter buyer one of the most valuable customers a (small) brand has (cf. Sharp, 2010).

Romaniuk (2011) emphasised the persistence of this right-skewed distribution for over 90 brands in ten categories and two consecutive years, irrespective of share change. The implication is that brand growth is largely driven by attracting new buyers. All things being equal, gains and losses are in line with the distribution of buyers in the previous year. This also means, that the buyers within the segments (non-buyers, light or heavy) cannot be exactly the same across different brands and they cannot be the same across different times for the same brand (also Anschuetz, 2002; Romaniuk & Wight, 2015). This is referred to as the law of buyer moderation and demonstrates that purchases are not distributed equally across different periods. The regression to the mean occurs *because* of the variation in purchase timing for individuals. Segmentation activities therefore carry the danger of mis-categorising buyers according to their sales volume (Sharp, 2010).

Since one purchase (in a year) is *"hardly is a life-changing event"*, understanding the impact of the infrequent customers on sales guides marketing and management decision-making (Romaniuk, 2011, p. 561; Graham *et al.,* 2017A) especially, for small brands, but much remains unknown about small brands in general: are there commonalities in the purchase frequency distributions of share dynamic small brands? If all brands have grown at some point (at least to their current size), it might be assumed that purchase frequency distributions were largely preserved. Do the roles of lighter and heavier buyers differ for excess as opposed to deficit loyalty brands? Do deviating small brands grow (decline) at all? And do they preserve their disproportional purchase frequency distributions? Or do they become more 'normal'?

### 4.3.4. Cross-purchasing or purchase duplication

Other commonly pursued strategies to drive growth attempt to either reduce switching or motivate buyers of rivals to increasingly switch away from them. If this is to work, the resulting disproportionate customer sharing would indicate the existence of partitions within otherwise assumed unsegmented markets (Ehrenberg & Goodhardt, 1970). The normal buyer sharing described by the Duplication of Purchase law would be violated when brands share customers disproportionally as they grow (decline) (Cohen *et al.,* 2012).

Loyalty programmes are, for example, designed to drive market partitioning. Their intent is to increase customer retention and reduce switching: successful brands would draw proportionally more customers from and share less of their buyers with rivals (Sharp & Sharp, 1997). Yet, there is generally little empirical evidence of the effectiveness of customer segmentation (Dawes, 2009; Uncles *et al.,* 2012). In fact, across successive purchases, individuals chose brands from their repertoires which, in aggregate, represents the heterogeneity of the population and depends on the level of category purchases (Uncles *et al.,* 1995; Ehrenberg *et al.,* 2004). Brands duplicate (share) their customers in line with their size and not their intended market position (Anesbury *et al.,* 2017).

Duplication analyses reveal just how complementary and competitive brands are. As most BPMs stay stable (Graham *et al.,* 2017B), so do both brand repertoires and duplication values of customer sharing (Dawes *et al.,* 2015). Where the link is asymmetric, deviations may occur for when the brands of a category compete differently within their partition as compared to outside the cluster (Dawes, 2016). Such deviations may be due to factors such as price, product formula or distribution and are meaningful for marketing although they do not frequently occur (Ehrenberg & Goodhardt, 1970). Some examples are: the gasoline market is reportedly split into leaded and unleaded (Ehrenberg & Scriven, 1994). Location is found to be the driver for market partitions due to store proximity of retail outlets (Sharp & Sharp, 1997). Tourist destinations disproportionally attract customers due to factors such as special locations or the offer itself (e.g. package holiday) (Mansfield *et al.,* 2003). Furthermore, the automobile market shows a distinct luxury segment (Ehrenberg & Bound, 2000), coffee may come as ground, instant, regular or decaffeinated (Ehrenberg *et al.,* 2004), more radical laundry detergent line extensions (disproportionate substitution) cannibalise the sales of their mother brand less while the less radical ones experienced more asymmetric customer sharing (Lomax *et al.,* 1998) and the Australian wine market is not just grouped into white or red (Cohen & Tataru, 2011; Cohen *et al.,* 2012), but different price tiers (Romaniuk & Dawes, 2015) and partitions arising due to terroir effects[26].

It seems that although markets are mostly near-stationary, some deviations in cross-purchasing may occur. But despite the evidence, most research has been done under fairly static conditions, not analysing the effect of (disproportional) buyer sharing on market share over time. Here, Dawes (2016) noted that his ten growing brands in general cross-purchased more from 69 out of their 72 collective competitors, which is largely expected

[26] How a particular regions' factors affect taste and choice of wines.

since share growth is driven by widening reach (also into the buyer bases of competitors). In fact, brand growth (decline) happens at the expense (benefit) of others. Analysing duplication rates *as* small brands grow (decline) helps understanding how segmentation may (or may not) work and helps setting realistic growth objectives. When small brands grow, do they acquire customers from all rivals or just specific ones? What about declining brands or those with loyalty deviations as opposed to brands behaving 'normal'?

## 4.4. Summary

The desire for growth is deeply engrained in business thinking and the efficiency of many marketing departments measured against their ability to plan and deliver growth (Dawes, 2016). But empirical evidence demonstrates time and time again that market share changes are rarely sustained, and the competitive structure of most markets characterised by an absence of trends (e.g. Ehrenberg *et al.,* 1997). Most research attention is, however, on category leaders and brand growth (as opposed to decline) or follows a success-story manner by discussing rare cases of brands that allegedly drove growth by achieving loyalty beyond reason. Largely unknown is what are the chances for small brands to grow (decline) in market share, and the extent to which this is affected by persistent loyalty deviations.

Understanding buyer behaviour over time gives insights on more appropriate resource allocation and allows theory development given we know *"what constitutes normal longitudinal behaviour"* (Romaniuk & Wight, 2015, p. 19). To avoid *"the dangers of false interpretations and halo effects"* (Dawes, 2016, p. 477) the current research aims to quantify emerging regularities in long term small brand buying *as* their market shares go beyond (near-)stationary definitions. By using consumer panel data, the current study replicates and extends knowledge derived from prior investigations using the Dirichlet derived norms of normal buying (i.e. Dawes, 2016). It is aimed to determine what is, if anything, the empirical link in loyalty deviations (excess or deficit) and incidences of non-stationarity. The usage of a panel of continuous buyers allows the investigation of any sustained trends arising in market share and other performance metrics. Of particular interest is how share changes reflect into BPMs that are typically used by practitioner in benchmarking activities. With that, the findings are of strategic interest for small brands and their business planning. The fourth research objective was therefore:

**To describe the typical characteristics in the BPMs of growing (declining) small brands.**

Brand differentiation is a cornerstone of successful marketing for small brands (e.g. Kotler, 2005). Only brands that are set apart from rivals can thrive as they provide customers with a reason to buy (repeatedly). Its effectiveness enjoys, however, little empirical support. Perhaps because most approaches are less or do not intent to be of systematic nature. Research is needed to identify the link (if any) sustained in growth, persistent loyalty deviations and differentiating aspects. The following chapter turns the attention towards the Dirichlet's non-segmentation assumption to contextualise and critically discuss the potential behind differentiation as a meaningful strategy to grow a small brand.

# Chapter 5: Loyalty deviations, strategic targeting & small brands

*As competition is fierce, small brands seem especially vulnerable. They are often urged to strategically position themselves as (perceived) differently in customers' minds. By attempting to either appeal to some customers most of the time (niche), or to a wider customer base on some purchase occasions (change-of-pace), the idea is to avoid head-on competition. But the effectiveness of differentiation is yet to be empirically proven and the extent to which strategic positioning accounts for small brands' loyalty deviations in need of further research. This chapter reviews the idea and relevance of differentiation in marketing in the context of small brands. Prior research at times attempted to explain loyalty deviations; the proposed reasons are discussed against characteristics often ascribed to niche and change-of-pace brands.*

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## 5.1. Introduction

Most markets are found to be near-stationary (e.g. Bass & Pilon, 1980; Lal & Padmanabhan, 1995; Ehrenberg *et al.,* 2004; Graham, 2009), competition is fierce and often led by rather deep-pocketed market leaders. Small brands (also referred to as market challengers) are frequently advised to identify and target the less competitive areas of a market. The idea is to avoid head-on confrontation with (larger) rivals and to channel their resources more effectively. The aim is to position the small brand as somewhat (perceived) differentiated from the mainstream in customers minds thereby providing buyers with a reason to favour the brand (repeatedly) over competitors (Bhattacharya, 1997; Bennett & Rundle-Thiele, 2005; Romaniuk *et al.,* 2007).

To build such a differentiated (small) brand, managers may pursue to appeal either to *"some customers all of the time"* (niche), or to a wider buyer base who favours them *"on* [just] *some purchase occasions"* (change-of-pace) (Sharp & Dawes, 2001, p. 743). Even though both type of brands may only attract a smaller share of the market (Kahn *et al.,* 1988), no clear size definition is provided – *all* brands are to differentiate (Sharp, 2010). Also, neither strategy enjoys much empirical support, and Sharp (2010) even demonstrated niche brands are unrealistic to grow (at least by loyalty). Kahn *et al.* (1988) implied strategic positions for small brands based on whether they over or under-performed their expected Dirichlet repeat purchase rates. But the study reflects a rather unsatisfactory logic as all that is described are symptoms. And, in fact, the concept of change-of-pace misses a reasonable explanation as a meaningful strategy, it in fact defines a failing brand. The idea of being bought for variety seeking may work for items in a portfolio of products (but not brands) from which customers may choose one or the other as a change of pace. But who would

design brands customers prefer only occasionally? And are all niche brands functionally different?

The existence of brand-level differentiation lets buyer behaviour appear manageable as loyalty would be a property of the brand. But the concept violates the Dirichlet assumption of market non-segmentation as not all participants would enjoy the same opportunities (or motivations) to buy one (or the other) brand per purchase occasion (Fader & Schmittlein, 1993; Bhattacharya, 1997; Danaher *et al.,* 2003; McCabe *et al.,* 2012). The model instead describes that competition is about how many people buy a brand, how often and what other brands they buy (Ehrenberg, 1988; Ehrenberg *et al.,* 1997). It is unknown how this applies to small brands. As a result managers are not provided with a clear guide as to how to interpret the loyalty outcomes of their small brands. So there is a need to examine deviations as exceptional cases by analysing more brands in more categories over extended periods of time. The aim is to identify regularities (if any) likely to cause small brands' performance deviations. The fifth and last objective of this research was therefore:

***To evaluate the extent of strategic positioning accounting for the loyalty deviations of small brands.***

The subsequent sections first review the idea behind differentiation and its role in marketing, before critically evaluating the term in the context of small brands. The ultimate aim is to arrive at standardised descriptive definitions for both niche (excess loyalty) and change-of-pace (deficit loyalty) brands. Prior research have attempted to explain loyalty deviations; the proposed reasons are now discussed from an empirical point of view against characteristics ascribed to niche and change-of-pace brands.

## 5.2. Brand differentiation in marketing

The concept of differentiation goes back to the 1930s and the model of perfect competition (Chamberlin, 1933; Robinson, 1933). It describes the activity to position a firm's offerings deliberately as recognisably different to reduce competition *because* alternative offers would be imperfect substitutes. Differentiation hereby arises from an urge that itself *"is based on the disadvantages of redundancy"* (Keller, 2003, p. 556; Barwise & Meehan, 2004).

Survival and growth of (small) brands depends on two *"distinct but intertwined activities"* (Blumentritt, 2006, p. 73) – *"strategic* [direction] *management and budgeting."* But they are frequently out of step; that is, the employed strategic direction (e.g. improve customer loyalty) may not necessarily result in the desired financial performance (e.g. improve sales) or vice versa. Smaller brands, for example, have inflexible budgets, and may therefore employ fewer or just one strategy at a time and lack the competitive breadth *"for extended battle"* (Blythe & Megicks, 2010, p. 224). The managerial challenge is to decide on a strategy that accommodates the available resources and achieves the expected buyer response.

To achieve differential advantage, an often-pursued business objective of smaller brands is to (allegedly) *manage* customer behaviour through meeting their needs *better* than rivals do (Marshall, 1995; Romaniuk & Sharp, 2004). Literature emphasises the benefits of strategic positioning (Fulmer & Goodwin, 1988; Sharp & Dawes, 2001; Sharp, 2010). But Porter's cost leadership, for example, may only be achieved with adequate resources which small brands might lack (Doyle & Stern, 2006). To not get *"stuck in the middle"* (Porter, 1980, p. 41), *"in the ditch"* (Sheth & Sisodia 2002, p. 91) *"or die"* (Trout & Rivkin, 2000). The only other alternative for small brands to deal with market stationary (e.g. Bass & Pilon, 1980; Graham, 2009) seems to be by sharpening differences between them and their rivals (Colley, 1984; Bradley, 1991). Differentiation is therefore believed to be the cornerstone of successful marketing (Doyle, 1990; Kotler, 2003; Romaniuk *et al.,* 2007) with branding at its heart (Mercer, 1992).

Propositions such as *"thou shalt differentiate"* (Fulmer & Goodwin, 1988; MacMillan & McGrath, 1997), Levitt's (1980) call to differentiate (almost) anything and Trout and Rivkin's (2000) motivational *"differentiate or die"* are reasons why marketers are judged against their ability to develop brands that are well-set apart from competitors (Bennett & Rundle-Thiele, 2005; Romaniuk *et al.,* 2007). But if small brands are to understand the result of their anticipated strategies they need to know what are the potential outcomes.

Customers see brands as *"a set of expectations and associations evoked from experience"* (Davis, 2002, p. 503) – and this applies to all brands, regardless of their size. The brand concept has evolved from a unilateral (Alexander, 1960) to a more multilateral perspective also comprising intangible aspects such as the views from both customers and marketers (Davidson, 1976). Differentiation may come about through various facets, some more visible materialistic features (Lancaster, 1984) while others are rather symbolic, emotional, or even trivial (Levitt, 1980; Carpenter *et al.,* 1994). That is, the levels of differentiation may

range from clear cut, to less distinguishable, barely noticeable, rather emotional to even irrelevant (although noticeable) (Ehrenberg *et al.,* 1997). But the differentiating elements must go beyond mere identification. They are essential for communicating how the brand wants to be seen in order to position it in customers' minds (image) (Keller, 2003). For that, the differential aspects (points of difference) need to be communicated consistently over time (as part of its brand identity) and resonate (being perceived and valued) with customers (image formation). Here points of difference refer to strong and favourable (for the brand) associations (Aaker, 1996; Volckner & Sattler, 2006) to express its uniqueness and vision (Heding *et al.,* 2009). This *"visual and verbal articulation of a brand"* is *"a master plan"* to build and preserve its *"memorable, consistent and distinctive"* public face (Landa, 2006, p. 5). Thus, establishing and maintaining a strong (differentiated) identity is at the heart of brand management (Kapferer, 1992).

Even though the NBD-Dirichlet is known as one of marketing's most important empirical generalisations (Uncles *et al.,* 1995; Sharp, 2010; Uncles & Kwok 2013; Kennedy & Hartnett, 2018) that describes simultaneously the market response to all competing brands in a fixed period (Bass *et al.,* 1976; Bass & Pilon, 1980), most attention has been on market leaders. And while many of the Dirichlet-described aspects about competitive market structures and competitive outcomes have been developed into law-like and simple patterns (Ehrenberg, 1988), much of marketing theory advises small brands to differentiate from competitors (e.g. Doyle, 1990; LaForet & Saunders, 1994; Kotler, 2003). So, if a (small) brand is not differentiated; that is, its differentiating aspects not relevant or strong enough to go beyond the points of parity (i.e. competitors provide very similar benefits), customers may not feel motivated (enough) to (repeatedly) purchase this (small) brand (Reeves, 1961; Doyle, 1990; Keller, 2003).

Brands may differentiate by having "cash rich" parent brands (brand portfolios and/corporate effects), offering functional differences, extending their offer within the same (also: line extension or line stretching) or to different product categories (also: brand extension, category extension or brand stretching) or use pricing strategies (e.g. Aaker & Keller, 1990; Keller & Aaker, 1992; Reddy *et al.,* 1994; Ambler & Styles, 1997; Keller, 2003, 2008; Singh *et al.,* 2012; Dall'Olmo Riley *et al.,* 2004, 2015; Kopp, 2019). This might not matter unless it results in small brands competing differently than would be expected by the Dirichlet norm.

Several authors have proposed a variety of elements to help brands achieve differential advantage (Kapferer, 1992; Aaker 1996; de Chernatony & Harris, 2000; Aaker & Joachimsthaler, 2000; Landa, 2006). But when reviewing the literature three key issues emerged: first, there is no clear definition of brand size. All brands are advised to differentiate, and in fact, no brand is the same. Not least since its more visible parts are often legally protectable (Sharp, 2010). Second, differentiation has no unified meaning. It refers to functional differences as well as the simple usage of blue stripes on the packaging (Ehrenberg *et al.,* 1997). This leads to third: there is a lack in unified measures to evaluate (perceived) differences between brands in a standardised manner because there is no explicit benchmark available to determine when the differentiation was successful. In fact, the sheer variety of building blocks (that are also not always clearly defined) question whether the concept is easy to operationalise. In other words, measuring the levels of differentiation that may (or may not) exist between brands is unlikely to result in the quantifiable outcomes the current research is aiming to achieve.

## 5.3. Differentiation & small brand performance: Theory vs practice

It seems that differentiation is key for (small) brand success (Fulmer & Goodwin, 1988), which is why marketers need to be able to evaluate the levels of differentiation and its outcomes inclusively. But since technically all brands are differentiated (regardless their size), the concept is hard to grasp; so is the extent to which differentiation defines the size of a brand or competitive market structures.

This research adopts the formal brand-level definition provided by Sharp and Dawes (2001, p. 743) who stated that *"differentiation exists when a firm's offering is preferred, on some buying occasions (or by some customers all of the time)".* The authors referred to a behavioural (observed) preference which is in line with the data format (purchase records) used in the current research. If brand level differentiation would exist, niche and change-of-pace brands would be more commonplace, and loyalty a function of the brand (that is differentiated) (Sharp, 2010).

Table 12 (overleaf) summarises key terms and characteristics found when reviewing literature on niche and change-of-pace brands. Although many authors agree either on most of these brand's descriptive or strategic characteristics, empirical evidence that supports the link between the strategies and their respective outcomes is thin. The subsequent

sections critically evaluate the extent to which strategic propositions and observed performance overlap for niche and change-of-pace brands.

***Table 12: Niche & change-of-pace brands: Strategic direction vs. descriptive outcomes***

| Characteristics | Brand type | |
|---|---|---|
| | Niche brands | Change-of-pace brands |
| Descriptive (observed) outcomes | Smaller market share<br>Lower than expected penetration<br>Higher then expected loyalty (>+10% beyond Dirichlet)<br>(e.g. Kahn *et al.,* 1988; Fader & Schmittlein, 1993; Bhattacharya, 1997; Jarvis *et al.,* 2003; Jarvis & Goodman, 2005) | Capture small market share<br>Higher than expected penetration<br>Lower than expected loyalty (<-10% below Dirichlet)<br>(e.g. Kahn *et al.,* 1988; Fader & Schmittlein, 1993; Bhattacharya, 1997; Jarvis *et al.,* 2003; Jarvis & Goodman, 2005) |
| Strategic direction | Small firm (Kahn *et al.,* 1988; Kotler, 2003; Hooley *et al.,* 2004)<br>Focus resources on limited section or sub-set of the market (Blythe & Megicks, 2010)<br>Charge premium prices (Kotler, 2003; Blythe & Megicks, 2010)<br>Avoid head-on competition with leaders (Kahn *et al.,* 1988)<br>Specialised marketing mix (Hollensen, 2003)<br>Fulfill primary needs (Bhattacharya, 1997)<br>Targeted products (Blythe & Megicks, 2010)<br>Small devision of large firm (Kahn *et al.,* 1988) | Focus on & targeting of variety-seeking customers (Kahn *et al.,* 1988; Bhattacharya, 1997)<br>Wide distribution networks (Kahn *et al.,* 1988; Jarvis & Goodman, 2005)<br>Reach large customer base (Kahn *et al.,* 1988; Jarvis & Goodman, 2005)<br>Appeal on specific purchase occasions (Bhattacharya, 1997) |

### 5.3.1. Niche performance: Strategic vs descriptive characteristics

Table 12 reveals that the strategic *"key to success* [for small brands] *is to specialise"* (Blythe & Megicks, 2010, p. 125). SMEs (Hooley *et al.,* 2004; Kotler, 2003), smaller portfolio brands and any small brand[27] *"with very limited resources"* are advised to use their *"high levels of expertise"* to focus on a *"small sub-set"* of the market (Blythe & Megicks, 2010, p. 141), a niche with *"a distinct set of needs"* (Kotler, 2003, p. 280). By *"offering carefully targeted products"* (Blythe & Megicks, 2010, p. 141), these small brands are able to *"develop intimate knowledge of* [the] *customer"* that allows them to *"charge premium prices"* (Blythe & Megicks, 2010, p. 125, 144). In theory, brand comparisons are then not easily possible, and demand is to exceed supply (MacMillan & McGrath, 1997). The economies achieved through operating on such *"a low-volume, high margin basis"* (Blythe & Megicks, 2010, p. 125) are to result in *"superior profitability"* (Hollensen, 2003, p. 332), increased loyalty and growth (Fulmer &

[27] Although there was no clear definition of small to be found (see *Chapter 2*).

Goodwin, 1988; Kotler, 1994, 2003; Aaker, 2001). With such a *"differential advantage"* (Hooley *et al.,* 2004, p. 405) even *"low share firms* […] *can be as profitable as their larger competitors"* (Doyle, 1990; Kotler *et al.,* 2008, p. 45). If successful, differentiation helps the brand not only to maintain but also to improve its performance, develop a secure base of loyal customers for whom the (differential) aspect is so desirable (as it is not served by competitors) that they choose the brand over others beyond expectations. In other words, customers of well-differentiated niche brands switch less to competitors (Caves & Williamson, 1985). All of which must seem as a particularly appealing strategy to small brands. Yet a niche performance is also about *"being unattractive for many buyers"* (Sharp, 2007, p. 7), hence, the significantly lower penetration below Dirichlet estimates for brands of that size. In fact, it is argued that the term is frequently used to claim that a brand is highly preferred by (just) some because it seems easier to defend a niche performance to stakeholders than to answer why the brand is less well-known (if at all) to the rest of the market (Sharp, 2010). In addition, analysing niche brand performance in isolation loses the category comparator as brand performance is evaluated on the scope offered by the niche (market segment) and not relative to category rivals. It gives managers hardly any meaningful insight into the real world growth potential of their small brand. The brand may be vulnerable to rivals entering its niche and with that 're-introducing' competition the brand intended to circumvent.

*Chapter 3* revealed that choice behaviour studies find niches to be of lower share with excess loyalty and deficits in penetration for a brand of that size. Yet the only studies focussing on smaller brands were those of Kahn *et al.* (1988) and Pare *et al.* (2006) of whom only Kahn used the term niche – which since then has been picked up by others although they did not explicitly analyse small brands (see Fader & Schmittlein, 1993; Bhattacharya, 1997; Dowling & Uncles, 1997; Jarvis *et al.,* 2003; Jarvis & Goodman, 2005). These studies agree that small brands with niche characteristics are rare, which goes against marketing textbook expectations and Kotler's (2003, p. 281) statement of *"niche* [being] *the norm"*.

The term niche implies we know a brand's underlying strategy: the increased loyalty rate is to come about by selling more to existing customers leaving managers in the (mis)belief the brand represents a highly valued object thus having seemingly succeeded in at least some parts of their marketing objective (Ehrenberg, 1993A). And in fact, a niche position has often been *implied* for brands that exceeded their Dirichlet-expected loyalty rates. Kahn *et al.* (1988) clearly stated to *"not provide causal explanations for why* [these] *brands are* […]

*niche"* (p. 389). This is followed by Bhattacharya *et al.* (1996, p. 16) with no intention to draw *"any causal inferences about the relationship between* [loyalty outcomes] *and the marketing mix"*. Unclear is still whether all small brands with excess loyalty are in fact all (functionally) differentiated; that is, whether they are niche brands. In summary, true small niche brands are expected to have the following characteristics:

- Many (if not all) small brands would have niching positions (Kotler, 2003); that is, they have functional aspects that differentiates them from *"an average brand in the product class"* (Kahn *et al.,* 1988, p. 385),
- Building on Sharp and Dawes' (2001, p. 743) definition that *"differentiation exists when a firm's offering is preferred* […] *by some customers all of the time",* niche brands would have a smaller buyer base, but those purchase them beyond expectations (excess loyalty; ≥+10% above the Dirichlet norm),
- Their buyer base would show significantly larger proportions of heavy buyers,
- They would share fewer customers with other brands (under-duplication), in fact, they would attract more customers switching *towards* them.
- Over time niche brands need to keep their functional difference to maintain and even increase sales and market share.

### 5.3.2. Change-of-pace performance: Strategic vs descriptive characteristics

The revision of choice behaviour studies in *Chapter 3* revealed that significant proportions of small brands do not have niche characteristics (e.g. Fader & Schmittlein, 1993) but tendencies towards loyalty deficits (with excess penetration) (e.g. Kahn *et al.,* 1988; Pare *et al.,* 2006) which goes against marketing textbook expectations. In fact, textbooks rarely refer to or *"endorse* [the] *pursuit of a"* brand with such features (Jarvis & Goodman, 2005, p. 293). Kahn *et al.* (1988) termed these brands change-of-pace (also Bhattacharya, 1997; Dowling & Uncles, 1997; Jarvis *et al.,* 2003) and Jarvis and Goodman (2005) emphasised if a change-of-pace strategy is unsuccessfully implemented, then the brands should be harvested and re-introduced. The brands might also be in a transient position (Dowling & Uncles, 1997; Jarvis & Goodman, 2005), their loyalty deficit hence of short-term nature.

In general, change-of-pace brands are said to appeal to (many) more buyers then expected that look for a change (e.g. Kahn *et al.,* 1988; Bhattacharya, 1997) and with that have no definable target group (Jarvis & Goodman, 2005). According to Sharp and Dawes' (2001, p.

743) definition, change-of-pace are differentiated since *"differentiation exists when a firm's offering is preferred, on some buying occasions"* also called variety-seeking behaviour (Kahn *et al.,* 1988). The behaviour arises from a focus on attribute levels (Jarvis & Goodman, 2005), which implies we know customer's buying motives. In fact, in marketing theory variety-seeking is the type of consumer behaviour that occurs in situations with *"low consumer involvement, but significant perceived brand differences"* (Kotler *et al.,* 2008, p. 264-265). Customers switch *"out of boredom* [...] *to try something different"*; *"for the sake of variety"* (e.g. Jeuland, 1978; McAlister, 1982; McAlister & Pessemier, 1982; Givon, 1984; van Trijp *et al.,* 1996). Incongruity and post-purchase dissonance (Festinger, 1957) may trigger a tension towards a change, and curiosity then drives activity-seeking (Fowler, 1967), the search for something novel, a sensation (Zuckermann *et al.,* 1964) or a spontaneous alternation (Hosada, 1964). Such a willingness to test different (or new) products occurs even though the established ones are satisfying (Faison, 1977).

As switching may have various reasons, there is a need to separate derived from direct variation (Faison, 1977; McAlister & Pessemier, 1982; van Trijp *et al.,* 1996). External (derived) motivated switching arises through factors such as when the brand is on sale, recommended by others or purchased for another person (in the household e.g. children), while intrinsic motivations (direct variation) to switch are considered true variety-seeking as it is the *"variation* [that] *is rewarding in itself"* (Scriven *et al.,* 2017, p. 10). True change-of-pace brands are hence those resulting from the intrinsically motivated urge for a change. The implication is, that although intrinsic and extrinsic factors may result in the same behaviour (f.e. switching), customer motivations differ and so do marketing implications.

However, as with niches, Kahn *et al.* (1988) and Bhattacharya *et al.* (1996) *implied* a change-of-pace position from the fact that these brands under-performed their loyalty estimates. They are bought so infrequently (by a larger than expected group of customers) that they are in need of wide distribution channels to balance the deficit repeat purchase rates (Jarvis & Goodman, 2005). But these kinds of resources might not be available for the typical small brand, unless it is part of a portfolio which begs the question: is a change-of-pace strategy advisable to be pursued by smaller brands?

In summary, true small change-of-pace brands are to have the following characteristics:

- They can be identified as positioned differently from *"an average brand in the product class"* (Kahn *et al.,* 1988, p. 385) as they are aimed at variety-seekers (intrinsically motivated switching),

- Building on Sharp and Dawes' (2001, p. 743) definition that *"differentiation exists when a firm's offering is preferred, on some buying occasions",* they can only capture a small share of the market as those who buy them do so very infrequently, hence the loyalty deficit (≤-10% below the Dirichlet norm),
- Their buyer base would show significantly smaller proportions of heavy buyers,
- They would share more customers with other brands (over-duplication) as they are only bought for a change.
- Over time, the brands need to keep their differentiation to maintain share, but no specific notion of growth (or decline) has been made for change-of-pace brands.

Altogether, the idea of differentiation implies buyers are rather rational in optimising their decision-making amongst all alternatives available in the market (Simon, 1957; Stocchi *et al.,* 2015). Even though small brands are advised to strategically position themselves, less evaluated is whether this results into actual behaviour (purchases). In reality the unusual constellations of market share, number of buyers and loyalty seen with niche and change-of-pace brands are deviations from the Dirichlet norm, breaching its assumptions on buying (Fader & Schmittlein, 1993).

## 5.4. Conflicting evidence on the effectiveness of differentiation

The synchronisation of strategic management and budgeting depends on whether the differential aspects are effectively communicated *and* perceived as valuable by customers (Reeves, 1961; Carpenter *et al.,* 1994). But many functional differences do not show up as separate market segments (Ehrenberg, 1988). In fact, measuring differential advantage seems a rather complex matter. Trout and Rivkin's (2000) *"differentiate or die"* is at least testable, yet the all-or-nothing proposition lacks insights to the levels of differentiation. Also, the meaning behind *perceived* or *valued* is rather customer subjective, and what customers value *"is … anything but obvious"* (Fulmer & Goodwin, 1988, p. 57). Researchers frequently approach the topic by comparing brand images held by individual customers. Yet such perceptual mapping, and other multivariate analyses tend to *"highlight small differences, almost regardless of* [their] *magnitude"* (Romaniuk *et al.,* 2007, p. 43) and are thus less useful procedures to develop quantifiable results on how small brands compete (differently). In fact, perception data (i.e. attitudes towards brands or attribute responses)

collected from consumers is likely distorted by the more-buyer-effect (Collins, 2002): bigger brands are known by more while smaller brands are not, hence the fewer responses. This is rarely the outcome of differently valued attributes but a demonstration of the statistical selection effect of Double Jeopardy (e.g. Barwise & Ehrenberg, 1985; Romaniuk & Sharp, 2000; Stocchi *et al.,* 2015).

The predictable yet minor asymmetries between similarly differentiated smaller and larger brands are found to link to mental and physical availability as customers are differently exposed to and aware of the many available (brand) options in a market (Sharp & Dawes, 2001; Romaniuk & Sharp, 2004). To empirically understand differentiation and the impact it might have on the nature of consumer behaviour, Collins (2002) argued that the more-buyer-effect needs to be removed. This calls for analytical processes that analyse differentiation (outcomes) inclusively for example, by using the Dirichlet benchmarks of brand buying. The model describes purchase probabilities and switching in the *absence* of perceived brand positioning as the next sections outline.

### 5.4.1. The Dirichlet & small brand differentiation

Empirically, competition is between close substitutes that vary more in the size than the nature of their customer bases (Romaniuk, 2013B, 2015; Scriven *et al.,* 2017). The Dirichlet describes competition under the conditions of market near-stationarity and non-partitioning based on two simplifications: it first ignores the underlying determinants of choice assuming an *as-if-random* process, and second disregards purchase feedback deeming choice to be of zero-order (Goodhardt *et al.,* 1984; Uncles *et al.,* 1995). Detached from intrinsic (i.e. differential) aspects, all brands theoretically compete on all purchase occasions with equal chances to be bought describing an un-segmented market where choice probabilities are distributed *Dirichlet* across substitutable options. That is, the buying of one brand is independent of the buying of any other (Ehrenberg, 1988, 2000).

Of course, the real world is unlikely to offer these opportunities (Farris *et al.,* 1989) which is why brands differ more in size than loyalty as the latter is linked to purchase incidence. In other words, market shares are what they are *because* competing brands are perceived as substitutable and customers are differently aware of and exposed to them (Romaniuk & Sharp, 2004). If a brand is close to (not as different from) its rivals in the market, it should behave like them. In the absence of differentiation, brands do not differ much in loyalty but

compete for the buyers of other brands in line with their size – just as Double Jeopardy and the Duplication of Purchase expect (Ehrenberg & Goodhardt, 1970; Ehrenberg *et al.,* 2004). The laws combined represent that the size of a brand is determined by how many people buy it, how often and what other brands they buy.

Yet marketing textbooks suggest, for example, segmentation approaches where consumers are separated into smaller, similar or more homogeneous groups. The members of a segment are assumed to share one or few characteristics that cause them to have relatively similar needs and thus buying behaviour. The idea of segmentation is to help smaller brands gain a foothold in the market perhaps by identifying an opportunity not (yet) exploited by larger competitors (Dibb & Simkin, 1997; Dibb *et al.,* 2005). The brands offering a special feature would differ in the types of (segment) customers they attract. Empirical evidence says however, competitors are bought by similar user profiles (Uncles *et al.,* 1995; Hammond *et al.,* 1996; Kennedy *et al.,* 2000; Kennedy & Ehrenberg, 2001; Uncles *et al.,* 2012; Anesbury *et al.,* 2017). In other words, brands differ more in their number of customers but less in consumer demographic profiles (or other variables for customer identification) (Romaniuk & Sharp, 2004; Romaniuk *et al.,* 2007).

If brand level differentiation exists, brands would be less substitutable, and markets partitioned into groups of more or less closely competing brands. However, the Dirichlet-described Duplication of Purchase law widely applies: brands share customers in line with the other brand's size – more so with bigger and less so with smaller rivals (Ehrenberg *et al.,* 2004). In addition, brand management often utilises product attributes to explain the nature of competition in the market. If a brand competes strongly on some but not other attributes, those (strong) attributes can be emphasised and positioning strategies seek to identify and leverage those (Carter & Silverman, 2004). Yet, Colombo *et al.* (2000) argued that some (brand) clustering should rather be interpreted as that there are brands a substantial part of the customers in the market considers as unacceptable.

Targeting (specific buyer segments) assumes that an individual's buyer power (behaviour) remains the same over time. Managers of small brands then expect these buyer groups to deliver the same sales again in the future (Romaniuk & Wight, 2015). But *Chapter 3* outlined regression to the mean highlighted that buyer classifications are a frequent reason for errors in sales forecast, even more often than real changes in buyer behaviour, simply because the category is purchased more regularly than any one brand. And most of the times markets are found to be near-stationary, meaning category buying hardly changes over time

(e.g. Bass & Pilon, 1980; Lal & Padmanabhan, 1995; Ehrenberg *et al.,* 2004; Graham, 2009). The overreliance on specific segments might not result in the anticipated outcomes for small brands – at least not in the sense of sustained growth as the potential to do so predominantly depends on the number of buyers. And smaller brands have fewer buyers; niche brands even less.

Marketers are employed to develop brands that are perceived differently. But they seemed to have failed at least when looking at available empirical evidence (e.g. Bird *et al.,* 1970; Sharp, 2010). Buyers are found to not need to perceive brands to be different to repeatedly buy them. They see the competing options in a category largely as undifferentiated but prefer those they know, and habitually buy them (Sharp & Dawes, 2001). Smaller brands simply have fewer users, hence fewer associations (Barwise & Ehrenberg, 1985; Dall'Olmo Riley *et al.,* 1997). Positioning is, in fact, widely independent of brand buying patterns (Sharp & Sharp, 1997; Stocchi *et al.,* 2015) meaning small brands' loyalty deviations are unlikely the result of a successfully implemented differentiation strategy paving the way for more studies as there is limited research in this area.

This does not mean differentiation does not exist. As a matter of fact, differentiation exists in Dirichlet markets. But its nature depends on both the heterogeneity of *"market demands and* […] *firm resources"* (Sharp & Dawes, 2001, p. 756) making it *"a pervasive and almost unavoidable aspect of*" competition (p. 18) within the laws of scientific marketing. Larger households may prefer larger pack sizes or are heavier buyers of a specific product; cat food is usually bought by those owning a cat; children prefer pre-sweetened cereals and gasoline is more useful to those with cars. Instead of at the brand-level, segmentation might therefore occur at the category or sub-category level (Ehrenberg, 1959, 1988; Day *et al.,* 1979; Sharp & Dawes, 2001; Ehrenberg *et al.,* 2004; Sharp, 2010). Essentially *"brands are what is advertised"* (Singh *et al.,* 2000, p. 1185); SKUs[28] are what is stocked (Tanusondjaja *et al.,* 2018) and differences in pack size or flavour typically exist at SKU-level and tend to be much the same across rivals, balancing out many differentiation effects (Singh *et al.*, 2008). This has far reaching implications for small brands and their appropriate product portfolio management to accommodate the heterogeneity of the market (Sharp, 2010).

In summary despite marketers' efforts it appears that most empirical evidence demonstrates differentiation is hard to operationalise. The lack in meaningful

[28] Representing the combined turnover of the brand (Tanusondjaja *et al.,* 2018).

differentiation makes branding even more important. It allows potential customers to easily identify the source of the product (Sharp, 2010). Distinct (rather than different) elements such as names, terms or symbols, help customers to distinguish between brands and associate its elements accordingly. The difference between distinctive elements and meaningful differentiation is that the former (i.e. brand name, slogan or URL) may be protected by law while the latter is hard to measure (Johnson, 1997). Hereby, salience and awareness play a bigger role in competition than differentiation; that is, brands compete for awareness and smaller brands have fewer buyers because fewer people know (are aware) of them (Ehrenberg *et al.* 1997; Romaniuk, 2013A, B). With that brand salience (or the lack thereof) is a likely explanator of many purchase patterns (Romaniuk & Sharp, 2004).

### 5.4.2. Deviations from the non-segmentation condition

Marketers need to know the extent to which their brand's (observed) performance is defined by purchase patterns as a response to any anticipated strategic position. It is important to identify factors commonly associated with (loyalty) deviations as their interpretation *"will further strengthen benchmarking"* activities (Pare *et al.,* 2006, p. 6) and aids effective resource allocation.

Niche positions, being the holy grail of small brand marketing, are likely to justify resource commitment due to the (theoretically) higher profitability coming from the higher than expected repeat purchases, while literature falls short is in locating niche opportunities in competitive markets (Jarvis & Goodman, 2005). Perhaps this is a reason why niches rarely occur. What is more, managerial implications for niche and change-of-pace brands are likely to be different; not least for when the anticipated position was that of a niche but the outcome a change-of-pace brand.

Marketing needs to go beyond the analysis of the penetration-loyalty relationship towards an understanding of the outcomes of this behaviour in the context of the other competitors in the market. The Dirichlet shows that learning stabilised a long time ago; that is, consumer purchases may be used to measure how many people identify specific brands as more or less good enough options compared to their rivals. The Dirichlet-described laws of Double Jeopardy and the Duplication of Purchase provide benchmarks to evaluate just how substitutable brands are. As such, the two build the basis to document, quantify and perhaps explain small brand loyalty deviations in more detail. The extent to which frequently

acknowledged deviations are, in fact, customer's responses (purchases) to a brand's niche or change-of-pace position is the subject of the following sections with the viewpoint of Double Jeopardy first, and that of Duplication of the Purchase thereafter.

#### 5.4.2.1. Double Jeopardy & non-segmentation deviations

If brand-level differentiation exists, the expected penetration-loyalty relationship (Equation 4) described in *Chapter 2* would be disrupted. To identify brands that are niche or change-of-pace, the earlier introduced ±10% threshold is commonly used (e.g. Kahn *et al.,* 1988; Bhattacharya, 1997; Jarvis *et al.,* 2003; Jarvis & Goodman, 2005). The review of brand choice studies reveals that few focussed on small brands or mentioned brand size at all. Nonetheless, there are frequently acknowledged factors associated with brand performance deviations. Table 13 (below) classifies the factors after brand type: niche at the top and change-of-pace at the bottom. The factors are further grouped into deviations as outcomes of a strategy (right) which would represent niche (top right) and change-of-pace brands (bottom right).

Deviations due to aspects not typically associated with or fitting the above discussed niche and change-of-pace definitions are presented in column two: these brands exhibit a, for example, niche-like (also: niche candidate) loyalty outcome (top column two) but the suggested cause does not fit the common characteristics of a niche strategy.

A niche (top right) is a brand with a deliberately (functionally) different offer (as compared to the rest of the market) with the (intended) outcome of being *"preferred* […] *by some customers all of the time"* (Sharp & Dawes, 2001, p. 743). Soy based ice cream (Pare & Dawes, 2007), toothpaste for sensitive teeth (Scriven *et al.,* 2017), sugar-reduced cola (Kahn *et al.,* 1988), brands with peculiar pack sizes[29] (e.g. Bhattacharya *et al.,* 1996) and Spanish language-based TV shows in the US (e.g. Ehrenberg & Goodhardt, 2002) would therefore be considered niche brands. So are brands with a limited distribution (regional or local brands) or exclusive contracts with retailers (e.g. store brands) (Scriven & Bound, 2004; McCabe *et al.,* 2012) as they restrict opportunities for buyers to purchase them.

[29] The Dirichlet assumes brands are bought in similar quantities (Uncles & Ellis, 1989) larger or smaller than typical pack sizes may result in deviations.

## *Table 13: Loyalty deviations & strategic positioning of small brands*

| Performance | Theoretical accounted deviations | | | | Strategic direction driven deviations | | | |
|---|---|---|---|---|---|---|---|---|
| | Suggested cause | Study by | Examples | Link to brand size | Suggested cause | Study by | Examples | Link to brand size |
| Niche | **Restricted opportunity** | | | | **Restricted penetration** | | | |
| | Incentives | Ehrenberg *et al.* (2004) | i.e. free PC for prescribing special cardiovascular drug | N/A | Functional difference | Kahn *et al.* (1988) | i.e. *Tab* cola for weight conscious women | Small brands |
| | | Sharp & Driesener (2000) | Restaurants fitting certain groups are frequented more often | N/A | | Scriven *et al.* (2017) | i.e. *Sensodyne* for sensitive teeth | N/A |
| | Bulk-buyer | McCabe *et al.* (2012) | Growing brands | N/A | | Sharp (2007) | decaffeinated coffee | N/A |
| | | | | | | Ehrenberg & Goodhardt (2002); Ehrenberg *et al.* (2004) | US Hispanic & religious TV channels | N/A |
| | | | | | | Pare & Dawes (2007) | i.e. soy-based ice cream | N/A |
| | | | | | Private label | e.g. Uncles & Ellis (1988); Bound & Ehrenberg (1997); Pare & Dawes (2007); Pare (2008); Dawes & Nenycz-Thiel (2013) | i.e. *Tesco* , *Asda* , etc. | N/A |
| | | | | | Regional brand | e.g. Ehrenberg *et al.* (2004); Scriven & Bound (2004); Pare (2008); Scriven *et al.* (2017) | i.e. *Irn-Bru* , *Yorkshire Tea* , *Jakemans* (cough lozenge) | N/A |
| | | | | | **Restricted opportunity** | | | |
| | | | | | Peculiar pack sizes | Bhattacharya *et al.* (1996); Bhattacharya (1997); Jung *et al.* (2010) | i.e. pack size loyalty or variations in available pack sizes | N/A |
| Change-of-pace | **Restricted penetration** | | | | **Restricted opportunity** | | | |
| | Private label | Pare & Dawes (2007); Pare (2008) | i.e. *Tesco* , *Asda* , etc. | N/A | Variety-seeking | Kahn *et al.* (1988) | i.e. *7 Up* (uncola) | Small brands |
| | Functional difference | Bhattacharya (1997) | i.e. products for dieting, parties, specific HH members e.g. children | N/A | | Scriven *et al.* (2017) | i.e. *Kerrygold* positioned Irish | N/A |
| | | Scriven *et al.* (2017) | i.e. low-fat yoghurts for dieting; *Calpol* analgesic for children | N/A | Restriction in time | Scriven & Bound (2004); Sharp (2010); Scriven *et al.* (2017) | Seasonal offerings (i.e. Easter eggs or soup) | N/A |
| | | Pare (2008) | i.e. *Neutrogena* (dermatological moisturiser) | N/A | | | | |
| | | Dowling & Uncles (1997) | i.e. premium beer, low-alcoholic beer variants | N/A | | | | |
| | **Restricted opportunity** | | | | | | | |
| | Restriction in time | Sharp & Driesener (2000) | Discontinued business (closure) | N/A | | | | |
| | Peculiar pack sizes | Pare (2008) | e.g. larger pack size needs longer to use up | N/A | | | | |
| | Excess in trialists | Bhattacharya (1996); Bhattacharya *et al.* (1997); Danaher *et al.* (2003) | High-priced items on price promotion | N/A | | | | |
| | | Pare (2008) | Growing brands | N/A | | | | |

Their offering is likely not appealing to the mass of the market; the restriction in appeal (penetration) is accompanied by higher than expected repeat purchase rates. However, other factors restricting opportunities (to buy) reportedly also result in a niche-like performance (top left of Table 13). Deal incentives (Ehrenberg *et al.,* 2004) or restaurants fitting certain groups sizes better than others (Sharp & Driesener, 2000) are found to limit purchase opportunities in as much that the offerings are seemingly not relevant to large proportions of customers in the market. But in contrast to a strategically implemented functional difference the higher than expected loyalty cannot be considered as deliberately induced. In other words, while a functional difference is an intrinsic aspect of the brand, purchase incentives or a restaurant's ability to only serve specific group sizes are not.

The bottom right hand side of Table 13 lists the strategic factors attributed to the achievement of a change-of-pace position; a brand *"preferred on some buying occasions"* (Sharp & Dawes, 2001, p. 743). Change-of-pace performance is the result of variety-seeking behaviour (e.g. Kahn *et al.,* 1988), and van Trijp *et al.* (1996) argued only the intrinsically driven variation from normal behaviour is the true reward variety seekers are after. This seemingly applies only to *7 Up*, *Kerrygold* and seasonal offerings: *7 Up* offers buyers of the cola category a change (of pace) from other brown fizzy drinks while *Kerrygold* aims to appeal to butter buyers looking for something more Irish. At least *7 Up* might arguably be mis-categorised in the cola product class rather than being a change-of-pace brand but Kahn *et al.* (1988) did not detail further on their implied positioning proposition for this brand.

When looking at the bottom left of Table 13, it becomes evident that there are very many small brands for which the change-of-pace-like outcome is the result of extrinsically motivated switching such as analgesics or pre-sweetened cereals for children, products for dieting, pharmaceutical beauty products and restrictions in space through exclusive retailer contracts (e.g. store brands). In addition, as most losses and gains in a brand's customer base tend to happen in the groups of once-only and non-buyers (Romaniuk, 2011), significant changes within these groups may result in odd purchase frequency rates for the size of the brand in question. Pare (2008) argued since growth is driven by greater increases in reach compared to loyalty, deficit purchase rates are likely to occur. It is suspected that higher publicity triggers (brand) trials (i.e. more yet lighter buyers). Yet Pare found deficit loyalty is not universally exhibited by growing brands. McCabe *et al.* (2012) stated excess loyalty for growing brands, but there were no comments on declining labels.

Lastly, price is often a cue for quality, but effects vary: buyers of higher-priced items are unlikely to 'trade down'; those of lower-priced items tend to 'trade up'. The result is bigger

proportions of trialists, hence deficit loyalty may arise for the more expensive brands if on sale (Bhattacharya *et al.,* 1996; Bhattacharya, 1997; Danaher *et al.,* 2003). But the loyalty outcomes would not be due true variety-seeking, and brands hence considered change-of-pace candidates. And while some differentiation limits the size of the potential customer base (niche brands), in other cases *"it also seems to reduce rather than increase usage among brand buyers"* (Scriven *et al.,* 2017, p. 10). The question is, if these brands targeted a customer segment with a specialised offering (similar to niche brands) why do consumer responses result in a loyalty deficit?

Altogether the penetration-loyalty relationship is useful to identify deviations from the *"how many, how often"* but the nature of competition in a market is also affected by what other brands people buy. Here, the Dirichlet-described Duplication of Purchase law serves as a benchmark to determine just how substitutable (or not) brands are as shown in the next section. This could help to shed light on the more unexplained (and unexpected) loyalty outcomes in column two of Table 13.

#### 5.4.2.2. Duplication of purchase & non-segmentation deviations

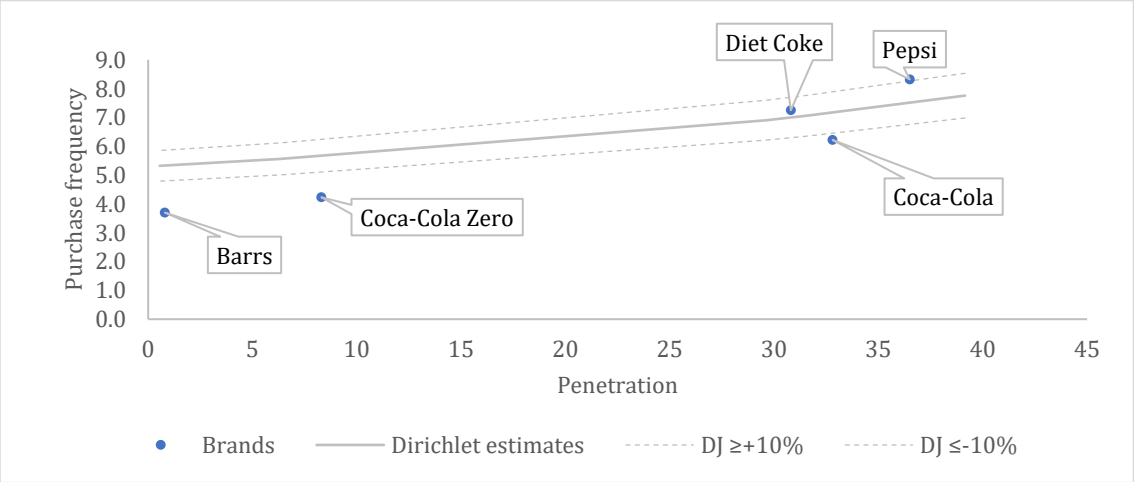
The Dirichlet makes assumptions on the other brands consumers buy (Ehrenberg & Goodhardt, 1970). This allows marketers to evaluate which rivals represent more or less of a threat. The combination of Double Jeopardy and Duplication of Purchase analyses permits insights on whether marked loyalty deviations are reflected in consumer behaviour (of buying of other brands) (Romaniuk & Sharp, 2016) resulting in market partitions. Figure 2 and Table 14 below illustrate this.

Figure 2 shows the top five UK cola brands and their penetration-loyalty relationship. *Barrs* and *Coca-Cola Zero* fall far below the Dirichlet estimates (grey line) and the ±10% threshold (dotted grey). These brands exhibit loyalty deficits, yet the competitive rivalry between the brands becomes clearer when looking at Table 14. Shown are the purchase duplications between the five brands. The brands are ordered after their penetration values (*b*, %) shown in column two and at the bottom of the table. It can be seen that brands share far more buyers with their larger rivals than with their smaller ones – just as the Duplication of Purchase expects. Computing the average duplications per column then reveals that cola brands share on average 62% of their buyers with *Pepsi*, 50% with *Diet Coke* and just 1%

with *Barrs*. This knowledge helps identify partitions – for when the Duplication of Purchase law does not hold (Ehrenberg, 1988).

***Figure 2: Loyalty performance of five cola brands (Y1)***

t = 1 year; Colas in the UK; Source: Kantar WorldPanel




The advantage of duplication tables is they indicate whether a deviation is just one sided, perhaps due to marketing shortfalls (Sharp, 2010; Romaniuk & Sharp, 2016), or two-sided (symmetrical on both sides of the blank diagonal). The latter is referred to as clear partition (Sharp, 2010). In general, disruptions in customer duplication may occur due to shared functional differences, distributional effects or effects from a shared brand name. Within these sub-categories brands may compete differently with each other (brand clusters) than they do with brands outside their partition (Ehrenberg & Goodhardt, 1970; Kalwani & Morrison, 1977; Sharp, 2010; Dawes, 2016).

***Table 14: Buying of five cola brands (Y1)***

| Buyers of (%) | % (b) | Who also buy (%) | | | | |
|---|---|---|---|---|---|---|
| | | Pepsi | Coca-Cola | Diet Coke | Coca-Cola Zero | Barrs |
| Pepsi | 37 | | 44 | 45 | 16 | 2 |
| Coca-Cola | 33 | 49 | | 41 | 12 | 2 |
| Diet Coke | 31 | 53 | 43 | | 18 | 1 |
| Coca-Cola Zero | 8 | 70 | 48 | 67 | | 2 |
| Barrs | 1 | 75 | 66 | 48 | 18 | |
| **Average duplication (%)** | | **62** | **50** | **50** | **16** | **1** |
| | % (b) | 37 | 33 | 31 | 8 | 1 |

t = 1 year; *Colas* (N = 5 brands)

Source: Kantar WorldPanel (rounded figures)

As discussed in *Chapter 4*, the gasoline market is reportedly split into leaded and unleaded (Ehrenberg & Scriven, 1994), shop location is found to drive market partition due to store proximity between the outlets (Sharp & Sharp, 1997). Some tourist destinations seem to disproportionally attract customers (e.g. due to special package holidays) (Mansfield *et al.,* 2003). The automobile market shows a distinct luxury segment (Ehrenberg & Bound, 2000) and coffee may come as ground, instant or regular (Ehrenberg *et al.,* 2004). Ice cream may be sold in tubs, as bars or on sticks and might be more premium or not, all of which affects distribution and may lead to market partition. Scriven *et al.* (2017) found the top twelve brands of the UK butter and spreads category to be partitioned into three groups: butters, spreads that taste similar to butter (buttery substitutes) and healthy spreads (oil-based). The former two over-duplicated within their respective groups and under-duplicated outside, while the healthy spreads competed normally across all groups. In a second example the authors then demonstrated the usefulness of combining Double Jeopardy and duplication analyses for a better understanding of the competitive structure of the UK sugar confectionery market. For example, mint-flavoured and children-targeted brands behaved differently than other confectionary, as did gum products and fruit-based snacks.

But literature has not often used the Duplication of Purchase to analyse niche and change-of-pace brands and in fact, most research is large brand oriented. Also missing is a consensus on a threshold to identify (brand) clusters clearly: Sharp (2010) used a few percentage points up or down, Scriven and Danenberg (2010) ±5 percentage points and Romaniuk and Sharp (2015) ±10% *"as a rule of thumb"* (p. 58). Looking back: for *Barrs* and *Coca-Cola Zero*, with loyalty deviations shown in Figure 2 and Table 14 respectively ±5% and ±10% bear the same outcome: *Barrs* is a popular soft drink in Scotland and less well distributed across the rest of the UK which might explain significant over-sharing with both *Pepsi* and *Coca-Cola*. It is likely that the latter two are stocked in most stores that sell *Barrs* but not necessarily the other way around. Hence the one-sided asymmetrical deviation.

The other deficit loyalty brand (*Coca-Cola Zero*) over-shares with *Pepsi* and *Diet Coke*; the latter might be due to both having sugar reduced recipes. *Diet Coke* and *Coca-Cola* also share a corporate name yet the typical associated result of over-duplication due to sharing sales force support or distribution channels (Sharp, 2010; Romaniuk & Sharp, 2016) seemingly does not apply. On the contrary: the brands share fewer than expected buyers and perhaps those that drink *Coca-Cola* look for the real taste but not a diet version and vice versa.

Knowing the duplication norm helps discover partitions *"much better than a statistical multivariate discovery technique"* (Ehrenberg *et al.,* 2004, p. 1314). Many differentiating aspects are, however, not featured on the packaging or within advertising, and might be quite trivial as discussed above (Carpenter *et al.,* 1994). In some instances, the difference is not (yet) known to buyers before starting to use the brand.

But despite frequent replication and usage of duplication analyses, associations between niche or change-of-pace performance and market partitioning are seldom drawn. In the context of small brands' loyalty deviations, duplication analyses allow a clearer picture on where extra buyers came from and vice versa, it may also reveal where missing buyers had switched to all of which contributes to a better understanding of asymmetric loyalty outcomes demonstrated by niche and change-of-pace brands.

## 5.5. Summary

*"Me-tooism remains the dominant force in competition"* (Ehrenberg *et al.,* 1997, p. 8) meaning survival is a process of *"competitive matching"* (Sharp, 2010, p. 113). Despite strategic marketing literature relentlessly advising small brands to target the less competitive areas of the market, sustainable differences are typically copied soon by rivals (Ehrenberg *et al.,* 1997). And in fact, neither the strategy of appealing to *"some customers all of the time"* (niche) nor the idea of being *"preferred on* [just] *some purchase occasions"* (change-of-pace) have much empirical support. Not only would such brand-level differentiation violate the Dirichlet assumption on market non-segmentation for when, in theory, all participants enjoy the same opportunities or motivations to buy any one brand per purchase occasion (Fader & Schmittlein, 1993; Bhattacharya, 1997; Danaher *et al.,* 2003; McCabe *et al.,* 2012). There are also several not (yet) well-researched areas: literature on brand differentiation is rarely clear about brand size – all brands are advised to be different (Sharp, 2010). While small niche brands are expected to grow by increasing their customer's loyalty beyond expectations (Fulmer & Goodwin, 1988; Kotler, 1994; Aaker, 2001; Kotler, 2003), it is found both niche and change-of-pace brands can only achieve a small share of the market (Kahn *et al.,* 1988) and Sharp (2010) reports brand growth for niches to be unrealistic. Can we expect change-of-pace brands to decline? Who would design a brand that buyers prefer sometimes, and are all niche brands functionally different? To provide the managers with a

clearer understanding about how to interpret the loyalty outcomes of their small brands, the fifth and last objective of this research was:

***To evaluate the extent of strategic positioning accounting for the loyalty deviations of small brands.***

The following chapter describes and justifies the methodological steps undertaken to address the five key objectives of this research. This includes discussions on the research approach and design. Also introduced are the utilised datasets for both the short and long-term analyses.

# PART III - METHODOLOGY

## Chapter 6: Methodology & data

*This chapter describes the data used in this study and the general steps undertaken to determine how small brands compete as well as their growth potential. The chapter starts with a reminder of the purpose of this research, discusses the adopted approach of building replication and extension in its design followed by setting its aims and underlying objectives in their epistemological context. In building on a framework of prior research discussed throughout PART II, the importance to develop empirical, quantifiable and generalizable outcomes is emphasised.*

……

### 6.1. Introduction

The proposed long-term value many marketing activities are justified with often lacks empirical support. The previous chapters addressed several issues involved in measuring (small) brand performance inclusively and over extended periods of time. Opinions on how to meaningfully measure the success of customer-attracting strategies diverge: on one side, the advocates of relationship marketing highlight the importance of an attitudinal desire to generate a behavioural response (a purchase). This lets consumer behaviour appear manageable (Romaniuk & Nenycz-Thiel, 2013; Hollebeek *et al.,* 2014; Leckie *et al.,* 2016). On the other hand, the outcomes of aggregated purchase data are frequently analysed using the NBD-Dirichlet. The model is a *"systematically related set of statements, including some lawlike generalizations, that is empirically testable"* (Hunt, 1991, p. 4) and known to reliably describe and predict performance metrics of differently-sized brands inclusively. This puts the focus on purchase occasion and brand choice – a move away from the individual consumer perspective and their intentions to buy. But research attention has mostly been on larger brands and their typical behaviour in the medium term (i.e. over periods of up to two years) up to the point that it is unclear what the term *small* means in relation to brands (Prinz, 1988).

The lack of unified approaches to define what a small brand is and the general disagreement on what is a systematic way to measure their performance over periods that exceed the length of two years reveal: there is still much to learn about how small brands compete. The key aim of this research was therefore to determine the extent to which the Dirichlet derived norms for the buying of large brands yield similar managerial implications about

the performance of their smaller rivals. This study differs from prior research in the following aspects:

(1) It uses a standardised approach to quantify the relative competitive relationship between successively ranked brands to identify and describe the common characteristics of small brands.
(2) It does not use a size-related cut-off point; the short-term analyses included 45 small brands with a ≤1% share; in the five-year long study 28 had this characteristic[30].
(3) It replicates and quantifies observations across *MSoD* in a period of one year,
(4) and extends the replicational process by another four years using a sub-sample of the initial product categories.
(5) Inferences are made on the underlying buyer behaviour and possible market share effects with the aim to identify emerging trends.
(6) Lastly, the identified patterns in small brand buying are discussed against niche marketing theory and current knowledge on change-of-pace brands.

If the Dirichlet assumptions on near-stationarity and non-segmentation hold, the usefulness and robustness of the models' well-known theory is confirmed in the rather under-researched context of small brands. The current study aims to fulfil the elements of marketing science (Bass, 1993, p. 5) such as *"(1) empirical generalisation, (2) generalised explanation, and (3)* [the] *process of extension, revision, and updating"* existing knowledge. The research process addressed five objectives:

I. To systematically define and describe the relative competitive performance of small brands.
II. To describe the regularities in the incidence, scale and nature of loyalty deviations from the Dirichlet norm of small brands in a period such as a year.
III. To determine the persistence of small brand's loyalty deviations from the Dirichlet norm over five consecutive years.
IV. To describe the typical characteristics in the BPMs of growing (declining) small brands.
V. To evaluate the extent of strategic positioning accounting for the loyalty deviations of small brands.

[30] This relates to small manufacturer brands not private labels as small brands were the focus of this research.

The subsequent sections first discuss this study's epistemological setup before describing the analysed data. This is followed by an introduction of typical category and brand performance measures used in Dirichlet analyses and closes with a description of the analytical steps undertaken to operationalise the underlying research objectives.

## 6.2. The method

### 6.2.1. Research philosophy

When conducting research, essentially the act of generating knowledge, its philosophy describes the assumptions held by the researcher relating to the nature (ontology), the sources (epistemology) and the usage (paradigm) of that knowledge to appropriately meet the requirements of the objectives (Hughes & Sharrock, 1997; Benton & Craib, 2001). The assumptions on reality also determine the adopted strategy and method starting from the design of the research down to the conclusions drawn (Blaikie, 1993; Saunders *et al.,* 2016).

Ontology is the philosophical view on the nature of reality (Krauss, 2005; Saunders *et al.,* 2016) which may reveal itself as subjectivist or objectivist (Burrell & Morgan, 1979). The data used in this research was of quantitative nature – purchase records aggregated at both the household and the brand level. The here utilised model (the NBD-Dirichlet) to describe consumer behaviour does not take marketing mix, brand position or other external factors into account (Ehrenberg *et al.,* 1990). The overall objective of this research was to analyse how small brands grow. Standardised and well-established processes that aimed for a systematic and quantifiable description of these brand's performance were used. This research largely excludes consumer perceptions and attitudes towards specific brands and their marketing activities to develop generalisable results. Some subjectivist traits come indirectly into play within the analyses for objective five inasmuch that small brand's systematically observed buying patterns are discussed against the concept of differentiation. In particular, it is aimed to document and quantify the extent to which small brand's loyalty deviations conformed to the in *Chapter 5.3.* given definitions for niche and change-of-pace. Based on commercialised (as in publically available) brand positioning information, assumptions are made on the likeliness of small brand performance (measured via how many people buy it, how often and what other brands they buy) being the outcome of their anticipated positioning strategy (implied from brands' marketing communications,

elements, ingredients, etc.). As such, this study has a more objectivistic view on the nature of reality on how small brands grow.

Regarding appropriate sources (epistemology), Johnson and Duberley (2000) propose that an objectivist perspective calls for a positivist viewpoint inasmuch that it allows phenomena to be understood by using a scientific approach. Aiming for empirical testing, a positivist approach represents a reliable pathway for observations and measurements in an objective and value-free manner (also Gill & Johnson, 2010). Systematically examined are consumer purchase records; the focus was on the observation and description of quantifiable results aiding the derivation of scientific laws with the objective to explain and generalise patterns (Smith, 2004; Bryman, 2012).

The NBD-Dirichlet is used as a diagnostic tool to analyse and interpret small brand performance. As such, current knowledge on competition and market structure that had been developed for large brands is expanded. Therefore, neither an interpretivist view (where the world is too complex to fit into law-like patterns (Holbrook, 1995)) nor realism (which essentially conveys aspects of social conditioning) fit the requirements of developing results that replicate and generalise across diverse product classes and time. Noteworthy is that realists and positivists share the opinion of an external reality and therefore, for example, empirical research can be conducted but they distance themselves from the positivists by saying that even though observations report repeatedly the same outcome, the causes cannot be determined (Bhaskar, 2010).

The here used secondary data tables were not collected by the researcher. That is, the researcher was process external and analyses undertaken value-free – in fact, an important aspect of positivism (Gill & Johnson, 2010; Saunders *et al.,* 2016). Positivist studies tend towards highly detailed methodological descriptions which then allow replications, aimed at by the current research. And because of the here adopted way of analysing the regularities in small brand performance (objective one to four), and perhaps attempt an explanation of *why* these occur (objective five) the philosophical paradigm was of a more radical structuralist nature (Burrell & Morgan, 1982) by analysing brand performance measures and their relationships, it was aimed to develop a systematic understanding of how deviations from the Dirichlet norm *"may produce dysfunctionalities"* (Saunders *et al.,* 2016, p. 143). As such, the adopted paradigm also fits the objectivist manner of knowledge generation and nature of data used.

The combination of an objectivistic view on reality with a positivistic nature and a radical structuralist paradigm allows to determine the relationship between phenomena and regularities. This helps to derive law-like results from which to describe the complex nature of, say, the nature of competition for small brands.

### 6.2.2. Research approach & design

The NBD-Dirichlet is frequently labelled as the best-known empirical generalisation in marketing science (Uncles *et al.,* 1995; Sharp, 2010; Uncles & Kwok 2013; Kennedy & Hartnett, 2018). Its perhaps most special feature is that it describes, in just one model, simultaneously the market response to all competing brands in a fixed period (Bass *et al.,* 1976; Bass & Pilon, 1980). And many of these aspects about competitive market structures and competitive outcomes have been developed into law-like and simple patterns that are much *"the same for different brands and products and different marketing conditions"* (Ehrenberg, 1988, p. 17). These patterns help describe and predict performance based differences between big and small brands – which are largely occur as a result of penetration, and have been confirmed across various CPG categories (Ehrenberg *et al.,* 1990), geographical areas, repertoire and subscription markets (Ehrenberg *et al.,* 2004; Sharp *et al.,* 2012), length of time (Graham, 2009; Pare & Dawes, 2011) and contexts such as forestry products (Michael & Smith, 1999), television viewing (Barwise & Ehrenberg, 1987), radio listening (McDowell & Dick, 2005), political polls (Ehrenberg, 1991), FMCGs (e.g. Ehrenberg, 1988), consumer memory (Stocchi *et al.,* 2015), average spend per buyer (Dawes *et al.,* 2017) or the mental market share of brands (Romaniuk, 2013A). The so established theory is assumed to apply to both big and small competing brands (e.g. on how brands grow). However, after decades of replication and extension much is known about the buying of market leaders and less attention has been paid to the lower end of the 'Double Jeopardy line'. Although the resulting theory encompass both end, most early studies only considered the *"ten or so leading brands"* in a product category (Fader & Schmittlein, 1993; Kennedy *et al.,* 2000, p. 1; Scriven & Bound, 2004; Habel *et al.,* 2005B; Jung *et al.,* 2010). Unknown is whether small brands grow through increases in the penetration figures, and if not, is Kotler's (2003) niching advice actually evidenced? Some literature evidence Dirichlet deviations for small brands (e.g. Kahn *et al.,* 1988; Pare *et al.,* 2006) but in general, research that tests the extent to which established Dirichlet-described law-like patterns in consumer behaviour apply to small brands is scarce.

Therefore, there is a need on both the theoretical and managerial side to look at the lower end of the penetration (Double Jeopardy) curve in more detail. In order to test the reliability of existing empirical generalisations at this end to ascertain the characteristics of (small) brand growth. Established empirical generalisations and, if any, newly emerging patterns are systematically replicated and extended aiming to obtain a reliable representation of phenomena (Bass & Wind, 1995). Similar to prior studies, Dirichlet benchmarks are used to describe competitive market structures and consumer behaviour. Based on the format of the here used data (numerical) and the simple, direct comparison approach (as recommended by Barnard *et al.,* 1994) of systematically measuring the relationships between performance variables (BPMs) to document and quantify emerging regularities across categories and time. The research design is thus of descriptive nature. By following such an inductive empirical-generalist approach, the current study sits within a vast programme of inquiries utilising Ehrenberg's (1993B) empirical-then-theoretical (EtT) manner of extending knowledge in marketing science.

Representing *"the building blocks of science"* (Bass & Wind, 1995, p. G1), empirical generalisations (EGs) are regularities or patterns that are repeatedly observed across various contexts. They are simple relationships that may be expressed in a simple mathematical, symbolic or graphical manner (Bass, 1995; Uncles & Wright, 2004). By systematically investigating occurrence and recurrence of regularities in small brand buying across varying product categories (many sets of data or *MSoD*) covering periods from one to up to five years, this research aimed to identify typical performance patterns of small brands. Those can be verified and transformed into principles which can be further tested, and their applicability extended to systematically build scientific knowledge. That is, empirically-grounded theory that accounts (explains) for the occurring patterns is proposed. In other words, marketers and marketing science may find the here discovered patterns in small brand performance useful to understand competition and characteristics of growth from the viewpoint of smaller brands.

Barwise (1995) proposed that a good empirical generalisation is therefore of scope (with no intention to be universal), precision (that is, an approximate-neat description of the pattern), parsimony (i.e. utilises only the variables necessary to describe the relationship), relevant (because of its recurrence across various conditions it allows routine predictions, provides context and serves as a benchmark) and is the basis for theory-building (the explanation that accounts for the scope of the pattern). Such recurring patterns help

understand and explain how the world works; their predictive validity has significant practical value the greater their scope (i.e. contexts they replicate across). The so developed *"evidence-based theory"* is seen *"as a route to improve understanding"* on the nature of competition (Kennedy & Hartnett, 2018, p. 304).

In summary, the development of useful empirical generalisations relates hence to three factors: the access to (1) multiple sets of data to (2) systematically replicate and extent findings that can be interpreted with the help of (3) prior knowledge. How these are implemented into the current research is discussed in below.

## The importance of *MSoD*

Marketing science has two main approaches when it comes to data interpretation. The traditional theory-first pathway essentially treats additional data as new. The implication is that a new theory (or concept) needs to be developed to fit and explain this specific set of data (Bound & Ehrenberg, 1998); perhaps the reason why much of the (traditional) marketing knowledge is based on single-shot research (Hubbard & Armstrong, 1992; Munafò *et al.,* 2017). This approach of generating knowledge is described as TETE, Theory-Empirical-Theory-Empirical (Bass, 1995) or TiL (theory-in-isolation) (Uncles & Wright, 2004). The aim is to achieve statistical significance or best-fit which by definition do not intend to look for replicability (Hubbard & Armstrong, 1992). Instead, the testing of empirical data follows the initial development of theory that is aimed at describing the outcomes of the tests. There is no evidence whether the developed theory generalises to other sets of data. Such empirical studies that do not generalise (f.e. isolated facts, ad hoc anecdotes, one-off cases or isolated experiments) and *"generalisations that are not empirical"* (Uncles & Wright, 2004, p. 8) do not fall under the definition of empirical generalisations. They may help determine relationships but have no intent to generalise merely permitting speculations on the possible scope of the results (Leone & Schultz, 1980; Hubbard & Armstrong, 1992; Ehrenberg, 1994).

The second approach uses prior knowledge to test whether patterns identified in earlier studies also fit new data (Bound & Ehrenberg, 1998). Investigating patterns beyond the initial dataset helps develop generalisable knowledge (Leone & Schultz, 1980; Bass, 1993, 1995) thereby improving replicability and reliability of the findings (Brinberg & McGrath, 1985). The approach of empirically validating and expanding knowledge beyond a single

set of data (*SSoD*) through gradually analysing the recurrence of patterns over multiple sets of data (*MSoD*) is called ETET, Empirical-Theory-Empirical-Theory approach (Bass, 1995) or EtT (empirical-then-theory) (Uncles & Wright, 2004). The focus is on the search for 'significant sameness' – the degree of generalisability (Ehrenberg, 1990; Barwise, 1995; Uncles & Kwok, 2013). Bass (1995) argued that the status of empirical and theoretical should be clearly communicated in the research process but their sequence is not necessarily fixed. Important to understand is that the development of empirical generalisations puts the attention on the data and the identification of patterns from that data to develop theory (f.e. EtTEtT approach).

The data-first approach is applied in the current study which is strongly linked to an inductive reasoning taken up by researchers attempting to fill a gap that occurs in a logic argument (Ketokivi & Mantere, 2010; Saunders *et al.,* 2016). Data is systematically analysed aiming to identify and quantify patterns that emerge over *MSoD*. The so identified patterns are then discussed in the light of existing knowledge (Uncles & Wright, 2004). The here used data are FMCG categories which differ in factors such as the nature of products, brand shares, market concentration and marketing efforts. The data is assumed to be consistent in sampling and gathering approach as is described in *Section 6.3*. The usage of *MSoD* does not only allow comparisons across datasets, it also permits to identify exceptions to the expected patterns. These norms provide valuable background and meaning to findings developed in areas where little systematic research has been undertaken. Prior knowledge helps contextualise the patterns (and deviations) in the buying of small brands.

## The importance of replication-extension

The search for significant sameness across datasets is linked to the subject of replication-extension (Uncles & Kwok 2013). Replicability is crucial to advance scientific knowledge (Mittelstaedt & Zorn, 1984; Collins, 1985; Hubbard & Armstrong, 1994). Empirical theory is developed by repeatedly putting it *"to the test of falsification"* (Robertshaw, 2007, p. 8) to reduce the occurrence of sampling error (Popper, 1935; Wright & Kearns, 1998), bias or other subjective influence. In other words, replications help distinguish one-off from generalisable results (Jacoby, 1978); that is, replication-extension studies determine the extent to which findings are valid and robust (Lindsay & Ehrenberg, 1993).

Literature distinguishes between three forms of replications: repeat studies, replications close to the initial study and those more (or less) differentiated from it. Their purpose differs in that repeat studies *"help establish the truth of the first study"* (Uncles & Wright, 2004, p. 11), while in close replications some aspects are changed (f.e. a different sample is used or different product classes) to determine whether the initial findings were a one-off-happenstance. Differentiated replications are understood to be most important for scientific advancement by determining the extent to which patterns occur across various (changed) aspects. They aim to expand the scope of the relationship that describes the pattern (and perhaps to identify boundary conditions) to then theorise *why* the pattern did (or did not) occur. As such, replications require *MSoD* (Ehrenberg, 1995) to test the relationship across changed aspects of place (i.e. different geographical markets), time (i.e. varying length of time) or content dimensions (i.e. categories varying in products, demand or market concentration) (Mittelstaedt & Zorn, 1984; Brinberg & McGrath, 1985; Lindsay & Ehrenberg, 1993; Uncles & Wright, 2004; Uncles & Kwok 2013).

This thesis has an in-built replication-extension research design to increase the confidence that the results are not a one-off happenstances or artefacts of a specific approach to research. It also provides an empirical insight to the extent to which results generalise and the probable factors affecting the results. Differences between replications may be achieved through changes in variables but definitions of minor or major are rather subjective (Sharp, 1999). Within this research the FMCG purchases of 36 product categories over two different length of time (one year and five consecutive years) were analysed which is why the results may be interpreted differently. For example:

1. Thirty-six close replications (36 categories over one year) followed by more differentiated replications of fifteen of these categories over another four years.
2. One study (*Biscuits* in one year) followed by several (somehow) differentiated replications to 35 categories over the same length of time and more differentiated replications into fifteen of these product classes over another four years.
3. Two studies: f.e. *Biscuits* over one year and *Butter* over five consecutive years. The first study is followed by 35 close replications (to 35 categories over the same length of time), and the second study is followed by fourteen further close replications over the same time period. The second study is a differentiated replication of the first.

The studies may also be distinguished by, for example, their level of market concentration, promotional expenditure, usage of the same sample or the degree of brand differentiation

(i.e. in brand image) in each product class. This highlights the level of interpretation required to analyse the results of replication studies (cf. Sharp, 1999).

It was decided to treat the findings of this research as derived from two main differentiated studies (above point three) each followed by a series of close replications as outlined under point three in the list above. The first study analysed small brand performance over the period of one year in one initial product class followed by 35 close replications to different categories covering the same length of time, and all but two (*Margarine* and *Butter*) were even gathered in the same 52 weeks ending in October 2010 (see Table 15 in *Section 6.3.2.*). These two outliers covered the 52 weeks ending in April 2008. This initial study tests whether earlier identified patterns and deviations in small brand performance described by Kahn *et al.* (1988) and Pare *et al.* (2006) also occur when analysing a greater number of highly dissimilar and more recent product classes with a clear and standardised definition of the typical characteristics of small brands. The close replications aim to determine whether the initial patterns are replicable. Recurring patterns are of increased importance. The here used product categories differ in buying metrics and market concentration.

The second study analysed the year-by-year performance of small brands over five consecutive years in one initial category. This is a differentiated replication of the patterns identified in the first study over an extended period of time and followed by fourteen close replications to various product classes over the same length of time. The aim is to document and quantify the patterns, the effects of time (if any) and to analyse whether (non-) stationarity in buying is likely to affect the performance of small brands. This provides an understanding of what factors do (or do not) affect results. In other words, knowing what does (and does not) matter improves the validity of performance predictions for small brands. The data for all but two of the categories (again *Margarine* and *Butter*) was gathered from October 2010 to October 2014. The two outliers covered the period of April 2008 to April 2012 (see Table 16 in *Section 6.3.2.*).

It needs to be reminded that replications do not provide absolute proof but increase the level of confidence to which results generalise and contributes to theory building (Lindsay & Ehrenberg, 1993). Any replication-extension includes the application of prior knowledge.

### The importance of prior knowledge

Generating results following an empirical-generalist approach requires the combination of (many sets of) data with theory (Ehrenberg, 1993B; Lindsay & Ehrenberg, 1993). These studies have the purpose to increase scientific understanding though a systematic structure that aids explanations and predictions (Hunt, 1991). Empirical generalisations describe a relationship (norm) and provide an understanding on the regularities behind the pattern. The aim is to verify the patterns across datasets to establish principles which are further empirically tested and gradually transformed into scientific knowledge. That is, empirically-grounded theory that accounts (explains) for the occurring patterns is proposed.

For the current research, the Dirichlet provides a set of well-grounded interpretive norms that represent the baselines for analysing small brands. With the help of the baselines, the effects of marketing interventions and strategies may be understood in some detail. The norms also demonstrate what would, in theory, be expected to happen if conditions change. If the patterns generalise (replicate), the identified relationships occur *despite* the focus on small brands, different product classes, category demand, usage, length or year of study. In other words, similar patterns occur *because "these background factors do not affect the general nature of consumer choice"* (Colombo *et al.,* 2000, p. 34). In turn, if relationships do not hold, insights are obtained to where discrepancies arise. The usage of prior knowledge provides a framework of *"analytical convenience"* (p. 34) to interpret newly generated results and is also understood to be the basis of scientific research. As such, the replication and extension of descriptive models (such as the Dirichlet) serves theory building and enhances our understanding on whether the well-established empirical generalisations in marketing science and also describe the nature of competition for small brands as approximately-neat as they do for market leaders.

The following sections first introduce the source and nature of the here analysed data before the detailed steps undertaken to achieve each of the five research objectives are described.

## 6.3. Data: Sources & description

### 6.3.1. Consumer panels

The analyses of this research are based on the consumer purchase behaviour of various UK consumer packaged goods categories provided by Kantar WorldPanel (formerly TNS).

There are two key types of such purchase data, as has been outlined in *Chapter 2.2.3.*: retailer audits (scanner data) and information collected via hand-held home scanners, so called consumer panels (Dawes, 2016; Brown, 2018).

This research utilised consumer panels. In contrast to scanner data[31], consumer panels capture the underlying patterns of repeat buying as they comprise the purchases of participating households across multiple (theoretically all) outlets (Boyd & Westfall, 1960; Driesener, 2005; Sharp, 2007). This allows analyses of *"continuous purchasing records of the same people or households over extensive periods of time"* (Ehrenberg, 1988, p. 7), the steady state of patterns in the long term (Wansink, 2001) and the systematic identification of seasonality or other trends. It also allows comparison of data over varying time length, such as the performance of small brands over one and up to five years. Perceptible changes, if any, reflected in the underlying buying properties of consumers can be detected (Boyd & Westfall, 1960; Singh, 2004).

Buyer behaviour is a central part of marketing thought (Eryigit, 2017). As the dependent variable is sales (Sharp *et al.,* 1999) the accuracy of consumer panels *"is of considerable importance"* (Morrison *et al.,* 1966, p. 85). The impact of panel tenure (length of membership) on recording accuracy was analysed in depth by Boyd and Westfall (1960), Morrison *et al.* (1966) and Wilson (1981); Sudman (1964) provided a comprehensive evaluation of the usefulness of continuous panels highlighting their advantages for tracking household purchasing over extended periods of time.

Consumer panels have several advantages regarding representativeness, sampling and consistency (Singh, 2004). First, even though only the products brought home can be scanned (which leaves out those consumed outside), the home scanning devices have been found to reduce reporting omission considerably. That is, incorrect or over-recording occur less often than expected. The observed data specifies the purchases per occasion. The week-by-week purchases are researched; the data then collapsed into quarterly, six-month, yearly or even longer performance spreadsheets (Ehrenberg, 1988).

Second, the panels are effective for aggregating purchase data for high numbers of households. This allows tracking of minority behaviour (Bradley, 2007) such as one-off

[31] Their data reveals information on price, store environment and sales volume yet only of participating retailers – typically the UK top four yet few others (Brown, 2018). This might help to understand advertising effects and their persistence, but limited insights are given on loyalty and switching activities of the same households (Wansink, 2001), let alone on over time changes of consumer behaviour (Nijs *et al.,* 2001).

buying. Large panels also increase the significance of results and reduce the danger of sampling errors (Goodhardt *et al.,* 1984). But as with any panel, some households may drop out over time. Therefore, panel agents (here: Kantar) often apply a quota sampling method. A quota sample as replacement helps maintain a steady selection of participants that is geographically and demographically weighted to provide a representative reflection of the market's purchase behaviour (e.g. Boyd & Westfall, 1960; Saunders *et al.,* 2016; Kantar WorldPanel, 2018A). This allows the distinction between whether a household has left the panel or simply stopped buying a (particular) brand altogether (East & Hammond, 1996).

Kantar itself has operated since 1991, and its well-run commercial panels include the what, when, where and how much is bought by over 15,000 households[32] (Kantar WorldPanel, 2017). This gives a reasonably exact description of the buying patterns of the British population. The data analysed in this research are therefore secondary data tables initially derived for a different purpose (Saunders *et al.,* 2016). This also means that the data's potential goes beyond that is used here. The data type used is of the same format and structure as what clients (data managers) of Kantar would receive and monitor for their benchmarking activities to track, for example, brand choice decisions and infer on responses to marketing activities (Wilson *et al.,* 1981; Fader & Schmittlein, 1993; Bhattacharya, 1997; Sharp *et al.,* 2000; Sharp, 2007).

The aggregated purchase records used here show information for various performance metrics for each brand and some additional information on category buying much like that presented in Table 6 (*Chapter 2.3.1.*). The data is also similar to that used in earlier studies on brand performance such as Ehrenberg (1988), Kahn *et al.* (1988), Scriven and Bound (2004), Pare *et al.* (2006), Pare and Dawes (2007, 2011), Sharp (2007), Pare (2008), Graham (2009), Singh *et al.* (2012) or Dawes (2016).

### 6.3.2. The datasets & their preparation

Stochastic modelling requires repeat purchase records of continuous reporters (cf. Zufryden, 1978; Ehrenberg, 1988). The intervals between successive purchases likely differ among households and may even exceed several months yet the households are still active

[32] Any collected personal household data is protected by Kantar complying with Esomar and MRS confidentiality rules, meaning, no such information that could be used to track and relate any household to specific purchases is provided by the panel operator or in any kind used within the current research (Esomar, 2016; Kantar-TNS, 2018; Kantar WorldPanel, 2018; MRS, 2018).

panel members. The data used here came in yearly snapshots that had already been aggregated by Kantar; that is, the panel supplier had defined continuity according to the Powerview manual (also: Sharp, 2007) (75% minimum reporting time with a few weeks at both the beginning and the end of the yearly snapshots).

The current research aims to document, quantify and compare shorter term fluctuations in buying patterns with their persistence over an extended length of time. Panel defection and replacement (quota) would disturb the long run analyses (Boyd & Westfall, 1960; Sudman, 1964; Dekimpe & Hanssens, 1995B; Driesener, 2005). To ensure continuity over the period of five consecutive years, a different sort of panel was needed. With the help of Kantar's specialist software Powerview, the non-continuous buyers were discarded to establish a panel of continuous reporters. The households recording in the first and last six months of the five-year period were considered continuous. This ensures participants were panel members for at least the specified length of the investigation. Year-on-year comparisons of brand loyalty thus draw on panelists reporting for the entire panel period. This means the data used in the short and long-term analyses is consistent allowing determination of the stable nature of purchasing behaviour. It also helped to set up before and after analysis of the same population avoiding sampling variation arising from two (or more) separate populations. The approach further avoids a downward bias (reporting fatigue) in repeat-purchasing metrics that might otherwise occur if panellists are present for only a part of the investigation period (Dalal *et al.,* 1984; Wansink, 2001).

The buying records provided by Kantar covered two periods ranging from one to up to five consecutive years. 36 datasets of a one-year panel length period were available; for fifteen of these categories continuous purchase records covering another four years were available. Thus, the longitudinal data was a subset of the short-term panel. Panel length was not concurrent and covered periods from 2008 to 2014[33], giving ample opportunity to buy (small) brands (at least once). The product classes are specified by Kantar. The aim of this research is not to assess the appropriateness of Kantar's category naming but to ensure that they had been widely used in prior research (cf. Nijs *et al.,* 2001; Driesener, 2005).

The tables below (15 and 16) reveal the market characteristics for the one-year and the five-year sub-sample respectively. Presented are: product class name (as specified by Kantar in column one), panel start and duration (column two), column three shows the proportions

[33] For example, *Butter* data was collected starting from April 2008; *Fabrics* from October 2010.

of households who purchased the category at least once in a period of a year (category penetration; *B*) and how often they did so on average (column four; *W*). The product categories are arranged in a downward order by their (initial) buying propensity (*B*) in year one.

***Table 15: Average annual descriptive metrics for 36 short-term categories***

| Category | Panel length & year | Category metrics B (%) | W | Total* brands (No.) |
|---|---|---|---|---|
| Toilet tissue** | 52 w/e 17 Oct 10 | 96 | 21 | 23 |
| Laundry | 52 w/e 17 Oct 10 | 91 | 6 | 10 |
| Biscuits | 52 w/e 17 Oct 10 | 90 | 19 | 10 |
| Fabrics | 52 w/e 17 Oct 10 | 89 | 7 | 16 |
| Margarine | 52 w/e 20 Apr 08 | 89 | 13 | 18 |
| Juices | 52 w/e 17 Oct 10 | 85 | 21 | 15 |
| Dentifrice | 52 w/e 17 Oct 10 | 83 | 6 | 15 |
| Kitchen towels | 52 w/e 17 Oct 10 | 79 | 7 | 23 |
| Cooking sauce | 52 w/e 17 Oct 10 | 76 | 11 | 16 |
| Butter | 52 w/e 20 Apr 08 | 71 | 12 | 16 |
| Instant coffee | 52 w/e 17 Oct 10 | 69 | 7 | 19 |
| Colas | 52 w/e 17 Oct 10 | 67 | 14 | 14 |
| Facial skin care (F) | 52 w/e 17 Oct 10 | 64 | 6 | 10 |
| Facial tissue | 52 w/e 17 Oct 10 | 62 | 6 | 24 |
| Deodorant (F) | 52 w/e 17 Oct 10 | 55 | 4 | 10 |
| Premium ice cream | 52 w/e 17 Oct 10 | 55 | 5 | 15 |
| Pizzameals | 52 w/e 17 Oct 10 | 54 | 9 | 13 |
| Deodorant (M) | 52 w/e 17 Oct 10 | 51 | 4 | 10 |
| Non-medicated | 52 w/e 17 Oct 10 | 49 | 6 | 19 |
| Shampoo | 52 w/e 17 Oct 10 | 34 | 3 | 10 |
| Pasta sauce | 52 w/e 17 Oct 10 | 32 | 8 | 10 |
| Razor (M) | 52 w/e 17 Oct 10 | 30 | 2 | 10 |
| Chocolate ice cream | 52 w/e 17 Oct 10 | 25 | 3 | 10 |
| Dogfood (adult) | 52 w/e 17 Oct 10 | 24 | 19 | 10 |
| Dogfood (dry) | 52 w/e 17 Oct 10 | 20 | 8 | 10 |
| Beer | 52 w/e 17 Oct 10 | 19 | 3 | 19 |
| Cappuccino | 52 w/e 17 Oct 10 | 18 | 5 | 13 |
| Instant DeCaf | 52 w/e 17 Oct 10 | 17 | 5 | 18 |
| Dogfood (wet) | 52 w/e 17 Oct 10 | 17 | 21 | 10 |
| Razor (F) | 52 w/e 17 Oct 10 | 16 | 2 | 10 |
| Shampoo & Conditioner | 52 w/e 17 Oct 10 | 12 | 2 | 10 |
| Special instant coffee | 52 w/e 17 Oct 10 | 10 | 4 | 9 |
| Facial skin care (M) | 52 w/e 17 Oct 10 | 10 | 2 | 10 |
| Hot milk drink | 52 w/e 17 Oct 10 | 8 | 10 | 10 |
| Catfood (adult) | 52 w/e 17 Oct 10 | 5 | 34 | 10 |
| Catfood (wet) | 52 w/e 17 Oct 10 | 4 | 36 | 10 |
| Average | | 47 | 10 | 485 |
| MAD | | 27 | 6 | |

t = 1 year; 36 categories (N = 485 brands); M = Male; F = Female (rounded figures)
*Continuously reported individual brands & private labels Source: Kantar WorldPanel
**2010 data estimated

Category penetration averaged at 47% and 69% for short and long run sets respectively: *Biscuits*, for example, are bought by 90% of households, *Beer* reached about 19%, and *Instant DeCaf* was purchased by 17% of the reporting households in year one. How often households purchased the categories ranged between two occasions for *Razors (M)*, to six for *Dentifrice* and 21 for *Juices*, while *Catfood (wet)* was shopped for about every ten days annually. The medium purchase frequency of both the short and the long-term datasets was ten times (per year). Most of the FMCGs are not fast-moving: over a period of one year, some are bought every 1.5 weeks; others roughly every third month.

Whilst the analysed categories are all from a FMCG context, a wide array has been studied encompassing personal care, pet food (wet, dry and adult), cleaning, food and drink items with great diversity in their underlying purchase style providing a sound opportunity to find evidence for robust and generalizable patterns through replication-extension approaches across categories and time (Dawes & Nenycz-Thiel, 2013).

***Table 16: Average descriptive metrics for 15 long-term categories***

| Category | Panel length & year | | Category metrics | | Total* |
|---|---|---|---|---|---|
| | Start year | End year | Y1; B (%) | Y1; W | brands (No.) |
| Toilet tissue** | Oct. 2010 | Oct. 2014 | 96 | 21 | 23 |
| Fabrics | Oct. 2010 | Oct. 2014 | 89 | 7 | 16 |
| Margarine | Apr. 2008 | Apr. 2012 | 89 | 13 | 18 |
| Juices | Oct. 2010 | Oct. 2014 | 85 | 21 | 15 |
| Dentifrice | Oct. 2010 | Oct. 2014 | 83 | 6 | 15 |
| Kitchen towels | Oct. 2010 | Oct. 2014 | 79 | 7 | 23 |
| Cooking sauce | Oct. 2010 | Oct. 2014 | 76 | 11 | 16 |
| Butter | Apr. 2008 | Apr. 2012 | 71 | 12 | 16 |
| Instant coffee | Oct. 2010 | Oct. 2014 | 69 | 7 | 19 |
| Colas | Oct. 2010 | Oct. 2014 | 67 | 14 | 14 |
| Facial tissue | Oct. 2010 | Oct. 2014 | 62 | 6 | 24 |
| Premium ice cream | Oct. 2010 | Oct. 2014 | 55 | 5 | 15 |
| Pizzameals | Oct. 2010 | Oct. 2014 | 54 | 9 | 13 |
| Non-medicated | Oct. 2010 | Oct. 2014 | 49 | 6 | 19 |
| Instant DeCaf | Oct. 2010 | Oct. 2014 | 17 | 5 | 18 |
| Average | | | 69 | 10 | 264 |
| MAD | | | 15 | 4 | |

t = 5 years; 15 categories (N = 264 brands) (rounded figures)
*Continuously reported individual brands & private labels Source: Kantar WorldPanel
**2010 data estimated

### 6.3.3. Criteria for brand inclusion

The here analysed categories varied in the numbers of individually listed brands from nine for *Special instant coffee* to up to 24 for *Facial tissues*. The brands studied were present in all years, not continuously listed labels were discarded, as is consistent with prior studies (e.g. Ehrenberg, 2000; Fader & Schmittlein, 1993; Pare & Dawes, 2011; Dawes *et al.,* 2015).

It is noteworthy that additional screeners had not been utilised in this research. Other studies frequently employ them: for example, Fader and Schmittlein (1993), Bhattacharya *et al.* (1996) and Danaher *et al.* (2003) only analysed categories with a minimum of three eligible brands that must at least either make up a cumulative 50% share of the category or represent a minimum of 80% of its total volume. Again others applied a <1% share cut-off for reasons of data stability (e.g. Bhattacharya, 1997; Baldinger *et al.,* 2002; Pare, 2008; Dawes, 2009; Jung *et al.,* 2010) while Pare and Dawes (2007; 2011) only included brands with a minimum penetration of 2.5%.

Statistical issues may arise if brands are bought very infrequently indicating a narrow sample size. However, small brands have fewer buyers and are often advised to target segment buyers resulting in making them less well-known (desired) by the mass of the market. It is important to analyse such small brands to evaluate how they compete amongst their larger and smaller rivals in general. Statistical oddities (if any) based on small samples are highlighted. The panel provider did not disclose what type of screeners they might have used and none were applied retrospectively with this research.

## 6.4. Operationalising the Dirichlet

To achieve the five research objectives, the empirical components of this work required several performance metrics per brand. The observed values (purchase records) were taken from the Kantar panel. Then, per category, each brand's metrics were tabulated according to brand size. Remembering *Chapter 2.3.,* the Dirichlet combines five assumptions across two separate functions of probability: the NBD (purchase incidence) and the DMD (brand choice). The two functions describe how many times each brand in each category had been purchased. Goodhardt *et al.* (1984) and Ehrenberg (1988) provided their mathematical derivations.

All but objective one required Dirichlet estimates of the BPMs. Once the observed values were obtained, the Dirichlet was fitted to each category using its four required yet parsimonious inputs of (1) category penetration, (2) category purchase frequency, (3) brand penetration and (4) brand purchase frequency. The mathematics behind this calibration process are rather complex but several software applications allow this to be a more straightforward approach. In this research (similar to earlier studies) the Dirichlet was calibrated by inputting said four metrics into Dr. Zane Kearns' designed Excel-based Dirichlet software[34] defining (setting) the investigation length to twelve-month windows (snapshots) (cf. Ehrenberg *et al.,* 2004; Scriven & Bound, 2004; Driesener, 2005; Pare, 2008). The process followed the procedures Ehrenberg (1988, see pp. 263-290) described in great detail.

The outcomes of the calibration are estimations (*T* values) for the purchase distributions for any brand of any given size and any time period (Keng *et al.,* 1998; Ehrenberg *et al.,* 2004; Romaniuk, 2013); observed (*O*) values were then tabulated against the estimates. The accuracy of the Dirichlet values is frequently reported as has been discussed in *Chapter 2* (see Fader & Schmittlein, 1993; Uncles *et al.,* 1995; Ehrenberg *et al.,* 2004; Bound, 2009). This research does not question the assumptions the Dirichlet is built on but instead respects the model as what it is: a well-established empirical benchmark for competition.

## 6.5. Analyses procedures & data reduction

The subsequent sections define the methodological steps undertaken to achieve each of the five research objectives. For every CPG category the analyses were performed using yearly time windows. Hence why for those categories with five years of available data, five analyses were conducted – one for each year.

The various data reduction principles proposed by Ehrenberg (1982) were applied to highlight the main patterns and systematically develop generalizable and quantifiable insights on how small brands compete. The techniques included rearranging the data to easily identify patterns and exceptions from them. The brand tables per categories have been ordered by market share, from highest to lowest; figures are rounded to one decimal place, and lines and spaces have been used in order to make the tables more convenient to

[34] Others used the BUYER software (Uncles, 1989) yet the outputs are similar (Kearns & Lewis, 2000).

read. In general, these principles are not complicated and do not require the use of inferential statistical techniques (Bound & Ehrenberg 1998) but the calculation of just simple averages. Throughout, descriptive modelling was applied to measure and describe arising phenomena (Little, 1994). In seeking to quantify relationships from the data (data-first), noticeable patterns were looked for which was adhering to the inductive nature of this research.

The subsequent sections contextualise the applied methodological steps for each research objective: first described is the approach followed to determine the characteristics of a typical small brand and its relative performance amongst its close (category) rivals (objective one). This is followed by an outline of the procedures used to ascertain frequency (objective two) and persistence (objective three) of small brands' repeat purchase rate deviations. Thereafter, the process for analysing changes in the underlying buying behaviour *as* small brands grew (or declined) is described to achieve objective four. The last section discusses the steps undertaken to identify whether the identified loyalty deviations in fact account for implied positioning strategies taken up by small brands in an attempt to stay competitive (objective five). The analyses are focussed on small manufacturing brands unless otherwise described.

### 6.5.1. The relative competitive performance of small brands

To date, there is much disagreement as to what defines small (or large) brands resulting in no unified or standardised way to separate one from the other. As discussed in *Chapter 2*, approaches are either too theoretical, abstract, impractical or arbitrary.

The purpose of objective one was to obtain simple and widely applicable characteristics that systematically describe and quantify the nature of the relative competitive relationship between brands. The ultimate aim was to quantify a reliable performance divide between small and large brands to then describe what defines a small brand. This also offered the potential to approximate and perhaps predict the relative relationship between brands decoupled from factors such as marketing activities. Thus, the first research objective was:

***To systematically define and describe the relative competitive performance of small brands.***

Any description of brand performance should consider the competitive environment. That is, both category structure and a brand's rivals need to be considered when analysing how it (the brand) competes. It was aimed to identify patterns that generalise across time, vastly dissimilar product-classes such as *Hot milk drinks* and *Toilet tissue*, and the fact that no two brands on the same rank across datasets achieved identical shares.

To achieve objective one, three steps were undertaken: first, share distributions and annual average sizes of brands were computed rank-by-rank for one category, and then for the remaining 34 categories analysed over the period of one year to then describe the general emerging cross-category patterns. Lastly, the impacts of category structure and over time purchase behaviour changes were analysed. Again, by using an exemplary category first before describing rank-share distributions across categories over five consecutive years. Noteworthy is that at this stage both store and manufacturer labels were analysed to determine where to separate large from small brands. Store brands are an important aspect of the competitive market structure, especially in the UK where they represent one in every two products sold (Mintel, 2018). It was found that buying of own labels is similar to manufacturer brands of the same size; that is, customers buy them as they buy branded items or labels of other retailers (Uncles & Ellis, 1989). Private labels thus represent a significant competitive force (Mintel, 2018), having 'earned' their ranks in any category's share order. Excluding them prior to describing the relative competitive relationship between brands would distort results; even hinder the emergence of generalizable cross-category patterns.

For step one: any fluctuations from a brand's retaliation activities must be minimised (Chatfield, 1989; Dekimpe & Hanssens, 1995B). Thus, the mean yearly share figures for each brand were produced; that is, the annual average market share per brand (and per year) was computed. For example: for *Category A* the average share of *Brand I* in year one was x%; *Brand II* had y%, and so forth. This is necessary to then evaluate the share distributions per category using the share-rank metrics on the y and x-axis respectively. Emerging patterns and relationships between brands were then described.

In the second step the mean annual share of the brand ranked second (in, say, *Category A*) was divided by the average annual share of the brand ranked first (in the same category). This way the relative relationship between *Brand I* and *II* (of the same category) was computed. The same was done for all other successive pairs of brands in that category (i.e. *Brand III* divided by *Brand II*; *Brand IV* divided by *Brand III*; etc.) and replicated to every

single product class. The closer the relative relationship the smaller the share gap between brands and the closer do the brands compete with each other. The cross-category patterns and any exceptions were noted to fulfil step two. Step one and two follow the approach by Kohli and Sah (2004, 2006) with the difference that this thesis did not aim to fit a function onto the data. Instead, in a data-first approach, emerging patterns from the data were documented and quantified.

The third step determined whether the obtained rank-share ratios in the period of one year also captured the competitive relationship over time. Hence, above steps one and two were replicated to the long-term subset of continuously listed brands for another four years. Once the outcomes were obtained, year-on-year values were compared to determine the extent of over time stability of the share-rank ratios. The third step also discussed the extent to which external factors such as category buying ($B$, $W$) or the competitive intensity ($C$) affected the relative competitive relationship between brands in a year and over time. For example: high-penetration markets are often found to be more fragmented (Geroski & Pomroy, 1990) – the share-rank ratio may be flatter and share gaps between brands smaller. Competitive intensity ($C$) is a proxy for market structure (Caves & Porter, 1978): the more unequal share concentrations are distributed between a category's top and bottom, the more concentrated the market and the greater the competitive intensity (especially from the leading brands). Highly concentrated categories are thus expected to have steeper rank-size distributions with wider share gaps between larger and closer relative share gaps amongst the smaller brands. It has also been found that brands in low-reach and low-loyalty categories are rather share unstable over time (Trinh *et al.,* 2014; Nenycz-Thiel *et al.,* 2018) which might have consequences for the stability of rank-size ratios. In other words, for the long-term datasets step three also included discussions of the share-rank patterns in the light of the Dirichlet's assumed over time market near-stationarity. Any trends that indicated a different rank-size ratio than would be expected were documented.

Generally documented were ratio differences between larger and smaller brands to evaluate where to separate a category's brands into two echelons, that of large and that of small brands. In other words, the analytical steps described above permit determination of the final sample of small brands that the subsequent analyses (for objectives two to five) were based on.

### 6.5.2. Loyalty deviations for small brands

Research objectives two and three aimed to expand knowledge on small brands' isolated, non-systematic deviations from the Dirichlet-captured penetration-loyalty link. Objective two focussed on the scale of the deviational patterns that emerged across *MSoD* over the period of a year. The third objective then analysed both scale and persistence; that is, the extent to which deviations in the penetration-loyalty link quantified for a sub-sample of the product classes over another four years was examined. The objectives were:

***To describe the regularities in the incidence, scale and nature of loyalty deviations from the Dirichlet norm of small brands in a period such as a year.***

and

***To determine the persistence of small brand's loyalty deviations from the Dirichlet norm over five consecutive years.***

The average yearly purchase frequency (*w*) was the chosen loyalty metric due to its simplicity and frequent industry-wide usage. Acknowledging that according to Double Jeopardy smaller brands are bought slightly less often, penetration was the corresponding size metric expressing the proportion of people buying the brand at least once in a set period of time. The combination of the two metrics has been widely used to study Double Jeopardy patterns in brand choice (e.g. Ehrenberg *et al.,* 1990, 2004; Scriven & Bound, 2004; Pare *et al.,* 2006; Pare, 2008; Pare & Dawes, 2007, 2011). The observed and theoretical values for the two metrics were obtained as described in *Chapter 6.4.* Remembering *Chapter 3*: the Dirichlet does not aim for a statistical best but approximately neat fit (also meaningful for managers). Thus, the current study applied the simple comparison method stipulated by Barnard *et al.* (1994). To document and quantify any deviations, the observed *w* figures (*O*) are compared to their Dirichlet baseline (*T*). In other words, deviations express the percental discrepancies between a brands' *O* (observed) and *T* (theoretical) loyalty values using Equation 12. The same procedure was followed for the penetration metric.

***Equation 12: Calculation of discrepancies in observed & estimated figures***

$$Scale\ of\ deviations = \frac{O - T}{T}$$

The widely used ±10% rule was applied to evaluate the goodness of fit between *O* and *T* figures (e.g. Kahn *et al.,* 1988; Bhattacharya, 1997). Brands with values outside the benchmark are referred to as deviations. This permitted the classification of brands into three groups: those with observed *w* rates ≥+10% above expectations were defined as excess loyalty brands; rates of ≤-10% indicated deficit loyalty; those within the ±10%-range were defined as 'normal' or Double Jeopardy brands.

For objective two, this approach was followed for year one for all 36 provided categories to determine the extent to which small brands deviate in a period of a year. By replicating the approach across *MSoD*, the degree of managerial importance of small brand's loyalty deviations was evaluated. Regarding objective three, to ascertain whether the cross-sectional outcomes picked up a trend or simply identified peaks or troughs reflecting rather tactical marketing activities or buying characteristics for a specific year, five-year run-plots of the long-term datasets were set up. The approach described in step two was replicated over the further four years in yearly time frames. For each category, a total of five analyses were conducted – one for each year. This was to determine the degree (scale and persistence) to which the *same* brand deviated over subsequent years, much like looking through the same window at different points of time. To address the stability of the initially identified patterns in a time-series manner, each brands' year-on-year performance was conducted. Any brand moving beyond its initially identified loyalty performance, i.e. from deficit to excess (or vice versa), from one year to the next, was considered irregular. The here used analytical steps to note incidence and persistence of deviations are similar to those used by, for example, Pare *et al.* (2006) and Pare and Dawes (2007).

Determining the persistence of patterns is especially important on the background of often reported market and brand share equilibria. As stability is approximate (Ehrenberg, 1988) brands might exhibit a certain behaviour in one or two, but perhaps not consistently over five years, in fact, loyalty deviations are found to decrease over-time (f.e. Pare *et al.,* 2006; Pare & Dawes, 2011). The current study thus expected shrinking proportions of deviating brands with *t* increasing. Also, remembering traditional marketing literature, it is expected to find a high proportion of niche brands, while on the other side, choice behaviour studies reported that smaller labels tend to under-perform their Dirichlet estimates.

In using and comparing cross-sectional and time-series analyses, knowledge gained from earlier studies on the behavioural loyalty performance of small brands by Kahn *et al.* (1988) and particularly Pare *et al.* (2006) was confirmed and extended. It was important to

evaluate the range and frequency of deviations Dirichlet users might routinely encounter, to help interpret brand performance, set realistic objectives and understand brand loyalty in general. The current study imparts insights on persistence and, if at all occurring, dynamics in loyalty deviations. Any such variance indicates breaches of the conditions underlying the Dirichlet (Scriven *et al.,* 2017). Therefore, the Dirichlet theory forms the context against which to benchmark brand performance on one side, and if of recurring nature, guides long-term strategic (brand) management. Having determined frequency and persistency of loyalty deviations for the smaller brand, attention turned towards market structure and the stationarity condition of the Dirichlet. The in objective one identified nature of category buying and its impacts on (short-term and over time) brand performance is further evaluated.

Lastly, competition on the shelves of supermarkets and within categories is between differently sized manufacturer and retailer labels indicating a sizeable impact on buyer behaviour. Therefore, significant cross-patterns identified for high share and store brands were outlined. Prior studies found that private labels are bought as national brands of similar size (e.g. Uncles & Ellis, 1989), and Fader and Schmittlein (1993, p. 479) proposed that excess loyalty for high share brands *"represents a third threat to the success of"* low-share labels coming at their expense. To ascertain the key performance patterns of high share and private labels and their relationship to the regularities in the buying of small brand, the steps described above were applied.

### 6.5.3. The buying of (non-)stationary small brands

Marketing objectives and resource allocation are largely growth oriented. As managers tend to implement several strategies simultaneously, it is difficult to isolate why a brand had grown (see *Chapter 4*). But studies that empirically analyse brand growth in relation to the various links to underlying BPMs are rare; even rarer are those on share decline. Hence, the fourth objective was:

***To describe the typical characteristics in the BPMs of growing (declining) small brands.***

Based on several key performance measures typically associated with growth strategies, the aim was to describe the changes in such performance metrics *as* small brands grew (or declined). To achieve the requirements for this objective, the analyses were split into two main processes each with its own methodological steps as is described below.

## Process Part 1: Stationary vs. non-stationary small brands

Before analysing how perceptible changes in share reflect a brand's underlying BPMs, stationary and non-stationary brands needed to be identified and separated. This is linked to the aspects of scale and persistence. Scale was concerned with evaluating the point from when market share was deemed to have changed (growth or decline), while persistence aimed to separate seasonal or promotional peaks (or troughs) from sustained trends by using run plots.

When calculating share changes, the focus is not on a *"few points up or down"* (Ehrenberg, 1988, p. 12). To distinguish (the often short-term) fluctuations resulting from promotional activities from the sustained turning points, Ehrenberg proposed the usage of absolute as opposed to relative measures. Absolute measures are frequently used (see also Baldinger *et al.,* 2002; Graham, 2009; Trinh & Anesbury, 2015). The approach does not lose the category comparator: for example, a 1% share gain may be a 25% increase for a 5% brand, but a 100% success for a 1% brand. *Relative* to the category, however, this is out of proportion. Smaller brands may only gain (or lose) some share points, but due to the competitive zero-sum all brands in a category compete for the same points. *Absolute* share differences were computed by deducting a brand's mean share in the opening year (Y1) from its achieved mean share in the terminal year (Y5).

Having determined the absolute share changes, brands were classified according to the magnitude of that change which allows to distinguish sudden from more gradual cases (Ehrenberg *et al.,* 2000). For the current research, an absolute share change of ±5% over five years is the equivalent to a gradual yearly change of ±1%. The approach is similar to earlier work (e.g. Buzzel *et al.,* 1975; Ehrenberg, 1988; Baldinger *et al.,* 2002; Graham, 2009; Romaniuk, 2011; Romaniuk *et al.,* 2014; Trinh & Anesbury, 2015). The share changes classes were in more detail:

- ±1% representing a 0.2% change per year,

- ±2-3% points illustrating a yearly 0.4-0.6% variation,
- ±4-5% points demonstrating a 0.8-1% annual change,
- and fluctuations <5% for growth/decline exceeding a 1% change per year.

Results that were positive indicated a share gain, while negative figures showed a loss. Then the proportions of brands that had changed (grown or declined) by, for example, ±1% up to ±n% points in size were deducted. This aimed to answer whether, for example, excess loyalty brands tended to grow, as some marketing literature would have us believe. Further analysed were the extents to which deficit loyalty and Double Jeopardy brands remained (non-)stationary. Choice behaviour studies to date have not analysed the relationship between loyalty performance and share (non-)stationarity.

Next, the analytical attention turned towards each brand group's (excess, Double Jeopardy, deficit) joint customer base. The differences and similarities between observed (*O*) and Dirichlet estimated (*T*) buying frequencies were analysed in more detail. Hereby, the current research focused on: the light buyers (those that purchase the brand once) and those purchasing five or more times (heavy buyers) in a particular time frame. For example, the joint light buyer proportion of brands with excess loyalty were compared against the joint respective light buyer proportions of deficit and Double Jeopardy brands. The observed values were taken from the Kantar provided data; the estimations were computed using the approach described in *Section 6.4*. The same approach was undertaken for the heavy buyer analyses; the contribution each group of buyers (light or heavy) makes to a brand's bottom line was also evaluated.

The differences and similarities in the repeat buying metrics between the three groups of brands over a period of a year were discussed. The longitudinal subset was then used to determine the over time persistence of the patterns. Such correlations between persistent loyalty deviations and differences in the underlying light and heavy buyer proportions allowed inferences on how brand share stability might have been achieved *despite* ongoing loyalty under or over-performance. Comparisons of buying distributions between brands that differ in their loyalty performances had not yet been analysed before but was called for by Dawes (2016).

## Process Part 2: Buying patterns of non-stationary small brands

After obtaining the level of share (non-)stationarity for small brands the purpose of the next analyses was to understand the underlying buying patterns. The changes of the patterns found for more dynamic brand are described and the differences and similarities to the buying patterns of (non-)stationary brands are discussed. The aim was to document and quantify any trend in purchase probabilities likely to breach the Dirichlet assumptions.

The above two aspects of scale and persistence are adhered to again[35]. Regarding scale: buyer behaviour is defined by the law of Double Jeopardy (Ehrenberg *et al.,* 1990) – and growing (or declining) brands' performance measures should in theory remain constrained to this norm. In other words, the penetration-loyalty relationship was expected to remain constant despite share changes (Anschuetz, 2002). Discussed are the year-on-year (in-)stabilities of key buying patterns (Table 17) per share magnitude group. For example, the joint penetration values of the stable brands (±1%) in year one are compared to the joint penetration figures of the brands with an absolute share change of +2 to +3% in the same year, and so forth until all share change groups were discussed. The analyses were replicated for each share change tier's BPM in each of the five years. Any exceptions are documented for further inspection.

***Table 17: Standard brand performance measures***

| **Related to** | **Level of analysis**<br>Category-level | Brand-level |
|---|---|---|
| Size | Category penetration (B; %) | Brand share (%)<br>Brand penetration (b; %) |
| Loyalty | Category purchase frequency (W)<br>Double jeopardy constant (wo) | Brand purchase frequency (w)<br>Proportion of once-only buyers (%)<br>Proportion of heavy buyers (5+ times; %)<br>Proportion of sole buyers (%) |

Adapted after Ehrenberg (1988)

To fully describe the characteristics of share changing small brands, their BPMs were then analysed in more detail. Each growing (and declining) brand was classified according to its identified loyalty performance (excess, Double Jeopardy, deficit). Changes in buying patterns are discussed against four commonly described brand growth strategies as

[35] Scale was concerned with evaluating the point from when purchase behaviour was to be deemed changed; persistence aimed to separate seasonal and promotional peaks (or troughs) from trends by using run plots.

discussed in *Chapter 4*. The aim was to identify and quantify persisting patterns within their buying metrics – a similar approach to Dawes (2016) and Baldinger *et al.* (2002).

The first growth strategy concerned the composition of sales. To determine how much penetration changed compared to purchase frequency as brands grew (or declined), the absolute and percental differences of the two metrics between year one and year five were calculated. The calculations build on observed figures taken from the Kantar provided data. It was chosen to present absolute and percental changes as penetration evidently varies much more than purchase frequency, hence *"the ratio of absolute penetration change to loyalty is biased down if penetration is small, but proportional changes are biased upward if penetration is small"* (Dawes, 2016, p. 483). Both the absolute and the percental changes were averaged to evaluate whether the penetration or the loyalty metrics had changed more significantly. These steps were applied to growing and declining brands separately. This approach is similar to Dawes (2016). Since much marketing literature advises loyalty-related strategies to achieve brand growth over time, it was expected that excess loyalty brands would grow in share. The analyses of sales changes linked to persistent loyalty deviations has not been done before. In each group (growing or declining) the brands were classified after their achieved loyalty performance (excess, deficit or Double Jeopardy). This allows to compare BPMs changes of growing against that of declining brands. It also allows separate and more detailed inferences on the joint measures of excess, deficit and Double Jeopardy brands that grew or declined.

A second growth strategy is linked to the weight of buying. The aim was to determine whether brands change share by changing the size or the nature of their customer base, or in other words: how the distributions of buyers change for growing and declining brands respectively. Each non-stationary brand's annual mean proportions of light and heavy buyers were calculated for the first and the terminal year. This is a similar approach to Romaniuk (2011) who compared the buyer distributions of stable, growing and declining brands. The absolute difference for each metric was computed using *Y5 – Y1* to obtain their magnitudes. Correlations with both penetration and share changes were evaluated to determine whether the shifts in share were within the Double Jeopardy norm. Parts of this approach are similar to that described by Baldinger *et al.* (2002) who evaluated share shifts against changes in the penetration and loyalty (share of category requirement) metrics. What had not been studied before (to the best of the author's knowledge) was whether and to what extent loyalty deviations would be reflected in the proportions of once-only and

five-plus buyer proportions of small brands. In addition: what was, if anything, the difference in over time buying proportions between deviating and non-deviating brands? The theoretical values for penetration, light and heavy buyers were calculated as described in *Section 6.4* and aimed to emphasise any arising significant discrepancies to their respective observed counterparts (taken from the Kantar provided data). All in all, the approach helps to determine whether share change might have been triggered by extra sales coming from the heavier buyers only or from both light and heavy buyers.

The third growth strategy analysed here is concerned with customer sharing. The aim was to determine whether share changing brands drew (more or less) buyers from some specific competitors only. Brand-switching matrices help to examine substitution patterns between brands and thus permit the determination of from which and to whom customers switch (Colombo *et al.,* 2000). The analysis steps are similar to Keng *et al.* (1998) and Dawes (2016) with the difference that the current thesis also analysed over time changes, and in here, conducted separate evaluations for growing and declining brands. First, for each growing and declining brand, category purchase duplication tables were created for both the beginning and the terminal year. In other words, for each of the share changing brands, the proportion of buyers of other brands who also bought the brand in question were calculated for year one and year five before the difference of said proportions (Y5 – Y1) was computed. The duplication values were taken out of the Kantar provided data. Any discrepancy from the expected norm was noted.

Lastly analysed were the impacts of over time category buying changes on brand share as marketers often intend to grow brand size by increasing the category demand. Such an evaluation allows assumptions on whether brand share shifts are, in fact, sustained performance changes or simple share maintenance. The analysis is similar to Graham (2009) and Nenycz-Thiel *et al.* (2018). Shifts in the number of category buyers might obscure the penetration-loyalty relationship or distort the distribution of buying. Trinh *et al.* (2014) found low loyalty and penetration categories to be more unstable, thus increased share dynamics are expected for the product classes with such characteristics.

An additional step of this investigation looked at rank improvements despite brand share near-stationarity. For this, all (stable and non-stable) brands were analysed to fully determine the impact of over time changes in category buying on the relative competitive position of brands. Disruptions in category structure affects shares and is likely to impact a small brand's competitive position. Even a share stable brand could 'climb' ranks if a rival's

shares decline. Of managerial significance were especially those that left the small brand echelon to compete *among* the category leading brands. They are termed 'overtakers'.

### 6.5.4. The small brand syndrome vs strategic positioning

Aiming to appeal to many (preferably all) customers most of the time (niche brand), or to a wider customer base on some purchase occasions (change-of-pace brand), are reasons small brands are often advised to avoid head-on competition through strategically position themselves as differentiated from their rivals. It is unclear is to what this accounts for loyalty deviations. In fact, while differentiating aspects typically associated to niche brands may appear somewhat clear, conditions for change-of-pace brands are not. In order to know what to expect, marketers need to understand the typical reasons behind loyalty deviations and their possible effects on the nature of competition. The fifth research objective was therefore:

***To evaluate the extent of strategic positioning accounting for the loyalty deviations of small brands.***

Once a description of the proportion of persistently deviating brands was obtained (see objective three), the nature and structure of competition in the market was further examined to map deviations against a set of frequent conditions associated with loyalty deviations. The analyses are based on all individually and consistently listed brands in the categories including large and store brands to allow evaluations of the relative competitiveness of brands in general and the impact, if any, on small brands' performance. Three main steps were followed to achieve this objective: first, Double Jeopardy provides insights into occurrence and persistence of loyalty deviations of small brands. To determine their relative competitive performance (using, for example, market share, penetration and repeat purchase metrics), all individually and continuously listed brands were put in tables. The brands are sorted after their achieved market share in a downward manner with the largest at the top and the smallest at the bottom. A brand's $O$ (observed) and $T$ (theoretical) penetration ($b$) and loyalty ($w$) values are then utilised to plot Double Jeopardy graphs including the Dirichlet base to compute the ±10% "normal" area around the benchmark.

Deviations (≥+10% and ≤-10%) were identified by comparing the observed *w* figures to their Dirichlet baseline (*T*) using Equation 12 as described in *Section 6.5.2*. The Double Jeopardy line graphically illustrates the penetration-loyalty relationship using penetration (*b*; x-axis) and purchase frequency (*w*; y-axis) as was shown in Figure 1 in *Section 3.3.2*. Having identified the deviating brands, the Double Jeopardy graphs give detailed insights into just how close (or far) brands "score" around the ±10% norm. Even slight discrepancies from said norm could indicate asymmetric customer sharing which is then discussed against the outcomes of the Duplication of Purchase analyses. The graphs were plotted using the five-year averages of the penetration and purchase frequency values. Both tables and graphs respectively carry information on which brands are large (those that compete among the top five in year one), small (those that compete below the top five in year one) and private labels. Large brands and private labels are highlighted with different colours to distinguish small brands (see *Appendix III*, Table 59). Khan *et al.* (1988) give an empirical definition of a niche brand, by applying a Double Jeopardy model to observed buying behaviour. The specified +10% threshold around the Dirichlet norm helps to identify niche brands – those that demonstrate loyalty rates deviating ≥+10% from expected values. In contrast, Kahn *et al.* (1988), change-of-pace brands are those showing loyalty rates that deviate ≤-10% from expected repeat purchase rates.

Second, having obtained the Double Jeopardy relationship, duplication tables were set up for each category that comprised small deviating brands to evaluate just how substitutable the deviating small brands are relatively to their category rivals. Switching analyses allow insights to asymmetric customer sharing indicating the existence of market partitions which, in theory, are a breach of the underlying conditions of the Dirichlet. The ultimate aim was to evaluate whether the here analysed datasets comprise niche or change-of-pace candidate brands. It needs to be noted that, even though duplication tables allow to identify cases of more (or less) switching, the impact of the purchase occasion itself is described as largely ignored (Lattin & McAlister, 1985). However, the used data comprises brand-level information of close substitutes that, in general, share the same broad underlying product characteristics, serve very similar needs and should hence have similar customers shared according to the size of the brand (Ehrenberg & Goodhardt, 1970).

All individually and continuously listed brands were analysed within the duplication tables; where there was more than one label from the same retailer the averages were taken from those and put down as, for example, 'Tesco' (comprising all individually listed brands of that

retailer in that category). To be able to identify and document discrepancies in customer sharing, the tables needed to be set up in a way to allow extraction of the general patterns. Per category, the brands are listed descending after the size of their customer base (penetration) with the largest at the top and the smallest at the bottom. This builds the basis for inferences on the *"proportions of customers who bought Brand X…"*. To determine the extent to which the competing options gained or lost sales to each other, *"…also bought Brand Y"* analyses permit insights to the proportion of people who then also bought other brands in that category. The brands in each category were ordered in a descending manner after the size of their penetration values from largest on the left to the smallest on the right hand side of the table. Per column, the average duplication value was computed which gives insights into the general patterns in brand substitutability. Having obtained those is the basis for identifying discrepancies in customer sharing. However, as *Chapter 5* had already revealed, there is a lack in consensus on a threshold. Therefore the managerially meaningful benchmark of ±5 percentage points around the average duplication value, as proposed by Scriven and Danenberg (2010), was utilised in the current thesis. Any duplication values deviating ≥+5% from the average expected sharing indicated over-duplication – customers switched away from, say, Brand X to purchase Brand Y. These lost sales may result in a repeat purchase deficit for Brand X. Duplication values deviating ≤-5% of the average expected sharing indicate under-duplication – customers did not switch between these brands as expected. These customers seemingly perceive Brand Y as a less of a good enough substitute to Brand X. The so gained sales (for Brand X) may result in a repeat purchase excess for said brand. In other words, duplication tables make high or low customer sharing between any pair of brands identifiable.

Duplication analyses focus on the earlier identified small deviating brands. Hence the analyses only concentrate on asymmetric customer sharing in relation to small brands exhibiting excess or deficit loyalty. The customer sharing tables are set up using the five-year value averages. Small brands with excess loyalty are highlighted using a green font; deficit loyalty brands by a red font (see *Appendix III*, Table 58). Cases of over-duplication between any pair of brands are emphasised with green background colour; under-duplication was shown with a red-underlined cell. The detailed outcomes of the Double Jeopardy analyses (list of brands per category and both the graphical and percental illustration of Double jeopardy) and the Duplication of Purchases examinations (per category) are put into *Appendix III* to support the analyses in *Chapter 10*. Only the categories that comprised deviating (excess or deficit) small brands were analysed.

Lastly, it was attempted to explain the emerged discrepancies using the set of characteristics frequently associated with either loyalty deviations to determine whether the identified niche or change-of-pace candidates fit, in fact, niche and/or change-of-pace brand definitions discussed in *Chapter 5*: to be considered a change-of-pace brand, its (the brand's) loyalty under-performance is supposed to be the result of customer's intrinsically variety-seeking behaviour (e.g. van Trijp *et al.,* 1996). While niche brands are expected to have a functionally differentiated offering preferred by many more customers than expected, hence the loyalty surplus (e.g. Kotler, 2003). This discussion was supported by research from various sources such as Mintel, MarketLine, The Grocer and the respective brand websites to achieve objective five.

## 6.6. Summary

This chapter discussed the nature of the research methodology applied in this study. Presented are the utilised data and detailed descriptions given of the analytical steps undertaken to achieve each of the five research objectives. The key points were:

- The context of this research are FMCGs. The product classes are specified by Kantar; outcomes hence depend on the definition applied by the panel provider.
- Only the purchase records of continuously reporting households were used.
- The longitudinal categories are a subset of the product classes utilised in the short-term analysis.
- The focus was on small continuously listed manufacturer brands. Non-continuously listed brands were discarded.
- The analyses were based on mean annual values of typical BPMs.
- The loyalty represent was the metric of purchase frequency.
- Discrepancies between *O* and *T* values greater than ±10% around the Dirichlet norm were classified as deviations.
- Deviations are termed excess loyalty when a brand exceeded its loyalty estimates (≥+10%); deficit loyalty described the situation when a brand under-performed its loyalty estimations (≤-10%).
- Over time share changes were calculated using absolute differences (closing year minus the starting year).
- Share changes greater than ±1% per year were classified as more dynamic cases.

- The year-on-year buying metrics of dynamic brands were discussed against that of near-stationary brands to evaluate nature, magnitude and effect of share change.
- Duplication deviations were identified using a ±5% threshold.
- To be considered as either niche or change-of-pace, brands need to fulfil the characteristics that were evaluated in *Chapter 5*.

The results are presented in the following four chapters of *PART IV*. In *Chapter 7* the characteristics of small brands' relative competitive performance are discussed to identify what defines small brands thereby addressing objective one. *Chapter 8* summarises the key findings on nature, incidence and persistence of loyalty deviations for small brands linking to objective two and three respectively. In *Chapter 9* the differences and similarities of BPMs for stationary and non-stationary small brands are presented, and *Chapter 10* evaluates the extent to which positioning strategies account for the loyalty performance of small brands.

# PART IV - DATA ANALYSIS & DESCRIPTIVE FINDINGS

## Chapter 7: The characteristics of a small brand

*Research is still inconclusive as to what divides small from large brands. Market share is a key metric to describe relative brand performance over any period of time due to the metrics' independence from the length of the study. It is shown that share distributions follow a recurring pattern across datasets, and the pattern remained stable over time. The relative performance division among smaller brands was on average a 0.9 while larger entities were more volatile. It is concluded that brands competing below a category's top five are small. This benchmark allows analysis of small brands' relative performance and to determine what is to, step by step, climb upwards in category share ranks. This aids managers in setting more realistic brand growth objectives.*

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**Purpose & data:** the performance of nearly 500 brands in thirty-six categories was observed over periods ranging from one to up to five years. In addressing objective one, the nature and shape of the competitive relationship between brands is discussed in an attempt to define the common characteristics of small brands. The aim was to quantify the relative competitive divide between large and small brands, and to systematically test the stability of emerging relationships over time. *All* individually listed brands were analysed as discussed in *Section 6.5.1*. A focus on selected brands would distort outcomes and hinder the development of a generalizable benchmark.

**Key findings:** category buying remained near-stationary. That is, the utilised data proved suitable for analyses using the NBD-Dirichlet. As the data was examined in yearly periods, deviations are the unlikely outcome of within-period brand dynamics. Despite the variations in category buying styles, simple and quantifiable patterns emerged that replicated across datasets and time highlighting their robustness. It is concluded that small brands are all those that compete below a category's top five.

**Detailed findings:**

- Size ratios of any two successively-ranked brands decreased in line with shares.

- The ratios declined rapidly amid a category's top five brands, then flattened to 0.8 indicating even closer competition between the smallest brands.
- The average size-rank ratio of neighbouring brands was 0.8. The mean ratio of the top five brands was 0.7; that between those competing below rank five had a 0.9.
- The patterns were found at every point of the investigation; that is, share-rank ratios seem fixed despite levels of buying (non-)stationarity.
- Effects from category buying, fragmentation or share changes were weak. Purchasing remained as predicted, same for the relative gaps between brands.

**Chapter structure:** the chapter starts by describing the over time nature and scope of category buying stationarity. Thereafter, the typical characteristics of share distributions are analysed; first over one and thereafter for another four consecutive years. The chapter closes by specifying the final sample size of small brands from which the results of the remaining four research objectives were obtained.

## 7.1. Category buying over time

Table 18 (overleaf) presents the mean yearly category penetration, usually denoted as *B* (Ehrenberg, 1988) in fifteen CPG categories to determine the scale and shape of the category buying level equilibrium. The categories are arranged by descending rate of the absolute change in *B* (last column).

Evidently, *B* varied greatly: 17% of the households bought *Instant DeCaf* while 96% purchased *Toilet tissue* (in year one). Two-fifths of the datasets remained within ±1% of their initial size, and none showed a greater change in penetration than ±4% in five years. In other words, category buying was near-stationary. Even though individual categories fluctuated slightly, none went beyond a change of one percentage point a year, on average.

Noteworthy is the fact that the pace of such changes was not steady: *Pizzameals*, for example, were stable in the first two years, gained in the third, and then levelled off, while the total of *Non-medicated* items showed slight ups and downs in their overall near-stationarity. This illustrates that category turning points might be either due to market-driven changes for individual brands (i.e. changing customer purchase probabilities) or based on external factors affecting the entire category. It also demonstrates that the data is

not biased in the sense of systematic reporting fatigue. This would show up as gradual (year-by-year) decline in reach for all sets, which is not evident.[36]

***Table 18: Average annual category penetration (Y1-5)***

| Category | Category penetration (av. %/year) | | | | | MAD | Absolute |
|---|---|---|---|---|---|---|---|
| | Y1 | Y2 | Y3 | Y4 | Y5 | Y1-5 | change (%) |
| Pizzameals | 54 | 54 | 58 | 58 | 58 | 1.9 | 4 |
| Colas | 67 | 67 | 68 | 69 | 69 | 0.7 | 2 |
| Cooking sauce | 76 | 76 | 77 | 78 | 77 | 0.6 | 1 |
| Instant coffee | 69 | 69 | 70 | 70 | 69 | 0.5 | 0 |
| Toilet tissue* | 96 | 97 | 97 | 97 | 96 | 0.1 | 0 |
| Premium ice cream | 55 | 52 | 53 | 54 | 54 | 0.9 | 0 |
| Dentifrice | 83 | 83 | 82 | 82 | 82 | 0.3 | -1 |
| Margarine | 89 | 90 | 89 | 88 | 88 | 0.6 | -1 |
| Non-medicated | 49 | 48 | 48 | 49 | 47 | 0.7 | -2 |
| Facial tissue | 62 | 62 | 60 | 61 | 60 | 0.7 | -2 |
| Fabrics | 89 | 88 | 87 | 87 | 87 | 0.7 | -3 |
| Instant DeCaf | 17 | 16 | 16 | 15 | 15 | 0.9 | -3 |
| Juices | 85 | 84 | 84 | 84 | 82 | 0.8 | -4 |
| Kitchen towels | 79 | 76 | 76 | 76 | 75 | 0.9 | -4 |
| Butter | 71 | 71 | 69 | 68 | 67 | 1.5 | -4 |
| Average (all cat.) | 69 | 69 | 69 | 69 | 68 | 0.8 | -1.1 |

t = 5 years; 15 categories
*Corrected missing data in Y1.

Source: Kantar WorldPanel (rounded figures)

Regarding the frequency of category buying, Table 19 (overleaf) lays out how the metric changed (or not) over time. Categories are ordered by absolute magnitude of change (column eight). Year-on-year, the rates barely altered as reflected by the low *MAD* figures. The medium interpurchase time was about every five weeks. Of the fifteen categories, only *Juices* showed a slight decline (-2 times), thus there is great stationarity overall.

Such an equilibrium over time indicates that consumers continue to buy the same categories in the same way; that is, needs hardly changed. It also demonstrates the barriers marketers are confronted with: growth, in terms of convincing current category non-buyers to purchase, is hard to achieve. Few new buyers enter the scene, and only a few leave (cf. Pare & Dawes, 2011; Bennett *et al.,* 2017; Nenycz-Thiel *et al.,* 2018). Changes in category buying over time are, as with brands, largely driven by appealing to current non-buyers rather than increasing loyalty (Sharp, 2010). In other words, purchase frequency also increases slightly with rising penetration and vice versa.

[36] Yet *Butter* comes close. Interestingly enough, it does not seem that *Margarine* picks up these buyers even though the two categories belong to the same panel period (April 2008 to April 2012; Table 16; *Section 6.3.*).

***Table 19: Average annual category purchase frequency (Y1-5)***

| Category | Purchase frequency (Av./year) | | | | | MAD | Change | Interpurch. days | |
|---|---|---|---|---|---|---|---|---|---|
| | Y1 | Y2 | Y3 | Y4 | Y5 | Y1-Y5 | Y5-Y1 | Y1 | Y5 |
| Pizzameals | 9 | 10 | 10 | 10 | 10 | 0.3 | 1 | 39 | 36 |
| Cooking sauce | 11 | 12 | 13 | 12 | 12 | 0.4 | 1 | 32 | 30 |
| Premium ice cream | 5 | 5 | 5 | 5 | 5 | 0.1 | 0 | 78 | 71 |
| Colas | 14 | 14 | 15 | 15 | 15 | 0.2 | 0 | 26 | 25 |
| Instant coffee | 7 | 7 | 7 | 7 | 7 | 0.2 | 0 | 53 | 51 |
| Dentifrice | 6 | 6 | 6 | 6 | 6 | 0.0 | 0 | 62 | 62 |
| Facial tissue | 6 | 6 | 6 | 6 | 6 | 0.0 | 0 | 61 | 61 |
| Margarine | 13 | 14 | 13 | 13 | 13 | 0.2 | 0 | 27 | 28 |
| Instant DeCaf | 5 | 4 | 5 | 5 | 4 | 0.1 | 0 | 80 | 84 |
| Non-medicated | 6 | 6 | 6 | 6 | 6 | 0.1 | 0 | 63 | 66 |
| Kitchen towels | 7 | 6 | 6 | 6 | 6 | 0.2 | -1 | 54 | 59 |
| Toilet tissue* | 21 | 21 | 21 | 20 | 20 | 0.3 | -1 | 18 | 18 |
| Fabrics | 7 | 6 | 6 | 6 | 6 | 0.2 | -1 | 52 | 59 |
| Butter | 12 | 12 | 11 | 11 | 11 | 0.4 | -1 | 29 | 32 |
| Juices | 21 | 22 | 21 | 21 | 20 | 0.5 | -2 | 17 | 18 |
| Average (all cat.) | 10 | 10 | 10 | 10 | 10 | 0.2 | -0.19 | 46 | 47 |

t = 5 years; 15 categories
*Corrected missing data in Y1.

Source: Kantar WorldPanel (rounded figures)

***Table 20: Average annual category concentration (Y1-5)***

| Category | Top 4 concentration (av. %/year) | | | | | MAD | Absolute |
|---|---|---|---|---|---|---|---|
| | Y1 | Y2 | Y3 | Y4 | Y5 | Y1-5 | change (%) |
| Pizzameals | 47 | 54 | 57 | 57 | 57 | 3.1 | 10 |
| Non-medicated | 24 | 28 | 28 | 30 | 32 | 2.1 | 8 |
| Dentifrice | 74 | 74 | 75 | 76 | 80 | 1.8 | 6 |
| Margarine | 54 | 56 | 57 | 60 | 58 | 1.6 | 4 |
| Instant coffee | 57 | 60 | 54 | 58 | 58 | 1.5 | 1 |
| Toilet tissue* | 30 | 32 | 30 | 30 | 31 | 0.7 | 1 |
| Colas | 82 | 81 | 81 | 82 | 82 | 0.5 | 0 |
| Facial tissue | 50 | 51 | 49 | 50 | 50 | 0.4 | 0 |
| Butter | 59 | 60 | 59 | 62 | 57 | 1.3 | -2 |
| Cooking sauce | 36 | 34 | 36 | 34 | 34 | 1.0 | -2 |
| Instant DeCaf | 56 | 55 | 53 | 54 | 54 | 0.9 | -2 |
| Premium ice cream | 55 | 54 | 55 | 56 | 52 | 1.1 | -3 |
| Fabrics | 57 | 54 | 54 | 53 | 53 | 1.1 | -4 |
| Kitchen towels | 48 | 47 | 48 | 45 | 43 | 1.8 | -5 |
| Juices | 45 | 42 | 35 | 34 | 34 | 4.4 | -11 |
| Average (all cat.) | 52 | 52 | 51 | 52 | 52 | 1.5 | 0.1 |

t = 5 years; 15 categories
*Corrected missing data in Y1.
Adapted after Caves and Porter (1978)

Source: Kantar WorldPanel (rounded figures)

The over time concentration ratios of the top four brands after Caves and Porter (1978) in Table 20 (ordered after the magnitude of change in the last column) were less stable at first

sight. It should be noted, however, that since only the four largest brands[37] were included, a year-on-year increase of +1% (per brand) reflecting a joint concentration increase of 4%, would still fit the stationary definition. This indicates that, despite (short term) fluctuations, three datasets became slightly more concentrated (*Dentifrice, Pizzameals* and *Non-medicated*), and one more fragmented (*Juices*). It also means that despite near-stationarity, within-category brand shares had some fluctuations; perhaps some brands grew or declined (as discussed in *Chapter 9*).

The subsequent sections introduce the empirical findings developed following analysis of 500 brands over a period of one to five years to determine whether rank-share patterns differ among smaller brands as opposed to their larger rivals. If similar rank-share relationships emerge, the resulting benchmark helps to identify smaller brands across many categories over a 12-months period first, to then evaluate the extent to which the pattern persisted over time. Each section starts by presenting the findings of one example category – cross-sectional first and later over time.

## 7.2. The annual share-rank relationship (Y1)

### 7.2.1. The annual share-rank relationship in *Butter* (Y1)

Below Figure 3 graphically illustrates how skewed the brand share relationship in the *Butter* category was. The vertical axis shows market share percentage points; the category ranks can be found on the horizontal axis. From top to bottom, brands differed significantly in size: the leading brand (most left hand rank (rank one) on the horizontal axis) had 28% market share, brand two 14%, brand three 10% and brand four 8%. This indicates rank-size ratios between any two successive brands seemingly differed dramatically demonstrating Henderson's (1976) 4:2:1 and Kotler's (1977) 40%:30:20%proportions on fixed sizes of the top three brands did not apply – at least in this category. Also: brands with over 15% market share were rare (Habel *et al.,* 2005B).

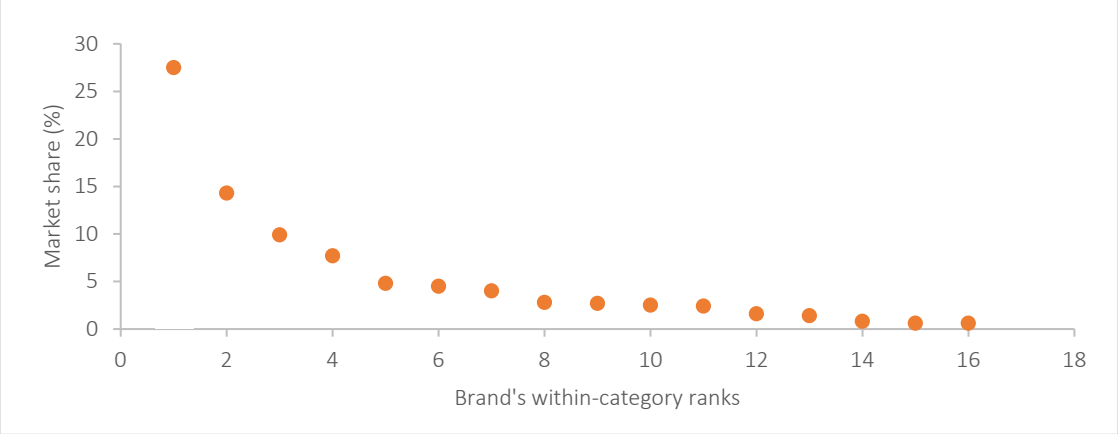
In addition, arbitrarily set definitions of brand size such as small brands which have 'less than 10% market share', are rather tentative yet not specific enough to classify product categories after their level of fragmentation. Lastly it can be seen that brand share distributions are not exponential: neither brand size nor rank-share ratios were fixed to

[37] After Caves and Porter's (1978) approach.

certain percentages and, because of the J-shaped nature of the share-distribution, rank-share ratios between any two successive brands were not equal which is different to what Henderson (1976), Kotler (1977) and Sheth and Sisodia (2002) expected.

***Figure 3: Achieved market share by rank in (Y1) or Butter brands***

t = 1 year; *Butter* category; Source: Kantar WorldPanel




As can be seen in Figure 3, differences between any two successively listed brands decreased from left to right (top to bottom of the category). There were more relative differences between the category top (also Kohli & Sah, 2006). This means that there more minor differences between adjacently-ranked lower share brands. That is, the skewed share distribution flattened significantly.

Table 21 (overleaf) shows the relative relationship between the top fifteen brands[38] (column one) in the same category. The mean annual shares of each brand are shown in column two, and the average annual size in this category was 5%; that is, there was a 22-fold difference from the top to the bottom of the category. The table shows that the lower the brand rank, the less significant the relative size-rank ratio – the ratio flattened to around 0.8 after brand five. It can also be seen that relative share differences between neighbouring larger brands had more discrete variation (also Kohli & Sah, 2006): the typical size-rank ratio between leading brands was 0.7 which was close to Buzzel's (1981) top-four rank size ratio of 0.6[39]. Those ranked below the top five demonstrated smaller rank size ratios with a

[38] As Figure 3 already showed: the rank-share plots flattened quickly and significantly, hence the decision to truncate the table at rank fifteen.
[39] After Caves and Porter's (1978) approach.

mean of 0.9. The implication was that smaller brands compete more closely for market share points than the big ones at the top.

***Table 21: Average relative competitive relationship of Butter brands (Y1)***

| Brands ranked | Av. market share (%) | Relative difference | Average |
|---|---|---|---|
| 1 | 28 | | |
| 2 | 14 | 0.5 | |
| 3 | 10 | 0.7 | |
| 4 | 8 | 0.8 | |
| 5 | 5 | 0.6 | 0.7 (rank 1-5) |
| 6 | 5 | 0.9 | |
| 7 | 4 | 0.9 | |
| 8 | 3 | 0.8 | |
| 9 | 3 | 0.9 | |
| 10 | 3 | 0.9 | |
| 11 | 2 | 0.9 | |
| 12 | 2 | 0.9 | |
| 13 | 1 | 0.9 | |
| 14 | 1 | 0.9 | |
| 15 | 1 | 0.8 | 0.9 (rank 6-15) |
| Average | 6 | 0.8 | |

t = 5 years; *Butter* category (N = 15 brands/year)
Including store labels; excluding 'all other' brands
Source: Kantar WorldPanel

To determine whether the patterns found in *Butter* are specific for this category or generalise across product classes, the procedure was replicated across *MSoD*. The results are discussed below.

## 7.2.2. The annual share-rank relationship across MSoD (Y1)

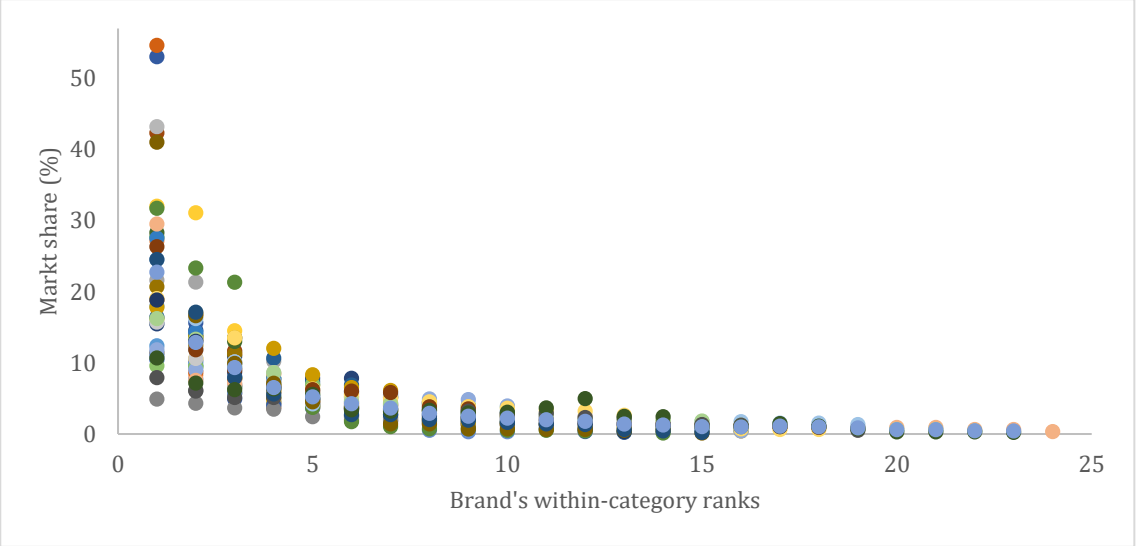
Figure 4 below illustrates that the brand shares in each dataset followed highly skewed distributions. The vertical axis shows market share as a percentage; the horizontal the ranks occupied within the categories. Across product classes, brands of the same rank were of significantly different size: for example, leaders (most left-hand point on the horizontal axis) ranged in size from about 5% to 55% indicating rank-size ratios between any two successive brands differed dramatically. This highlights four points: first, both Henderson's (1976) 4:2:1 and Kotler's (1977) 40%:30%:20% propositions on fixed sizes of the top three brands only loosely apply, if at all. Second, brands with a greater share than 15% are quite

rare, just as Habel *et al.* (2005B) assumed. Only about 8% of the here analysed brands either achieved or exceeded this value. They are mostly found on category rank one or two.

Third, arbitrarily set size definitions of small such as 'all brands with a less than 10% share', would misclassify labels of more fragmented categories. Finally, share distributions were not exponential: shares were not fixed to certain percentages nor were ratios between any two rivals, and because of the reversed J-shaped nature of the slope, ratios cannot be equal as was proposed by Henderson (1976), Kotler (1977) and Sheth and Sisodia (2002).

***Figure 4: Achieved market share by rank in (Y1)***

t = 1 year; 36 categories; Source: Kantar WorldPanel




The differences between any two successive brands decreased from the top (left) to the lower ranks (right) and there was more relative difference (and disturbance) among a category's top (also Kohli & Sah, 2006). The implication of this is that, regardless of the category, the lower the share, the more minor became the differences between adjacently-ranked brands: the skewed share distributions flattened significantly.

Table 22 (below) summarises the relative relationship between the average brands ranked one to fifteen (column one) across categories. Column two reveals the mean shares of the brands per rank from the largest (the average share of all brands ranked on place one) to the lowest (showing the mean share of all brands on rank fifteen). The average leader had a share of 23%. The respective mean market shares for the second, third and fourth were 13%, 9% and 6%, and brands ranked fifteen averaged at 1%, demonstrating a mean 23-fold difference from the top to the bottom. Evidently, despite variations in category buying (and

employed targeting strategies), a very consistent pattern emerged: the lower-ranked brands had less significant relative size-rank ratios; they flattened to a 0.8 after rank five.

It is noteworthy that the relative share differences between neighbouring larger brands demonstrated some more discrete variation (also Kohli & Sah, 2006): their typical size-rank ratio was 0.7; close to Buzzel's (1981) top-four rank-size ratio of 0.6. The brands ranked six to fifteen had much more balanced and smaller rank-size ratios with a mean of 0.9. This indicates that brands below a category's top five compete more closely for market share points than the big ones at the top.

***Table 22: Average relative competitive relationship (Y1)***

| Brands ranked | Av. market share (%) | Relative difference | Average | |
|---|---|---|---|---|
| 1 | 23 | | | |
| 2 | 13 | 0.6 | | |
| 3 | 9 | 0.7 | | |
| 4 | 6 | 0.7 | | |
| 5 | 5 | 0.8 | 0.7 | (rank 1-5) |
| 6 | 4 | 0.8 | | |
| 7 | 4 | 0.8 | | |
| 8 | 3 | 0.8 | | |
| 9 | 2 | 0.9 | | |
| 10 | 2 | 0.9 | | |
| 11 | 2 | 0.9 | | |
| 12 | 2 | 0.9 | | |
| 13 | 1 | 0.8 | | |
| 14 | 1 | 0.8 | | |
| 15 | 1 | 0.9 | 0.9 | (rank 6-15) |
| Average (rank 1-15) | 5 | 0.8 | | |

t = 1 year; 36 cat. (N = 485 brands)
Including store labels; excluding 'all other' brands.
Source: Kantar WorldPanel

Recalling Figures 3 and 4, leaders varied widely in size, resulting in different cross-category concentration ratios. Table 15 (*Section 6.3.*) revealed the dissimilarities in category purchase styles: reach ranged from 4% to 96% (average: 47%) and the mean purchase frequency was ten times per year with categories ranging from two to up to 34 times. *Section 1* in *Appendix I* details the findings on category buying to determine any impacts on rank-size ratios. Overall, neither penetration (*B*) nor purchase frequency (*W*) seemed to affect the general pattern: the typical rank-share ratio was 0.8; leading brands varied more and had an average ratio of 0.7 as shown above. This provides good evidence to establish two separate brand echelons: bigger and smaller labels respectively – a highly valuable

benchmark for scholars and managers to describe the relative competitive performance between brands. Knowing which echelon their brand is in, managers can determine what it takes to 'climb up' the share ladder; that is, small brands know that, on average, their nearest follower was just about 0.9 times smaller while the next-larger was 0.9 times bigger. This finding puts share growth objectives into perspective, and the law of Double Jeopardy then allows evaluation of what penetration and purchase frequency figures are needed to achieve them.

Altogether, despite the variations in category type and buying, the top five rank-size ratios were robust over the period of a year, but maybe the results have picked up a pattern that was distinctive for that year of the investigation. Even though most markets were near-stable, and share changes are rare, they do occur. Do the rank-size ratios still apply in such dynamic situations? The next section analyses the share-rank ratio over five consecutive years of brand buying in the *Butter* category first and across *MSoD* thereafter to identify whether the identified pattern persisted over time.

## 7.3. The rank-share relationship over time (Y1-5)

### 7.3.1. The rank-share relationship over time in *Butter* (Y1-5)

This section discusses the findings on whether the above identified cross-sectional rank-size ratios in the *Butter* ca67tegory persisted over multiple years. Figure 7 in *Section 2* of *Appendix I* shows the annual results. It can be seen that each years' share distribution was highly skewed with fewer, rather larger brands at the category top and many more smaller brands at the bottom of the curve demonstrating again that both Henderson's (1976) and Kotler's (1977) fixed-size proportions did not apply. That is, the differences between any two successively ranked brands decreased from top to bottom with more variation among bigger and less among smaller brands showing the right-skewed share distribution flattened after brand five.

Table 23 (below) illustrates the relative relationship between the average brands ranked one to fifteen in each year. The many-fold differences between the top and bottom brands was evident, and the typical brand on any rank had a similar share size year-on-year. The implication is that the short-term findings presented in the previous two sections are similar to the here discussed over time results – at least for this category: robust patterns

emerged showing the mean rank-size ratio was 0.8; there were greater discrete gaps between the brands at the top of the category (0.7) and less among lower share brands (0.9).

***Table 23: Average relative competitive relationship (Y1-5)***

| Brands ranked | Av. market share (%) Y1 | Y2 | Y3 | Y4 | Y5 | Absolute diff. Y5-Y1 | Av. share Y1 to Y5 | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 28 | 26 | 26 | 28 | 26 | -2 | 27 | | |
| 2 | 14 | 14 | 14 | 15 | 13 | -2 | 14 | 0.6 | |
| 3 | 10 | 14 | 13 | 12 | 11 | 1 | 12 | 0.7 | |
| 4 | 8 | 7 | 7 | 7 | 7 | 0 | 7 | 0.7 | |
| 5 | 5 | 6 | 5 | 5 | 5 | 0 | 5 | 0.8 | 0.7 (rank 1-5) |
| 6 | 5 | 5 | 5 | 4 | 5 | 0 | 5 | 0.8 | |
| 7 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.8 | |
| 8 | 3 | 3 | 3 | 3 | 4 | 1 | 3 | 0.8 | |
| 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 3 | 2 | 2 | 2 | 3 | 0 | 2 | 0.9 | |
| 11 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 0.8 | |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 0.9 (rank 6-15) |
| Average (rank 1-15) | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | |

t = 5 years; Butter category (N = 15 brands/year) Source: Kantar WorldPanel
Incl. store labels; excl. 'all other' brands

The next section demonstrates whether the here identified year-on-year patterns in the *Butter* generalised across *MSoD*, thereby fully addressing objective one.

## 7.3.2. The rank-share relationship over time across MSoD (Y1-5)

This section presents the findings on whether the above identified cross-sectional rank-size ratios persist over multiple years. Figure 8 in *Section 3* of *Appendix I* illustrates the yearly results using the analytical steps as had been applied in the cross-sectional analyses. Share plots all followed the same general pattern: they were highly skewed with fewer yet significantly bigger brands at the top and very many smaller ones at the bottom of the curve. Again, both Henderson's (1976) and Kotler's (1977) fixed-size propositions only weakly applied, confirming the findings of the previous section. The differences between any two successive ranks decreased from top to bottom with more variation among bigger and less amid smaller brands. The right-skewed share distribution flattened after brand five.

More tellingly, below Table 24 reveals the relative relationship between the average brands ranked one to fifteen across categories in every single year. Evident is the many-fold

difference between the top and bottom labels. But a typical brand on any rank occupied a similar market share year after year. The implication is that over time, the share-ratio figures were akin to the short-term results presented in *Sections 7.2.1.* and *7.2.1*. This produced robust evidence of a quantifiable mean category rank-size ratio of 0.8, with slightly more differences between the brands at the category top (0.7) and less among the low-share entities (0.9).

***Table 24: Average relative competitive relationship (Y1-5)***

| Brands ranked | Av. market share (%) Y1 | Y2 | Y3 | Y4 | Y5 | Absolute diff. Y5-Y1 | Av. share Y1 to Y5 | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 22 | 21 | 21 | 22 | 22 | 1 | 22 | | |
| 2 | 13 | 13 | 13 | 13 | 12 | -1 | 13 | 0.6 | |
| 3 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 0.7 | |
| 4 | 7 | 7 | 7 | 7 | 7 | 0 | 7 | 0.7 | |
| 5 | 5 | 6 | 6 | 6 | 6 | 1 | 6 | 0.8 | 0.7 (rank 1-5) |
| 6 | 4 | 5 | 5 | 5 | 5 | 1 | 5 | 0.8 | |
| 7 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.8 | |
| 8 | 3 | 3 | 3 | 3 | 4 | 1 | 3 | 0.8 | |
| 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 2 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 11 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 1 | 2 | 2 | 2 | 2 | 0 | 2 | 0.8 | |
| 14 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 0.8 | |
| 15 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.9 | 0.9 (rank 6-15) |
| Average (rank 1-15) | 5 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | |

t = 5 years; 15 cat. (N = 264 brands/year) Source: Kantar WorldPanel
Incl. store labels; excl. 'all other' brands

*Section 3* in *Appendix I* details whether category buying or fragmentation[40] affected brand rank share ratios over time. Remembering the striking findings in near-stationarity in *Chapter 7.1.* (Tables 18 and 19) none of the measures had quantifiable impact on the over time share-rank ratios. That is, the figures remained at, or at about, their established rates over five successive years. The results were robust across distinct product classes from *Toilet tissue* to *Juices*, and do not support earlier studies that proposed, for example, fixed ratios or exponential share distributions (Henderson, 1976; Sheth & Sisodia, 2002). Furthermore, the impacts of a brands' marketing mix and targeting strategies did not reflect into the BPMs, though they may be analysed separately. There was also strong evidence that brand shares did not change (much) over time (as is discussed further in *Chapter 9*).

[40] The classifications per metric (category penetration, purchase frequency or concentration) were done using the values of year one.

Brand share gains (or losses) are off-setting. The rank-share ratio patterns presented above were therefore confirmed over time. The conclusion is that brands competing below the top five are defined as much closer competitors, leading to their common characteristic of being considered as *small*. The recurring pattern allowed identification of the small brands from the total number of analysed labels to determine the final sample for the remaining four research objectives. The focus was on the small manufacturer brands; that is, those competing below a category's top five and not being store brands. Unless valuable cross-patterns emerged, the following analyses excluded both high-share and private labels.

## 7.4. Introduction of the final sample

Table 25 reveals that the sample for the current analyses spanning the one-year period comprised 125 smaller brands. Their average market share was 2% – a similar figure to that of the sub-sample with 66 continuously listed small brands over the five-year period. This allows the development of generalizable and comparable findings across *MSoD* and time.

***Table 25: Sample size per length of investigation***

| | t = 1 year 36 categories | Av. share Y1 (%) | t = years 15 | Av. share Y1-5 (%) |
|---|---|---|---|---|
| High share branded | 134 | 12 | 50 | 13 |
| High share PL | 46 | 6 | 25 | 7 |
| Small branded | 125 | 2 | 66 | 2 |
| Small share PL | 180 | 2 | 123 | 2 |
| Total/Av. | 485 | 5 | 264 | 6 |

PL: Private label
*Continuously listed brands only

Source: Kantar WorldPanel

## 7.5. Discussion & summary

Responding to research objective one, this chapter revealed new empirical regularities in the market shares of competing brands. The patterns were robust across fundamentally dissimilar categories and persisted over time. Year-to-year repeat buying behaviour was near-stationary, was replicated over fifteen categories and extended to five consecutive years. The ratio of markets shares became smaller as one progressed from high to lower share ranks and shares remained stable over time. And where they did not, the effects on

rank-size ratios were not evident as the rank-size ratios stayed stable. In other words, the general relative brand performance persisted. The cumulative competitive power (in share) resided with the top few brands. Category buying and concentration had weak effects on the rank-size ratios; that is, consumers buy categories, not brands (also Barwise & Meehan, 2004). Thus, under stationary conditions, the analysed rank-share ratio seemed fixed implying that the relationship was independent of category characteristics or specific years.

In the spirit of Bass (1995) and Ehrenberg (1972) the current findings are descriptive. This is a first step towards quantifying the empirical generalisation that the relative competitive gap between brands in fact flattens out to 0.8 after rank five. This contributes to clarify and describe the common characteristics of smaller brands. The 'natural' rank-size ratio between any two successively listed lower-share items was 0.9; that of the larger brands 0.7. This goes against the common belief that shares can be managed in incremental steps through adjustments in advertising or pricing. Instead, consistent patterns on the relative performance gap between brands emerged that replicated across categories and time.

Such a robust model may be used to predict the share steps necessary to 'climb' the competitive rank ladder. It does not give insights on whether a brand achieved a 'normal' size for its rank, instead quantifiable insights on relative brand performance are given. The key implication is that, in order to set feasible and achievable share goals, marketers needs to understand that they do not compete in a vacuum. Market share is a zero sum. Gains (losses) come at the expense (benefit) of the other rivals in the market. Academics may replicate the findings into different contexts with the aim to further strengthen its robustness.

The current research now applies the top-five rule to determine how small brands compete and their buyers behave. The following chapter discusses the identified loyalty patterns of smaller brands, first over the period of a year, and subsequently over the extended time span of five successive years, to address research objectives two and three respectively.

# Chapter 8: Deficit loyalty – The small brand syndrome

*It is widely believed small brands follow niche patterns inasmuch that they command loyalty beyond reason. Yet empirical evidence says otherwise. This chapter first presents the results obtained from the 12-month long analyses to document the frequency of repeat purchase deviations for small brands. Thereafter, their recurrence is quantified by using a sub-sample spanning another four years. Over 50% of the small brands exhibited loyalty deficits, a little less than two in ten had niching and the remainder normal (Double Jeopardy) performance. The patterns are robust across MSoD and persist over five years thereby challenging traditional thinking about how small brands compete.*

……

**Purpose & data:** to address objectives two and three, small brands' repeat purchase rates were analysed systematically to determine the regularities in the incidence, scale and level of persistence of loyalty deviations across significantly dissimilar product classes. The aim was to discuss the role (increased) loyalty plays when describing the nature of competition for typical small brands. The performance of 125 small manufacturer brands in thirty-six categories over a period of one year was analysed first followed by a representative sub-sample comprising 66 of the small brands examined over a further four years. Also discussed are cross-patterns of high share and store brands as well as effects of long-term category buying.

**Key findings:** contrary to popular belief, the minority of small brands exhibited excess loyalty (niche characteristics) at any one time. In fact, over half of the small brands suffered from severe loyalty deficits (change-of-pace traits) below Double Jeopardy estimations. These patterns persisted with little change over five years.

**Detailed findings:**

- In general, loyalty deviations persisted at somewhat decreasing rates: about 70% of the small brands deviated over three years, and 50% over four or more years.
- Half of the small brands had deficit loyalty and just under 20% exhibited niche characteristics in any one year.
- The performance of other brands (high share or store labels) in the same categories had no evident effect on the performance of their smaller rivals.

- No unified characteristics could be identified that defined categories where a loyalty deficit (or surplus) occurred and where it did not.

**Chapter structure:** the chapter starts by presenting the cross-sectional observations describing the loyalty performance for small brands within one example category over twelve months. Subsequently, the results of replicating this approach into another thirty-five categories spanning the same length of time are discussed. This is followed by quantifying the persistence of the initially identified patterns over a total of five years for a sub-sample of the small brands. The chapter closes by evaluating possible effects from the nature of competition within categories and long-term category buying on small brand performance.

## 8.1. Loyalty deviations for small brands

To demonstrate a Double Jeopardy market, Figure 5 (overleaf) graphically illustrates the penetration-loyalty link among the *Male Deodorants* from Table 6 (*Chapter 2.3.1.*). Over a period of one year, the top ten[41] individually listed brands are shown.

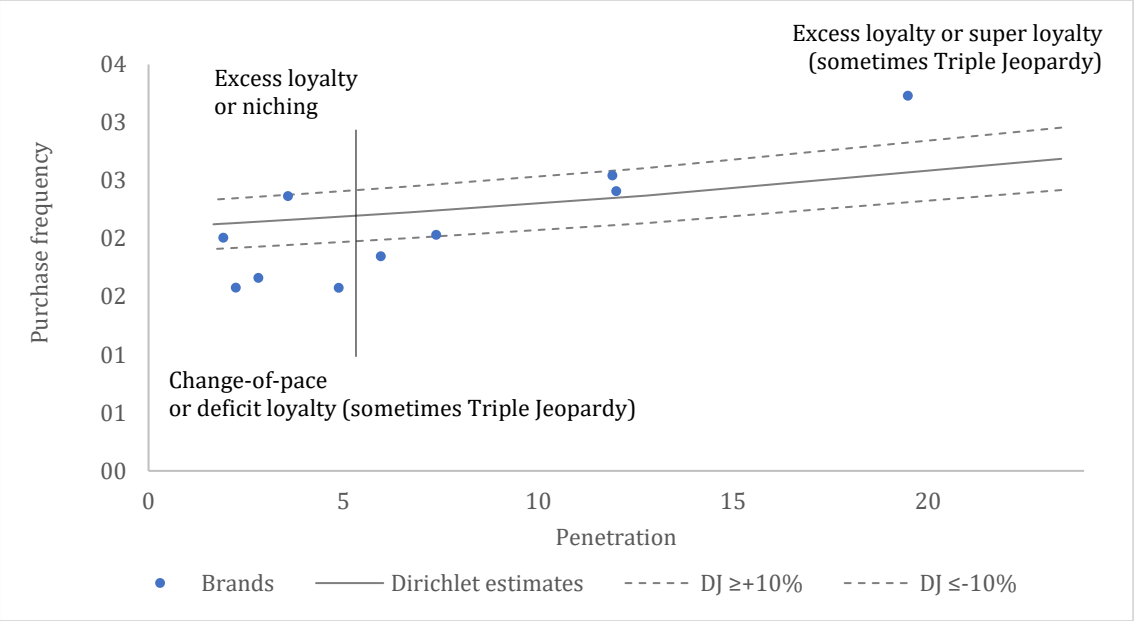
Double Jeopardy is evident: the leading brand is bought by just under 20% of customers about 3.5 times. The 2% or so of the households that purchased smaller brands also bought them a little less often (just below twice). The solid black line represents the vertical division into large (right) and small brands (left) that was achieved by objective one. The grey line visualises the Dirichlet estimated penetration-loyalty values. Around it, the dotted grey dashes portray the ±10%-benchmark to identify deviations. As can be seen, most brands fall within the 'normal' area as has often been described in prior research (e.g. Ehrenberg, 1988; Ehrenberg *et al.,* 1990; Graham, 2009). By focussing on the left side of the vertical divide (where the small brands are located), it can be seen that there is no sign of excess loyalty (niche characteristics) for small brands which is against what traditional marketing literature would have us believe. Interestingly, a significant number of smaller brands exhibit deficit loyalty ≤-10% as the few prior studies suggested (i.e. Kahn *et al.,* 1988; Fader & Schmittlein, 1993; Pare *et al.,* 2006). The example category further reveals one case

[41] This comprises big and smaller brands.

of excess loyalty for the highest share brand – the phenomenon's frequency of occurrence is, however, highly debated as *Chapter 3.3.2.1.* outlined.

***Figure 5: Double Jeopardy for Male Deodorant brands***

t = 1 year; *Male Deodorant* category*; Source: Kantar WorldPanel (adapted after Dowling & Uncles, 1997)




* Excluding the 'all others' brand.

To determine whether the *Male Deodorant* patterns are the norm, strange or just a sampling error, the procedure was replicated across *MSoD*, thereby fully addressing objective two.

## 8.1.1. The frequency of loyalty deviations for small brands

Table 26 (overleaf) summarises the cross-sectional results of the loyalty performance small brands exhibited in any one year. The size of the respective sample is shown below the table. Columns two to six reveal the proportions of brands with excess and deficit loyalty and those performing just about normal (Double Jeopardy brands).

Each year, about seven in ten brands deviated. It could be expected that most of them enjoyed a loyalty premium as suggested in the mass of (strategic) marketing literature (e.g. Lilien *et al.,* 1992; Kotler, 2003, 2005 & 2013). The current data shows, however, that over the period of a year, just about 10% exhibited excess loyalty. This pattern is largely replicated in the year-on-year data: just under 20% over-performed their repeat purchase metrics in any one year. More astonishing is that most (50%) small brands had significant

loyalty deficits: after accounting for Double Jeopardy, these brands clearly suffered more than twice.

***Table 26: Annual loyalty rates for small brands short term & year-on-year***

t = 1 year; 36 categories (N = 125 small brands)

| Brand loyalty performance | Annual proportion (%) of brands per performance group | | Joint average percental (%) discrepancy in | |
|---|---|---|---|---|
| | Y1 | Avg. Y1 | Penetration (b) | Purchase per buyer (w) |
| Excess | 11 | 11 | -20 | 28 |
| DJ* | 30 | 30 | 2 | 1 |
| Deficit | 59 | 59 | 37 | -26 |

t = 5 years; 15 categories (N = 66 small brands)

| Brand loyalty performance | Annual proportion (%) of brands per performance group | | | | | | Joint average percental (%) discrepancy in | |
|---|---|---|---|---|---|---|---|---|
| | Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-5 | Penetration (b) | Purchase per buyer (w) |
| Excess | 18 | 20 | 20 | 20 | 15 | 18 | -21 | 31 |
| DJ* | 27 | 30 | 32 | 29 | 36 | 31 | 2 | 1 |
| Deficit | 55 | 50 | 48 | 52 | 48 | 51 | 33 | -23 |

t = 1 year; 36 categories (N = 125 small brands) Source: Kantar WorldPanel
t = 5 years; 15 categories (N = 66 continuously listed small brands) (rounded figures)
*DJ: Double Jeopardy

The last two columns in Table 26 summarise the joint average percental performance discrepancies per loyalty group (excess, Double Jeopardy, deficit). *Appendix II* shows the more detailed findings. Evidently, in year one the deficit loyalty brands jointly under-performed their repeat purchase rates by about a quarter (-26%); they have a corresponding penetration surplus of 37%. These brands are bought by a greater number of customers who do not re-purchase at the expected rates. Regarding the brands with excess loyalty: 20% fewer buyers accounted for nearly one-third more purchases. The small Double Jeopardy brands were nearly on point with their estimates. The patterns replicated year-on-year with similar figures.

In response to the second research objective, the cross-sectional picture revealed that in any one year, at least half of the small brands tended towards significant repeat purchase deficits; just under two in ten enjoyed a loyalty surplus beyond the expected rates and nearly 30% competed at normal (Double Jeopardy) performance. By determining the extent

to which the identified loyalty deviations persist over five years, the following section addresses research objective three.

### 8.1.2. The persistence of small brands' loyalty deviations

Table 27 shows the proportions of brands that deviated persistently, over periods ranging from three years (column two), four years (column three) and over the full five years of the investigation time (column four). In any given period, there were more brands deviating (excess or deficit) than behaved in a 'normal' manner. The overall result is striking: loyalty rates, and with that deviations, persisted. For example, 80% of those with deficit loyalty followed this pattern most of the time.

***Table 27: The persistence of loyalty rates for small brands (Y1-5)***

| Brand loyalty performance | Proportion (%) of brands per performance group over | | | Joint average percental (%) discrepancy in | |
|---|---|---|---|---|---|
| | ≤3 years | ≤4 years | ≤5 years | Penetration (b) | Purchase per buyer (w) |
| Excess | 18 | 14 | 12 | -21 | 31 |
| DJ* | 32 | 15 | 11 | 2 | 1 |
| Deficit | 50 | 44 | 36 | 33 | -23 |
| Total | 100 | 73 | 59 | | |

t = 5 years; 15 categories (N = 66 small continuously listed brands) (rounded figures)
Source: Kantar WorldPanel
*DJ: Double Jeopardy

There was some erosion (similar to *Pare et al.,* 2006; Pare & Dawes, 2011): with *t* increasing, proportions of deviating brands decreased. That is, more brands deviated in the same direction over three than five years. More precisely, of the 66 small bands, nearly two-thirds deviated (any direction) over three consecutive years, 58% over four and 48% in all five years. Furthermore, about 30% followed their loyalty estimates closely over three years which decreased to just over 10% of brands with a Double Jeopardy performance across all five years. The proportions of excess loyalty brands also decreased from 20% to 10% over time. It should be noted that just one brand moved beyond the adjacent loyalty category[42]. With that, the long-term datasets largely reflect the above cross-sectional picture thereby demonstrating the persistence of brand performance.

[42] The *Facial tissue* brand *Countess* moved from three years of continuous excess loyalty to deficit in the following year. The brand is classified into the excess group due to its three years of persistent excess loyalty.

The last two columns of Table 27 reveal the joint average percental performance discrepancies per group of brands[43]. Deficit loyalty brands were purchased at a 20% lower than expected rate year-on-year. There are variations for individual cases[44], possibly due to promotional activities (perhaps intended to protect or increase share), but the big picture is that a great proportion of small brands tended to persistent loyalty deficits (change-of-pace characteristics). They had an over 30% bigger customer base than expected; some[45] of the brands were purchased by a buyer proportion 90% above the estimate.

The sales of the few brands with niche characteristics (excess loyalty) were seemingly based on a one-fifth smaller than expected customer base purchasing at a more than 30% higher rate than expected. Magnitudes for some individual brands surpassed the figures[46].

The normal brands made up about 30% of those investigated; just under 50% of them persistently fell within the Dirichlet threshold over four years. Their figures demonstrated minor yearly fluctuations but were in line with Double Jeopardy expectations.

Overall, the three loyalty classifications demonstrated near-stable annual means. That is, consumers buy brands at near-fixed rates – even over five years – just as the Dirichlet expects. In response to objective three: loyalty deviations largely persist at slightly declining rates. The vast majority suffered from significantly lower than expected repeat purchase rates, three in ten performed about normal and about two in ten had niche characteristics.

The following sections outline key findings of studies on the loyalty performance of high-share and private labels. The aim is to determine whether there are category-specific deviational trends or whether loyalty deficiencies are the result of over time changes in category buying.

[43] The detailed insights are listed in *Appendix II*.
[44] For example, *Rappor* (*Instant coffee*) had an absolute loyalty variance of 0.5 in year four, approximately 10% higher than its average of -22%, hence this is exceptional.
[45] See the *Facial tissue* brand *Cherish*.
[46] *Swedish Glacé*, for example, had about 12% higher than average absolute variances in year two and five, which are clearly exceptional. It was also the only brand with an average loyalty premium of 90%, while at the same time being bought by just half of its expected consumer base.

## 8.2. Impacts of other brands & category characteristics

### High-share brands

The majority of large brands performed normally: in every year 60%[47] did so. Approximately one in ten deviated into the excess loyalty area and interestingly enough, around 20% suffered from repeat purchase deficits.

The figures persisted over time: two-thirds[48] followed their Dirichlet estimates closely over three years; 44% over five. Out of the 50 high-share brands, around 10% exhibited excess loyalty in any one year, and nearly one-fifth had deficit loyalty. Perhaps the proportions were slightly higher compared to earlier investigations as the current study considered the top five as large brands. Yet, overall, loyalty deviations for high-share brands were not universal (e.g. Ehrenberg, 1988; Scriven & Bound, 2004), and if they occurred, they persisted (e.g. Pare & Dawes, 2007, 2011).

### Private labels

The majority (70%)[49] of the private labels (high and low-share) demonstrated loyalty deviations in any one year, while about 30% had normal repeat purchase rates. That is, restricted distributions did not necessarily result in a loyalty surplus. While most of those that deviated, in fact, enjoyed higher than expected loyalty, about a quarter of the smaller store brands had deficit loyalty – a rare pattern for those with a larger share.

The analyses of store labels over time confirmed the cross-sectional findings[50]: excess loyalty was the most common performance pattern. About 60% of the larger and 40% of the smaller store labels exceeded their Dirichlet estimates, and one-third fell *within* the ±10%-range regardless of being big or small. Several of the smaller store brands had loyalty deficits and for 60% of them this pattern persisted over four or more years. Again, deficits were rarer amongst those with higher share.

In terms of store numbers, Pare and Dawes (2011) argued the labels of retailers with many more outlets may be less restricted in distribution. These retailers have perhaps higher proportions of labels performing normally which would emphasise the importance of a

[47] (Table 52, *Section 3*, *Appendix II*).
[48] As can be seen in Table 53 (*Section 3*, *Appendix II*).
[49] As can be seen in Table 54 (*Section 3*, *Appendix II*).
[50] (Table 55, *Section 3*, *Appendix II*).

wider distribution for smaller brands to compete successfully. This has been investigated, and Table 28 reveals the store brand performance per retailer. Listed are exclusively those that had individually identifiable brands competing within the analysed product classes. The retailers are in descending order after market share (column two). Column three reveals the number of outlets per retailer as of 2018.

*Tesco* runs about 30% of the total number of outlets followed by *The Co-op* (22%) and *Sainsbury's* (11%). *Tesco's* own range is widely listed within the datasets, and most of its labels exhibited excess loyalty followed by normal performance. Similar patterns arose for most of the other retailers, even though they had only fractions of the locations compared to *Tesco*. It is noteworthy that all retailers had some labels with deficit loyalty – even in the long run. Interestingly, *The Co-op* only had six individual labels listed and all under-performed despite the large number of outlets. Similar outcomes applied to *M&S*.

***Table 28: Store label performance per retailer***

| Retailer | Market share* (%) | Stores (No.) | t = 1 year; 36 categories | | | | t = 5 years; 15 categories | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Excess (No.) | DJ**** (No.) | Deficit (No.) | **Total (No.)** | Excess (No.) | DJ**** (No.) | Deficit (No.) | **Total (No.)** |
| Tesco*** | 24 | 3435 | 35 | 20 | 11 | **66** | 18 | 14 | 6 | **38** |
| Sainsbury's | 12 | 1423 | 9 | 11 | 4 | **24** | 8 | 6 | 3 | **17** |
| Asda | 12 | 635 | 21 | 9 | 10 | **40** | 12 | 6 | 3 | **21** |
| Morrisons | 9 | 491 | 4 | 11 | 5 | **20** | 3 | 5 | 6 | **14** |
| Aldi | 7 | 762 | 15 | 8 | 5 | **28** | 12 | 4 | 2 | **18** |
| The Co-op | 5 | 2774 | | | 6 | **6** | | | 6 | **6** |
| Lidl | 5 | 712 | 5 | 7 | 6 | **18** | 5 | 9 | 1 | **15** |
| Waitrose | 4 | 353 | 3 | 2 | 2 | **7** | 4 | 1 | 2 | **7** |
| Marks & Spencer | 4 | 1035 | | | 2 | **2** | | | 2 | **2** |
| Iceland Foods Ltd | 2 | 905 | 2 | | 2 | **4** | 2 | | 1 | **3** |
| Other outlets** | N/A | N/A | 4 | 1 | 6 | **11** | 1 | | 6 | **7** |
| Total | 84 | 12525 | 98 | 69 | 59 | **226** | 65 | 45 | 38 | **148** |

* see Mintel (2018B) Source: Kantar WorldPanel

** e.g. Boots, Superdrug, 99p Stores, Home Bargains, Wilkinson Hardware Ltd (now Wilko)

*** Excluding Booker Food Retail locations

**** DJ: Double Jeopardy

The general pattern is that the greater the number of outlets, the more private labels seem to be higher up in the share ranks of each category. Small brands should therefore not underestimate the power retailers may exert with their own labels. About 30% of them performed equally normal to manufacturer brands of similar size.

## High-share excess loyalty effects on small brand performance

Twenty of the short-term and six of the long-run categories are found to have big brands exhibiting excess loyalty. Fader and Schmittlein (1993) suggested that a large brand's superior loyalty may represent a third disadvantage[51] for the smaller brands in the same category coming at their expense. Hence, it would be expected to find proportionally more small brands with deficit loyalty in categories with excess loyalty high share brands.

Noteworthy is that most of the categories that had no large brand with excess loyalty had greater numbers of small brands with superior repeat purchase rates. There is, however, a weak link[52] between high-share excess loyalty and greater proportions of deficit loyalty for small brands, yet these categories had fewer small labels with excess loyalty. Fader and Schmittlein's proposition of the threat from the top by high-share brands with excess loyalty was not supported in the here analysed categories – year-on-year. Whether excess loyalty (for large or small) brands attract disproportionally (asymmetric customer duplication) more customers resulting in deficit loyalty for small brands is discussed in *Chapter 10*.

## Category buying effects on small brand performance

The in *Chapter 7.1.* presented shape and scope of the category buying equilibrium revealed that most product classes were near-stationary. Few buyers entered or left. No unified characteristics or aspects could be identified that defined categories where a loyalty premium (or deficit) happened (cf. Scriven & Bound, 2004). This highlights the dilemma of small brands: aside lower marketing budgets, market near-stationarity seems to constraint competition and desired growth (more in *Chapter 9*).

Trinh and Anesbury (2015) found greater proportions of deviating brands in low-penetration and purchase frequency categories and Nenycz-Thiel *et al.* (2018) reported that low-reach categories are rather volatile in nature and so might show greater numbers of deviating brands. This is, however, not supported by the current research – at least not for the data used. Greater category reach does not necessarily result in excess loyalty for high-share brands, but somehow links to higher numbers of smaller brands with this performance (see Table 56, *Section 4*, *Appendix II*).

[51] After having fewer buyers who buy them less often (Ehrenberg, 1988).
[52] Tables 56 and 57 (*Section 4*; *Appendix II*).

Yet the effect replicated weakly over time as can be seen in Table 57 (*Section 4*, *Appendix II*). Even though a higher category purchase frequency rate reflects increased competitive rivalry within the category in question, this does not link to increased proportions of deficit loyalty brands. A lower proportion of excess loyalty for high-share brands was found for categories with below-average purchase frequency. Greater penetration figures seemingly linked to higher proportions of private labels competing in them – retailers want to cash in on the high number of customers buying these specific categories, and the managers of small brands would need to consider this in their (strategic) marketing planning.

Altogether, the proposition that a high share excess loyalty performance comes at the expense of small brands inasmuch that there would be greater proportions of small deficit loyalty brands was not supported. Equally true is that lower category demand was not an exclusive characteristic for categories with higher numbers of deviating brands, and even though an increased category purchase frequency reflects greater rivalry, there is no evidence that this leads to increasing numbers of small brands with deficit loyalty. Similarly, weak evidence for declining brand loyalty was found by others (e.g. Johnson, 1984; Sharp *et al.,* 2012; Dawes *et al.,* 2015). What was also not supported by this data was Sharp's (2007) proposition that high loyalty brands tend to gather in declining categories.

## 8.3. Discussion & summary

This chapter has addressed research objectives two and three in identifying and discussing in repeat purchasing deficiencies for small brands in both cross-sectional (12-month long) and extended (up to five years) periods of time. Earlier studies that indicated performance deviations for lower-share entities exist (e.g. Kahn *et al.,* 1988; Bhattacharya, 1997; Dawes *et al.,* 2017) and persist (e.g. Pare *et al.,* 2006; Pare & Dawes, 2007, 2011) were replicated; results thus unlikely to be sampling errors, isolated cases or random variations.

The current analyses yielded several important results: first, excess loyalty for small brands was an exceptional and not universal pattern. It was exhibited by just under 20% of the brands. The pattern remained stable over time in line with its corresponding penetration deficit suggesting the brands are limited in mass market attractiveness. In other words, against popular belief (see e.g. Kotler, 2003, 2005) there are few niche performers.

Second, the most common characteristic of small brands was deficit loyalty below Double Jeopardy expectations – a rather counter-intuitive but recurring finding. Over 50% of the

small brands had this performance persistently over time alongside significant surpluses in their penetration figures. The deficits were thereby seemingly not caused by high share brands with excess loyalty in the same category as had been suggested by Habel *et al.* (2005B) and Fader and Schmittlein (1993). It was further found that around 30% of the small brands did indeed exhibit normal (Double Jeopardy) loyalty.

This research further confirmed there is little change over five years: loyalty performance (excess, Double Jeopardy or deficit) recurred persistently over five successive years at somewhat declining rates. The new finding is that superior loyalty was a rare characteristic of smaller brands (also Pare *et al*., 2006; Pare & Dawes, 2011; Dawes *et al.,* 2017). This suggests that loyalty-based targeting strategies have either a lower than expected success rate or small brands are not good at executing them.

Lastly, there was no evidence of unified characteristics or aspects that could help identify product classes where a loyalty premium (or a deficit for that matter) occurred. Neither did declining categories comprise greater proportions of brands with excess loyalty (cf. Sharp, 2007), nor did low-penetration low-loyalty categories have higher numbers of deviating brands (cf. Trinh & Anesbury, 2015; Nenycz-Thiel *et al.,* 2018). All of this may be outcomes of the here revealed near-stationary nature in category buying – as had been reported in earlier research (e.g. Bass & Pilon, 1980; Lal & Padmanabhan, 1995; Ehrenberg *et al.,* 2004; Graham, 2009).

So, if not with loyalty, what and how (else) to describe small brands' nature of competition more accurately in any period of time? And perhaps more importantly: do small brands (ever) grow, and what buying patterns emerge *as* they do so? To determine this, a detailed understanding of their BPMs is needed, and the findings of these analyses are reported in the subsequent chapter to address research objective four.

# Chapter 9: How small brands grow

*This chapter presents the observations of patterns in long-term continuous repeat buying for small brands classed into stationary, near-stationary and non-stationary performance. It appears purchase behaviour is constrained by Double Jeopardy, describing the stationary nature of long-term competition regardless of a brands' loyalty performance. Trends are exceptional and not apparently driven by loyalty or repeat purchase deficiencies in general. In fact, every one in four small share brand with normal performance did grow. Most significant changes in share dynamic brands' customer bases were in the group of light buyers. This challenges the traditional retention-based outlook on small brand success.*

……

**Purpose & data:** to address research objective four, small brand's repeat buying performance was analysed over time to determine the scope and shape of the share equilibrium. Further described are the patterns observed in several key performance measures *as* brands grew (or declined). The metrics for 66 small brands from consumer panel of continuous reporters were analysed to evaluate (non-)stationary performance over the extended period of five years.

**Key findings:** most brands are share stable, and for those that grew change was not, against popular marketing belief, driven by loyalty. The same applied to share declining small brands. The patterns persisted over time.

**Detailed findings:**

- Regardless of their loyalty performance, over 80% of the small brands were share-stable; a cumulative 97% were near-stationary; only two demonstrated changes exceeding ±5% points.
- The nature of loyalty deficiencies was not sensitive to brand size or share change. Of those deviating, 90% were share-stable and none exceeded a ±3% change.
- Excess loyalty was mitigated by penetration values below expectations but had no obvious association with trending loyalty or share growth.
- Deficit loyalty was mitigated by penetration beyond expectations; no associations with downward trending loyalty or declining share emerged.

- For small brands with buying patterns that remained within Double Jeopardy estimates, there was a one in four chance to grow.
- In case of share dynamics, the prominent metric that changed was penetration. The metric correlated highly negatively with the proportion of once-only buyers. That is, brands grew more in penetration while their once-only buyer proportions declined and vice versa for share decreasing brands.
- Jointly, small brands revealed a dramatic dependence on lighter buyers that persisted and was sensitive to their loyalty performance. The customer bases of deficit loyalty brands had 30% more than expected infrequent buyers; excess loyalty brands had just over 10% more.
- Share changing brands did largely cross-sell as expected with their competitors indicating buyers are not drawn from or lost to just one or few rivals. Small brands compete as expected by the Duplication of Purchase law.

**Chapter structure:** the chapter starts with evaluating the scope and shape of brand share equilibrium as a basis to determine differences and similarities in the underlying repeat buying distributions of the excess, normal and deficit loyalty brands. After analysing the long-term patterns of stationary brands, the few non-stationary cases are discussed. The focus was on the empirically observed changes in the BPMs *as* brands changed market share.

## 9.1. Share equilibrium & repeat purchase distributions for small brands

### 9.1.1. Loyalty performance & share changes

To examine the scope and nature of brand share equilibrium, small brands' absolute share changes were analysed over time. Table 29 (overleaf) summarises the findings. Brands are classified by their observed loyalty performance (excess, normal, deficit). Each group is categorised into the nature and magnitude of share change (column one). The last column provides the total number of brands per share-change tier.

A striking share equilibrium (±1%) was revealed for over 80% of the small brands. If the term stationary is to accommodate changes in the second and third class (±2% to ±3%), the proportion of brands in equilibrium increased to 92%, confirming results of prior studies

discussed in *Chapter 4* (e.g. Bass & Pilon, 1980; Johnson, 1984; Ehrenberg, 1988; Lal & Padmanabhan, 1995; Baldinger *et al.,* 2002; Graham, 2009; Trinh & Anesbury, 2015).

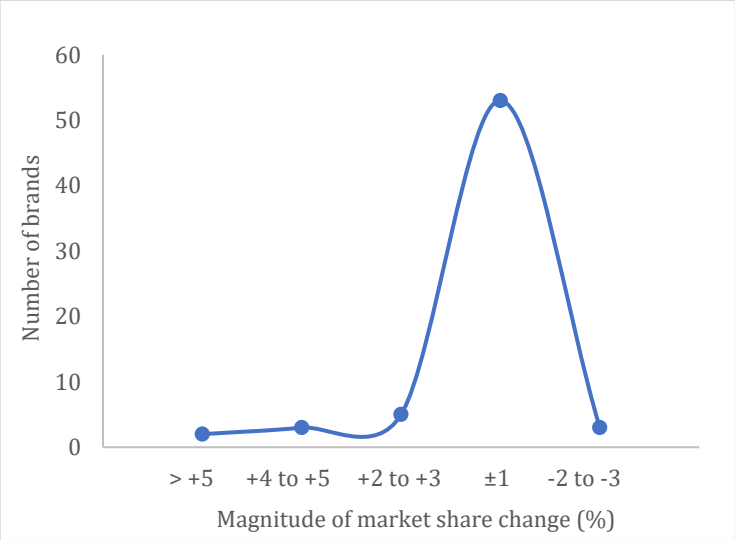
***Table 29: Distribution of share changes & loyalty deviations***

| Brand share change (%) | Brand loyalty performance | | | Total brands (No.) |
|---|---|---|---|---|
| | Excess (No.) | Deficit (No.) | DJ* (No.) | |
| -2 to -3 | | 1 | 2 | 3 |
| ±1 (stationary) | 11 | 30 | 12 | 53 |
| +2 to + 3 | 1 | 2 | 2 | 5 |
| +4 to +5 | | | 3 | 3 |
| >+5 (substantial growth) | | | 2 | 2 |
| Total | 12 | 33 | 21 | 66 |

t = 5 years; 15 categories (N = 66 small continuously listed brands)
Source: Kantar WorldPanel
*DJ: Double Jeopardy

***Figure 6: Share change distribution (Y1-5)***

t = 5 years; 15 categories; Source: Kantar WorldPanel




Following the definition of near-stationarity by Ehrenberg (1988) and Ehrenberg *et al.* (2004) that includes share changes up to ±5% points, a cumulative 97% of the small brands met this characteristic. Overall, higher proportions of growing brands were noted as indicated by the left hand tail of the graph in Figure 6. The curve had a mean of 0.6 and its Standard Deviation (SD) was two which reveals how close the frequencies sit around the stationary area of ±1%. So much for the growth ambitions of the marketers of small brands. Equilibrium persists, despite (or perhaps *because* of) their disruptive (target) marketing

activities. Only two dynamic outliers surpassed the annual ±1% benchmark by far; both grew and are discussed in more detail in *Section 9.2.2*.

Of the 28 smallest brands (with ≤1%), only two changed more than two percentage points over five years; one of them dramatically by about 10%. Of the remaining 38 that had a >1% starting share in year one, ten either grew or declined between 2% and 5% up or down; just one grew significantly by 8%. This indicates that very small brands were not especially volatile (as Baldinger *et al.* (2002) suggested), instead none of those with ≤1% declined, and apart from one all were near-stationary.

To determine which of the loyalty performance classifications were more (or less) prone to brand share change, the focus now goes to the loyalty performance shown in the middle section of Table 29. It appears that any loyalty class tended towards share stability: of the respective two and five in ten brands with excess and deficit loyalty, a joint 90% did not gain or lose more than ±1% over five years, and all of those deviating were considered near-stationary at the ±3% level (Ehrenberg 1988; Ehrenberg *et al.,* 2004). If anything, excess loyalty rates did not result in systematic growth (e.g. Lilien *et al.,* 1992; Kotler 2013); just one of them grew. It is equally true that deficit loyalty brands were not prone to share loss; over 90% were in absolute equilibrium (±1%), and of the three with slight dynamics, two grew and one declined. Most astonishingly, however, was that the majority of the share changes happened within the group of Double Jeopardy brands. About 60% were absolutely stable and a cumulative 90% could be considered near-stationary (±3 to ±5%). One-third of the Double Jeopardy brands grew.

All in all, neither of the loyalty extremes was prone to share changes; deficit loyalty was not a sign of imminent disaster. Not only did these brands survive *despite* substantially lower average purchase frequency; they also largely *maintained* their share. But if penetration and loyalty rates stayed approximately stable, then a brand's year-on-year customer base cannot be entirely the same. How does one maintain share if customers do not repeat buy as expected? The observed patterns in brands' underlying repeat buying distributions are discussed below.

### 9.1.2. The weight of buying: The buyer base of small brands

The small association between loyalty deviations and substantial share changes opens the discussion on what held these brands in near-stationarity? Equation 4 (*Chapter 2.3.1.*)

expressed that any brand's sales are the product of how many are bought, and how often. With the absence of major trends in buying patterns as the prevalent scope of share equilibrium in Table 29 revealed, a brand's year-on-year customer base appears to comprise similar proportions of lighter and heavier buyers. The Dirichlet predicts this heterogeneity of the market. In fact, the steady state is the outcome of aggregating households' heterogeneous buying probabilities. The resulting near-stationarity *despite* the typical split-loyal nature of purchasing reflects this regression to the mean (East & Hammond, 1996; Ehrenberg *et al.,* 2004; Romaniuk & Wight, 2015) which is an ideal benchmark to examine and compare the repeat buying distributions of small brands with excess, deficit and normal loyalty.

*Chapter 8* revealed that deficit loyalty brands had significantly greater than expected penetration proportions, whilst the equally opposite was found for those with a loyalty premium. This indicated that perhaps the distributions of buyers of brands exhibiting deficit loyalty might look different from that of one with, say, excess loyalty and both should differ from the Double Jeopardy brands. A stable share despite lower than expected repeat purchase rates would have to be *maintained* by attracting *even* more than expected buyers; and those would be light purchasers of the brands. If traditional marketing is believed, however, heavier buyers would play a greater role than empirically expected.

To understand the differences of deviating and non-deviating small brands Table 30 (overleaf) compares the joint repeat buying distributions for each group (excess, deficit and Double Jeopardy brands). That is, the joint average once-only buyer proportions observed for excess loyalty brands is compared to those with deficit and normal loyalty performance. As a second comparator, the Dirichlet-estimated values (*T*) for heavy and light buying are provided (to the right side of the observed values).

It can be seen that all brands, regardless of their loyalty performance and regardless of the length of the investigation period, need to focus on penetration building in order to grow and avoid the acquired light buyers from lapsing. Those with a deficit loyalty need to pay even more attention on retaining their heavy buyers while brands with excess loyalty have to keep an eye on their lighter buyer proportions for share maintenance alone.

## Buying distributions in one year

Looking at the upper part of Table 30 (below) that shows the buying patterns of small brands in a period of a year, four things are evident: first, all brands' customer bases had more once-only than heavy buyers. That is, smaller brands in aggregate had more infrequent and fewer heavier buyers – just as Double Jeopardy would expect. Second, depending on the loyalty level, each of the two buyer proportions (light or heavy) significantly differed in their contributions to brand sales. In other words, in a period such as a year, deficit loyalty brands are bought by about 25% more infrequent buyers than the joint group of those with a loyalty surplus. This clearly shows that deficit loyalty brands attracted a greater proportion of trialists who did not buy again as predicted.

***Table 30: Short & long term buying of small brands (Y1 & Y1-5)***

t = 1 year; 36 categories (N = 125 small brands)

| Brands ranked 6th to 20th | Total brands (No.) | Penetration (b) | | | Buyers purchasing | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | % | % | % differ. | Once (%) | | % differ. | 5+ (%) | | % differ. |
| | | O | T | (±) | O | T | (±) | O | T | (±) |
| Excess | 14 | 4 | 5 | **-19%** | 54 | 49 | **9%** | 18 | 17 | **8%** |
| DJ* | 37 | 5 | 5 | **1%** | 63 | 56 | **12%** | 9 | 12 | **-26%** |
| Deficit | 74 | 3.5 | 2.6 | **35%** | 70 | 54 | **29%** | 6 | 14 | **-57%** |
| Total | 125 | 4 | 4 | **0.3%** | 62 | 53 | **17%** | 11 | 14 | **-23%** |

t = 5 years; 15 categories (N = 66 small brands)

| Brands ranked 6th to 20th | Total brands (No.) | Penetration (b) | | | Buyers purchasing | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | % | % | % differ. | Once (%) | | % differ. | 5+ (%) | | % differ. |
| | | O | T | (±) | O | T | (±) | O | T | (±) |
| Excess | 12 | 4 | 5 | **-21%** | 55 | 49 | **12%** | 18 | 17 | **5%** |
| DJ* | 21 | 9 | 9 | **1%** | 57 | 48 | **18%** | 12 | 17 | **-27%** |
| Deficit | 33 | 5 | 4 | **33%** | 65 | 49 | **33%** | 8 | 17 | **-53%** |
| Total | 66 | 6 | 6 | **1%** | 59 | 49 | **21%** | 13 | 17 | **-25%** |

(rounded figures) Source: Kantar WorldPanel
*DJ: Double Jeopardy

The third finding concerns the group of more frequent purchasers (heavy buyers). Here, the reverse effect is evident for each loyalty performance group: reflecting their above-expectation repeat purchase rates, excess loyalty brands were bought about two to three times more by those purchasing five or more times a year. And lastly, comparing the observed with the Dirichlet estimates revealed that smaller brands are not bought as frequently as anticipated. In the period of a year, their joint heavy buyer proportions are

about one-fifth smaller than expected. In other words, regardless of their loyalty performance, on average, just one in ten buyers bought one of the small brands in a year, resulting in both a substantial shortfall in heavy buyers and an excess of once-only purchasers; the latter jointly amounting to about two-thirds of their customers.

And because excess and deficit loyalty brands are exceptions, and not accommodated by the Dirichlet, the penetration groupings differed significantly in their light and heavy buyers. Here, deficit loyalty brands demonstrated the most dramatic discrepancy: they are bought by about 25% more lighter buyers and nearly 2.5 times fewer heavier buyers than expected. Collectively for small brands of any size, the infrequent buyer had a huge dominance – at least over the course of one year, and even more so for those with loyalty deficits. The question is how that evolved over a further four years.

## Buying distribution over time

Using the five-year averages per metric, the lower part of Table 30 revealed the long-term buying distributions for the three loyalty classifications of small brands. Similar figures of *expected* light and heavy buying rates still applied over time. Any brand's customer base comprised many more who only bought once. But how closely the small brands followed their Dirichlet buying estimates differed again according to their exhibited loyalty performance: once more, the metrics are more extreme for deficit loyalty brands. Overall, small brands were jointly bought once by an average of 60% of their buyer base, and just over one in ten customers bought any of them five times (or a little more) over five years – so, at a rate of once per any twelve months. This illustrates the combined imperative contribution of the light-buyer segment to small brands that are already suffering twice. And surprisingly this reveals what held them in their mostly stable shares: a vastly higher light buyer proportion resulting in a dramatically left-side skewed customer base. In other words, deficit loyalty brands maintained shares by sheer selling (transactional business), which does not have much in common with marketing *"as the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers"* (AMA, 2013).

Overall, the results reflected the level of share stability often reported for larger rivals (see *Chapter 4*). The smaller proportions of the joint heavy buyer segment demonstrated their important yet not ultimate necessity for growth (cf. Anschuetz, 2002; Romaniuk, 2011) –

which is especially evident for the small Double Jeopardy brands. Heavy buyers accounted for more purchases in frequency per household, but for the joint group of small brands, one in five of the additional customers tended towards infrequent buying. A focus on the heavy buyer alone did not seemingly result in any anticipated growth as proven by the rarity of share shifts especially for small excess loyalty brands. In other words, widening reach increased the likeliness to grow for both share and heavy-buyer proportions – as the laws of marketing expect.

The Dirichlet expects high levels of light buyers, yet for the deficit loyalty brands, the competitive reality was even worse than predicted. And against traditional marketing belief, the group of excess loyalty brands also seemed to maintain share by attracting some more yet lighter buyers. Both (excess and deficit brands) of them did not seemingly make buyers less (or more) loyal, as demonstrated by the absence of major trends.

To understand the differences in the underlying purchase patterns between stationary and non-stationary brands, the following sections discuss their isolated key BPMs.

## 9.2. Repeat buying for small brands

The scope of over time stationarity across typical brand performance measures can be seen in Table 31 (overleaf). Brands are classified into the five tiers of share changes identified in Table 29 (*Section 9.1.1.*). Column three of Table 31 gives the number of brands within each share-tier: eighty percent are in equilibrium not exceeding a ±1% share change over five consecutive years while 97% met near-stationary characteristics demonstrating either losses or gains of up to ±5%, and just two brands exhibited significant growth beyond five percentage points.

It becomes evident that the biggest changes were in penetration and once-only buyer metrics: the rise in penetration accounted for the increase in shares for the three growing tiers and vice versa for the declining group. Noteworthy is the brands that grew were not in fact 'new brands' (i.e. not launched in year one of the current analysis period). The two brands that grew more than five percentage points, *Oral-B* and *ICBINB*, were introduced to the UK in 2005 (Campaign, 2005) and 1991 respectively (Unilever, 2012). Those growing between four and five percentage points – *Regina, Clover* and *Innocent* – were launched in the UK in 2007 (Marketing Communication News, 2017), 1983 (Dairy Crest, 2020) and 1999 respectively (Innocent, 2020).

## *Table 31: Performance measures over time for small brands (Y1-5)*

| Performance measure | Magnitude of share change | No. of brands | Average annual figures Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-5 | Abs.* Y5-1 | Correl. w. time | MAD Y1-5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Market share (%) | > +5 | 2 | 3 | 5 | 10 | 12 | 12 | 8 | 9 | 0.94 | 4 |
| | +4 to +5 | 3 | 3 | 5 | 7 | 7 | 8 | 6 | 4 | 0.96 | 1 |
| | +2 to +3 | 5 | 2 | 4 | 4 | 4 | 5 | 4 | 2 | 0.93 | 1 |
| | +/-1 | 53 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | -0.09 | 0 |
| | -2 to -3 | 3 | 4 | 3 | 2 | 2 | 2 | 3 | -2 | -0.87 | 0 |
| Penetration (*b*, %) | > +5 | 2 | 11 | 17 | 26 | 28 | 27 | 22 | 16 | 0.90 | 6 |
| | +4 to +5 | 3 | 9 | 15 | 18 | 18 | 18 | 15 | 9 | 0.85 | 3 |
| | +2 to +3 | 5 | 7 | 8 | 10 | 11 | 11 | 9 | 5 | 0.96 | 2 |
| | +/-1 | 53 | 4 | 5 | 5 | 5 | 4 | 5 | 0 | 0.23 | 0 |
| | -2 to -3 | 3 | 12 | 9 | 8 | 8 | 7 | 9 | -5 | -0.89 | 1 |
| Purchase frequency (*w*) | > +5 | 2 | 2.4 | 2.3 | 3.2 | 3.4 | 3.7 | 3.0 | 1 | 0.92 | 1 |
| | +4 to +5 | 3 | 4.4 | 3.8 | 4.3 | 4.4 | 4.5 | 4.3 | 0 | 0.43 | 0 |
| | +2 to +3 | 5 | 2.6 | 3.0 | 2.9 | 2.9 | 3.1 | 2.9 | 0 | 0.73 | 0 |
| | +/-1 | 53 | 2.8 | 2.9 | 2.8 | 2.8 | 2.7 | 2.8 | 0 | -0.79 | 0 |
| | -2 to -3 | 3 | 2.8 | 2.6 | 2.5 | 2.5 | 2.6 | 2.6 | 0 | -0.64 | 0 |
| Once-only buyers (%) | > +5 | 2 | 72 | 61 | 45 | 44 | 44 | 53 | -28 | -0.91 | 11 |
| (once) | +4 to +5 | 3 | 53 | 51 | 48 | 45 | 45 | 49 | -8 | -0.97 | 3 |
| | +2 to +3 | 5 | 63 | 57 | 57 | 58 | 56 | 58 | -7 | -0.76 | 2 |
| | +/-1 | 53 | 62 | 62 | 63 | 61 | 62 | 62 | 0 | -0.25 | 1 |
| | -2 to -3 | 3 | 60 | 64 | 66 | 64 | 63 | 63 | 4 | 0.52 | 2 |
| 5+ buyers (%) | > +5 | 2 | 12 | 10 | 17 | 19 | 19 | 16 | 7 | 0.87 | 3 |
| (heavy) | +4 to +5 | 3 | 19 | 17 | 19 | 20 | 21 | 19 | 2 | 0.83 | 1 |
| | +2 to +3 | 5 | 11 | 13 | 12 | 12 | 13 | 12 | 3 | 0.81 | 1 |
| | +/-1 | 53 | 11 | 11 | 11 | 11 | 11 | 11 | 0 | 0.09 | 0 |
| | -2 to -3 | 3 | 9 | 7 | 7 | 7 | 8 | 8 | -2 | -0.47 | 1 |
| Category purchase | > +5 | 2 | 13 | 13 | 12 | 12 | 12 | 12 | -1 | -0.83 | 1 |
| | +4 to +5 | 3 | 21 | 20 | 19 | 19 | 18 | 19 | -2 | -0.93 | 1 |
| | +2 to +3 | 5 | 16 | 16 | 16 | 15 | 15 | 16 | -2 | -0.96 | 1 |
| | +/-1 | 53 | 14 | 14 | 15 | 14 | 14 | 14 | 0 | -0.37 | 0 |
| | -2 to -3 | 3 | 19 | 20 | 20 | 20 | 20 | 20 | 1 | 0.58 | 0 |
| SCR (%) | > +5 | 2 | 18 | 18 | 28 | 30 | 31 | 25 | 13 | 0.93 | 6 |
| | +4 to +5 | 3 | 23 | 21 | 24 | 25 | 27 | 24 | 4 | 0.89 | 2 |
| | +2 to +3 | 5 | 18 | 23 | 22 | 23 | 25 | 22 | 7 | 0.80 | 2 |
| | +/-1 | 53 | 23 | 24 | 23 | 22 | 23 | 23 | 0 | -0.61 | 0 |
| | -2 to -3 | 3 | 16 | 15 | 14 | 14 | 15 | 15 | -1 | -0.57 | 1 |
| Penetr. of 100% loyals | > +5 | 2 | 2 | 5 | 8 | 10 | 11 | 7 | 9 | 0.97 | 3 |
| (sole buyers, *b*) | +4 to +5 | 3 | 7 | 8 | 8 | 9 | 10 | 9 | 4 | 0.98 | 1 |
| | +2 to +3 | 5 | 7 | 12 | 10 | 11 | 12 | 10 | 5 | 0.79 | 2 |
| | +/-1 | 53 | 13 | 13 | 13 | 13 | 13 | 13 | 0 | 0.33 | 0 |
| | -2 to -3 | 3 | 7 | 6 | 6 | 7 | 6 | 7 | -1 | -0.43 | 1 |
| Purch. freq. 100% loy. | > +5 | 2 | 4.6 | 3.2 | 4.5 | 4.5 | 4.8 | 4.3 | 0 | 0.44 | 0 |
| (sole buyers, *w*) | +4 to +5 | 3 | 7.1 | 6.6 | 6.5 | 6.0 | 6.4 | 6.5 | -1 | -0.81 | 0 |
| | +2 to +3 | 5 | 3.4 | 4.3 | 3.3 | 3.2 | 3.4 | 3.5 | 0 | -0.41 | 0 |
| | +/-1 | 53 | 3.4 | 3.5 | 3.4 | 3.5 | 3.3 | 3.4 | 0 | -0.39 | 0 |
| | -2 to -3 | 3 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.5 | 0 | -0.95 | 0 |
| w(1-b) | > +5 | 2 | 2.1 | 1.8 | 2.3 | 2.4 | 2.6 | 2.2 | 1 | 0.86 | 0 |
| | +4 to +5 | 3 | 4.0 | 3.2 | 3.4 | 3.6 | 3.6 | 3.6 | 0 | -0.19 | 0 |
| | +2 to +3 | 5 | 2.4 | 2.8 | 2.6 | 2.6 | 2.7 | 2.6 | 0 | 0.46 | 0 |
| | +/-1 | 53 | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.7 | 0 | -0.82 | 0 |
| | -2 to -3 | 3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 0 | -0.24 | 0 |

t = 5 years; 15 categories (N = 66 continuously listed small brands) Source: Kantar WorldPanel
*Absolute change in metric value (Year5 - Year1) (rounded figures)

And lastly, those gaining between two and three percentage points in market share, *Nicky, Intertissue, Pataks, Velvet* and *Copella*, had been sold in the UK since 2002 (Sofidel Spa, 2020), 2002 (Farrell, 2017), the 1950s (Business Case Studies, 2019), 1997 (Velvet Care, 2013), 1969 (Copella Fruit Juices, 2013) respectively. Penetration evolved in proportion with market share giving it high correlations (r = 0.98) for the growing >+5%-tier and an equally high r = 0.99 for the declining group – regardless small brand's loyalty performance. The changes in purchase frequency were less dramatic compared to the above size-related measure yet were largely in line with share change magnitudes. It can be seen that the biggest share gainers (top tier) jointly accelerated in purchase frequency by about 50%, resulting in a rather high (positive) penetration-loyalty correlation r = 0.89. For the declining tier, the relationship was r = 0.84, and all of this fits classic Double Jeopardy: bigger brands have some more buyers purchasing them a little more often (McPhee, 1963; Ehrenberg, 1988). Growing (declining) brands gained (lost) buyers in line with share growth (decline) magnitude. This confirmed earlier findings by Anschuetz (2002), Baldinger *et al.* (2002) and Dawes (2009, 2016).

For the fourth and fifth performance metric – the distributions of light and heavy buyers respectively – it is revealed that the ten growing brands saw declining once-only buyer proportions. They arrived at a joint negative share to light buyer correlation of r = -0.88, while on average proportions of heavy buyers rose gradually (r = 0.85). In other words, with increasing penetration, the chances to reach category buyers that had bought the brand already once (or a little more) were higher. The opposite trend applied to declining brands: they saw increasing numbers of lighter buyers combined with a (slight) loss in heavy-buyer proportions. That is, smaller (meaning declining) brands demonstrated greater reliance on rather infrequent buyers.

The proportions of sole-buyers (penetration of 100% loyals) rose (decreased) with increasing (decreasing) market share – another Double Jeopardy effect. In addition, it can be seen that smaller share brands have buyers, who are on average more frequent or 'heavier' purchasers of the category: buyers of the two substantially growing (and with that larger brands; average 8% market share) brands had bought the category on average twelve times over the course of five years while those purchasing the smaller brands (average between 2% and 4%) bought the respective product categories between fourteen and twenty times annually. This confirmed earlier findings on the matter by McPhee (1963), Ehrenberg *et al.* (2004) and Dawes (2020). In addition, the bigger brands had higher *"SCR*

*among a buyer pool that buys the category less often"* (Dawes, 2020, p. 93; Fader & Schmittlein, 1993; Uncles *et al.,* 1994) meaning the differences between smaller and larger brands were in terms of how much loyalty they obtained from lighter and heavier category buyers. And here, despite the buyers of smaller brands purchasing the product category more often, they devoted fewer purchases on buying these smaller brands. In other words: larger brands obtain larger proportions of their buyers' category purchases (higher SCR) which offsets the effects of it (the larger brand) appealing to a somewhat lighter buyer base. The many yet lighter category buyers buy the respective product class less often and have been found to (mostly) know the most popular alternatives – and so are more loyal to them. In contrast, people who know about the more obscure (less popular) alternatives in a category also know about the most popular ones and are therefore less loyal to the former (the least popular brands). This supports earlier findings by Ehrenberg (1988, 2002), Ehrenberg *et al.* (2004), Scriven and Bound (2004), Elberse (2007), Bartels and van den Berg (2011), Banelis *et al.* (2013), Lynn (2019) and Dawes (2020). The implication is that for a small brand to grow, its buyer base will alter from one that tends towards heavy category buyers to one that tends towards those purchasing the category less frequently. So, pursing heavy category buyers (to buy even more of a brand) is not a sustainable way to grow. Instead, lighter category buyers should be reminded of one's (smaller) brand.

The Double Jeopardy statistic is the last metric in Table 30. It demonstrates the nature of the relationship between the number of buyers and how often they buy (Equation 9, *Section 3.2.2.*). Dynamic brands with a rather constant *w(1-b)* suggest that penetration and loyalty evolved within Double Jeopardy expectations (e.g. Anschuetz, 2002). That is, penetration changes much more than loyalty. Table 30 illustrates that declining and stationary brands had almost stable *w(1-b)* values: as brands lost share points they also decreased in both loyalty (*w*) and penetration (*b*). The ten growing brands, and especially the two dynamic outliers, showed more dramatic fluctuations, yet overall share gains and losses were rare, and if occurring were found follow Double Jeopardy constraints. The implication is that share changes are mostly penetration driven.

The next sections first discuss the repeat buying measures for the 53 near-stationary small brands before moving to those evidently more volatile. The aim was to determine what happens in the underlying BPMs *as* brands (substantially and sustainably) changed in market share.

### 9.2.1. Repeat buying for stationary small brands

Eighty percent of the analysed small brands are considered share stable (i.e. they stayed within a ±1% share change over five years). Below Table 32 summarises their average annual BPMs. Three findings emerged: first, in aggregate, these brands consistently occupied a 2% share of the market. Most other metrics were also near-stationary; that is, with low Mean Absolute Deviations (*MADs*): the brands were bought by about 5% of households on approximately 2.8 occasions. Just over 60% acquired the brands once; the heavy buyer proportion was stable at 11%, indicating the sales importance of the lighter customer. Those that bought these 53 brands also purchased the categories at about fourteen times in any one year, thereby devoting just under one-quarter of their purchases to any one brand.

***Table 32: Repeat purchase stability for 53 share-stable small brands***

| Performance measure | Av. annual figures Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-Y5 | Abs.* Y5-1 | Correl. w. time | MAD Y1-5 |
|---|---|---|---|---|---|---|---|---|---|
| Market share (%) | 2 | 2 | 2 | 2 | 2 | 2 | 0 | -0.09 | 0.0 |
| Penetration (%, *b*) | 4 | 5 | 5 | 5 | 4 | 5 | 0 | 0.23 | 0.1 |
| Purchase frequency (*w*) | 2.8 | 2.8 | 2.8 | 2.8 | 2.7 | 2.8 | 0 | -0.87 | 0.0 |
| Once-only buyers (%) | 62 | 62 | 63 | 63 | 63 | 63 | 0 | 0.85 | 0.2 |
| 5+ buyers (%) | 11 | 11 | 11 | 11 | 11 | 11 | 0 | 0.09 | 0.2 |
| Category purchase | 14 | 14 | 15 | 14 | 14 | 14 | 0 | -0.37 | 0.2 |
| SCR (%) | 23 | 24 | 23 | 22 | 23 | 23 | 0 | -0.61 | 0.4 |
| Penetr. of 100% loyals | 13 | 13 | 13 | 13 | 13 | 13 | 0 | 0.33 | 0.1 |
| Purch. freq. of 100% loyals | 3.4 | 3.5 | 3.4 | 3.5 | 3.3 | 3.4 | 0 | -0.39 | 0.1 |
| w(1-b) | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.7 | 0 | -0.82 | 0.0 |

t = 5 years; 15 categories (N = 53 share-stable small brands) Source: Kantar WorldPanel
*Absolute change in metric value (Year5 - Year1) (rounded figures)

The second key finding was that the households that remained solely loyal (13%) bought at an increased rate of 3.4 compared to the average customer with 2.8. Further research showed these excessive rates may be based on niche positions of some brands with excess loyalty (see *Chapter 10*). The remaining brands are close to the average of 2.8. It is worth mentioning that the frequency with which those sole-buyers purchased somewhat declined. This was expected as over time people's probability to purchase something (else) increased – at least slightly (Scriven & Bound, 2004).

Third, when comparing the 53 stable brands to their average Double Jeopardy constant (Equation 10, *Section 3.2.2.*), their joint figures were close to the $w_0(1-b)$ estimate. The

implication is that apart from minor irregularities, if anything, Table 32 confirms the rarity of major trends for most of the brands. The patterns remained surprisingly stable over time, perhaps a reflection of the above-discussed share near-stationarity. In other words, the customers of small brands are just as habitual and multi-brand-loyal as the typical category buyer. Against this background, the next section reveals how the BPMs of those brands classified as near-stationary (N = 11) or dynamic (N = 2) evolved. The aim was to understand the mechanics behind share changes for small brands.

### 9.2.2. Repeat buying for non-stationary small brands

To determine the full scope of the long-term equilibrium, attention is now turned towards the thirteen brands that demonstrated share changes beyond one percentage point over five years. *Chapter 7.2.* showed that the observed product classes were largely near-stationary. They comprised ten brands that grew (Table 33) and another three with declining market share (Table 34). The brands belonged to eight categories. A total of eight brands either gained or lost share between two and three percentage points; the remaining five rose by 4% or more. The biggest winners were *Oral-B* with just about +10% followed by *ICBINB*[53] with a total share gain of +8% – they are considered dynamic outliers. Of interest is what happened within the BPMs *as* brands grew (or declined).

The aim was to determine the potential of the in *Chapter 4* discussed typical brand growth strategies. Each strategy links to a different set of performance metrics; that is, brand share change may be the result of:

1. (Odd) compositions in sales (i.e. greater purchase frequency from a lower than expected number of buyers or vice versa) as discussed in *Section 9.2.2.1.*,
2. Unexpectedly high (low) heavy-buyer proportions as discussed in *Section 9.2.2.2.*,
3. asymmetrical customer sharing with competitors (i.e. outside expected Duplication of Purchase) as discussed in *Section 9.2.2.3.*,
4. category demand growth (decline) as discussed in *Section 9.2.2.4.*

The outcomes are discussed in the following sections.

[53] Short for *'I can't believe it's not Butter'*. The brand was renamed to *'I can't believe it's so Good… for everything'* in 2017 (Talking Retail, 2017).

### 9.2.2.1. Share non-stationarity & the composition of sales

The before and after (year one and year five) value changes in penetration and purchase frequency for the growing (Table 33) and declining (Table 34) brands are analysed first. Within their loyalty groups (excess, deficit or normal) brands are ordered after their magnitude of share change (column five).

Presented are absolute and proportionate changes to overcome biased interpretations. Penetration varied much more than loyalty; if values of penetration are small, its absolute changes would have a downward biased ratio with loyalty shifts (i.e. a *b* change from 2% to 4% is in absolute just 2%, but 100% in percental terms), but would have a significant upwards bias when the ratio of their changes is looked at in a percental manner.

Table 33 demonstrates that the average brand that built share over time was found to double in penetration while their loyalty rates increased at a moderate 16%. In other words, penetration changed far more than these brand's repeat buying rates and at an absolute factor of 16.4:1 while the ratio for penetration was 28.4:1.

***Table 33: Growing small brands: Changes in penetration & loyalty***

| | | Market share | | | Penetration | | Purchase frequency | | Absol.* change (±) | | Percental change (±) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | % | % | Absol.* | % | % | | | | | | |
| Brands | Category | Y1 | Y5 | change (±) | Y1 | Y5 | Y1 | Y5 | *b* | *w* | *b* | *w* |
| **Excess loyalty brand(s)** | | | | | | | | | | | | |
| Nicky | Kitchen towels | 3 | 5 | 2 | 5 | 8 | 2.8 | 2.9 | 3 | 0.1 | 60 | 4 |
| **DJ** loyalty brand(s)** | | | | | | | | | | | | |
| Oral B | Dentifrice | 0.1 | 10 | 10 | 0.3 | 19 | 1.5 | 2.5 | 19 | 1.1 | ### | 75 |
| I C B I N B | Margarine | 6 | 14 | 8 | 21 | 34 | 3.4 | 4.8 | 14 | 1.3 | 66 | 39 |
| Regina | Kitchen towels | 2 | 7 | 5 | 5 | 10 | 2.3 | 3.0 | 6 | 0.7 | 119 | 31 |
| Clover | Margarine | 6 | 10 | 4 | 14 | 26 | 5.0 | 4.5 | 12 | -0.6 | 88 | -11 |
| Innocent | Juices | 2 | 6 | 4 | 7 | 17 | 5.9 | 5.9 | 10 | 0.0 | 139 | 0 |
| Intertissue | Kitchen towels | 0.4 | 2 | 2 | 1 | 4 | 1.6 | 2.5 | 2 | 1.0 | 171 | 60 |
| Pataks | Cooking sauce | 6 | 7 | 2 | 16 | 20 | 3.1 | 3.4 | 4 | 0.3 | 27 | 10 |
| **Deficit loyalty brand(s)** | | | | | | | | | | | | |
| Velvet | Facial tissues | 2 | 5 | 3 | 4 | 9 | 1.7 | 2.0 | 5 | 0.4 | 130 | 23 |
| Copella | Juices | 2 | 4 | 3 | 7 | 15 | 3.8 | 4.5 | 8 | 0.7 | 113 | 18 |
| Average | | 3 | 7 | 4 | 8 | 16 | 3.1 | 3.6 | 8 | 0.5 | 711 | 25 |
| Ratio | | | | | | | | | 16.4:1 | | 28.5:1 | |

t = 5 years; 15 categories (N = 10 growing small brands) Source: Kantar WorldPanel
*Absolute changes (Y5-Y1) (rounded figures)
**DJ: Double Jeopardy

The rise of purchase frequency was largely accounted for by the increasing loyalty rates of the new buyers – bought by more, slightly more often – just as Double Jeopardy expects.

This is in line with earlier research confirming the superiority of penetration changes as brands build market share (e.g. Ehrenberg, 1990; Uncles *et al.,* 1994; Anschuetz, 2002; Baldinger *et al.,* 2002; Allsopp *et al.,* 2004; Sharp *et al.,* 2012; Riebe *et al.,* 2014; Romaniuk *et al.,* 2014; Dawes, 2016). Loyalty did not seem to be the key growth driver for any of the brands; not even for the (just) one brand with persistent excess loyalty.

Looking at the declining brands next, Table 34 reveals that each lost between 40% and 50% of their sales between the opening and the terminating year. Comparing the over time changes in penetration and purchase frequency make clear that the three declining brands shared one common pattern: a catastrophic decline in buyers – on average they lost just over 40% of them. The yearly purchase frequency rates barely fluctuated; on average, the brands were bought about 7% less often over time. The brands showed an absolute penetration-loyalty change ratio of 24.8:1; in percental terms the ratio came to a factor of 6.8:1. Again, no brand showed greater *w* changes as opposed to their shifts in *b*.

Noteworthy is that the pattern of penetration as a prime change metric applied to all brands, regardless of their loyalty performance. In other words, for deficit, excess and Double Jeopardy brands the predominant figure changing the most while shares shifted was the proportion of people buying the brand at least once. Tables 33 and 34 further highlighted again that 70% (9 in 13) of the brands that changed share were Double Jeopardy brands; and most of them grew. In fact, remembering the above persistent loyalty performances: every one in four Double Jeopardy brands grew.

***Table 34: Declining small brands: Changes in penetration & loyalty***

| | | Market share | | | Penetration | | Purchase | | Absol.* | | Percental | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | % | % | Absol.* | % | % | frequency | | change (±) | | change (±) | |
| Brands | Category | Y1 | Y5 | change (±) | Y1 | Y5 | Y1 | Y5 | *b* | *w* | *b* | *w* |
| **DJ** loyalty brand(s)** | | | | | | | | | | | | |
| Johnsons | Non-medicated | 3 | 2 | -2 | 4 | 2 | 2.1 | 2.1 | -2 | 0.0 | -53 | -1 |
| Chicken Tonight | Cooking sauce | 4 | 2 | -2 | 12 | 8 | 2.8 | 2.7 | -4 | -0.1 | -31 | -4 |
| **Deficit loyalty brand(s)** | | | | | | | | | | | | |
| Princes | Juices | 4 | 2 | -2 | 20 | 11 | 3.5 | 3.0 | -10 | -0.5 | -47 | -14 |
| Average | | 4 | 2 | -2 | 12 | 7 | 2.8 | 2.6 | -5 | -0.2 | -44 | -6 |
| Ratio | | | | | | | | | 24.8:1 | | 6.8:1 | |

t = 5 years; 15 categories (N = 3 declining small brands) Source: Kantar WorldPanel
*Absolute changes (Y5-Y1) (rounded figures)
**DJ: Double Jeopardy

Altogether, this research evidently demonstrates that the primary metric that shifts the most *as* brands grew or declined is penetration, while the repeat purchase rates followed suit, yet to a much lesser extent. The size of a brand's customer base was linked to its market share – just as Double Jeopardy expects and many prior studies on the subject confirmed (e.g. Anschuetz, 2002; Baldinger *et al.,* 2002; Dawes, 2009, 2016; Sharp *et al.,* 2012; Riebe *et al.,* 2014; Romaniuk *et al.,* 2014). The findings generalised across share change magnitude, loyalty performance, category demand style, category type and opening brand share. This does not mean that loyalty is not important, just that brand share changes are not typically driven by significantly larger changes of the loyalty metric.

#### 9.2.2.2. Share non-stationarity & the repeat buying distribution

It has been so far shown that if a brand attracts more customers but does not retain them, they did not grow, regardless of the loyalty performance. In fact, few excess and deficit loyalty brands did grow (or decline), and for those that did, the primary growth driver was penetration. If brands grew and significantly widened their reach, but less so their repeat purchase rates, their light buyer proportions should decrease while those buying five or more times should increase – more buyers, buying more often, hence more market share – classic Double Jeopardy.

Table 35 (overleaf) reveals this to be the case for most of the growing brands: while increasing their share, most of the brands also increased their proportions of people who buy them at least once (penetration) with high correlations and without exceptions. And as they built share and penetration, high negative correlations were found in both metrics to the once-only buyers. High positive correlations were prevalent between both share and penetration to the heavy buyer proportion. That is, while brands grew, they attracted many more yet lighter buyers and they were sustained (hence the growth) and bought the brand likely a little more often over time. Upon further research, while these brands' once-only buyer proportions decreased and heavy buyer proportions increased, the differences to their Dirichlet estimated values largely declined over time. In other words, most of the brands became more normal over time, hence the increased growth potential. That said, there were two exceptions: first, *Nicky* (*Kitchen towels*) seemingly failed to acquire new customers. The brand had a more significant increase in *b* which correlated highly with its gained share, but correlations were low with the over time figures for the once-only buyer

proportions. Second, *Clover* (*Margarine*) was the only brand that grew but with negative correlations between share and penetration to heavy buyer proportions. Overall, however, most brands remained within the Double Jeopardy constraints when growing. That is, the share gain was accompanied by greater changes in penetration with a lower yet not less important gain in purchase frequency as over time, the infrequent buyers purchased the brands a little more often.

***Table 35: Growing small brands: Changes in light & heavy buyers***

| | | Correlation of brand penetration and … | | | |
|---|---|---|---|---|---|
| Brand | Category | Market share | Purchase frequency | % Buying Once | 5+ |
| **Excess loyalty brand** | | | | | |
| Nicky | Kitchen towels | 0.90 | -0.45 | 0.20 | -0.28 |
| **Deficit loyalty brand** | | | | | |
| Copella | Juices | 0.97 | 0.57 | -0.95 | 0.91 |
| Velvet | Facial tissues | 0.97 | 0.77 | -0.93 | 0.72 |
| **DJ* brand** | | | | | |
| Oral-B | Dentifrice | 0.98 | 0.94 | -1.00 | 0.41 |
| I C B I N B | Margarine | 0.97 | 0.83 | -0.94 | 0.89 |
| Regina | Kitchen towels | 0.97 | 0.81 | -0.95 | 0.65 |
| Clover | Margarine | 0.94 | -0.92 | -0.93 | -0.79 |
| Innocent | Juices | 0.96 | 0.27 | -0.92 | 0.64 |
| Intertissue | Kitchen towels | 0.98 | 0.95 | -0.75 | -0.13 |
| Pataks | Cooking sauce | 0.93 | 0.76 | -0.99 | 0.78 |

t = 5 years; 15 categories (N = 10 growing small brands) Source: Kantar WorldPanel
*DJ: Double Jeopardy (rounded figures)

***Table 36: Declining small brands: Changes in light & heavy buyers***

| | | Correlation of brand penetration and … | | | |
|---|---|---|---|---|---|
| Brand | Category | Market share | Purchase frequency | % Buying Once | 5+ |
| **DJ* brand** | | | | | |
| Chicken Tonight | Cooking sauce | 0.93 | 0.35 | -0.38 | 0.02 |
| Johnsons | Non-medicated | 0.99 | 0.43 | 0.04 | -0.05 |
| **Deficit loyalty brand** | | | | | |
| Princes | Juices | 0.99 | 0.91 | -0.98 | 0.98 |

t = 5 years; 15 categories (N = 3 declining small brands) Source: Kantar WorldPanel
*DJ: Double Jeopardy (rounded figures)

Results for the declining brands were less generalizable (Table 36). There are simply fewer declining brands to quantify results. While correlations between share and penetration decline were high, the expected high negative correlations to light and equally opposite high positive correlation to heavy buyers were only found for *Princes*. As it declined, it had some more trialists yet those buying five or more times were getting fewer over time.

### 9.2.2.3. Share non-stationarity & cross-selling

Replicating Dawes' (2016) approach to determine whether growing or declining brands shared (drew or lost) customers asymmetrically with their rivals, cross-purchasing tables are analysed. The ultimate questions this aimed to answer were: did growing brands induce more purchase duplications from certain or all their competitors, and all things being equal, did declining brands lose more customers to some special or all their rivals?

Tables 37 and 38 below list the results for the growing and declining brands respectively.

***Table 37: Cross-selling for growing small brands***

| Category | Brand | Y1 | Y5 | Change |
|---|---|---|---|---|
| | *% of brand's buyers who also purchased Pataks* | | | |
| Cooking sauce *(Pataks)* | Colmans | 24 | 30 | 6 |
| | Sharwoods | 34 | 45 | 11 |
| | Schwartz | 25 | 31 | 5 |
| | Homepride | 25 | 34 | 9 |
| | Blue Dragon | 25 | 35 | 10 |
| | *Asda* | 27 | 27 | 1 |
| | *Tesco* | 28 | 34 | 6 |
| | Uncle Bens | 26 | 36 | 10 |
| | Chicken Tonight | 26 | 33 | 7 |
| | *Morrisons* | 31 | 37 | 6 |
| | Old El Paso | 29 | 32 | 4 |
| | *Lidl* | 29 | 34 | 5 |
| | *Aldi* | 30 | 35 | 5 |
| | *Aldi Asia Specialities* | 26 | 32 | 6 |
| | *Aldi Specially Selected* | 42 | 42 | -0.2 |
| | **Average** | **28** | **35** | **6** |
| | *% of brand's buyers who also purchased Oral-B* | | | |
| Dentifrice *(Oral-B)* | Colgate | 1 | 22 | 21 |
| | Aquafresh | 1 | 24 | 24 |
| | Sensodyne | 0.4 | 23 | 23 |
| | Macleans | 0.4 | 28 | 28 |
| | Arm+Hammer | 0.4 | 29 | 29 |
| | *Tesco* | 1 | 26 | 25 |
| | *Asda Protect* | 1 | 30 | 29 |
| | *Morrisons* | 1 | 21 | 21 |
| | *Wilkinson Hardware Ltd* | 1 | 13 | 12 |
| | *Aldi* | 1 | 13 | 13 |
| | *Corsodyl* | 0.3 | 28 | 27 |
| | *Lidl* | 0.4 | 18 | 18 |
| | *Tesco Value* | 1 | 12 | 12 |
| | *Tesco Steps* | 3 | 28 | 25 |
| | **Average** | **1** | **23** | **22** |

| Category | Brand | Y1 | Y5 | Change |
|---|---|---|---|---|
| | *% of brand's buyers who also purchased Innocent* | | | |
| Juices *(Innocent)* | *Tesco* | 12 | 25 | 14 |
| | Tropicana | 16 | 41 | 25 |
| | *Asda* | 8 | 25 | 17 |
| | Princes | 7 | 20 | 13 |
| | *Sainsbury* | 13 | 28 | 15 |
| | *Tesco Value* | 6 | 14 | 8 |
| | *Morrisons* | 9 | 27 | 18 |
| | *Lidl* | 8 | 20 | 12 |
| | Ocean Spray | 10 | 25 | 15 |
| | *Asda Smartprice* | 5 | 13 | 8 |
| | *Aldi* | 7 | 20 | 12 |
| | *Sainsburys Basics* | 7 | 19 | 12 |
| | Copella | 20 | 48 | 29 |
| | Don Simon | 12 | 34 | 22 |
| | **Average** | **10** | **26** | **16** |
| | *% of brand's buyers who also purchased Copella* | | | |
| Juices *(Copella)* | *Tesco* | 11 | 23 | 12 |
| | Tropicana | 17 | 35 | 18 |
| | *Asda* | 8 | 22 | 14 |
| | Princes | 10 | 20 | 11 |
| | *Sainsbury* | 13 | 28 | 15 |
| | *Tesco Value* | 6 | 15 | 8 |
| | *Morrisons* | 12 | 27 | 15 |
| | *Lidl* | 8 | 22 | 13 |
| | Ocean Spray | 12 | 24 | 12 |
| | *Asda Smartprice* | 4 | 12 | 8 |
| | *Aldi* | 8 | 18 | 10 |
| | *Sainsburys Basics* | 12 | 22 | 10 |
| | Innocent | 20 | 43 | 23 |
| | Don Simon | 17 | 33 | 15 |
| | **Average** | **11** | **25** | **13** |

**(Table continued on next page)**

**(Table 37 continued)**

| Category | Brand | Y1 | Y5 | Change |
|---|---|---|---|---|
| | *% of brand's buyers who also purchased Nicky* | | | |
| Kitchen towels *(Nicky)* | Plenty | 6 | 7 | 2 |
| | Lotus Thirst Pocket | 9 | 12 | 3 |
| | *Asda* | 6 | 9 | 3 |
| | *Tesco Value* | 5 | 9 | 3 |
| | *Tesco* | 4 | 7 | 3 |
| | *Sainsbury* | 3 | 6 | 4 |
| | *Asda Smartprice* | 6 | 10 | 4 |
| | *Sainsburys Basics* | 4 | 7 | 4 |
| | *Spring Force (TSC)* | 6 | 5 | -1 |
| | *Tesco Ultra* | 4 | 8 | 4 |
| | *Morrisons* | 5 | 10 | 5 |
| | Regina | 10 | 12 | 2 |
| | *Aldi* | 8 | 13 | 5 |
| | *Lidl* | 7 | 12 | 6 |
| | Wilkin. Hardw. Ltd. | 12 | 17 | 5 |
| | The Snowman | 11 | 18 | 6 |
| | *Co-op* | 5 | 8 | 3 |
| | Mega | 18 | 18 | 0 |
| | *Waitrose* | 4 | 10 | 6 |
| | Handy | 26 | 30 | 4 |
| | Intertissue | 5 | 19 | 14 |
| | Thirsty Bubbles | 17 | 21 | 4 |
| | **Average** | **8** | **12** | **4** |
| | *% of brand's buyers who also purchased ICBINB* | | | |
| Margarine *(ICBINB)* | Flora | 24 | 42 | 18 |
| | St. Ivel | 44 | 63 | 18 |
| | Stork | 23 | 39 | 16 |
| | *Tesco* | 28 | 54 | 26 |
| | *Clover* | 37 | 53 | 16 |
| | *Bertolli* | 17 | 33 | 16 |
| | *Asda* | 39 | 52 | 13 |
| | *Sainsbury* | 27 | 46 | 19 |
| | Willow | 29 | 45 | 16 |
| | Vitalite | 32 | 46 | 14 |
| | *Tesco Healthy Living* | 19 | 45 | 26 |
| | *Aldi* | 31 | 49 | 18 |
| | *Lidl* | 31 | 50 | 19 |
| | *Morrisons* | 35 | 39 | 4 |
| | *Tesco Value* | 25 | 49 | 24 |
| | Pure Dairy Free | 17 | 30 | 13 |
| | Benecol | 15 | 25 | 10 |
| | **Average** | **28** | **45** | **17** |
| | *% of brand's buyers who also purchased Intertissue* | | | |
| Kitchen towels *(Intertissue)* | Plenty | 1 | 3 | 2 |
| | Lotus Thirst Pocket | 2 | 4 | 3 |
| | *Asda* | 2 | 5 | 3 |
| | *Tesco Value* | 1 | 6 | 4 |
| | *Tesco* | 1 | 4 | 3 |
| | *Sainsbury* | 1 | 4 | 3 |
| | *Asda Smartprice* | 2 | 7 | 6 |
| | *Sainsburys Basics* | 1 | 7 | 5 |
| | *Spring Force (TSC)* | 2 | 5 | 3 |
| | *Tesco Ultra* | 1 | 2 | 2 |
| | *Morrisons* | 2 | 5 | 4 |
| | Nicky | 1 | 9 | 7 |
| | Regina | 2 | 6 | 4 |
| | *Aldi* | 2 | 4 | 3 |
| | *Lidl* | 2 | 5 | 3 |
| | Wilkin. Hardw. Ltd. | 2 | 10 | 8 |
| | The Snowman | 4 | 9 | 6 |
| | *Co-op* | 2 | 5 | 4 |
| | Mega | 3 | 11 | 8 |
| | *Waitrose* | 1 | 4 | 2 |
| | Handy | 2 | 5 | 3 |
| | Thirsty Bubbles | 4 | 12 | 8 |
| | **Average** | **2** | **6** | **4** |

| Category | Brand | Y1 | Y5 | Change |
|---|---|---|---|---|
| | *% of brand's buyers who also purchased Regina* | | | |
| Kitchen towels *(Regina)* | Plenty | 9 | 18 | 9 |
| | Lotus Thirst Pocket | 9 | 18 | 9 |
| | *Asda* | 5 | 12 | 7 |
| | *Tesco Value* | 5 | 9 | 5 |
| | *Tesco* | 4 | 12 | 8 |
| | *Sainsbury* | 9 | 12 | 3 |
| | *Asda Smartprice* | 4 | 9 | 5 |
| | *Sainsburys Basics* | 8 | 10 | 3 |
| | *Spring Force (TSC)* | 6 | 10 | 4 |
| | *Tesco Ultra* | 5 | 13 | 9 |
| | *Morrisons* | 11 | 19 | 8 |
| | Nicky | 10 | 16 | 6 |
| | *Aldi* | 5 | 11 | 6 |
| | *Lidl* | 4 | 13 | 9 |
| | Wilkin. Hardw. Ltd. | 16 | 27 | 11 |
| | The Snowman | 14 | 26 | 12 |
| | *Co-op* | 5 | 18 | 13 |
| | Mega | 13 | 30 | 17 |
| | *Waitrose* | 14 | 16 | 2 |
| | Handy | 14 | 22 | 9 |
| | Intertissue | 7 | 17 | 11 |
| | Thirsty Bubbles | 11 | 20 | 9 |
| | **Average** | **8** | **16** | **8** |
| | *% of brand's buyers who also purchased Clover* | | | |
| Margarine *(Clover)* | Flora | 15 | 32 | 17 |
| | St. Ivel | 24 | 44 | 20 |
| | Stork | 15 | 29 | 14 |
| | ICBINB | 24 | 40 | 15 |
| | *Tesco* | 18 | 31 | 13 |
| | *Bertolli* | 12 | 26 | 15 |
| | *Asda* | 18 | 35 | 17 |
| | *Sainsbury* | 14 | 30 | 16 |
| | Willow | 17 | 40 | 22 |
| | Vitalite | 15 | 29 | 14 |
| | *Tesco Healthy Living* | 12 | 20 | 8 |
| | *Aldi* | 17 | 32 | 15 |
| | *Lidl* | 13 | 30 | 17 |
| | *Morrisons* | 14 | 40 | 26 |
| | *Tesco Value* | 13 | 29 | 16 |
| | Pure Dairy Free | 9 | 20 | 11 |
| | Benecol | 10 | 20 | 9 |
| | **Average** | **15** | **31** | **16** |
| | *% of brand's buyers who also purchased Velvet* | | | |
| Facial tissues *(Velvet)* | Kleenex | 9 | 19 | 10 |
| | *Tesco* | 8 | 24 | 16 |
| | *Sainsbury* | 7 | 15 | 8 |
| | *Spring Force (TSC)* | 8 | 22 | 14 |
| | *Tesco Value* | 4 | 12 | 8 |
| | *Asda Smartprice* | 7 | 12 | 5 |
| | *Aldi* | 6 | 13 | 7 |
| | *Asda Ultra* | 17 | 27 | 10 |
| | *Morrisons* | 10 | 26 | 16 |
| | Wilkin. Hardw. Ltd. | 6 | 17 | 11 |
| | *Sainsburys Basics* | 4 | 10 | 5 |
| | Tempo | 8 | 20 | 13 |
| | *Lidl* | 5 | 12 | 7 |
| | Paloma | 5 | 11 | 6 |
| | *Boots* | 9 | 24 | 15 |
| | *Asda* | 17 | 26 | 9 |
| | *Co-op* | 8 | 21 | 14 |
| | Cherish | 6 | 11 | 5 |
| | *Waitrose* | 5 | 20 | 15 |
| | Viscount | 4 | 11 | 7 |
| | Countess | 11 | 9 | -3 |
| | *Everyday* | 3 | 13 | 10 |
| | *Superdrug* | 7 | 15 | 8 |
| | **Average** | **7** | **17** | **9** |

t = 5 years; 10 categories (N = 10 growing small brands)

Source: Kantar WorldPanel
(rounded figures)

Per table, first shown is the initial extent to which each rival's customers also bought the respective (growing or declining) brand in year one (Y1). For example, Table 37 reveals for Pataks in year one: 24% of Colman's buyers also bought Pataks; so did 34% of the buyers of Sharwoods and so forth. For an average across all the individually continuously listed brands in the Cooking sauce category Pataks has 28% cross-purchasing in year one.

In year five, the now grown *Pataks* shared 6% more buyers with *Colman's*, 11% more with *Sharwoods*, and in total, while growing, *Pataks* attracted increased cross-purchases from most of its fifteen competitors with *Aldi Specially Selected* being the only exception. The overall cross-purchases rose from 28% in year one to 35% in year five.

The just described patterns are very similar for the remaining nine growing brands showing that, *as* brands grew, they attract more cross-purchasing from buyers of every other of their rivals. Overall, when growing, the analysed ten brands attracted more cross-purchases from 177 of their 180 joint competitors. With that this study shows growth was largely a result of increased cross-purchasing with most other brands.

Table 38 below shows similar patterns for the declining brands. For example, for *Chicken Tonight* in year one: 20% of *Colman's* buyers also bought *Chicken Tonight*; so did 20% of the buyers of *Sharwoods*, and so on. On average, *Chicken Tonight* had 20% cross-selling in year one. And this decreased (as expected) to 15% until year five, meaning while declining, the brand attracted fewer cross-purchases from all its competitors. This pattern was similar for the other two declining brands: as brand size shrank, they attracted somewhat lower purchases from buyers of most of their rivals. In total, the three declining brands attracted fewer cross-purchases from all of their 46 joint competitors, and overall, all thirteen brands with share changes demonstrated expected cross-selling with 223 of their 226 collective rivals. While growing (declining), brands drew (lost) more (less) cross-purchases from (to) most if not even all of their competitors thereby confirming earlier results by, for example, Dawes (2016). This opposes traditional marketing thinking of brands competing only with one or maybe few selected category rivals (cf. Lehmann & Winer, 1991).

***Table 38: Cross-selling for declining small brands***

| Category | Brand | Y1 | Y5 | Change |
|---|---|---|---|---|
| | *% of brand's buyers who also purchased Chicken Tonight* | | | |
| Cooking sauce | Colmans | 20 | 14 | -6 |
| | Sharwoods | 20 | 14 | -7 |
| | Schwartz | 20 | 14 | -5 |
| | Homepride | 29 | 26 | -3 |
| | Pataks | 20 | 14 | -6 |
| | Blue Dragon | 18 | 12 | -6 |
| | *Asda* | 21 | 16 | -5 |
| | *Tesco* | 20 | 15 | -5 |
| | Uncle Bens | 24 | 18 | -6 |
| | *Morrisons* | 20 | 15 | -5 |
| | Old El Paso | 19 | 12 | -7 |
| | *Lidl* | 15 | 12 | -3 |
| | *Aldi* | 18 | 16 | -2 |
| | *Aldi Asia Specialities* | 15 | 12 | -3 |
| | *Aldi Specially Selected* | 20 | 11 | -9 |
| | **Average** | **20** | **15** | **-5** |
| | *% of brand's buyers who also purchased Johnsons* | | | |
| Non-medicated | Nivea | 16 | 7 | -10 |
| | Vaseline | 13 | 6 | -7 |
| | Oil Of Olay | 14 | 7 | -7 |
| | Simple | 16 | 8 | -7 |
| | *Tesco* | 12 | 5 | -7 |
| | E45 | 9 | 5 | -4 |
| | Garnier Skin Naturals | 19 | 12 | -8 |
| | Dove | 16 | 6 | -10 |
| | *Aldi* | 7 | 5 | -3 |
| | L'Oreal Dermo Expertise | 19 | 9 | -10 |
| | *Boots No.7* | 14 | 7 | -6 |
| | *Asda Skin System* | 9 | 4 | -4 |
| | Palmers | 14 | 6 | -8 |
| | Montagne Jeunesse | 15 | 6 | -10 |
| | *Lidl* | 8 | 5 | -4 |
| | The Sanctuary | 13 | 5 | -7 |
| | *Tesco Value* | 8 | 2 | -6 |
| | **Average** | **13** | **6** | **-7** |

| Category | Brand | Y1 | Y5 | Change |
|---|---|---|---|---|
| | *% of brand's buyers who also purchased Princes* | | | |
| Juices | *Tesco* | 26 | 17 | -8 |
| | Tropicana | 23 | 13 | -10 |
| | *Asda* | 27 | 18 | -10 |
| | *Sainsbury* | 22 | 15 | -7 |
| | *Tesco Value* | 35 | 19 | -16 |
| | *Morrisons* | 37 | 22 | -15 |
| | *Lidl* | 31 | 18 | -13 |
| | Ocean Spray | 29 | 22 | -7 |
| | *Asda Smartprice* | 38 | 18 | -20 |
| | *Aldi* | 30 | 18 | -13 |
| | *Sainsburys Basics* | 34 | 16 | -18 |
| | Innocent | 21 | 13 | -8 |
| | Copella | 27 | 14 | -13 |
| | Don Simon | 30 | 20 | -10 |
| | **Average** | **29** | **17** | **-12** |

t = 5 years; 15 categories (N = 3 declining small brands)

Source: Kantar WorldPanel (rounded figures)

### 9.2.2.4. Share non-stationarity & the effects of category (non-)stationarity

Although earlier studies suggested a link between low category penetration (Nenycz-Thiel *et al.,* 2018) and purchase frequency with lower levels of brand share stationarity (e.g. Trinh *et al.,* 2014), most of the here identified changes occurred in categories with higher than average *B* (69%, Table 18; *Section 7.1.*). The low and high *W* categories revealed near equal proportions of volatile brands, so no clear relationship could be found. This study confirmed that category buying (*B*) was near-stationary; that is, no product classes exceeded a maximum change of ±4% over time.

That said, two categories are worth mentioning: Juices and Kitchen towels, each lost about 4% of their buying households over time. Arguably, the growth of brands coming from these

categories might be considered share maintenance. This concerned five of the ten growing brands: Innocent (+4%), Copella (+3%), Nicky (+2%), Intertissue (+2%) and Regina (+5%).

The Juice category lost about 13% of its sales going from 1831 to 1623 over five years (per 100 buyers). Here, both Innocent and Copella each gained about 2.5 times more sales while Princes ( 2%) performed really badly. Kitchen towels also lost circa 13% in demand (527 in year one to 459 in year five): Nicky gained about 60% in sales, Intertissue had ten times more than in year one and Regina sold two times more. Therefore, all brands but Princes improved in performance despite decreasing category sales. The remaining seven share changing brands originated from categories that did not go beyond a ±2% shift in demand; effects on sales changes were not evident.

***Table 39: Absolute loyalty performance & rank shifts***

| | | | Market share (%) | Penetration (b) % | Purchase per buyer (w) | Sales (per 100 buyers) |
|---|---|---|---|---|---|---|
| **Juices** | Total category | Y1 | 100 | 85 | 21.5 | 1831 |
| | | Y5 | 100 | 82 | 19.9 | 1623 |
| **Growing brands** | | | | | | |
| | Innocent | Y1 | 2 | 7 | 5.9 | 43 |
| | | Y5 | 6 | 17 | 5.9 | 102 |
| | Copella | Y1 | 2 | 7 | 3.8 | 27 |
| | | Y5 | 4 | 15 | 4.5 | 68 |
| **Declining brand** | | | | | | |
| | Princes | Y1 | 4 | 20 | 3.5 | 70 |
| | | Y5 | 2 | 11 | 3.0 | 32 |
| **Kitchen towels** | Total category | Y1 | 100 | 79 | 6.7 | 527 |
| | | Y5 | 100 | 75 | 6.1 | 459 |
| **Growing brands** | | | | | | |
| | Regina | Y1 | 2 | 5 | 2.3 | 11 |
| | | Y5 | 7 | 10 | 3.0 | 31 |
| | Intertissue | Y1 | 0 | 1 | 1.6 | 2 |
| | | Y5 | 5 | 8 | 2.9 | 23 |
| | Nicky | Y1 | 3 | 5 | 2.8 | 14 |
| | | Y5 | 2 | 4 | 2.5 | 10 |

t = 5 years; 2 categories (N = 6 small continuously listed brands) Source: Kantar WorldPanel

## 9.3. Rank changes for small brands: 'Overtaker brands'

As demonstrated in *Chapter 7*, most category brand share distributions were highly right-hand skewed with few large brands at the top (left) and many smaller rivals within the right hand tail. The rank-size ratios revealed greater relative differences between big rivals, while performance gaps between lower share brands are considerably smaller. Given the typical close rank-size ratio of 0.9 identified in *Chapter 7*, small brands might shift up and/or down ranks more often, while rank shifts at a category's top are less likely as larger brands have to overcome greater competitive performance gaps (cf. Sheth & Sisodia, 2002; Uslay *et al.,* 2010). Shorter-term share fluctuations could result in brands 'jumping' category ranks. Significant rank changes, for example, when a small brand moves up to compete among the top-five leaders could hint at dramatic shifts (Heggestad & Rhoades, 1976). How likely are they to persist?

In total, just eleven small brands moved up significantly in rank to compete among the category leading brands: 64% (seven out of eleven) of them had normal loyalty performance and eight gained between two and ten percentage points in market share. Table 40 (below) lists these 'overtaker' brands sorted after their loyalty performance, and in there the brands are arranged in descending order after market share achieved in year one. The years in which they competed *among* the top five are marked with a grey background. For example, *Nicky* (*Kitchen towels*) was considered a large brand in year three based on its significant move up (and later down) the category's brand ranks.

***Table 40: Loyalty performance of 'overtaker' brands***

| Category & loyalty performance | Brand | Market share (%) | | | Deviations in b (%) | | | | | | Deviations in w | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Y1 (%) | Y5 (%) | Change (±) Absol.* | Y1 (%) | Y2 (%) | Y3 (%) | Y4 (%) | Y5 (%) | Av. (%) | Y1 (%) | Y2 (%) | Y3 (%) | Y4 (%) | Y5 (%) | Av. (%) |
| **Excess loyalty** | | | | | | | | | | | | | | | | |
| Kitchen towels | Nicky | 3 | 5 | **2** | -11 | -14 | -6 | -7 | -13 | -10 | 12 | 16 | 6 | 8 | 15 | 11 |
| **DJ** brands** | | | | | | | | | | | | | | | | |
| Dentifrice | Oral-B | 0 | 10 | **10** | 54 | 38 | 5 | 2 | 2 | 20 | -35 | -28 | -4 | -2 | -2 | -14 |
| Juices | Innocent | 2 | 6 | **4** | -6 | 19 | -2 | -10 | -3 | 0 | 6 | -16 | 2 | 11 | 3 | 1 |
| Kitchen towels | Regina | 2 | 7 | **5** | 10 | 0 | 1 | -4 | -13 | -1 | -9 | 0 | -1 | 4 | 14 | 2 |
| Margarine | I C B I N B | 6 | 14 | **8** | 25 | 41 | 8 | 3 | -5 | 14 | -20 | -26 | -7 | -3 | 6 | -10 |
| Margarine | Clover | 6 | 10 | **4** | -15 | 0 | -3 | -4 | -7 | -6 | 18 | 2 | 3 | 5 | 7 | 7 |
| Cooking sauce | Pataks | 6 | 7 | **2** | 5 | -1 | -2 | -6 | -3 | -1 | -5 | 1 | 2 | 2 | 3 | 1 |
| Cooking sauce | Blue Dragon | 6 | 5 | **-1** | -8 | -7 | -6 | -2 | -1 | -5 | 8 | 7 | 6 | 7 | 1 | 6 |
| **Deficit loyalty** | | | | | | | | | | | | | | | | |
| Facial tissues | Velvet | 2 | 5 | **3** | 53 | 9 | 17 | 27 | 28 | 27 | -35 | -8 | -15 | -21 | -22 | -20 |
| Instant coffee | Carte Noire | 3 | 4 | **1** | 6 | 5 | 16 | 23 | 16 | 13 | -5 | -5 | -14 | -19 | -14 | -11 |
| Butter | Kerrygold | 5 | 5 | **0** | 28 | 17 | 13 | 14 | 34 | 21 | -22 | -14 | -11 | -12 | -26 | -17 |

t = 5 years; 15 categories (N = 11 small 'overtaker' brands) Source: Kantar WorldPanel

*Absolute changes (Y5-Y1) (rounded figures)

**DJ: Double Jeopardy

Excess or deficit brands had fewer rank fluctuations. Share change magnitude had some impact on outperforming competitors; disruptions in the competitive structure are possible, but rare (see *Chapter 7*). Overall, apart from the rank improvements through share growth, no unified brand or category characteristics could be found for why some brands 'improved' in category ranks while others did not. The implication for small brands is that when analysing brand performance, an attempt should be made to look at the bigger picture; that is, brands should be analysed inclusively and not outside the category context.

## 9.4. Discussion & summary

To describe the characteristics of growing (and declining) small brands this chapter evaluated the level of buying stationarity. The focus was on those brands with market share shifts, and the changes of their key BPMs *as* they grew (declined). The outcomes were discussed against commonly proposed brand growth strategies. The current analyses yielded six key results: first, market structure was mostly stable; few competitive shifts happened. Near-stationarity appears to be the competitive norm for long-term small brand buying, and in fact, the majority of the share changes did not exceed a few points up or down.

Second, only two small brands were non-stationary, and another eleven near-stationary. Altogether, 70% of the share shifting brands were Double Jeopardy brands (with normal loyalty performance). The implication is that deviating small brands neither tended toward share growth nor decline. And even *if* brands performed normally, they did not *always* grow: in total, every one in four small Double Jeopardy brand grew.

Third, loyalty measures between competing brands varied little and remained almost stationary over time (cf. Graham, 2009; Dawes *et al.,* 2015). The majority of shifts was constrained to and governed by the Double Jeopardy assumption as had been found in numerous earlier studies (e.g. Anschuetz, 2002; Baldinger *et al.,* 2002; Dawes, 2009; Romaniuk *et al.,* 2014). In other words, brand growth and decline were accompanied by manyfold more significant changes in penetration figures: growing brands attracted more buyers than they lost and continued to do so over time. Declining brands lost more buyers than they attracted. The changes in the purchase frequency metrics were found to be just a fraction compared to that.

Fourth, the fundamental characteristic of any brand's customer base was the significantly larger proportion of infrequent buyers. On average 60% bought any small brand just once

in any period of time. Against a background of loyalty deviations and near-fixed purchase proportions, buying was almost surprisingly light (e.g. Romaniuk, 2011; Graham *et al.,* 2017A; Scriven *et al.,* 2017). Share positions were maintained by reaching light buyers beyond Double Jeopardy expectation. Against traditional marketing thinking, the proportions of very loyal customers were small: on average just around 10% of any small brands' buyers purchased them five or more times in any one year. The pattern persisted over time. With that, the heavy buyers had both a low impact on revenues and share growth indicating there is little evidence that small brands have *better* customers.

Fifth, small brands are found to be bought by the heavier category buyers, and the smaller the brand the heavier the category buying of its customers. The implication is that not only are 60% of any small brands' buyers light, they are also experienced category buyers inasmuch that they purchased the category manyfold more often than any one brand. This confirmed that small brand buying was typically split-loyal in nature.

Lastly, looking at the BPMs of excess and deficit loyalty brands separately, just one of the twelve niche candidates grew (by about 2%) but also in a slightly declining category (-4%). This indicates share maintenance rather than sustainable growth. In addition, only two of the 33 deficit loyalty brands grew while one declined, and one of the growing brands may too rather be considered share maintenance.

Managers of small brands might find this helpful in understanding the effectiveness of marketing interventions and the impact of competition to set feasible, less optimistic growth objectives. Altogether, it seems that growth was unlikely the result of a planned niche or change-of-pace "strategy". And if these "strategies" are ineffective in living up to their promise, perhaps loyalty deficiencies are rather a sign of restraint than healthy competition. The next chapter discusses the extent to which loyalty deviations may indicate a successfully implemented strategic niche or change-of-pace positioning.

# Chapter 10: Small brands & the dangers of targeting

*Targeting segment buyers is believed to command loyalty beyond reason (niche) while a loyalty deficit (change-of-pace) is often linked to variety-seeking. But it is largely unknown to what extent strategic targeting accounts for small brands' loyalty deficiencies. This research demonstrated that a niche performance may be the result of functional aspects linked to the brand. A loyalty deficit had less unified reasons beyond what theory would account for as 'true' change-of-pace (based on intrinsically motivated variety-seeking). It further confirmed that normal performing small brands conform to Dirichlet assumptions had greater tendencies to grow. This has important implications for small brands and general brand portfolio management.*

……

**Purpose & data:** the 45 persistently deviating small brands (excess loyalty N = 12; deficit loyalty N = 33) identified in *Chapter 8* were analysed. The aim was to document and quantify the link, if any, between loyalty deviations and targeting strategies to confirm the prevalence of these performance outcomes and determine the proportions of niche and change-of-pace brands.

**Key findings:** few but overall plausible reasons for *why* small brands exhibited a niche performance were found, but explanations generalised weakly among the group of deficit loyalty brands. That is, while loyalty deficits are commonplace for small brands, change-of-pace performance (based on variety-seeking) is a rare phenomenon. The Dirichlet assumptions are the foundation for healthy competition – small brands that are conform to the assumptions and fall close to the Double Jeopardy line have greater chances to grow. Using the model can help diagnose the symptoms of deficient performance.

**Detailed findings:**

- Niche and change-of-pace performance are rather symptoms of poor brand management.
- A niche performance was likely the result of functional differences or limitations in physical availability restricting both penetration and opportunities to buy.

- Change-of-pace brands (based on variety-seeking) are rare and in fact most loyalty deficits seemingly due to bad brand management but not the result of a targeting strategy.
- Despite this, a loyalty deficit was no sign of brand size decline or downward trending BPMs other than the expected time-related trends. Vice versa, a niche performance was no sign of brand growth or upwards trending BPMs beyond expectations.
- Surprisingly performance deviations persist unless management action is taken to address the deficiencies that the Dirichlet reliably identified.
- Contrary to received marketing wisdom, small brands need to attract more *lighter* category buyers in any management period to increase the chances to grow.

**Chapter structure:** the chapter starts with evaluating the extent to which the identified group of small deviating brands comprised niches and change-of-pacers. This includes analyses of their respective over time BPMs to identify (any) trends in consumer behaviour. It further discusses several key hypotheses that are likely linked to the loyalty deficits of small brands. This includes analyses of the effects from the nature and structure of market competition on small brand performance deficiencies. Brief definitions of the here used terminology can be found in *Technical Term, Abbreviations & Notation*.

## 10.1. Strategic positioning: Restrictions of the competitive potential

*Chapter 5* introduced five characteristics for niche and change-of-pace brands respectively that are the basis for the following discussions. It is evaluated whether the here analysed categories comprised niche and change-of-pace brands to expand our knowledge on how small brands compete.

In short, both types of brands are expected to be more commonplace. Niches are believed to be differentiated (i.e. functionally), bought beyond expected rates by many more yet heavier buyers and in fact, niches are to attract many more buyers from competitors than expected. With this joint competitive advantage, small niche brands are estimated to grow over time. Change-of-pace brands target variety-seekers (intrinsically motivated switching) and are to attract many yet infrequent buyers, hence their low heavy buyer proportions. Buyers are expected to switch away from these brands at excessive rates; they are only bought for a change. It is not known whether the brands grow or decline in share.

### 10.1.1. The rare niche brand

In contrast to Kotler's (2003, 2005) proposition, niches are not the norm; just under two in ten brands were identified with persistent excess loyalty. Table 41 demonstrates there are, from a segment targeting point of view, twelve cases that more or less fit the in *Chapter 5* niche brand definition.

***Table 41: Small niche candidates***

| Brand | Category | Possible restriction | Suggested cause | Brand owned by |
|---|---|---|---|---|
| *Swedish Glace* | Premium ice cream | Functional difference<br>Restricted penetration | Soy-based<br>Dairy-free | Unilever (UK-Dutch) |
| *Montagne Jeunesse* | Non-medicated | Restricted portfolio<br>Restricted penetration | Vegan skincare<br>Mostly face masks | Montagne Jeunesse (UK) |
| *The Sanctuary Spa* | Non-medicated | Restricted distribution<br>Restricted opportunity | High priced<br>Exclusively available at *Boots* | Cussons Beauty LLP |
| *Nicky* | Kitchen towels | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Corporate effects<br>Fragranced product lines<br>Limited distribution<br>Category generification | Sofidel SpA (Italy) |
| *Handy* | Kitchen towels | Restricted distribution<br>Restricted opportunity | Bulk packs<br>Corporate effects<br>Limited distribution<br>Category generification | Accrol Papers (UK) |
| *Vitalite* | Margarine | Functional difference | Added vitamin E<br>Corporate effects | Dairy Crest (UK) |
| *Benecol* | Margarine | Functional difference | Cholesterol lowering | Raisio Group (Finnish) |
| *Pure Dairy Free* | Margarine | Functional difference<br>Restricted penetration | Dairy-free | Kerry Group (Ireland) |
| *Willow* | Margarine | Functional difference | Added buttermilk<br>Corporate effects | Dairy Crest (UK) |
| *Nicky* | Toilet tissue | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Corporate effects<br>Fragranced lines<br>Limited distribution<br>Bulk packs<br>Category generification | Sofidel SpA (Italy) |
| *Countess* | Facial tissue | Restricted distribution<br>Restricted opportunity | Bulk packs<br>Limited distribution<br>Corporate effects<br>Category generification | John Dale Ltd. |
| *LA Diner* | Pizzameals | N/A | Price marked<br>Category generification | N/A |

t = 5 years, 15 categories (N = 12 small niche brands) Source: Kantar WorldPanel

The identified possible restrictions ranged from restricted portfolios (i.e. offering primarily vegan skincare face masks), to restricted penetration by selling fragranced paper towels, soy-based dairy free products or exclusive distribution deals with retailers thereby limiting the opportunities to be bought. But when looking at the over time duplications (*Appendix III*), it seems that customers cared little if at all about the added value offered by these niche brands. *Montagne Jeunesse'* vegan skincare masks did not attract customers

beyond (or below) expectations and *The Sanctuary Spa* limits its growth potential by being exclusively available at one retailer (*Boots*), hence its over-duplication with *Boots'* labels. The brand was also priced at a premium within the *Non-medicated* category costing on average four to six times more than a typical moisturiser. *Countess'* facial tissues came mostly in cubes (and in large quantities) which was a different unit to the general soft pack or brands that offered both. The brand further showed signs of limited distribution (almost only available in *John Dale Ltd.*), over-duplicated customers with many of the other smaller brands in the category and had the opposite pattern with the leading brand. *Countess* is produced and sold by *John Dale Ltd.* thus and not available to many category buyers (limited distribution/listing) – and that seemed to be a general pattern amongst paper market products. Another contributing factor were the high numbers of store labels available in the paper markets plus the *Pizzameal* category. This restricts shelf space for manufacturer brands, pushing them to distribute via other channels. It also led to over-duplications amongst niches, other smaller and store brands.

Overall, niche brands showed joint penetration values below the Dirichlet norm for brands of a similar size (a joint -20%; see Table 51 in *Section 2* in *Appendix II*). Compared to the other brands (in their categories), they had greater proportions of heavy buyers. Table 30 (*Section 9.1.2.*) revealed that small brands with niche performance had an about 30% larger proportion of heavy buyers than normal brands, and the proportion was about two-thirds bigger than that of deficit loyalty brands. But this is not found to trend over time. This can be seen in Table 42 (below) which summarises the key BPMs of all niche brands in mean annual averages. Niches jointly achieved 2% market share by reaching about 4% of households. Their once-only buyer proportion was just about three times the size of the heavy buyer group. On average, their buyers bought the categories about fourteen times per year, devoting a third of their purchases to the small niche brands. Against expectations, just one in ten buyers was 100%-loyal, and they purchased at near 1.5 times the rate. In other words, excess loyalty (niche) brands are characterised by fewer trialists (as compared to the change-of-pace brands discussed in the next section).

But if potential buyers do not trial, niche brands are over-reliant on existing buyers, thereby limiting their growth potential. In fact, just one niche brand grew a little (*Kitchen towel* brand *Nicky*, +2%) in a slightly declining (category penetration loss of -4%) category. But the brand failed to acquire (many) new customers: it had a more significant increase in *b* which correlated highly with its gained share, yet correlations were low with the figures for

the once-only buyer proportions. More tellingly, the brand went from 56% to 54% once-only buyer proportions, and *Chapter* 9 showed the brand secured 60% more sales thus improved performance despite the slight decrease in category demand.

***Table 42: Over time BPMs for small niche brands***

| Performance measure | Av. annual figures Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-Y5 | Abs. Y5-1 | Correl. w. time | MAD |
|---|---|---|---|---|---|---|---|---|---|
| Market share (%) | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0.71 | 0.1 |
| Penetration (%) | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0.86 | 0.2 |
| Purchase frequency | 3.8 | 4.0 | 3.9 | 3.9 | 3.7 | 3.9 | 0 | -0.46 | 0.1 |
| Once-only buyers (%) | 54 | 55 | 55 | 56 | 56 | 55 | 2 | 1.00 | 0.5 |
| 5+ buyers (%) | 17 | 18 | 18 | 17 | 17 | 18 | 0 | -0.51 | 0.4 |
| Category purchase | 14 | 14 | 14 | 14 | 14 | 14 | 0 | 0.18 | 0.2 |
| SCR (%) | 29 | 30 | 29 | 29 | 28 | 29 | -1 | -0.73 | 0.5 |
| Penetr. of 100% loyals | 13 | 13 | 14 | 12 | 13 | 13 | 1 | 0.28 | 0.4 |
| Purch. freq. of 100% loyals | 5.1 | 5.6 | 5.5 | 5.5 | 5.1 | 5.4 | 0 | -0.08 | 0.2 |
| w(1-b) | 3.6 | 3.9 | 3.7 | 3.7 | 3.6 | 3.7 | 0 | -0.51 | 0.1 |

t = 5 years; 15 categories (N = 12 small niche brands) (rounded figures)
Source: Kantar WorldPanel

The remaining brands with niche performance stayed within a ±1% share change over the course of five years. In other words, their (functional) difference did not make these brands grow; the brands equally did not decline in share points. So, despite larger proportions of heavy buyers and excess loyalty, most of the performance metrics revealed time-related trends. But in contrast to traditional niche marketing, the brands did not make their customers *more* loyal, and equally true is that they did not make *more* customers *more* loyal perhaps because of their limited mass market appeal.

### 10.1.2. The even rarer change-of-pace brand

This research identified 33 brands with persistent deficit loyalty (see *Chapter 8*). Out of the total of 66 small brands, five in ten had this performance in any one and over five consecutive years. But against expectations, this under-performance was seemingly unlikely due to variety-seeking, thus change-of-pace are not commonplace (Table 43): there were just two. The *Kitchen towel* brand *The Snowman* (sold by *Nicky* under *Sofidel SpA*) is a seasonally offered version with decorated rolls. At Christmas time, customers are given more choice and many of *Regina's* and *Nicky's* (two of its sister brands) buyers bought *The Snowman* for a change as the over-duplications in *Appendix III* demonstrate.

The other change-of-pace brand, *Ocean Spray*, offered predominantly pure and mixed cranberry juice which was different from the typical apple or orange juice. In fact, few juice brands sold cranberry variants hence if customers wished for the flavour as a change, *Ocean Spray* seemed the brand to turn to. Surprisingly, most of the brand's duplications were normal and within few percentage points up or down. This goes against the belief that change-of-pace brands share higher than expected proportions of their buyers with rivals.

***Table 43: Small change-of-pace brands***

| Brand | Category | Possible restriction | Suggested cause | Brand owned by |
|---|---|---|---|---|
| *The Snowman* | Kitchen towels | Variety-seeking<br>Restricted opportunity | Seasonal product<br>Corporate effects<br>Category generification | Sofidel SpA (Italy) |
| *Ocean Spray* | Juices | Variety-seeking<br>Restricted portfolio | Predominantly cranberry | Ocean Spray Cranberries, Inc. |

t = 5 years, 15 categories (N = 2 small change-of-pace brands) Source: Kantar WorldPanel

Furthermore, both *Ocean Spray* and *The Snowman* did not go beyond a ±1% share change, and as can be seen in Table 44 most of their BPMs stayed within the expected time related trends. The brands are bought very infrequently: just over 2.5 times in any one year and 70% of its buyers purchased them just once. Their buyers were mainly heavy category buyers purchasing the product classes about twenty times a year (compared to the fourteen times for the niche brands).

***Table 44: Over time BPMs for small change-of-pace brands***

| Performance measure | Av. annual figures Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-Y5 | Abs. Y5-1 | Correl. w. time | MAD |
|---|---|---|---|---|---|---|---|---|---|
| Market share (%) | 2 | 2 | 2 | 2 | 1 | 2 | 0 | -0.70 | 0.1 |
| Penetration (%) | 7 | 7 | 7 | 6 | 6 | 7 | -1 | -0.88 | 0.4 |
| Purchase frequency | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.7 | 0 | -0.93 | 0.0 |
| Once-only buyers (%) | 71 | 69 | 72 | 74 | 74 | 72 | 4 | 0.86 | 1.8 |
| 5+ buyers (%) | 9 | 8 | 8 | 9 | 8 | 9 | -1 | -0.63 | 0.4 |
| Category purchase | 20 | 20 | 20 | 20 | 19 | 20 | -1 | -0.61 | 0.4 |
| SCR (%) | 13 | 13 | 14 | 13 | 13 | 13 | 0 | -0.19 | 0.2 |
| Penetr. of 100% loyals | 4 | 6 | 5 | 5 | 6 | 5 | 2 | 0.67 | 0.6 |
| Purch. freq. of 100% loyals | 3.5 | 3.3 | 3.6 | 3.0 | 3.8 | 3.4 | 0 | 0.05 | 0.2 |
| w(1-b) | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 0 | -0.81 | 0.0 |

t = 5 years; 15 categories (N = 2 small change-of-pace brands) (rounded figures)
Source: Kantar WorldPanel

On the other hand, the brands had a slight decline in purchase frequency and proportions of buyers yet its fractions of 100%-loyals increased. New buyers seemed to have tried the

brands but perhaps they were reluctant to re-purchase because the brands are just for a change, thereby restricting buyer opportunities in both appeal and usage. However, care needs to be taken in generalising this as there are only two change-of-pace brands. More research is needed to improve our knowledge on this matter.

## 10.2. Suggested causes for small brand's loyalty deficits

Apart from the above two change-of-pace brands, there were many more that exhibited deficit loyalty seemingly based on other reasons than (intrinsically motivated) variety-seeking and may be referred to as change-of-pace candidates. The identified possible restrictions and suggested causes are listed in Table 45 and results discussed below.

***Table 45: Small change-of-pace candidates***

| Brands | Category | Restriction(s) | Suggested cause | Brand owned by |
|---|---|---|---|---|
| *Yeo Valley Organic* | Failing brand extension | Organic butter<br>High priced<br>Line extension to yoghurt<br>Category generification | Butter | Yeo Valley (UK) (now: Arla) |
| *President* | Failing brand extension | High priced<br>Line extension to cheese<br>Category generification | Butter | Lactalis (France) |
| *Fredericks Cadbury* | Failing brand extension | Sold on sticks<br>Category generification | Premium ice cream | Cadbury (Mondelez International) |
| *Johnsons Baby* | Failing brand extension<br>Restricted penetration | Very gentle i.e. for babies | Non-medicated | Johnson & Johnson (US) |
| *Barrs* | Restricted portfolio<br>Restricted distribution<br>Restricted opportunity | Had no sugar free options<br>Limited distribution | Colas | A.G. BARR p.l.c. |
| *Corsodyl* | Failing brand extension | High priced<br>Limited distribution<br>Line extension to mouthwash | Dentifrice | GlaxoSmith Kline |
| *Cherish* | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Sold in cubes<br>Category generification<br>Corporate effects<br>Limited distribution | Facial tissue | John Dale Ltd. |
| *Velvet* | Restricted distribution<br>Growing brand | Category generification<br>Limited distribution | Facial tissue | Essity (Sweden) |
| *Paloma* | Restricted distribution | Category generification<br>Limited distribution | Facial tissues | Paloma d.d. (Slovenia) |
| *Don Simon* | Restricted penetration | Bulk packs<br>Category generification | Juices | Don Simon (Spanish) |
| *Mega* | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Bulk packs<br>Category generification<br>Corporate effects<br>Limited distribution | Kitchen towels | Accrol Papers (UK) |

**(Table continued on next page)**

**(Table 45 continued)**

| Brands | Category | Restriction(s) | Suggested cause | Brand owned by |
|---|---|---|---|---|
| *Thirsty Bubbles* | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Bulk packs; 3 plys<br>Category generification<br>Corporate effects<br>Limited distribution | Kitchen towels | Accrol Papers (UK) |
| *E45* | Functional difference<br>Restricted penetration | Dermatological moisturiser<br>High priced | Non-medicated | Crookes Healthcare (Reckitt Benckiser) |
| *Palmers* | Functional difference<br>Restricted penetration | Cocoa butter-based range<br>High priced | Non-medicated | E. T. Browne Drug Company, Inc. |
| *Regina* | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Fragranced lines<br>Category generification<br>Corporate effects<br>Limited distribution | Toilet tissue | Sofidel SpA (Italy) |
| *Triple Softy* | Restricted distribution<br>Restricted opportunity<br>Restricted penetration | Quilted paper<br>Fragranced lines<br>Category generification<br>Corporate effects<br>Limited distribution | Toilet tissue | Accrol Papers (UK) |
| *Nouvelle* | Functional difference | Recycled paper<br>Category generification | Toilet tissue | Georgia Pacific |
| *Kerrygold* | Poor performance | High priced<br>Category generification | Butter | Ornua (Ireland) |
| *Rappor* | Poor performance | Category generification<br>Corporate effects | Instant coffee | Jacobs Douwe Egberts (Dutch) |
| *Red Mountain* | Poor performance | Category generification<br>Corporate effects | Instant coffee | Typhoo Tea (Apeejay Surrendra Group, India) |
| *Carte Noire* | Poor performance | Category generification<br>Corporate effects | Instant coffee | Jacobs Douwe Egberts (Dutch) |
| *Percol Fairtrade* | Poor performance | Category generification | Instant DeCaf | Food Brands Group Ltd. (UK) |
| *Clipper Fairtrade* | Poor performance | Category generification | Instant DeCaf | Royal Wessanen nv (Dutch) |
| *Douwe Egbert* | Poor performance | Category generification<br>Corporate effects | Instant DeCaf | Jacobs Douwe Egberts (Dutch) |
| *Carte Noire* | Poor performance | Category generification<br>Corporate effects | Instant DeCaf | Jacobs Douwe Egberts (Dutch) |
| *Dove* | Poor performance | N/A | Non-medicated | Unilever (UK-Dutch) |
| *Garnier Skin Naturals* | Poor performance | N/A | Non-medicated | L'Oréal |
| *Goodfellas Takeaway* | Poor performance | Price marked<br>Category generification | Pizzameals | Nomad Foods (Irish) |
| *Cushelle* | Poor performance | Category generification | Toilet tissue | Procter & Gamble (US) |
| *Princess* | Poor performance | Category generification | Juices | Princess Food & Drink Group |
| *Copella* | Poor performance<br>Growing brand | Category generification | Juices | PepsiCo |

t = 5 years, 15 categories (N = 2 small change-of-pace candidates) Source: Kantar WorldPanel

With this, the current research gives insights into possible factors leading to the occurrence of deficit loyalty. Also highlighted are several areas for future research (further discussed in *PART V*). Before doing so, the brands' over time BPMs are analysed in Table 46 (below). Again, most metrics are near-stationary and remained within a percentage point or two over five years. *Chapter 9* noted that more than 90% of these brands had near-stable shares; just two grew (*Velvet* +3%, *Copella* +3%) by improving sales and one declined (*Princess* -2%). All of them were in slightly declining categories (see *Section 9.2.2.4.*).

Table 46 further demonstrates that these under-performing brands jointly captured 2% market share, had seven times more light than heavy buyers, an average purchase

frequency of fifteen times a year, and about 20% of *SCR*. Hereby, the brands reached about 5% of the buyers who bought them with great stability. The proportion of light buyers declined slightly with time, as opportunities to purchase (again) increased (Scriven & Bound, 2004) but the heavy buyer proportions did not grow. Perhaps this was a sign why the brands had deficit loyalty: buyers did not come back to buy again as expected. For the 100%-loyals, penetrations increased while buyer frequencies declined. Something keeps buyers from repurchasing these brands restricting opportunities in appeal *and* usage.

***Table 46: Over time BPMs for small change-of-pace candidates***

| Performance measure | Av. annual figures Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-Y5 | Abs. Y5-1 | Correl. w. time | MAD |
|---|---|---|---|---|---|---|---|---|---|
| Market share (%) | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0.86 | 0.1 |
| Penetration (%) | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0.67 | 0.2 |
| Purchase frequency | 2.4 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 0 | -0.66 | 0.0 |
| Once-only buyers (%) | 66 | 66 | 67 | 66 | 65 | 66 | -2 | -0.51 | 0.7 |
| 5+ buyers (%) | 8 | 9 | 8 | 9 | 9 | 9 | 1 | 0.66 | 0.3 |
| Category purchase | 15 | 15 | 15 | 15 | 15 | 15 | -1 | -0.75 | 0.2 |
| SCR (%) | 20 | 21 | 19 | 20 | 20 | 20 | 0 | -0.19 | 0.5 |
| Penetr. of 100% loyals | 12 | 13 | 13 | 13 | 13 | 13 | 0 | 0.27 | 0.4 |
| Purch. freq. of 100% loyals | 2.7 | 2.9 | 2.5 | 2.6 | 2.5 | 2.7 | 0 | -0.73 | 0.1 |
| w(1-b) | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 0 | -0.68 | 0.0 |

t = 5 years; 15 categories (N = 31 small deficit loyalty brands) (rounded figures)
Source: Kantar WorldPanel

## 10.2.1. High share excess loyalty & small brands

According to Fader and Schmittlein (1993), high share brands with excess loyalty may account for small brand's deficit loyalty. Of the fifteen long-term categories, thirteen comprised either excess or deficit loyalty small brands and of those just five had also a high share brand with excess loyalty. The duplication tables (*Appendix III*) of the five categories in question (*Premium ice cream, Butter, Juices, Margarine* and *Colas*) revealed there was no quantifiable pattern: *Margarine* had no small brands with deficit loyalty and for both *Colas* and *Butter* the effect was either weak or the deficit loyalty for small brands an outcome of other factors. That might be patchy distribution or a restricted product portfolio for *Barrs* while *President, Kerrygold* and *Yeo Valley Organic* were higher priced in a category (*Butter*) becoming increasingly generic (these categories hold high proportions of private labels).

For the remaining two categories (*Juices, Premium ice cream*), Fader and Schmittlein's (1993) proposition seems true. Some of the larger brands had excess loyalty, and attracted

more than expected customers from their smaller rivals who then suffered more than twice; that is, it led to deficit loyalty. But the pattern was hardly universal, and more research is welcome.

### 10.2.2. Corporate effects & small brands

Especially within the paper and coffee markets many of the smaller brands belonged to few bigger firm's brand portfolios which could lead to corporate effects attending small brand's performance. Effects might be sales cannibalisation among the respective sister brands due to shared distribution channels and resources (e.g. Sharp, 2010; Romaniuk & Sharp, 2016), yet the results varied across categories. The duplication tables (*Appendix III*) demonstrated that especially the three *Jacobs Douwe Egbert* brands (*Douwe Egberts*, *Carte Noire* and *Rappor*) in the *Instant DeCaf* category, 5% more of the *Carte Noire* buyers than expected perceived *Douwe Egbert* as 'more substitutable', and about 7% more of *Douwe Egbert's* buyers than expected perceive *Carte Noire* as 'better option'. Also, *Carte Noire* loses significantly more than expected sales to both *Nescafe* and *Kenco* while the same applies to the small brand *Douwe Egbert* which over-shares with both *Kenco* and *Nescafe Gold Blend*. All of which could be an explanation of *Carte Noire's* and *Douwe Egbert's* loyalty deficits. Similar patterns arose in the Instant coffee category: *Carte Noire* loses significantly more sales to all its large competitors while also sharing less than expected sales with both *Red Mountain* and *Maxwell House*. Nonetheless, the lost sales towards the larger brands seem to 'weigh' more, hence the loyalty deficit for *Carte Noire*. Similar patterns can be seen for *Rappor*: It overshares sales with most of its large category competitors and the smaller brand *Maxwell House*, which could be taken as an explanation for *Rappor's* loyalty deficit.

In Kitchen towels the *Accrol* brands *Mega* and *Thirsty Bubbles* did not share more amongst the brands in their competitive group but with both *Regina* (normal loyalty) and *Nicky* (excess loyalty) although buyers did not seem to see *Mega* and *Thirsty Bubbles* as substitutable enough for the other two brands. This could be an explanation of loyalty deficits of both *Mega* and *Thirsty Bubbles*.

### 10.2.3. Brand extensions & small brands

Hardie *et al.* (1994) found line extensions rarely led to increased category demand and are hardly more than a tactical response to competitive strikes, and many brands that attempted to use their well-known name to expand to other product categories, found this may not necessarily a success. In 1982, *Colgate* could not interest enough customers for their frozen dinner range *Kitchen Entrees* and subsequently had to take them off the market. Same for *Cosmopolitan's* yoghurt idea in the early 2000s (Huffpost, 2014; Schutte, 2014).

Perhaps the same applies to the here analysed brands. For example, *President* is rather known for its cheese than its butter products, *Frederick Cadbury* is mostly sold on a stick and perhaps not premium enough for the *Premium ice cream* category and *Johnson's Baby* products are a line extension to the other *Johnson's* beauty items. *Corsodyl* was well-known for mouthwash (a popular medicinal answer to treat gum conditions) before it started to target customers with everyday dental products. The medicinal heritage allows the brand to be perceived as an expert solution (Mintel, 2019A), perhaps also supported by the higher than category average price. The behavioural response from customers resulted, however, in deficit loyalty, same as for *President, Frederick Cadbury* and *Johnson's Baby*. Lastly, *Yeo Valley Organic* started its well-known yoghurt business in 1993 (Anderson, 2015), and was recently taken over by *Arla* (CMA, 2018) who strive for higher investments into more organic dairy products (Mintel, 2019B). The takeover could have similar outcomes for *Yeo Valley* butter products as it had for *Oral-B* which this thesis found to have increased share by 10% over five years – likely due to the wider distribution channels and greater marketing budget available through *P&G* (see *Chapter 9.2.2.*). *Yeo Valley* butter appears to be an extension to a category outside the well-established yoghurt business but led to deficit loyalty – at least for now within the analysed datasets. Future research could investigate the effects of the *Arla* takeover on the performance of *Yeo Valley*.

### 10.2.4. Pricing effects & small brands

FMCGs are typically lower-priced items with reduced risk and households tend to simplify grocery shopping by *"develop*[ing] *habits of buying one or a small number of brands"* (Ehrenberg, 1988, p. 5). In theory, a better brand performance might be achieved by increasing prices (Dawes, 2009; Trinh *et al.,* 2014; Nenycz-Thiel *et al.,* 2018; Dawes *et al.,* 2017), so marketing literature suggests small brands to set premium prices for their

products (e.g. Kotler, 2003, 2005). But it seems that the outcome were loyalty deficits – at least in the here analysed categories. Perhaps buyers are not willing to pay a price premium. For example, in the *Dentifrice* category, *Corsodyl* is relatively higher priced together with *Sensodyne* (a large brand) and *Oral-B* (normal loyalty). Perhaps this was the reason why *Corsodyl* over-shared with these two (see *Appendix III*) but failed in *"getting"* these buyers back from them. The so lost purchases seemingly led to deficit loyalty. This expands upon earlier findings by Pare (2008) who reported high price (high quality) items tend to have reduced volume of purchase; that is, they are likelier to have loyalty deficits. It also supports earlier findings by Dawes *et al.* (2017) who reported that, even though prices per unit varied across product classes, contrary to popular belief higher prices products did not necessarily have excess loyalty. In fact, Dawes found weak associations between performance deviations (i.e. excess or deficit loyalty) and higher average price. Similar patterns were visible in the *Non-medicated* category: *Palmers* and *E45* were higher priced than most of their rivals. However, both *The Sanctuary* (also restricted in distribution) and *L'Oréal Dermo Expertise* were even more expensive but for the former this resulted in excess loyalty and the latter behaved normal. Altogether, no universal pattern was identified. More research using, for example, retailer scanner data that also lists prices could help to gain more insights.

### 10.2.5. Functional differences, restricted portfolios & small brands

Functional differences may result in performance deficiencies, and although often linked to excess loyalty (e.g. Pare & Dawes, 2007) the current study identified three brands with functional differences that had persistent loyalty deficits. *Don Simon* (*Juice*) sold mostly bulk packs, and buyers seemingly needed longer to use them up (also Pare, 2008). *Palmers* added cocoa butter to their entire product line and *E45* came with dermatological benefits for sensitive skin. While this resulted in deficit loyalty for the three brands, their joint rival *L'Oreal Dermo Expertise* exhibited normal loyalty patterns despite its functional difference.

Lastly, *Percol* and *Clipper* are Fairtrade *Instant DeCaf* types targeting those that care about the local coffee producers in developing countries. But it seems customers did not care enough to buy the brands at normal rates, instead the result was deficit loyalty. The two further heavily over-shared their own customers in their Fairtrade segment. The

implication is that the two are perceived substitutes *within* their Fairtrade segment, but not substitutable enough to compete on par with the other coffee brands.

### 10.2.6. Category 'generification' & small brands

Retailers use their own labels as a strategic weapon to gain and maintain power in distribution channels, and to remain in control of shelf-space. In the UK every second item sold is a store label (Marketline, 2014). Uncle and Ellis (1989) found private labels are bought in a similar way to manufacturer brands, and their sheer numbers became apparent in the paper and coffee markets as well as in the *Butter* (also Mintel, 2019B) and *Pizzameal* categories. This could restrict shelf space available to manufacturer brands, and most outlets list a bigger brand and a few other (smaller) ones for customers to choose from. This may push small brands, for example, distribute over different channels (in the paper markets via wholesalers such as *John Dale Ltd.*). This seemingly also led to over-duplications with other small and store labels (*Appendix III*) as well as deficit loyalty. So managers of small brands should be aware of this competitive threat.

### 10.2.7. Small brands with poor performance

Lastly, Table 45 revealed that as many as fourteen small brands exhibited loyalty deficits yet possible causes were not easily to identify apart from perhaps increased category 'generification' (especially the coffee and paper markets) as outlined above. Yet, other brands such as *Dove* and *Garnier Skin Naturals* behaved differently. The duplication tables (*Appendix III*) revealed that *Dove* is seemingly not substitutable enough for the buyers of the leading *Nivea* while *Garnier Skin Naturals* over-duplicated with most of its larger rivals, both resulting in deficit loyalty for the two brands.

The *Copella* juice brand also grew by about +3% and according to Pare (2008) growing brands may exhibit deficit loyalty due to increasing proportions of trialists. The pattern is, however, less generalizable – not least because very few brands grew or declined.

## 10.3. Discussion & summary

In this chapter consideration has been given to the fifth objective of this research. The aim was to widen current knowledge on several suggested causes frequently associated with small brand loyalty deficiencies. The earlier identified persistently deviating small brands were analysed to determine whether said conditions affected long-term consumer behaviour. Managers of small brands need to understand possible reasons that underlie performance deviations and how frequently they might be encountered. As such, the current research was an important step into that direction.

Earlier empirical research that proposed a joint set of managerially significant factors to explain *why* (small) brands deviate from their Dirichlet estimated benchmark (e.g. Kahn *et al.,* 1988; Fader & Schmittlein, 1993; Bhattacharya, 1997; Scriven & Bound, 2004; Pare *et al.,* 2006; Pare, 2008; Pare & Dawes, 2007, 2011) has been expanded upon. Based on two conceptual frameworks (the definitions of niche and change-of-pace brands), explanatory theories were mapped against exhibited loyalty deviations. In other words, the prevalence of performance deficiencies is confirmed, and new evidence examined through the lens of the current theory. This contributes to a better understanding of how small brands grow.

The current analyses yielded several key results: first, the NBD-Dirichlet is a useful tool to analyse small brand performance and deviations from it. Brands that conformed the model's assumptions, and fell close to their Double Jeopardy estimates, had significantly increased probabilities to grow. With that, the use of the Dirichlet highlighted two systematic deviations – niche and change-of-pace performance. Both were seemingly symptoms of rather bad brand management, unlikely to result in brand growth. Third, functional differences seemed a largely adequate explanation for most niching brands, followed by being limited to certain usage situations, not appealing to the mass of the market (see Kahn *et al.,* 1988) or restricted distribution (see Bound & Ehrenberg, 1997). But contrary to marketing belief, these brands' performance measures are not found to trend beyond expectation: small niche brands were seemingly limited their growth potential by *"being unattractive for many buyers"* (Sharp, 2007, p. 7). Fourth, a number of possible co-varying factors that are likely to result in a loyalty deficit yet only few of these cases were seemingly due to variety-seeking; that is those were considered change-of-pace brands. Yet many more under-performing brands were either restricted in distribution or designed to appeal to a limited segment of the market but most brands with loyalty deficits

seemingly did not perform well (poor performance). This discounts the fact that any brand manager would knowingly target a low purchase frequency.

All in all, these findings challenge the high importance placed on targeting strategies, in fact, targeting was a sign for stagnation. Managers are provided with a more detailed categorisation of aspects that help distinguish mere poor yet *manageable* performance from more systematic (and less manageable) effects such as category 'generification'. Even after accounting for Double Jeopardy, small brands need to appeal to a broad section of the category buyers (across buying periods) to have (any) probability to grow.

The findings presented within this and earlier chapters are discussed subsequently to determine the contributions made to knowledge. Relevant implications for theory and practitioners are drawn thereafter and this dissertation ends with a detailed evaluation of limitations alongside recommendations for future research.

# PART V - DISCUSSION & CONCLUSION

## Chapter 11: Contribution to knowledge

*The findings are now summarised and discussed to determine the contribution to knowledge made by this research. The contribution includes the identification of a quantifiable divide between large and small brands, the replication and extension of key Dirichlet EGs and buying regularities into the context of strategic small brand management and elaboration on several to date rather under-researched performance deficiencies. All of these strengthen the reliability of the Dirichlet to describe competition inclusively. Also discussed are theoretical and practical implications as well as limitations and avenues for future research.*

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### 11.1. Introduction

Small brands are an important aspect of a healthy competitive environment – not least because there are so many of them. Most brands are per definition small, and their combined contribution to category and brand portfolio sales often exceeds that of larger rivals. Company portfolios comprise many smaller brands and the economic (competitive) future of most developed markets rests on the shoulders of start-ups and SMEs – themselves small brands. But when it comes to brands (in general), clear definitions on what is *small* are surprisingly rare (Prinz, 1988). So, if we do not know what a small brand is, how would we manage them? And how could we grow them successfully?

A brands' success largely depends on its ability to attract customers (Mellens *et al.,* 1996). And because of its often-limited resources, a small brand may seem particularly vulnerable. Their managers are seemingly asked to perform marketing on a shoestring. So far, the review of extant marketing literature revealed several frequently-proposed strategic stances for leading brands, challengers, me-too items or innovators. Military warfare analogies are often used to describe competitive strategies (attacks or defences) such as frontal, flanking and bypassing. And while leaders may either choose to grow the whole market (as in attracting new category buyers) or quickly copy innovative aspects of "weaker" brands, smaller "challengers" try to wrest sales with more modern personalised goods and adapt flexibly to a narrow segment of the market (Hollensen, 2003; Kotler, 2005; Doyle & Stern, 2006). Facing the competitive threat of big brands who employ millions and sell to billions (Hanssens & Pauwels, 2016; Sharp *et al.,* 2017A) in near-stationary markets

(e.g. Bass & Pilon, 1980; Graham, 2009), the targeting approach aims to allow small brands to avoid head-on competition. The idea is to either appeal to *"some customers all of the time"* or to be *"preferred, on* [just] *some buying occasions"* (Sharp & Dawes, 2001, p. 743). But empirical evidence of the effectiveness of targeting is scarce and strategy descriptors hardly related to brand size or relative performance metrics. This questions whether taking up any of the proposed strategies would support a small brand in its competitive struggles. While some believe poor targeting and increased product proliferation cause loyalty to decline over time (Kapferer, 2005; Wan *et al.,* 2012) limited quantifiable results support the claim. Loyalty figures may be affected by increased category buying (Johnson, 1984) but in general effects were small (Dekimpe *et al., 1997;* Sharp *et al.,* 2012; Dawes *et al.,* 2015). Also, most research attention was on a category's top three to ten brands (e.g. Ehrenberg & Goodhardt, 1970; Fader & Schmittlein, 1993; East & Hammond, 1996; Kennedy *et al.,* 2000; Jarvis *et al.,* 2004; Scriven & Bound, 2004; Habel *et al.,* 2005B) – the supposedly successful ones (Prinz, 1988; East *et al.,* 2008). And even when small brands are analysed, there is a focus on excess loyalty (niching performance) and its alleged (but to date weakly proven) ability in driving growth for the brand in front.

Altogether, there was still much to learn about how small brands grow. This comes as a surprise since the NBD-Dirichlet reliably analyses, describes and predicts the performance of brands that are many times the size of each other – although it was (to date) rarely used in that matter. This thesis presented and critically discussed theoretical arguments and empirical evidence to demonstrate the usefulness of the Dirichlet when analysing small brand performance and identifying deviations from its provided benchmarks. In doing so, the current research replicates and extends several analytical approaches which had before been used either separately (if at all), in the context of larger brands and/or in periods not exceeding two successive years.

This chapter starts with a summary of the key findings followed by a discussion of the main contributions made by this research. Relevant implications for management and marketing theory are introduced thereafter. The chapter closes by evaluating limitations and future research areas.

## 11.2. Key findings of this research

The results of this research are based on analyses of about 500 brands in over thirty-six vastly dissimilar FMCG categories and cover periods ranging from one to up to five years to establish generalisability and robustness. The key empirical findings[54] are:

1. **The NBD-Dirichlet describes long-term buying (and deviations) of small brands.**

   Small brands that conformed the models' two assumptions and fell close to their Double Jeopardy estimates were able to grow. The Dirichlet helped to identify symptoms of deficient performance by providing benchmarks for simple comparisons. Revealed was the surprisingly low effect of targeting strategies on (the *management* of) consumer behaviour.

2. **This research provides a quantifiable operational definition of small brands.**

   The relative competitive relationship between successive brands was systematically analysed across categories and time which revealed a discrete gap. Small brands are those competing below a category's top five. This provides a benchmark for researchers and practitioners and puts strategic brand management into a competitive (inclusive) perspective.

3. **Deficit loyalty was the small brand syndrome.**

   This research provided significant support that when small brands deviated from the Dirichlet norm they tended (five in ten brands) towards persistent loyalty deficits rather than niching (just under two in ten). That is, most small brands suffered *more* than twice year-on-year.

4. **Small brands had near-stable market shares.**

   Repeat purchasing behaviour was analysed, and the emerged patterns of near-stationarity replicated over periods of up to five years. The patterns persisted for almost all small brands as 97% remained within share changes not exceeding ±5%.

[54] Many of the here listed findings have been presented to academics and practitioners in more public forums such as conferences (i.e. Academy of Marketing and ANZMAC), and to the corporate sponsors of the Ehrenberg-Bass Institute for Research in Marketing at the University of South Australia (see A*ppendix IV*). All of which provides some level of external validation.

5. **Market share changes were constrained by Double Jeopardy.**

   Market share near-stationarity was the rule: just two out of 66 small brands shifted more than five absolute share points over five years, and they remained within the constraints Double Jeopardy puts on the penetration-loyalty relationship. That is, share dynamics were largely attributable to either category penetration changes or external factors such as mergers. But they were clearly not the result of loyalty deficiencies other than was expected to come about with changes in penetration. And where buying patterns remained within Double Jeopardy estimations and conformed Dirichlet assumptions, small brands had a one in four chance to grow.

6. **Small brand buying was surprisingly light-buyer based.**

   Small brands were bought once by a joint 60% of their buyers in any one year. Deficit loyalty brands revealed more dramatic figures of just under seven in ten, yet 90% maintained shares by attracting many more lighter buyers than would be expected – and continued to do so year-after-year.

7. **Niche and change-of-pace were symptoms of stagnation.**

   The strategic targeting of segment buyers is not a reliable driver for brand share growth and equally true was that a loyalty under-performance was not an indicator of share decline. Most small brands had persistent loyalty deficiencies, and this is unlikely to change unless management action is taken to address this.

8. ***"Don't shoot* [your small brand] *with target marketing"*[55].**

   The analysed categories were mostly non-partitioned – just as the Dirichlet assumed. Functional differences, restricted portfolios and patchy physical availability were likely explanations for a niching outcome. But, most surprisingly, a loyalty deficit was associated with many co-varying factors. The activity of distinguishing poor (yet often manageable) performance from less manageable external factors is therefore a vital but more complex part of competitive benchmarking and small brand management.

[55] Romaniuk and Sharp (2016, p. 40)

By using the established NBD-Dirichlet norms of buying behaviour, this research provided a comprehensive examination and description of competition from the viewpoint of smaller brands. The empirical results are of significance for (future) Dirichlet research and managerial decision-making. The key aspects this study contributed to research are discussed in the subsequent section.

## 11.3. Contribution to knowledge

This research employed two in extant analyses (to date) unusual approaches of determining brand performance. Not only was the focus on small brands, their longitudinal buying behaviour was investigated with the help of time series. The analyses were based on a set of comprehensive BPMs available to and frequently used by the typical brand manager. The NBD-Dirichlet as stochastic model and its widely-reported descriptions of buyer behaviour were used as analytical framework. In other words, the principles of marketing science were applied while observing new and confirming known regularities (and deviations) in consumer purchase records in the under-researched areas of small brands and long-term continuous buying. Altogether, this thesis made six contributions to knowledge which are discussed below.

### The Dirichlet describes long-term buying & helps identify deviations

In benchmarking exercises, it is important for marketers to understand frequency (and perhaps reasons) of deviations. This research expands knowledge on the substitutability and competitive potential of niche and change-of-pace brands. It was shown that purchase frequency remained stable and brands differed the most in the size but not the nature of their customer bases. The identified deviations remained at the brand level but did not disturb competitive market structures. Category and small brand buying was mainly near-stationary; most dynamics accompanied by greater changes in penetration values. That is, when small brands conformed to Dirichlet assumptions (i.e. their observed penetration-loyalty relationship was close to Dirichlet expectations), they were more likely to grow than small brands with either excess or deficit loyalty.

## A relative competitive divide provides a definition of small brands

Small brands are an important aspect of competition. But until now, there was no unified definition of or approach available to identify what *small* is. This has hindered the development of comparable findings on how they grow.

This thesis revealed and quantified an empirical regularity in market share distribution of brands that was robust across fundamentally dissimilar product categories and persisted over time. The size ratios of any two successively ranked rivals decreased in line with share: the typical size-rank ratio of neighbouring brands was 0.8. The ratios declined more rapidly amid a category's top five, then flattened to 0.8 indicating even closer competition between smaller brands. More tellingly, the mean ratio of the top five brands was 0.7, and a 0.9 amongst those competing below rank five. This led to the conclusion that brands competing below a category's top five are considered small.

Extant work by Kohli and Sah (2004, 2006) indicated some regularities in a category's share distribution. But their focus was on the top four brands and the authors employed a theory-first approach. The current research found that year-to-year repeat buying behaviour was near-stationary. The pattern was replicated over fifteen product categories and extended to five consecutive years. Under stationary conditions, the analysed rank-share ratio seemed fixed. The implication is that the relationship was independent from category characteristics or specific years. Market shares remained near-stable over time, and even when not, effects on rank-size ratios were not evident.

The discovery of such a simple yet quantifiable threshold to separate larger from smaller brands provides future research with an operational definition of what a small brand is. This is important for the development of comparable findings on how their buyers behave. As competition is a zero-sum – gains come at the expense of rivals – the current findings aid marketers in setting feasible share goals. That is, this research provides the context for marketers in what needs to be overcome to *climb* the share-rank ladder, and to evaluate how far *behind* followers are.

## Most small brands had deficit loyalty – year-on-year

This research discovered a new and highly useful empirical generalisation in small brand performance: six in ten had loyalty deficits over any one year and 50% under-performed persistently over five years. Small brands seemingly suffered *more* than twice which contradicts what marketing theory suggests (or perhaps hopes for) as just under two in ten enjoyed excess loyalty. Overall, deviations persisted at slightly declining rates. This supports earlier studies by Kahn *et al.* (1988), brief observations by, for example, Fader and Schmittlein (1993) covering one-year periods and Dawes *et al.* (2017) looking at average spend per buyer at 214 brands across thirteen US and UK FMCG product categories. It also extends the more recent two-year long study on the performance of small and medium-sized brands by Pare *et al.* (2006) by another three years. In other words, the approach of systematically replicating and extending patterns that had emerged in the few earlier studies on small brand buying generalised across many, vastly different product categories and in more than twice the time span of Pare *et al.*'s (2006) research on the topic. Loyalty deviations were not found to be any more commonplace within specific product classes or years, and just one brand fluctuated between the two loyalty "extremes"[56]. The findings add considerably to our understanding of how small brands grow and are therefore a useful empirical generalisation (Barwise, 1995).

## No brand growth from excess loyalty, & no decline from loyalty deficits

This research confirmed that marketing management is constrained to the Dirichlet assumptions of near-stationarity and non-segmentation. Most brands (80%) did not exceed ±1% share change over five years. Brands rarely grew; just ten did so, and of those only two (!) grew by more than one annual percentage point. To the very opposite of received marketing wisdom, "anything goes" strategies are unlikely to deliver the expected results (cf. Ehrenberg, 2001; Ehrenberg *et al.,* 2004; Sharp, 2010); that is, growth was not driven by targeting and/or loyalty boosting strategies. The one niche brand that grew by +3% in a slightly declining category (-4%) managed to secure a 60% sales improvement. But in general, a niche position indicated stagnating performance. Also rare was share decline: only three brands lost on average two percentage points in five years. No change-of-pace

[56] The *Facial tissue* brand *Countess* went from three consecutive years of excess loyalty to one year of loyalty deficits (see *Chapter 8.1.2.*).

brand grew or declined but there were just two of them. And if brands stayed within Double Jeopardy and Dirichlet constraints, they had a one in four chance to grow. In other words, when brands grew (declined), primary shifts were in penetration values while purchase frequencies changed to a lesser extent. The growing brands showed an absolute evolution in their penetration-loyalty ratio of 16.4:1; in percental terms the ratio came to a factor of 28.5:1. Declining brands had 24.8:1 (absolute) and 6.8:1 (percental) respectively. The growing brands also attracted more cross-purchasing from the buyers of nearly all their competitors; vice versa for declining brands. This means, while growing, the brands had the tendency to attract more, yet lighter buyers, and those were seemingly sustained (hence the growth) as they buy the brand a little more often over time. The opposite effect did not clearly generalise for the declining brands perhaps because there were only three of them and their share change magnitude did not exceed a -2% over five years. More research on declining (small) brands is therefore welcome.

All in all, category buying and small brand performance were mostly stationary. However, the majority small brands did not achieve so-called "level playing field" metrics. And most surprisingly: despite the identified deviations they maintained market shares – year-on-year. The likely implication is: there is little empirical evidence for the effectiveness of targeting strategies. Double Jeopardy brands evidently had greater probabilities to grow. By systematically replicating and extending acknowledged empirical generalisations of buying behaviour into the context of long-term small brand buying. This adds useful knowledge to the current understanding (Barwise, 1995) on how small brands grow. The findings also confirmed earlier studies on the prominence of brand share equilibrium in mature markets (e.g. Bass & Pilon, 1980; Johnson, 1984; Ehrenberg, 1988; Lal & Padmanabhan, 1995; Baldinger *et al.,* 2002; Graham, 2009; Trinh & Anesbury, 2015).

## Small brands suffer from an *"unbearable lightness of buying"*[57]

Double Jeopardy says small brands have fewer buyers who also buy them less often. Their customer bases comprise greater proportions of infrequent (lighter) buyers than that of larger rivals. The market reality was even more dramatically skewed. The Dirichlet predicted small brands to be bought once by a joint 50% of their customers while those buying five or more times should have numbered up to just under two in ten. In reality,

[57] Graham *et al.* (2017A, p. 1)

small brands were purchased once by about 60% of their customers and just one in ten were heavy buyers in any one and over five successive years.

But this transactional nature of small brand buying is not even the full story. The brands with deficit loyalty demonstrated the most significant discrepancies: they were bought by about 25% more infrequent buyers than was expected and by about 2.5 times fewer than anticipated heavy buyers. This illustrates the combined imperative contribution of the light-buyer segment to the sales of small brands *already* suffering (more than) twice. It also demonstrates that with time, households may expand their repertoires. But those who buy a category more often (heavy category buyers) tend to buy lots of (smaller) brands (cf. Romaniuk & Sharp, 2016) because they have larger repertoires (meaning they know more brands) due to more purchase incidences (Uncles & Ellis, 1989; Ehrenberg, 1969A, 1988; Uncles *et al.,* 1995; Dawes *et al.,* 2015). Contrary to marketing theory, neither did these 'top-ups' lead to excess loyalty nor did they drive brand share change. In the short and long term, buyers distributed their purchases as-if-random across the market and switched amongst the substitutable options in their brand repertoire – just as the Dirichlet assumed. This further explains the share equilibrium most small brands demonstrated: share was maintained by sheer selling (transactional business) which has little to do with the understanding of marketing in building and maintaining strong customer-brand relationships (e.g. Kotler, 2003, 2005). To grow, a wide spectrum of different category buyers needs to be attracted – *"light as well as heavy"* (Romaniuk & Sharp, 2016, p. 35).

To arrive at this contribution, well-known empirical regularities on (mostly larger brand) buying were replicated into the context of long-term small brand buying. In this context, the finding is new and has not been published before. This contributes tremendously to our understanding on how small brands grow and provides useful knowledge to marketers for the set-up of feasible growth objectives. It also showed that targeting strategies did either not work, or small brands were just bad at implementing them. The contribution is therefore meaningful and aids a better understanding of the limited growth potential of loyalty-boosting marketing activities. This does not mean loyalty is not important, but marketers should not to lose sight of the infrequent buyers and their vital role for both brand health and growth.

## Niche brands are rare, & change-of-pace brands even rarer

The alleged correlation between premium loyalty and high profitability has undoubtedly spurred academic and managerial interest. And while marketing theory puts much attention on niching strategies, choice behaviour studies expand the strategic portfolio by that of a change-of-pace brand. The idea is to offer ways to small brands to keep up with larger rivals. But the extent to which targeting helps achieve a *better* position (i.e. competitive advantage) is questionable. The effectiveness of said strategies simply lacks empirical support.

The current research found that small niche brands exhibited excess loyalty with persistent deficits in penetration. Few new buyers were attracted, and few new sales generated from those the brands were salient to. Weak signs of *"brand love"* or increasing repeat purchase rates. With that, this research contributed knowledge on niching being a sign of stagnating performance but not for growth. And the one niche brand that grew[58] did so by acquiring proportionally more customers rather than increasing the repeat sales of existing buyers (absolute ratio 30:1 and percental ratio 17:1) as Table 33 in *Section 9.2.2.1.* demonstrated. This research further found that most niche performance was either due to functional differences, limited product portfolios (compared to competitors) or restricted distribution. Most buyers seemingly *would* not or *could* not consider these brands as good enough choices out of otherwise substitutable rivals.

Equally true is that change-of-pace brands were rare – at least in the here analysed product categories. Just two could be identified, both with stagnating long-term performance. Good news was that change-of-pace (as well as deficit loyalty) brands did not tend towards share loss. But the infrequence at which these brands were bought confronts their managers with the task of attracting buyers beyond expectations – year-on-year – just to maintain market share. Perhaps most surprising was the lack of consistency in the factors underlying small brand's loyalty deficits. Some factors were more linked to the brand itself such as functional differences (and perhaps even brand extensions, pricing strategies or issues in distribution) but this needs data that allows clearer inferences on these matters. And while said factors seem largely manageable, others such as high share brands attracting more than expected buyers from their smaller rivals (Fader & Schmittlein, 1993) or increased category

[58] The *Kitchen towel* brand *Nicky* gained about two percentage points in market share in a category that lost about 4% of its buyer over five years (see *Chapter 10.1.1.*).

'generification' are rather outside marketers' control. They are, however, not less important and should be monitored.

The findings are new, and challenge firmly held beliefs of niching as the holy grail in (small) brand management (e.g. Kapferer, 2005). The current research is different inasmuch that loyalty outcomes (i.e. excess or deficit) were not used to *imply* on a brands' targeting strategy (i.e. niche or change-of-pace) as had been done in previous studies (e.g. Kahn *et al.,* 1988; Bhattacharya, 1997). Instead, small brands were mapped against a set of factors frequently related to performance deficiencies. The aim was to document and quantify the incidences of excess and deficit loyalty against explanatory theory – a novel process which had, to the best of the researcher's knowledge, not been utilised in this manner before. Both the findings and the analytical approach therefore contribute tremendously to the knowledge of competitive market structures and manager's understanding of how their small brands compete.

## 11.4. Implications to theory

Earlier work by Kohli and Sah (2004, 2006) indicated some regularities in a category's share distribution but was focussed on the top four brands. They also employed a theory-first approach. The research presented here established the existence of an empirical regularity in the relative competitive performance between brands. This has resulted in a quantifiable threshold to separate larger from smaller brands. Future research now has an operational definition of what a small brand is to develop comparable findings on how they compete.

The NDB-Dirichlet was supported once again as a sensible baseline to analyse (small) brands' performance. Some of the analysed brands did not fit well but the model fulfilled its benchmark reputation as most correlations between observed and predicted performance measures were high – just as Table 6 in *Chapter 2.3.1.* showed. The implication is the here identified deviations are of isolated nature but do not constitute boundary conditions to the framework. This supports prior findings on the subject using an Empirical then Theory approach and strengthens the Dirichlet as well as the buying patterns it describes. As such, the Dirichlet represents a meaningful tool to analyse how the typical small brand competes. What is more, the model's ability to predict performance measures for brands of any given size (Keng *et al.,* 1998; Romaniuk, 2013B). The Dirichlet's benchmarks are based on its assumptions (e.g. stationarity) that must be met if the model is to fit the data. These

therefore provide a theoretical framework to explain expected performance, and any deviations (e.g. Scriven & Bound, 2004; Pare *et al.,* 2006; Driesener *et al.,* 2017).

The substantial consistency in over-time buying seem to provide a solid base for segmentation, targeting, positioning (STP) strategies. However, the fact that the proportions of light and heavy buyers remained largely stable in conjunction with the identified share equilibrium, questions the ability of these strategies to attract the desired customer group – year-on-year – especially for the niche brands who are expected to target the same segment buyers consistently (e.g. Kotler, 2003; Blythe & Megicks, 2010). The implication is that strategic targeting of segment buyers is unlikely to drive brand growth. The natural churn of buyers puts targeting segment buyers to the test. Segmentation builds on consistency; and while buyer proportions remained stable, those are not the same people buying at the same purchase weight. The so-called regression to the mean shows that over adjacent time periods, buyers did not buy consistently (e.g. Romaniuk, 2011; Romaniuk & Wight, 2015; Anesbury *et al.,* 2017). Loyalty (in terms of repeat buying) is not specific to a brand but a characteristic consumer behaviour (Sharp, 2010). This also highlighted that a *better* customer base in terms of its correlation to brand share growth, seems to be a larger one (also Romaniuk, 2011). As brands grew their penetration values increased much more accompanied by a less significant but not less important increase in loyalty rates (also Baldinger *et al.,* 2002). This provided compelling evidence that brand growth (decline) is defined by and constrained to Double Jeopardy. The Dirichlet described patterns of (small) brand buying revealed that repertoire buying is the norm, loyalty did not vary much between competing options and brands shared customers in line with the size of their customer bases (see Dawes, 2016). This further questions the suitability of STP-approaches for small brands to stay competitive let alone grow.

This research also expanded existing knowledge on niche and change-of-pace brands. The limited overlap of targeting theory and actual loyalty outcomes (i.e. deviations) highlighted just how careful those strategies should be considered. Their ability to increase rather than limit profitability is further questioned – especially as the strategic definition of change-of-pace is at odds with what is available (i.e. financial resources) and manageable for small brands (i.e. larger distribution networks to balance loyalty deficits as was suggested by Jarvis and Goodman (2005)). Lastly, the fact that small brands with apparent functional differences (e.g. a soy-based product line making the brand a less substitutable option compared to its rivals) were found across performance deviations (excess and deficit

loyalty). What is missing are further explanations on *why* the differences in consumer behaviour happen. This emphasises just how restrictive segment buyer targeting is for brand health and growth.

## 11.5. Managerial implications

The managers of smaller brands face a dilemma. Not only are they *"forever being asked to achieve more with less"* (Cuddeford-Jones, 2017, p. 1), most markets do not attract new buyers or new uses for the existing products describing the market equilibrium. The current study addressed a number of aspects in competition that are of practical relevance. To operate in the shadow of much larger rivals, economic survival depends on marketing managers who monitor (small) brand performance inclusively.

It was found that the Dirichlet assumptions of near-stationarity and non-segmentation largely persisted over time. Its predicted values correlated highly with observed buying behaviour showing just how meaningful the Dirichlet is for benchmarking activities. In other words, the Dirichlet described patterns in buying are of great practical relevance. Small brands' performance was found to depend on how many people buy it, how often and what other brands they purchase (e.g. Ehrenberg *et al.,* 2004). Double Jeopardy and Duplication of Purchase are therefore highly useful tools that provide context to understand market structure and competition.

This research has established a regularity in market share distributions. They followed a right-hand skewed plot: there are many more smaller brands, and their joint size averaged at a near-stationary 3% over five years. They would theoretically compete with over 90% of the market on each purchase occasion – if customers know, recall and notice them. Managers should reduce the obstacles that keep customers from re-purchasing. Advertising in equilibrium markets is found to be mostly defensive – keeping the brand salient for the many infrequent buyers. Low budgets often result in less above-the-line advertising. But this limits the chances of nudging back those who know the (small) brand already. And as those are mostly (nearly two-thirds) light buyers, the chances are high that they will forget the brand if advertising intervals increase. Advertising of small brands is not less effective but according to Double Jeopardy simply reaches fewer people (Romaniuk & Wright, 2009). This highlights the need to commit resources perhaps for several years to achieve a sustainable and lasting outcome.

Many marketing plans pursue brand growth (e.g. Kohli & Sah, 2004, 2006; Hanssens & Dekimpe, 2012). This research identified relative discrete share gaps between competitors. The gaps persist over categories and time and applied to all brands including niche and change-of-pace – those which marketing theory often believes to be *"outside"* competition. The already well-established rule of share equilibrium (e.g. Bass & Pilon, 1980; Graham, 2009) and the here developed relative competitive share differences between brands provide context for marketers as to what is needed to be overcome to "rank up" and to monitor how far "behind" the next follower is. The zero-sum of competition revealed share gains come at the expense of competitors – and they tend to fight for the same customers too. These results aid the set-up of feasible growth objectives – a step away from "anything goes" marketing.

The current research further confirms the persistent share equilibrium also found by Dekimpe and Hanssens (1995A/B), Pauwels *et al.* (2002) and Graham (2009). In other words, shorter term gains are typically neutralised by competitor's retaliation actions – they are more useful to maintain instead of triggering substantial growth in share (c.f. Bass & Pilon, 1980; Srinivasan *et al.,* 2000). Marketing – even if constrained by Double Jeopardy – has plenty of scope; also for competitors. The typical outcome is the competitive equilibrium (Ehrenberg *et al.,* 2004). And while all brands, regardless of their loyalty performance, need to focus on penetration building in order to grow and avoid the acquired light buyers from lapsing, those with deficit loyalty need to pay even more attention on retaining their heavy buyers. Their proportions are about two-thirds smaller than those of niche brands, and only half of that of small Double Jeopardy brands.

Versatility increases usage as the products then share more usage associations with a higher number of other products; that is, the probability of being bought increases. The main idea is that substitutable options act as surrogates for similar benefits (Ratneshwar & Shocker, 1991). Much larger parts of the whole category should be targeted and not just those buyers with children, or a preference for scented tissues or soymilk or (other) dietary constraints. Many buyers probably *would* not or *could* not consider buying such narrowly appealing products. In fact, this research has shown the danger of becoming over-reliant on a few buyers as it significantly limits the potential to grow. Remembering that seven in ten buyers did not make a second purchase within a year emphasises how easy it is for these very many, light buyers to forget about the brand. And when they buy, *"they do something they haven't*

*done for a long time, perhaps a couple of years or even more"* (Graham *et al.,* 2017A, p. 2). This is quite a long time for marketers to keep their small brand in customers' minds.

Small brands with deficit loyalty have by definition a customer base of unexpectedly light buyers, therefore bold changes in packaging or other elements that alter the look of the brand dramatically, risk the brand not being recognised altogether. The here identified transactional nature of small brand buying indicates marketers should not over-interpret (i.e. generalise) possible drivers behind single purchases. The implication is therefore not the tenuous loyalty of the largest 'segment' of any brand's customer base (which has been shown to be almost normal), but its corollary – the relentless and necessary objective to keep up annual penetration of small brands topped up with 'new' buyers.

Loyalty between rivals does not differ much, indicating the limited effects of loyalty programmes on loyalty itself (Sharp & Sharp, 1997; Meyer-Waarden & Benavent, 2006). This research found that the minority of customers buy any brand five or more times in a year, and even fewer buy the lower-share options as often. Even if they are the targets of loyalty programmes, the heavy buyers' contribution to revenues is hence small. They are individually important yet not *en masse*; the brand is salient to them, but they are unlikely to need even more of the, say, ice cream than they already do. They need to be regularly reminded but are unlikely drivers of share growth.

The lighter buyers typically do not buy the brand for a long time, and their proportions are found to decrease slightly, while the fractions of heavy buyers tend to be stable. Targeting the heavy buyers only would mean risking the here found near-70% of sales that come from once-only buyers. In light of share maintenance alone, for deficit loyalty brands to focus on customer retention without keeping up reach would be self-defeating.

In many CPG categories, customers divide their loyalties and purchase other brands more often than any one (small) brand. This implies that small brands do not create customer loyalty; at least not in the sense of loyalty beyond reason. In the UK, 68 pence in a pound are spent in supermarkets[59] (Mintel, 2017) and those offer about 30-50,000 items. With an average of 43 minutes spent per shopping trip (Statista, 2018), this is a 700-1,100-items per second adventure – not much time for brand love. Habitual decision-making suggests that what customers want is the category, and brand choice is found to be of *satisficing* nature (Simon, 1957) following near-fixed purchase propensities spread across substitutable

[59] This excludes discounters.

options (Goodhardt *et al.,* 1984; Barwise & Meehan, 2004). A typical household[60] fulfils over 80% of its needs with about 150 SKUs; 80% only choose between a maximum of three different shopping locations; a little more than 30% go to just one (Mintel, 2018B). So, most FMCGs enjoy a high chance of being ignored (unintentionally) even *if* stocked (Trout & Rivkin, 2000). Above all, listings should be maintained. Larger brands have wider distribution networks (e.g. Reibstein & Farris, 1995), occupy more shelf-space, enjoy more in-store promotions and have huge advertising budgets (Dyson *et al.,* 1997). They therefore have the capacity to be stocked in a greater number of differently sized outlets. Retail chains often rationalise their range[61], and high-contribution (high sales turn-around) brands are likely in advantage.

Also, if brands are found to exhibit superior loyalty, managers might conclude that at least some part of their marketing plan was effective. And all things being equal, this begs the question on whether it is appropriate to assume deficit loyalty brands have failed. Bought by some (excess) or sometimes (deficit), loyalty deviations for small brands persist, did not disrupt competitive market structures[62] and were mere *symptoms* of stagnation. That is, loyalty is a characteristic of buyer behaviour; maybe a category effect at maximum – which is predicted to be near-fixed. What customers want is the category, and what they buy is one of the *good enough* options in their brand set in mind (Barwise & Meehan, 2004).

Furthermore, if small brands did deviate, they tended towards loyalty deficits, but variety-seeking behaviour only accounted for very few cases. In fact, the majority of deficit loyalty occurrences were seemingly linked to functional differences. Other hypotheses emerged but need further research such as failing brand extensions, pricing effects, category 'generification', corporate effects and restricted distribution. Supermarkets tend to stock some but not all brands of a category (likely their own labels and few others) due to shelf space restrictions (Sharp, 2007). In combination with the often-found high store first loyalty (see East *et al.,* 1995), consumers tend to choose from what is available at the time of their purchase emphasising once more the importance of being listed. Niching was mainly explainable by functional differences or restricted portfolios limiting the mass of customers in a market in their opportunities to buy. In general, the here gathered factors associated to niche and change-of-pace brands are a guide to distinguish poor (yet manageable)

[60] Households do their main shopping every fortnight with top-ups approximately every 1.6 days – numbers found to persist over time (McShane, 2015).
[61] For example, *Tesco* with its star programme and Project Reset (Dorsett, 2016).
[62] By driving share growth or decline.

performance from external and less manageable aspects. It is important for the managers of small brands to understand the reasons behind and incidences of performance deviations. It needs to be noted that the product lines and SKUs of most brands are rather similar. Larger brands typically offer far more options compared to smaller brands (Tanusondjaja *et al.,* 2018). Adjusting the competitive offering with the aim of filling the gaps (Singh *et al.,* 2000) is important to avoid over-dependence on a few segment buyers, to guard shelf-space, increase visibility and respond to demand from retailers and customers alike.

The pattern stationarity *despite* varying product categories and possible targeting strategies helps to understand that marketing mix effects can be separated from competitive analyses. Smaller brands have greater proportions of people who do *not* buy them, and those who do, buy other brands more often, just as Double Jeopardy and the Duplication of Purchase predict. It needs to be noted that this is unlikely to be based on buyers not 'liking' or 'feeling strongly' about the brands in question. Brand repertoires are smaller than marketers would expect (or like them to be). Buyers buy what they know, and they like what they buy (Barnard & Ehrenberg, 1997). Brand knowledge drives behaviour, and attitudes follow suit (e.g. Sharp, 2010; Stocchi, 2014). The many-fold difference in rivals' penetration figures is linked to purchase incidence. As such, reach is not optional. And this is one of the quantifiable implications of this study. Settling for less leads to stagnation (or even decline) as has been demonstrated. Targeting should be inclusive with a broad appeal to generic category benefits, much in the sense of being a brand that is one for all instead of all for one (cf. Barwise & Meehan, 2004).

To conclude, growth objectives are, at best, optimistic. Only two (!) brands grew, and none of the sales changes were predicted by loyalty. The repeat purchase figures hardly changed over the years and were in line with the number of customers. That is, brand size is what it is *because* consumers perceive brands as mostly undifferentiated and substitutable.

## 11.6. Limitations & looking ahead

The current study does not intend to offer a comprehensive 'treatment' for the small brand syndrome but opens up ground for discussion on how small brands (really) grow. Nevertheless, there are a number of limitations worth recognising, permitting considerable scope for further research.

First, several diverse categories were analysed across varying lengths of time between 2008 and 2014 (with a maximum of five consecutive years). The context were FMCGs, and the categories provided by Kantar WorldPanel, limiting the generalisability of the results to other contexts, for example, durables, prescription or subscription markets, perhaps supplied by different panel providers, and maybe comprising more recent data.

Second, results may be sensitive to the product class definition (cf. Kahn *et al.,* 1988). Categories usually comprise a set of close substitutes that offer comparable benefits (Day *et al.,* 1979). The current study utilised categories specified by Kantar and the findings therefore depend on the definition made by the panel provider.

Third, each of the categories comprised the top ten[63] to twenty-four individual brands[64]: of the thirty-six short-term product classes, about 50% listed more than ten labels, and all of the long-term categories did so. The findings can be further quantified by using categories with greater numbers of individually listed brands (Rungie *et al.,* 2004). Future research might also look at the full brand lists (i.e. de-aggregating 'all other' superbrands) to gain an understanding of the performance of even smaller brands.

Fourth, only continuously listed items were analysed. While this allowed investigations on how small brands grew over time, it hampered insights on the performance of temporary items (other than seasonal products such as price-fighter or shorter-term line extensions), discontinued or even newly launched brands. Such cases affect the entire competitive structure of a category because purchases are then re-distributed across a smaller or larger group of brands respectively (Habel *et al.,* 2005A).

Fifth, the idea to use rank-share ratios to identify and define the small brands in a typical category stems from research on the power law. But prior studies were of deductive, theory-first nature. The current research documented and quantified a relative competitive divide between small and large brands in a data-first manner. More research is needed to replicate the identified top five rule in other industries and markets as well as over longer periods of time and perhaps in less stable environments (i.e. emerging markets).

Another limitation concerns wrongly attributed cause-effect relations within the short-term datasets. This emphasises that without appropriately long periods, it is unlikely to detect changes in brand share, the penetration-loyalty relationship and other BPMs. It needs to be

[63] Only *Special instant coffee* listed the top nine brands (see *Section 6.3.2.*).
[64] Panel providers often summarise the rest of the category into an 'all other' aggregation of brands.

noted that observations on the Dirichlet-type nature of the markets were only possible for the fifteen categories where long-term data was available. The issue of category expansion is of equally high interest: confronted with persistent share equilibrium, brands may attempt to grow via attracting new buyers, communicating new uses, increasing the current rate of use or changing prices. Future research could also investigate the extent to which the identified rank-share ratios remain fixed even under more volatile conditions (i.e. developing markets), across different industries (i.e. durables or services) or periods exceeding five consecutive years.

Next, the datasets comprised the FMCG purchases of one geographical market: the UK. Replication across industries and other developed as well as emerging markets is needed to strengthen the generalisability of the developed results. Cross-country replications also allow a deeper understanding of whether the nature of deviations was intrinsic to a brand or the prevailing market factors.

Eighth, this research analysed a number of factors frequently associated with loyalty deviations (e.g. exclusive retailer deals, functional differentiation, usage limiting aspects). But others were omitted because of data restrictions: for example, the current data gave no insights to price differentiation or distributional networks. Further research is needed, and results are likely to draw an even wider picture of how small brands compete. In addition, the extent to which targeting strategies account for the performance deviations of small niche and change-of-pace brands needs further replication.

Another limitation is that the current research largely focussed on discrepancies in the penetration-loyalty relationship. Even though the two metrics correlate highly, it is not intended to imply that purchase frequency is the only way to measure loyalty. *Chapter 2* introduced several other metrics to empirically analyse buyer behaviour.

The buying distribution used in the current thesis comprised light (those who buy once) and heavy buyers (buying five or more times per period) but left out those who purchased two, three or four times, and aggregated all that purchased five or more times into one group. Given that small brands, and especially those with loyalty deficits, were highly light-buyer-dependent, future investigations could separate buying distributions into more than just the lower and upper ends permitting insights into repertoire turn-around times of the buyers of small brands. In addition, authors such as Fader and Schmittlein (1993) and Trinh *et al.* (2014) reported that the Negative Binominal Distribution part of the Dirichlet may show deviations when used to estimate the evolution of behavioural loyalty, especially

when excessively loyal buyers are involved (Ehrenberg, 1988). Based on this, it was proposed to use a Poisson-Log-Normal (PLN). But the PLN is not of closed nature, and hence requires estimation by simulation that may not reflect real-world buying patterns. Future research could use the PLN to estimate the performance of small brands and compare the outcomes to Dirichlet-based studies to determine how much of an overlap there is.

Another promising area of further research could include investigations of prevailing distributional anomalies. The aim is to evaluate whether the distribution-share relationship for (small) brands is equally convex as is reported for their larger rivals, and whether the degree of convexity would then change if distributional restrictions were resolved (see Farris *et al.,* 1989; Reibstein & Farris, 1995; Wilbur & Farris, 2014).

Also unknown is the internal distribution (across all outlets) of store labels. Retailers might not offer all sub-brands in all their stores which affects purchase propensities disproportionally. Remembering that store brands were not analysed in much depth within *Chapters 8* and *10*, the extent to which their restriction to their host depends on the number of outlets of said retailer needs further research. The restriction to their host is technically nothing intrinsic to the brand itself and unlikely to change with time. A quick look showed that very few possessed obvious differentiating features such as a Fairtrade promise or the focus on children.

Lastly, the identified set of conditions likely to contribute to either niche performance or deficit loyalty need further empirical support. Especially deficit loyalty appeared to be the result of many co-variating conditions such as pricing (e.g. premiumisation), restricted distribution, corporate effects or category 'generification'. Further research could use data that comprises information on price and distribution (e.g. retailer scanner data). And regarding corporate effects, Henfrey (2018) has and currently analyses the effects of corporate brands on consumer loyalty in FMCG categories, and future research could investigate the differences and similarities in the competitive performance of small portfolio brands as opposed to small individual brands.

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# APPENDICES

# Appendix I - Detailed findings on rank-size ratios

## (1) Cross-sectional findings across MSoD (Y1)

***Table 47: Rank-size ratios, category penetration & purchase frequency (Y1)***

| **High penetration (≥47%, B)** | | | | **Low penetration (≤47%, B)** | | | |
|---|---|---|---|---|---|---|---|
| Brands ranked | Av. market share (%) | Relative difference | | Brands ranked | Av. market share (%) | Relative difference | |
| 1 | 21 | | | 1 | 23 | | |
| 2 | 12 | 0.5 | | 2 | 14 | 0.6 | |
| 3 | 9 | 0.8 | | 3 | 11 | 0.8 | |
| 4 | 8 | 0.8 | | 4 | 7 | 0.6 | |
| 5 | 6 | 0.8 | 0.7 | 5 | 6 | 0.9 | 0.7 |
| 6 | 5 | 0.9 | | 6 | 6 | 0.9 | |
| 7 | 4 | 0.8 | | 7 | 4 | 0.8 | |
| 8 | 4 | 0.9 | | 8 | 4 | 0.9 | |
| 9 | 3 | 0.8 | | 9 | 3 | 0.8 | |
| 10 | 3 | 0.9 | | 10 | 3 | 0.9 | |
| 11 | 2 | 0.9 | | 11 | 2 | 0.9 | |
| 12 | 2 | 0.9 | | 12 | 2 | 0.8 | |
| 13 | 2 | 0.9 | | 13 | 2 | 0.8 | |
| 14 | 2 | 0.9 | 0.9 | 14 | 1 | 0.8 | 0.8 |
| Average | 6 | 0.8 | | Average | 6 | 0.8 | |

t = 1 year; 19 categories (N = 296 brands) t = 1 year; 17 categories (N = 189 brands)
Including private labels; excluding 'all others' brand
Source: Kantar WorldPanel

| **High purchase frequency (≥10, B)** | | | | **Low purchase frequency(≤10, B)** | | | |
|---|---|---|---|---|---|---|---|
| Brands ranked | Av. market share (%) | Relative difference | | Brands ranked | Av. market share (%) | Relative difference | |
| 1 | 20 | | | 1 | 23 | | |
| 2 | 12 | 0.6 | | 2 | 13 | 0.6 | |
| 3 | 10 | 0.9 | | 3 | 9 | 0.7 | |
| 4 | 7 | 0.7 | | 4 | 8 | 0.8 | |
| 5 | 6 | 0.9 | 0.7 | 5 | 6 | 0.8 | 0.7 |
| 6 | 5 | 0.8 | | 6 | 5 | 0.9 | |
| 7 | 4 | 0.8 | | 7 | 4 | 0.8 | |
| 8 | 4 | 0.9 | | 8 | 4 | 0.9 | |
| 9 | 3 | 0.8 | | 9 | 3 | 0.8 | |
| 10 | 3 | 0.9 | | 10 | 3 | 0.9 | |
| 11 | 2 | 0.9 | | 11 | 2 | 0.9 | |
| 12 | 2 | 0.9 | | 12 | 2 | 0.9 | |
| 13 | 2 | 0.9 | | 13 | 2 | 0.8 | |
| 14 | 2 | 1.0 | 0.9 | 14 | 1 | 0.8 | 0.8 |
| Average | 6 | 0.8 | | Average | 6 | 0.8 | |

t = 1 year; 12 categories (N = 162 brands) t = 1 year; 24 categories (N = 323 brands)
Including private labels; excluding 'all others' brand
Source: Kantar WorldPanel

## *Table 48: Rank-size ratios & category concentration (Y1)*

Adapted after Caves and Porter (1978)

| **Low concentration (0-55%, C)** | | | | | **Medium concentr. (55.1-77.5%, C)** | | | | | **High concentration (77.6-100%, C)** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brands ranked | Av. share top 4 (%) | Relative difference | | Average | Brands ranked | Av. share top 4 (%) | Relative difference | | Average | Brands ranked | Av. share top 4 (%) | Relative difference | | Average |
| 1 | 15 | | | | 1 | 27 | | | | 1 | 43 | | | |
| 2 | 10 | 0.7 | | | 2 | 15 | 0.6 | | | 2 | 20 | 0.5 | | |
| 3 | 8 | 0.8 | | | 3 | 11 | 0.7 | | | 3 | 12 | 0.6 | | |
| 4 | 6 | 0.8 | | | 4 | 7 | 0.7 | | | 4 | 5 | 0.4 | | |
| 5 | 5 | 0.9 | 0.8 | (rank 1-5) | 5 | 5 | 0.7 | 0.7 | (rank 1-5) | 5 | 4 | 0.8 | 0.6 | (rank 1-5) |
| 6 | 5 | 0.9 | | | 6 | 4 | 0.8 | | | 6 | 3 | 0.6 | | |
| 7 | 4 | 0.9 | | | 7 | 4 | 0.9 | | | 7 | 2 | 0.8 | | |
| 8 | 3 | 0.8 | | | 8 | 3 | 0.8 | | | 8 | 1 | 0.7 | | |
| 9 | 3 | 0.9 | | | 9 | 2 | 0.8 | | | 9 | 1 | 0.8 | | |
| 10 | 3 | 0.9 | | | 10 | 2 | 0.9 | | | 10 | 1 | 0.9 | | |
| 11 | 2 | 1.0 | | | 11 | 2 | 1.0 | | | 11 | 1 | 0.7 | | |
| 12 | 2 | 0.9 | | | 12 | 2 | 0.9 | | | 12 | 0.4 | 0.5 | | |
| 13 | 2 | 0.8 | | | 13 | 1 | 0.8 | | | 13 | 0.3 | 0.7 | | |
| 14 | 2 | 0.9 | 0.9 | (rank 6-14) | 14 | 1 | 0.8 | 0.8 | (rank 6-14) | 14 | 0.1 | 0.4 | 0.7 | (rank 6-14) |
| Average | 5 | 0.8 | | | Average | 6 | 0.8 | | | Average | 7 | 0.6 | | |

t = 1 year; 18 categories (N = 238 brands)
Including private labels; excluding 'all others' brand

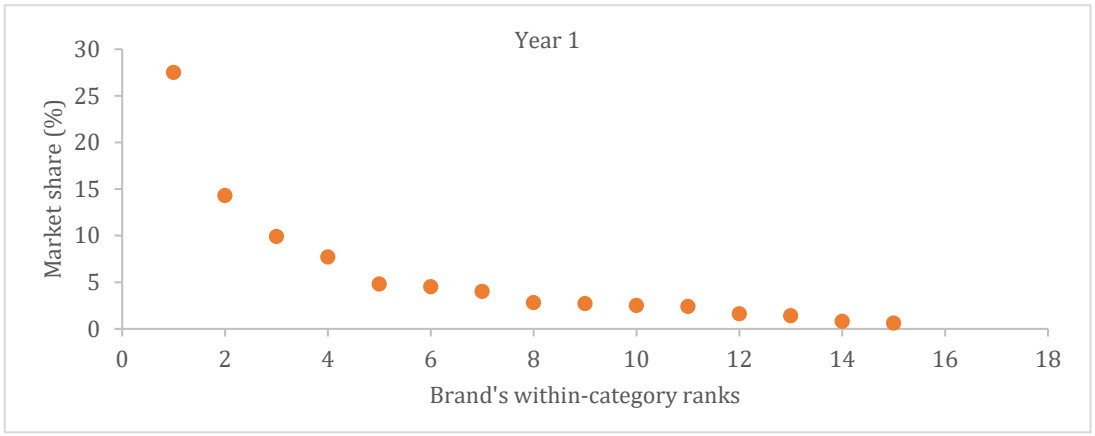
t = 1 year; 14 categories (N = 201 brands)

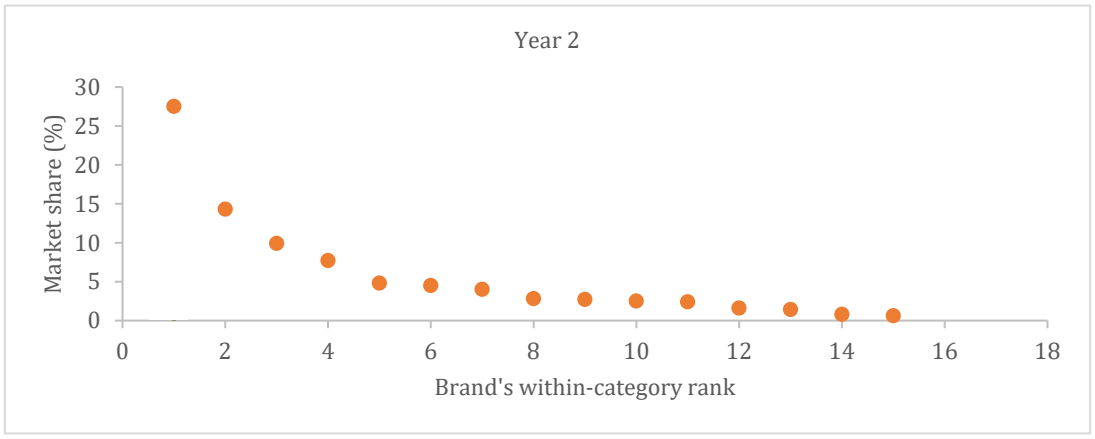
t = 1 year; 4 categories (N = 46 brands)
Source: Kantar WorldPanel

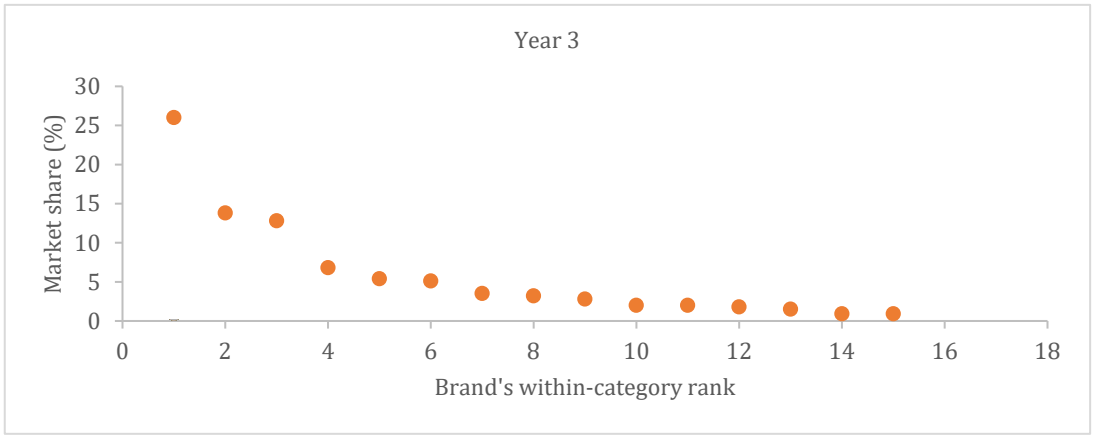
## (2) Long run findings in the *Butter* category (Y1)

***Figure 7: Achieved market share by rank (Y1-5)***

t = 5 years; *Butter* category; Source: Kantar WorldPanel

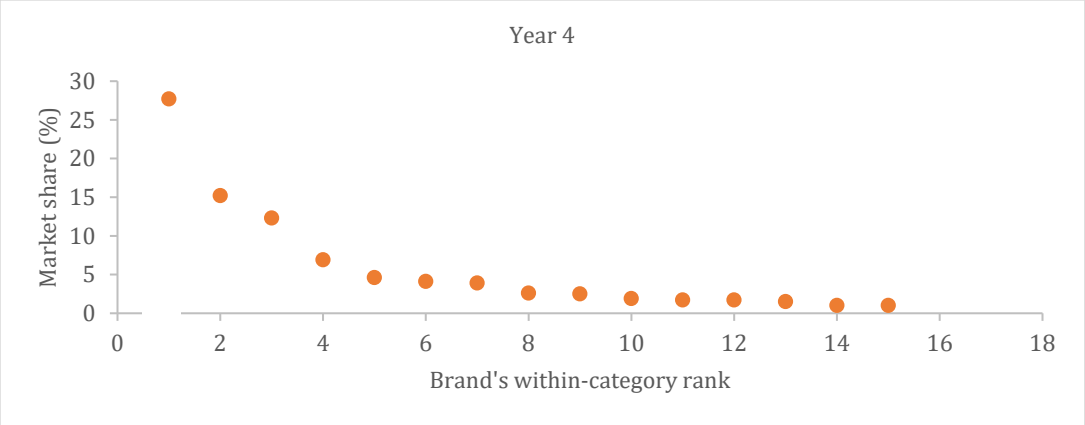


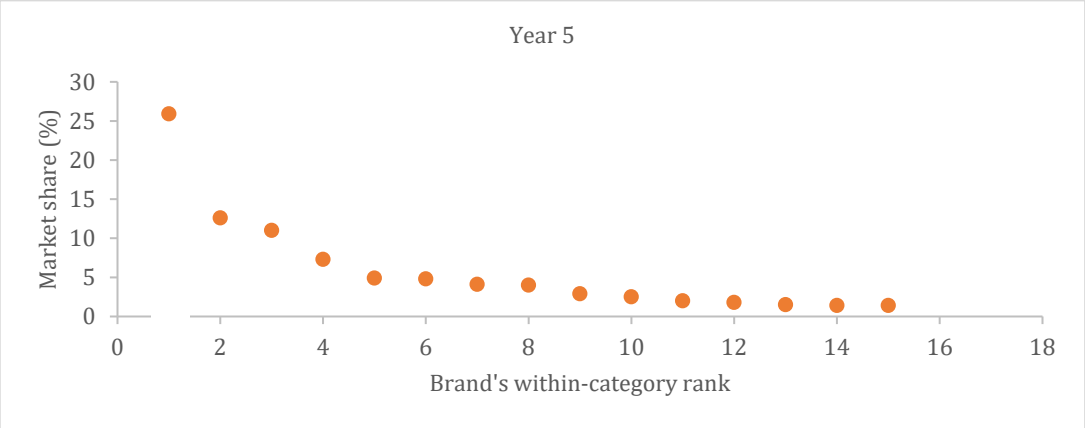




**(Figure continued on next page)**

**(Figure 7 continued)**

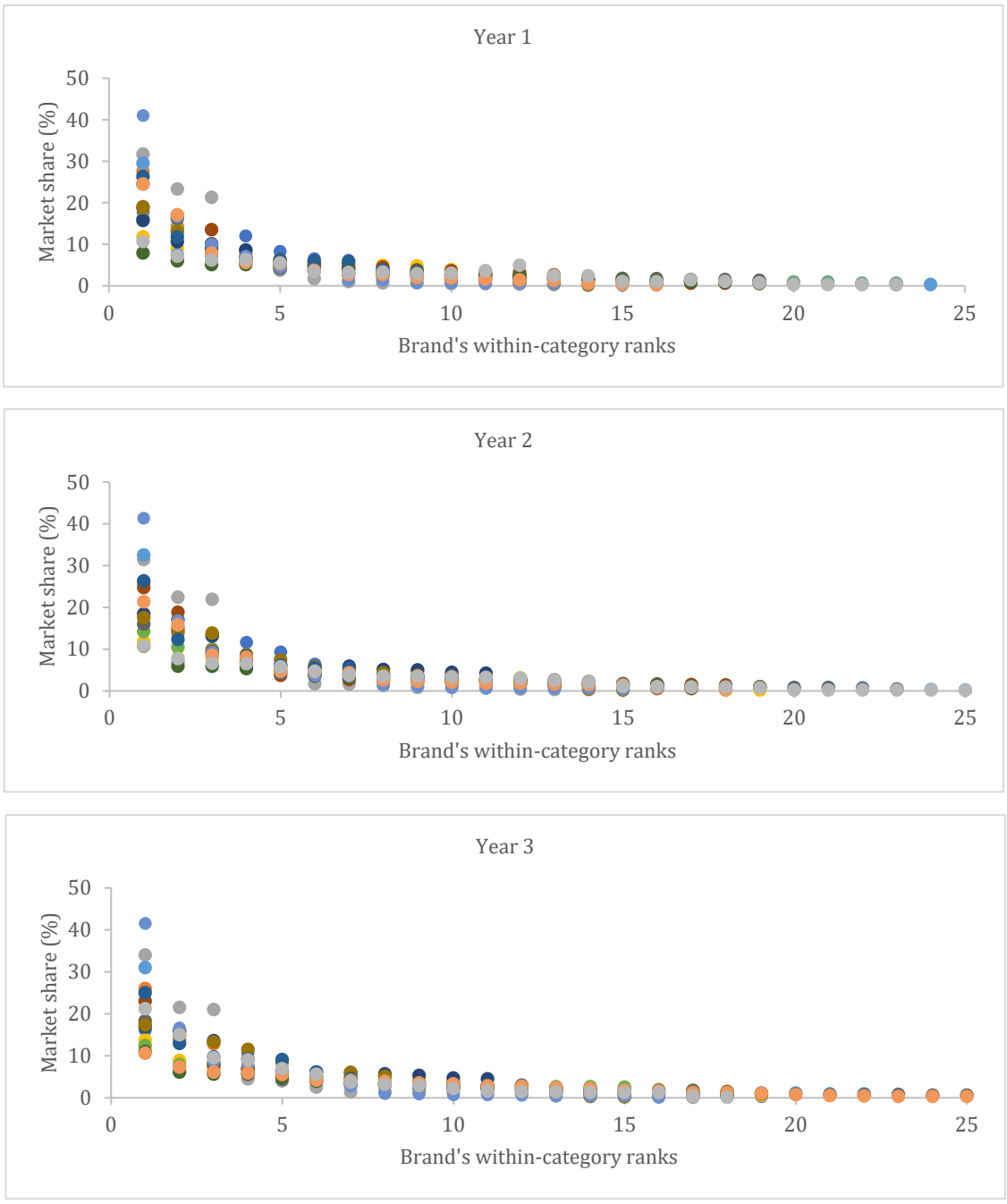


## (3) Long run findings across *MSoD* (Y1-5)

***Figure 8: Achieved market share by rank (Y1-5)***

t = 5 years; 15 categories; Source: Kantar WorldPanel

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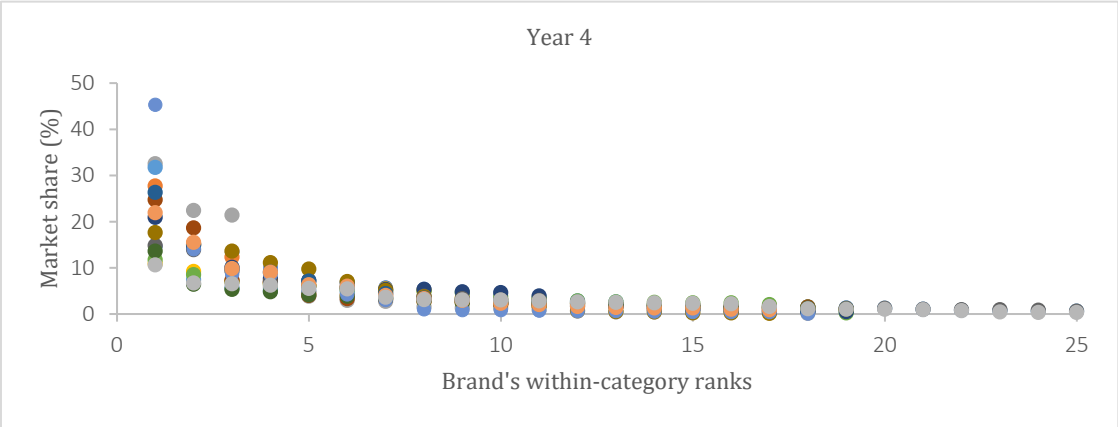
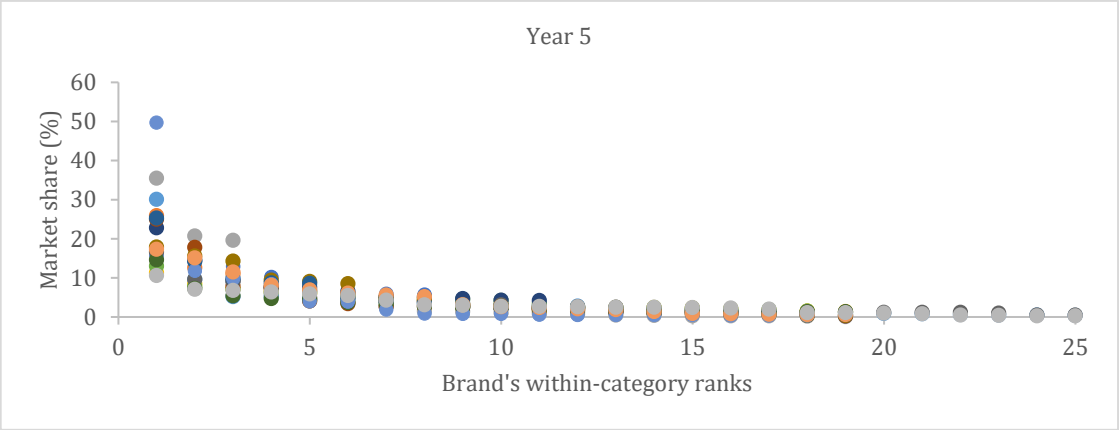
**(Figure 8 continued)**



## *Table 49: Over time rank-size ratios, category buying & concentration (Y1-5)*

**High penetration (≥69%, B)**

| Brands ranked | Av. market share (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share Y1 to Y5 | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 21 | 21 | 21 | 21 | 21 | 0 | 21 | | |
| 2 | 13 | 13 | 13 | 13 | 12 | -1 | 12 | 0.6 | |
| 3 | 10 | 10 | 9 | 9 | 9 | -1 | 9 | 0.7 | |
| 4 | 8 | 7 | 7 | 8 | 8 | 0 | 8 | 0.7 | |
| 5 | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | 0.7 (rank 1-5) |
| 6 | 5 | 5 | 5 | 5 | 5 | 0 | 5 | 0.8 | |
| 7 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.8 | |
| 8 | 3 | 3 | 3 | 4 | 4 | 1 | 3 | 0.8 | |
| 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 2 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 11 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.8 | |
| 14 | 1 | 1 | 1 | 2 | 2 | 0 | 1 | 0.8 | 0.8 (rank 6-14) |
| Average (rank 1-14) | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | |

t = 5 years; 9 categories (N = 161 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

**Low penetration (≤69%, B)**

| Brands ranked | Av. market share (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share Y1 to Y5 | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 22 | 22 | 22 | 23 | 23 | 1 | 22 | | |
| 2 | 14 | 14 | 13 | 14 | 14 | 0 | 14 | 0.6 | |
| 3 | 11 | 12 | 12 | 11 | 11 | 0 | 11 | 0.7 | |
| 4 | 6 | 7 | 7 | 7 | 7 | 1 | 7 | 0.7 | |
| 5 | 5 | 5 | 6 | 6 | 6 | 1 | 6 | 0.8 | 0.7 (rank 1-5) |
| 6 | 4 | 4 | 5 | 5 | 6 | 2 | 5 | 0.8 | |
| 7 | 3 | 4 | 4 | 4 | 4 | 1 | 4 | 0.8 | |
| 8 | 3 | 3 | 4 | 3 | 4 | 1 | 3 | 0.8 | |
| 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 0.9 | |
| 11 | 2 | 2 | **2** | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 1 | 2 | 2 | 1 | 2 | 0 | 1 | 0.8 | |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.8 | 0.8 (rank 6-14) |
| Average (rank 1-14) | 6 | 6 | 6 | 6 | 6 | 1 | 6 | 0.8 | |

t = 5 years; 6 categories (N = 103 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

**(Table continued on next page)**

**(Table 49 continued)**

**High purchase frequency (≥10, W)**

| Brands ranked | Av. market share (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share Y1 to Y5 | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 21 | 20 | 20 | 20 | 20 | 0 | 20 | | |
| 2 | 13 | 12 | 12 | 13 | 12 | -1 | 12 | 0.6 | |
| 3 | 11 | 11 | 11 | 11 | 10 | 0 | 11 | 0.7 | |
| 4 | 7 | 7 | 7 | 7 | 7 | 0 | 7 | 0.7 | |
| 5 | 5 | 6 | 6 | 6 | 6 | 1 | 6 | 0.8 | 0.7 (rank 1-5) |
| 6 | 4 | 5 | 5 | 5 | 5 | 1 | 5 | 0.8 | |
| 7 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.8 | |
| 8 | 3 | 3 | 3 | 3 | 4 | 0 | 3 | 0.8 | |
| 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 11 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.8 | |
| 14 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 0.8 | 0.8 (rank 6-14) |
| Average (rank 1-14) | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | |

t = 5 years; 6 categories (N = 102 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

**Low purchase frequency (≤10, W)**

| Brands ranked | Av. market share (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share Y1 to Y5 | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 22 | 22 | 22 | 23 | 23 | 1 | 22 | | |
| 2 | 13 | 14 | 13 | 13 | 13 | -1 | 13 | 0.6 | |
| 3 | 9 | 10 | 10 | 9 | 9 | 0 | 10 | 0.7 | |
| 4 | 7 | 7 | 8 | 8 | 8 | 1 | 8 | 0.7 | |
| 5 | 5 | 6 | 6 | 6 | 6 | 1 | 6 | 0.8 | 0.7 (rank 1-5) |
| 6 | 4 | 5 | 5 | 5 | 5 | 1 | 5 | 0.8 | |
| 7 | 4 | 4 | 4 | 4 | 4 | 1 | 4 | 0.8 | |
| 8 | 3 | 3 | 4 | 4 | 4 | 1 | 3 | 0.8 | |
| 9 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | 0.9 | |
| 10 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 0.9 | |
| 11 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 1 | 2 | 2 | 2 | 2 | 0 | 2 | 0.8 | |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.8 | 0.8 (rank 6-14) |
| Average (rank 1-14) | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | |

t = 5 years; 9 categories (N = 162 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

**(Table continued on next page)**

**(Table 49 continued)**

**Low concentration (0-55%, C)**

| Brands ranked | Av. share top 4 (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share top 4 (%) | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 14 | 14 | 14 | 13 | 14 | 0 | 14 | | |
| 2 | 10 | 10 | 10 | 10 | 9 | -1 | 10 | 0.7 | |
| 3 | 8 | 9 | 8 | 8 | 8 | 0 | 8 | 0.8 | |
| 4 | 7 | 7 | 7 | 7 | 7 | 0 | 7 | 0.8 | |
| 5 | 5 | 6 | 6 | 6 | 6 | 1 | 6 | 0.9 | 0.8 (rank 1-5) |
| 6 | 4 | 5 | 5 | 5 | 6 | 1 | 5 | 0.8 | |
| 7 | 4 | 4 | 4 | 4 | 5 | 1 | 4 | 0.8 | |
| 8 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.9 | |
| 9 | 3 | 4 | 4 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 11 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 12 | 2 | 3 | 3 | 2 | 2 | 0 | 2 | 0.9 | |
| 13 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 14 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | 0.9 (rank 6-14) |
| Average (rank 1-14) | 5 | 5 | 5 | 5 | 5 | 0.3 | 5 | 0.9 | |

t = 5 years; 6 categories (N = 109 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

**Medium concentr. (55.1-77.5%, C)**

| Brands ranked | Av. share top 4 (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share top 4 (%) | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 26 | 26 | 25 | 27 | 26 | 0 | 26 | | |
| 2 | 14 | 14 | 14 | 14 | 14 | -1 | 14 | 0.5 | |
| 3 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 0.7 | |
| 4 | 7 | 7 | 8 | 8 | 8 | 1 | 8 | 0.8 | |
| 5 | 5 | 6 | 6 | 6 | 6 | 0 | 6 | 0.8 | 0.7 (rank 1-5) |
| 6 | 5 | 5 | 5 | 5 | 5 | 0 | 5 | 0.9 | |
| 7 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.8 | |
| 8 | 3 | 3 | 3 | 3 | 4 | 1 | 3 | 0.8 | |
| 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0.9 | |
| 10 | 2 | 2 | 3 | 2 | 3 | 0 | 2 | 0.8 | |
| 11 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.9 | |
| 12 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.8 | |
| 13 | 1 | 1 | 1 | 2 | 2 | 0 | 1 | 0.8 | |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.8 | 0.8 (rank 6-14) |
| Average (rank 1-14) | 6 | 6 | 6 | 6 | 6 | 0.3 | 6 | 0.8 | |

t = 5 years; 8 categories (N = 141 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

**(Table continued on next page)**

**(Table 49 continued)**

**High concentration (77.6-100%, C)**

| Brands ranked | Av. share top 4 (%) Y1 | Y2 | Y3 | Y4 | Y5 | Abs. diff. Y5-Y1 | Av. share top 4 (%) | Relative difference | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 32 | 31 | 34 | 33 | 36 | 4 | 33 | | |
| 2 | 23 | 22 | 22 | 22 | 21 | -3 | 22 | 0.7 | |
| 3 | 21 | 22 | 21 | 21 | 20 | -2 | 21 | 1.0 | |
| 4 | 6 | 5 | 5 | 6 | 6 | 0 | 5 | 0.3 | |
| 5 | 4 | 4 | 4 | 4 | 4 | 0 | 4 | 0.7 | 0.7 (rank 1-5) |
| 6 | 2 | 2 | 3 | 3 | 4 | 2 | 3 | 0.6 | |
| 7 | 1 | 2 | 1 | 3 | 3 | 2 | 2 | 0.7 | |
| 8 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 0.7 | |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | |
| 11 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.8 | |
| 12 | 0.4 | 0.4 | 1 | 1 | 1 | 0 | 1 | 0.8 | |
| 13 | 0.3 | 0.3 | 0.4 | 0.4 | 1 | 0 | 0 | 0.6 | |
| 14 | 0.1 | 0.3 | 0.4 | 0.4 | 0.4 | 0 | 0 | 0.8 | 0.8 (rank 6-14) |
| Average (rank 1-14) | 7 | 7 | 7 | 7 | 7 | 0.5 | 7 | 0.7 | |

t = 5 years; 1 category (N = 14 brands) Source: Kantar WorldPanel
Including private labels; excluding 'all others' brand

# Appendix II - Loyalty performance & share-loyalty correlations

## (1) Loyalty outcomes of small brands (Y1)

### *Table 50: Small brand loyalty performance (Y1)*

| **Excess loyalty brands (N = 14)** | | Market | Penetration (b, %) | | | | Purchase frequency (w) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | share (%) | O | T | O-**T** | O-**T** (%) | O | T | O-**T** | O-**T** (%) |
| Margarine | Clover | 6 | 14 | 16 | -2 | -15 | 5.0 | 4.3 | 1 | 18 |
| Toilet tissue | Nicky | 4 | 15 | 20 | -5 | -24 | 4.8 | 3.7 | 1 | 32 |
| Dogfood (dry) | Hi-Life | 3 | 1 | 1 | 0 | -29 | 5.3 | 3.8 | 2 | 41 |
| Kitchen towels | Nicky | 3 | 5 | 6 | -1 | -11 | 2.8 | 2.5 | 0 | 12 |
| Margarine | Vitalite | 3 | 6 | 7 | -2 | -23 | 5.2 | 4.0 | 1 | 30 |
| Facial skin care (F) | L'Oreal Dermo Exp. | 2 | 4 | 5 | -1 | -11 | 2.1 | 1.9 | 0 | 12 |
| Pizzameals | LA Diner | 2 | 3 | 4 | 0 | -12 | 3.7 | 3.3 | 0 | 14 |
| Premium ice crem | Swedish Glace | 2 | 1 | 2 | -1 | -49 | 4.4 | 2.2 | 2 | 95 |
| Non-medicated | Montagne Jeunesse | 1 | 2 | 2 | 0 | -16 | 2.5 | 2.1 | 0 | 18 |
| Margarine | Pure Dairy Free | 1 | 3 | 4 | -1 | -22 | 5.1 | 3.9 | 1 | 28 |
| Non-medicated | The Sanctuary | 1 | 1 | 2 | 0 | -21 | 2.7 | 2.1 | 1 | 27 |
| Margarine | Benecol | 1 | 3 | 3 | -1 | -22 | 5.0 | 3.9 | 1 | 27 |
| Kitchen towels | Handy | 1 | 2 | 2 | 0 | -18 | 3.0 | 2.5 | 1 | 22 |
| Fabrics | Ecover | 1 | 2 | 2 | 0 | -12 | 3.0 | 2.7 | 0 | 13 |
| **Average excess loyalty brands** | | 2 | 4 | 5 | -1 | -20 | 3.9 | 3.1 | 1 | 28 |

| **DJ brands (N = 37)** | | Market | Penetration (b, %) | | | | Purchase frequency (w) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | share (%) | O | T | O-**T** | O-**T** (%) | O | T | O-**T** | O-**T** (%) |
| Fabrics | Fairy | 6 | 12 | 13 | **-1** | -8 | 3.1 | 2.8 | **0** | 9 |
| Shampoo & cond. | Dove | 6 | 1 | 1 | **0** | -7 | 1.7 | 1.6 | **0** | 7 |
| Shampoo & cond. | Pantene Pro V | 6 | 1 | 1 | **0** | 4 | 1.5 | 1.5 | **0** | -4 |
| Cooking sauce | Blue Dragon | 6 | 14 | 15 | **-1** | -7 | 3.5 | 3.2 | **0** | 8 |
| Cooking sauce | Pataks | 6 | 16 | 15 | **1** | 5 | 3.1 | 3.2 | **0** | -5 |
| Dogfood (adult) | Winalot | 5 | 5 | 4 | **0** | 2 | 5.4 | 5.5 | **0** | -2 |
| Shampoo | Tresemme | 5 | 4 | 4 | **0** | 8 | 1.5 | 1.6 | **0** | -7 |
| Laundry | Fairy | 5 | 12 | 12 | **0** | -1 | 2.6 | 2.6 | **0** | 1 |
| Cooking sauce | Uncle Bens | 5 | 12 | 13 | **-1** | -7 | 3.4 | 3.2 | **0** | 7 |
| Shampoo | Timotei | 4 | 3 | 3 | **0** | -2 | 1.6 | 1.6 | **0** | 2 |
| Shampoo | Alberto VO5 Advance | 4 | 3 | 3 | **0** | 1 | 1.5 | 1.6 | **0** | -1 |
| Shampoo | Dove | 4 | 3 | 3 | **0** | 2 | 1.5 | 1.6 | **0** | -2 |
| Cooking sauce | Chicken Tonight | 4 | 12 | 11 | **1** | 10 | 2.8 | 3.1 | **0** | -9 |
| Facial skin care (F) | Garnier Skin Naturals | 4 | 8 | 7 | **1** | 9 | 1.8 | 1.9 | **0** | -8 |
| Biscuits | Tunnocks | 4 | 18 | 17 | **1** | 6 | 3.3 | 3.5 | **0** | -6 |
| Non-medicated | Garnier Skin Naturals | 3 | 5 | 4 | **0** | 9 | 2.0 | 2.2 | **0** | -8 |
| Non-medicated | Johnsons | 3 | 4 | 4 | **0** | 1 | 2.1 | 2.2 | **0** | -1 |
| Dogfood (wet) | Chappie | 3 | 2 | 2 | **0** | 1 | 6.6 | 6.7 | **0** | -1 |
| Instant coffee | Carte Noire | 3 | 4 | 4 | **0** | 6 | 2.9 | 3.1 | **0** | -5 |
| Facial tissues | Tempo | 2 | 4 | 4 | **0** | 4 | 2.5 | 2.6 | **0** | -4 |
| Juices | Innocent | 2 | 7 | 8 | **0** | -6 | 5.9 | 5.6 | **0** | 6 |
| Non-medicated | L'Oreal Dermo Exp. | 2 | 3 | 3 | **0** | -6 | 2.3 | 2.1 | **0** | 7 |
| Facial skin care (F) | Johnsons | 2 | 4 | 4 | **0** | 1 | 1.8 | 1.9 | **0** | -1 |
| Deodorant (F) | Mum | 2 | 3 | 3 | **0** | 4 | 1.9 | 2.0 | **0** | -4 |
| Razor (F) | Personna | 2 | 0 | 0 | **0** | 4 | 1.3 | 1.3 | **0** | -4 |
| Kitchen towels | Regina | 2 | 5 | 4 | **0** | 10 | 2.3 | 2.5 | **0** | -9 |

**Table continued on next page**

**(Table 50 continued)**

| **DJ brands continued** | | Market | Penetration (b, %) | | | | Purchase frequency (w) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | share (%) | O | T | O-**T** | O-**T** (%) | O | T | O-**T** | O-**T** (%) |
| Facial skin care (M) | The Real Shaving Co | 2 | 0 | 0 | **0** | 3 | 1.4 | 1.5 | **0** | -3 |
| Margarine | Willow | 2 | 6 | 6 | **0** | 1 | 3.9 | 4.0 | **0** | -1 |
| Facial skin care (M) | Bayliss+Harding | 2 | 0 | 0 | **0** | 7 | 1.4 | 1.5 | **0** | -7 |
| Beer | John Smths Ex.Smooth | 2 | 1 | 1 | **0** | 4 | 1.4 | 1.5 | **0** | -4 |
| Instant coffee | Maxwell House Classic | 2 | 3 | 3 | **0** | 7 | 2.8 | 3.0 | **0** | -7 |
| Instant DeCaf | Clipper Fairtrade | 2 | 0 | 0 | **0** | -8 | 3.1 | 2.8 | **0** | 9 |
| Razor (M) | King Of Shaves | 1 | 1 | 1 | **0** | 4 | 1.5 | 1.5 | **0** | -4 |
| Fabrics | Easy | 1 | 2 | 2 | **0** | 7 | 2.5 | 2.7 | **0** | -6 |
| Facial tissues | Viscount | 1 | 1 | 1 | **0** | -7 | 2.7 | 2.5 | **0** | 8 |
| Facial tissues | Countess | 1 | 1 | 1 | **0** | -6 | 2.7 | 2.5 | **0** | 6 |
| Hot milk drink | Belight | 0 | 0 | 0 | **0** | 8 | 2.6 | 2.8 | **0** | -8 |
| **Average DJ brand** | | 3 | 5 | 5 | **0** | 2 | 2.6 | 2.6 | **0** | -1 |

| **Deficit loyalty brands (N = 74)** | | Market | Penetration (b, %) | | | | Purchase frequency (w) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | share (%) | O | T | O-**T** | O-**T** (%) | O | T | O-**T** | O-**T** (%) |
| Margarine | I C B I N B | 6 | 21 | 17 | **4** | 25 | 3.4 | 4.3 | **-1** | -20 |
| Butter | Kerrygold | 5 | 12 | 9 | **3** | 28 | 3.4 | 4.4 | **-1** | -22 |
| Deodorant (F) | Vaseline | 4 | 5 | 5 | **1** | 12 | 1.8 | 2.0 | **0** | -11 |
| Juices | Princes | 4 | 20 | 12 | **8** | 66 | 3.5 | 5.7 | **-2** | -40 |
| Instant Decaf | Carte Noire | 4 | 1 | 1 | **0** | 16 | 2.5 | 2.9 | **0** | -14 |
| Biscuits | Burtons | 4 | 22 | 17 | **5** | 30 | 2.7 | 3.5 | **-1** | -23 |
| Chocolate ice cream | Nestle Caramac | 4 | 2 | 1 | **1** | 46 | 1.3 | 1.9 | **-1** | -32 |
| Deodorant (M) | Nivea | 4 | 5 | 4 | **1** | 37 | 1.6 | 2.2 | **-1** | -27 |
| Dogfood (dry) | Iams | 3 | 1 | 1 | **0** | 11 | 3.4 | 3.8 | **0** | -10 |
| Special instant coff. | Kruger | 3 | 1 | 0 | **0** | 25 | 2.4 | 3.0 | **-1** | -20 |
| Shampoo & cond. | Herbal Essences | 3 | 1 | 0 | **0** | 22 | 1.3 | 1.5 | **0** | -18 |
| Pasta sauce | Napolina | 3 | 4 | 3 | **1** | 26 | 2.1 | 2.6 | **-1** | -21 |
| Non-medicated | Johnsons Baby | 3 | 4 | 4 | **0** | 13 | 1.9 | 2.1 | **0** | -11 |
| Non-medicated | E45 | 3 | 5 | 4 | **1** | 31 | 1.6 | 2.1 | **-1** | -24 |
| Biscuits | Blue Riband | 3 | 19 | 14 | **5** | 32 | 2.6 | 3.4 | **-1** | -24 |
| Catfood (wet) | Kit-E-Kat | 3 | 1 | 1 | **0** | 75 | 4.5 | 7.9 | **-3** | -43 |
| Cappuccino | Douwe Egbert | 3 | 1 | 1 | **0** | 46 | 1.8 | 2.7 | **-1** | -32 |
| Instant Decaf | Douwe Egbert | 3 | 1 | 1 | **0** | 33 | 2.2 | 2.9 | **-1** | -25 |
| Instant coffee | Rappor | 3 | 5 | 4 | **2** | 41 | 2.2 | 3.1 | **-1** | -29 |
| Juices | Ocean Spray | 3 | 11 | 8 | **3** | 34 | 4.2 | 5.6 | **-1** | -25 |
| Toilet tissue | Cushelle | 2 | 19 | 14 | **5** | 36 | 2.6 | 3.5 | **-1** | -26 |
| Razor (F) | Super-Max | 2 | 1 | 0 | **0** | 13 | 1.2 | 1.3 | **0** | -11 |
| Beer | Hobgoblin Strong Ale | 2 | 1 | 1 | **0** | 15 | 1.3 | 1.5 | **0** | -13 |
| Deodorant (F) | Dove Go Fresh | 2 | 4 | 3 | **1** | 47 | 1.4 | 2.0 | **-1** | -32 |
| Catfood (adult) | Kit-E-Kat | 2 | 1 | 1 | **0** | 74 | 4.0 | 6.9 | **-3** | -43 |
| Non-medicated | Dove | 2 | 4 | 3 | **1** | 31 | 1.6 | 2.1 | **-1** | -24 |
| Deodorant (F) | Rightguard | 2 | 3 | 3 | **0** | 17 | 1.7 | 2.0 | **0** | -15 |
| Deodorant (M) | Sanex | 2 | 3 | 2 | **1** | 28 | 1.7 | 2.1 | **0** | -22 |
| Catfood (wet) | Butchers Classic | 2 | 1 | 0 | **0** | 34 | 5.8 | 7.8 | **-2** | -26 |
| Beer | Old Speckled Hen | 2 | 1 | 1 | **0** | 14 | 1.3 | 1.5 | **0** | -12 |
| Cooking sauce | Old El Paso | 2 | 6 | 6 | **1** | 12 | 2.7 | 3.0 | **0** | -11 |
| Facial skin care (M) | Dove Men+Care | 2 | 0 | 0 | **0** | 69 | 0.9 | 1.5 | **-1** | -41 |
| Facial tissues | Velvet | 2 | 4 | 3 | **1** | 53 | 1.7 | 2.5 | **-1** | -35 |

**Table continued on next page**

**(Table 50 continued)**

| **Deficit loyalty continued** | | Market | Penetration (b, %) | | | | Purchase frequency (w) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | share (%) | 0 | T | 0-**T** | 0-**T** (%) | 0 | T | 0-**T** | 0-**T** (%) |
| Instant coffee | Maxwell House | 2 | 3 | 3 | **1** | 23 | 2.5 | 3.0 | **-1** | -19 |
| Deodorant (F) | Mitchum | 2 | 3 | 2 | **0** | 22 | 1.6 | 2.0 | **0** | -18 |
| Deodorant (M) | Vaseline | 2 | 2 | 2 | **1** | 35 | 1.6 | 2.1 | **-1** | -26 |
| Cappuccino | Cafe Classic | 2 | 1 | 0 | **0** | 31 | 2.0 | 2.6 | **-1** | -24 |
| Instant coffee | Red Mountain | 2 | 3 | 2 | **1** | 40 | 2.2 | 3.0 | **-1** | -29 |
| Pizzameals | Goodfellas Takeaway | 2 | 4 | 2 | **2** | 74 | 1.9 | 3.2 | **-1** | -42 |
| Juices | Copella | 2 | 7 | 5 | **2** | 43 | 3.8 | 5.5 | **-2** | -30 |
| Toilet tissue | Regina | 1 | 10 | 8 | **2** | 18 | 2.8 | 3.4 | **-1** | -16 |
| Beer | San Miguel Lager | 1 | 1 | 0 | **0** | 16 | 1.2 | 1.4 | **0** | -14 |
| Butter | President | 1 | 3 | 3 | **0** | 11 | 3.8 | 4.2 | **0** | -10 |
| Premium ice cream | Fredericks Cadburys | 1 | 2 | 2 | **0** | 22 | 1.8 | 2.2 | **0** | -18 |
| Juices | Don Simon | 1 | 6 | 5 | **2** | 36 | 4.0 | 5.4 | **-1** | -26 |
| Facial skin care (M) | Montagne Jeunesse | 1 | 0 | 0 | **0** | 16 | 1.3 | 1.5 | **0** | -14 |
| Beer | Kronenbourg 1664 | 1 | 0 | 0 | **0** | 11 | 1.3 | 1.4 | **0** | -10 |
| Beer | Carlsberg Export | 1 | 0 | 0 | **0** | 45 | 1.4 | 2.0 | **-1** | -31 |
| Beer | Guinness Draught | 1 | 1 | 0 | **0** | 68 | 1.2 | 2.0 | **-1** | -40 |
| Facial tissues | Paloma | 1 | 3 | 2 | **1** | 43 | 1.8 | 2.5 | **-1** | -30 |
| Beer | Banks Bitter | 1 | 0 | 0 | **0** | 57 | 1.3 | 2.0 | **-1** | -36 |
| Beer | Bavaria Lager | 1 | 0 | 0 | **0** | 26 | 1.6 | 2.0 | **0** | -21 |
| Beer | Crabbies Ginger Beer | 1 | 0 | 0 | **0** | 67 | 1.2 | 2.0 | **-1** | -40 |
| Beer | Spitfire Kentish Ale | 1 | 0 | 0 | **0** | 73 | 1.2 | 2.0 | **-1** | -42 |
| Toilet tissue | Nouvelle | 1 | 10 | 6 | **4** | 75 | 1.9 | 3.3 | **-1** | -44 |
| Non-medicated | Palmers | 1 | 2 | 1 | **0** | 18 | 1.8 | 2.1 | **0** | -15 |
| Beer | Becks Lager | 1 | 0 | 0 | **0** | 68 | 1.2 | 2.0 | **-1** | -41 |
| Facial tissues | Cherish | 1 | 2 | 1 | **0** | 31 | 1.9 | 2.5 | **-1** | -24 |
| Beer | Peroni Lager | 1 | 0 | 0 | **0** | 74 | 1.2 | 2.0 | **-1** | -42 |
| Instant Decaf | Percol Ftrd. | 1 | 0 | 0 | **0** | 51 | 1.9 | 2.8 | **-1** | -34 |
| Butter | Yeo Valley Organic | 1 | 2 | 1 | **0** | 41 | 2.9 | 4.1 | **-1** | -29 |
| Kitchen towels | The Snowman | 1 | 3 | 1 | **1** | 93 | 1.3 | 2.4 | **-1** | -48 |
| Kitchen towels | Mega | 1 | 2 | 1 | **0** | 30 | 1.9 | 2.4 | **-1** | -23 |
| Dentifrice | Corsodyl | 1 | 2 | 1 | **0** | 28 | 1.8 | 2.2 | **0** | -22 |
| Hot milk drink | Mars | 1 | 0 | 0 | **0** | 26 | 2.3 | 2.8 | **-1** | -21 |
| Kitchen towels | Intertissue | 0 | 1 | 1 | **0** | 54 | 1.6 | 2.4 | **-1** | -35 |
| Kitchen towels | Thirsty Bubbles | 0 | 1 | 1 | **0** | 33 | 1.8 | 2.4 | **-1** | -25 |
| Colas | Barrs | 0 | 1 | 1 | **0** | 44 | 3.7 | 5.3 | **-2** | -30 |
| Cappuccino | Kardomah | 0 | 0 | 0 | **0** | 36 | 1.9 | 2.6 | **-1** | -26 |
| Hot milk drink | Galaxy | 0 | 0 | 0 | **0** | 67 | 1.7 | 2.8 | **-1** | -40 |
| Toilet tissue | Breeze | 0 | 2 | 2 | **0** | 11 | 2.9 | 3.3 | **0** | -10 |
| Toilet tissue | Triple Softy | 0 | 2 | 2 | **0** | 18 | 2.7 | 3.3 | **-1** | -17 |
| Cappuccino | Rappor | 0 | 0 | 0 | **0** | 13 | 2.3 | 2.6 | **0** | -12 |
| Dentifrice | Oral-B | 0 | 0 | 0 | **0** | 54 | 1.5 | 2.2 | **-1** | -35 |
| Average | | 1.8 | 4 | 3 | **1** | 37 | 2.2 | 2.9 | **-1** | -26 |

t = 1 year; 36 categories (N = 125 small brands)
M = Male; F = Female

Source: Kantar WorldPanel
(rounded figures)

# (2) Persistent loyalty outcomes of small brands (Y1-5)

## *Table 51: Small brand persistent loyalty performance & market share (Y1-5)*

| **Excess loyalty brands (N = 12)** | | Share (%) | | Absolute annual av. variances in b | | | | | | | Absolute annual av. variances in w | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | Y1 | **+/-** | Y1 | Y2 | Y3 | Y4 | Y5 | **Av. Y1-Y5** | Av. % Y1-Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | **Av. Y1-Y5** | Av. % Y1-Y5 |
| **Over 5 years** | | | | | | | | | | | | | | | | | |
| Toilet tissue | Nicky | 4 | **1** | -5 | -4 | -4 | -5 | -5 | **-5** | -23 | 1 | 1 | 1 | 1 | 1 | **1** | 32 |
| Margarine | Benecol | 1 | **1** | -1 | -1 | -2 | -2 | -2 | **-1** | -31 | 1 | 2 | 2 | 2 | 1 | **2** | 48 |
| Kitchen towels | Handy | 1 | **0** | 0 | 0 | -1 | -1 | -1 | **0** | -22 | 1 | 1 | 1 | 1 | 1 | **1** | 28 |
| Premium ice cream | Swedish Glace | 2 | **0** | -1 | -1 | -1 | -1 | -1 | **-1** | -47 | 2 | 2 | 2 | 2 | 2 | **2** | 89 |
| Non-medicated | Montagne Jeunesse | 1 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | -16 | 0 | 1 | 0 | 0 | 1 | **0** | 19 |
| Non-medicated | The Sanctuary | 1 | **0** | 0 | -1 | 0 | -1 | 0 | **0** | -27 | 1 | 1 | 1 | 1 | 1 | **1** | 38 |
| Margarine | Pure Dairy Free | 1 | **0** | -1 | -2 | -2 | -1 | -1 | **-1** | -25 | 1 | 2 | 1 | 1 | 1 | **1** | 36 |
| Margarine | Vitalite | 3 | **0** | -2 | -3 | -3 | -1 | -1 | **-2** | -25 | 1 | 2 | 2 | 1 | 1 | **1** | 33 |
| **Over 4 consecutive years** | | | | | | | | | | | | | | | | | |
| Pizzameals | LA Diner | 2 | **-1** | 0 | 0 | 0 | 0 | 0 | **0** | -9 | 0 | 0 | 0 | 1 | 0 | **0** | 11 |
| **Over 3 consecutive years** | | | | | | | | | | | | | | | | | |
| Margarine | Willow | 2 | **0** | 0 | 0 | -1 | -1 | 0 | **0** | -7 | 0 | 1 | 1 | 1 | 0 | **0** | 11 |
| Facial tissues | Countess | 1 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | -7 | 0 | 1 | 1 | 1 | -1 | **0** | 11 |
| **Over 3 years, but not sequential** | | | | | | | | | | | | | | | | | |
| Kitchen towels | Nicky | 3 | **2** | -1 | -1 | 0 | -1 | -1 | **-1** | -10 | 0 | 0 | 0 | 0 | 0 | **0** | 11 |
| Average | | 2 | **0** | -1 | -1 | -1 | -1 | -1 | **-1** | -21 | 1 | 1 | 1 | 1 | 1 | **1** | 31 |

| **DJ brands (N = 21)** | | Share (%) | | Absolute annual av. variances in b | | | | | | | Absolute annual av. variances in w | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | Y1 | **+/-** | Y1 | Y2 | Y3 | Y4 | Y5 | **Av. Y1-Y5** | Av. % Y1-Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | **Av. Y1-Y5** | Av. % Y1-Y5 |
| **Over 5 years** | | | | | | | | | | | | | | | | | |
| Cooking sauce | Pataks | 6 | **2** | 1 | 0 | 0 | 0 | -1 | **0** | -1 | 0 | 0 | 0 | 0 | 0 | **0** | 1 |
| Facial tissues | Viscount | 1 | **1** | 0 | 0 | 0 | 0 | 0 | **0** | -4 | 0 | 0 | 0 | 0 | 0 | **0** | 5 |
| Non-medicated | L'Oréal Derm. Exp. | 2 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | -5 | 0 | 0 | 0 | 0 | 0 | **0** | 6 |
| Cooking sauce | Uncle Bens | 5 | **0** | -1 | 0 | 0 | 0 | 0 | **0** | -1 | 0 | 0 | 0 | 0 | 0 | **0** | 1 |
| Fabrics | Fairy | 6 | **0** | -1 | -1 | 0 | 0 | 0 | **-1** | -5 | 0 | 0 | 0 | 0 | 0 | **0** | 5 |
| Cooking sauce | Blue Dragon | 6 | **-1** | -1 | -1 | -1 | -1 | 0 | **-1** | -5 | 0 | 0 | 0 | 0 | 0 | **0** | 6 |
| Facial tissues | Tempo | 2 | **-1** | 0 | 0 | 0 | 0 | 0 | **0** | 1 | 0 | 0 | 0 | 0 | 0 | **0** | -1 |
| **Over 4 consecutive years** | | | | | | | | | | | | | | | | | |
| Kitchen towels | Regina | 2 | **5** | 0 | 0 | 0 | 0 | -1 | **0** | -1 | 0 | 0 | 0 | 0 | 0 | **0** | 2 |
| Margarine | Clover | 6 | **4** | -2 | 0 | -1 | -1 | -2 | **-1** | -6 | 1 | 0 | 0 | 0 | 0 | **0** | 7 |
| Cooking sauce | Old El Paso | 2 | **0** | 1 | 0 | 0 | 0 | 0 | **0** | 6 | 0 | 0 | 0 | 0 | 0 | **0** | -6 |
| **Over 3 consecutive years** | | | | | | | | | | | | | | | | | |
| Dentifrice | Oral-B | 0 | **10** | 0 | 3 | 1 | 0 | 0 | **1** | 20 | -1 | -1 | 0 | 0 | 0 | **0** | -14 |
| Margarine | I C B I N B | 6 | **8** | 4 | 7 | 3 | 1 | -2 | **3** | 14 | -1 | -1 | 0 | 0 | 0 | **0** | -10 |
| Instant coffee | Maxw. House | 2 | **1** | 1 | 0 | 0 | 0 | 0 | **0** | 10 | -1 | 0 | 0 | 0 | 0 | **0** | -9 |
| Fabrics | Ecover | 1 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | -2 | 0 | 0 | 0 | 0 | 0 | **0** | 3 |
| Instant coffee | Maxw. House Clas. | 2 | **-1** | 0 | 0 | 0 | 0 | 0 | **0** | 4 | 0 | 0 | 0 | 0 | 0 | **0** | -3 |
| Cooking sauce | Chicken Tonight | 4 | **-2** | 1 | 1 | 1 | 0 | 1 | **1** | 8 | 0 | 0 | 0 | 0 | 0 | **0** | -7 |
| **Over 2 consecutive years** | | | | | | | | | | | | | | | | | |
| Kitchen towels | Intertissue | 0 | **2** | 0 | 0 | 0 | -1 | 0 | **0** | 4 | -1 | 0 | 0 | 0 | 0 | **0** | 0 |
| Toilet tissue | Breeze | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | 11 | 0 | 0 | 0 | 0 | 0 | **0** | -10 |
| **Over 3 years, but not sequential** | | | | | | | | | | | | | | | | | |
| Juices | Innocent | 2 | **4** | 0 | 2 | 0 | -2 | -1 | **0** | 0 | 0 | -1 | 0 | 1 | 0 | **0** | 1 |
| Fabrics | Easy | 1 | **0** | 0 | 0 | -1 | 0 | 0 | **0** | -4 | 0 | 0 | 1 | 0 | 0 | **0** | 5 |
| Non-medicated | Johnsons | 3 | **-2** | 0 | 0 | 0 | 0 | 0 | **0** | 7 | 0 | 0 | 0 | 0 | 0 | **0** | -6 |
| Average | | 3 | **1** | 0 | 1 | 0 | 0 | 0 | **0** | 2 | 0 | 0 | 0 | 0 | 0 | **0** | -1 |

**Table continued on next page**

**(Table 51 continued)**

| **Deficit loyalty brands (N = 33)** | | Share (%) | | Absolute annual av. variances in b | | | | | | | Absolute annual av. variances in w | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | Brand | Y1 | **+/-** | Y1 | Y2 | Y3 | Y4 | Y5 | **Av. Y1-Y5** | Av. % Y1-Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | **Av. Y1-Y5** | Av. % Y1-Y5 |
| **Over 5 years** | | | | | | | | | | | | | | | | | |
| Juices | Copella | 2 | **3** | 2 | 2 | 3 | 4 | 3 | **3** | 35 | -2 | -1 | -2 | -1 | -1 | **-1** | -26 |
| Facial tissues | Paloma | 1 | **1** | 1 | 1 | 1 | 1 | 1 | **1** | 34 | -1 | -1 | 0 | -1 | -1 | **-1** | -25 |
| Kitchen towels | Mega | 1 | **1** | 0 | 0 | 1 | 0 | 1 | **0** | 26 | -1 | 0 | -1 | 0 | -1 | **0** | -21 |
| Butter | Kerrygold | 5 | **0** | 3 | 2 | 1 | 1 | 3 | **2** | 21 | -1 | -1 | 0 | 0 | -1 | **-1** | -17 |
| Non-medicated | Palmers | 1 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | 25 | 0 | 0 | -1 | 0 | 0 | **0** | -20 |
| Facial tissues | Cherish | 1 | **0** | 0 | 0 | 0 | 0 | 1 | **0** | 25 | -1 | 0 | 0 | 0 | -1 | **0** | -20 |
| Instant coffee | Rappor | 3 | **0** | 2 | 2 | 1 | 1 | 1 | **1** | 29 | -1 | -1 | -1 | 0 | -1 | **-1** | -22 |
| Butter | Yeo Valley Organic | 1 | **0** | 0 | 1 | 1 | 1 | 0 | **1** | 42 | -1 | -1 | -1 | -1 | -1 | **-1** | -29 |
| Juices | Don Simon | 1 | **0** | 2 | 2 | 3 | 3 | 2 | **2** | 39 | -1 | -1 | -2 | -2 | -2 | **-1** | -28 |
| Colas | Barrs | 0 | **0** | 0 | 0 | 0 | 1 | 0 | **0** | 53 | -2 | -2 | -2 | -2 | -1 | **-2** | -34 |
| Dentifrice | Corsodyl | 1 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | 25 | 0 | 0 | 0 | -1 | 0 | **0** | -20 |
| Juices | Ocean Spray | 3 | **0** | 3 | 3 | 3 | 3 | 2 | **3** | 33 | -1 | -1 | -1 | -1 | -1 | **-1** | -25 |
| Instant DeCaf | Percol Ftrd. | 1 | **0** | 0 | 0 | 0 | 0 | 0 | **0** | 46 | -1 | -1 | -1 | -1 | -1 | **-1** | -31 |
| Non-medicated | Dove | 2 | **0** | 1 | 1 | 1 | 1 | 1 | **1** | 30 | -1 | 0 | -1 | -1 | -1 | **-1** | -23 |
| Non-medicated | Johnsons Baby | 3 | **0** | 0 | 1 | 1 | 1 | 1 | **1** | 16 | 0 | 0 | 0 | 0 | 0 | **0** | -14 |
| Kitchen towels | The Snowman | 1 | **0** | 1 | 1 | 1 | 1 | 1 | **1** | 91 | -1 | -1 | -1 | -1 | -1 | **-1** | -48 |
| Toilet tissue | Cushelle | 2 | **0** | 5 | 6 | 5 | 5 | 4 | **5** | 35 | -1 | -1 | -1 | -1 | -1 | **-1** | -26 |
| Instant coffee | Red Mountain | 2 | **0** | 1 | 0 | 1 | 0 | 0 | **1** | 27 | -1 | -1 | -1 | 0 | 0 | **-1** | -21 |
| Pizzameals | Goodfellas Takeaway | 2 | **-1** | 2 | 1 | 2 | 1 | 1 | **1** | 78 | -1 | -1 | -2 | -2 | -1 | **-1** | -43 |
| Non-medicated | E45 | 3 | **-1** | 1 | 1 | 1 | 1 | 1 | **1** | 30 | -1 | 0 | -1 | -1 | 0 | **-1** | -23 |
| Premium ice cream | Fredericks Cadburys | 1 | **-1** | 0 | 0 | 1 | 1 | 0 | **0** | 33 | 0 | 0 | -1 | -1 | -1 | **-1** | -24 |
| Toilet tissue | Nouvelle | 1 | **-1** | 4 | 5 | 5 | 5 | 2 | **4** | 80 | -1 | -2 | -1 | -1 | -2 | **-1** | -44 |
| Instant DeCaf | Douwe Egbert | 3 | **-1** | 0 | 0 | 0 | 0 | 0 | **0** | 45 | -1 | -1 | -1 | -1 | -1 | **-1** | -30 |
| Juices | Princes | 4 | **-2** | 8 | 6 | 5 | 6 | 5 | **6** | 79 | -2 | -2 | -3 | -2 | -2 | **-2** | -44 |
| **Over 4 consecutive years** | | | | | | | | | | | | | | | | | |
| Kitchen towels | Thirsty Bubbles | 0 | **1** | 0 | 0 | 0 | 1 | 0 | **0** | 23 | -1 | -1 | 0 | 0 | 0 | **0** | -18 |
| Toilet tissue | Regina | 1 | **1** | 2 | 1 | 2 | 2 | 1 | **2** | 19 | -1 | -1 | -1 | -1 | 0 | **-1** | -16 |
| Non-medicated | Garnier Skin Naturals | 3 | **1** | 0 | 1 | 1 | 1 | 1 | **1** | 14 | 0 | 0 | 0 | 0 | 0 | **0** | -12 |
| **Over 3 consecutive years** | | | | | | | | | | | | | | | | | |
| Facial tissues | Velvet | 2 | **3** | 1 | 1 | 1 | 2 | 2 | **1** | 27 | -1 | 0 | 0 | -1 | -1 | **-1** | -20 |
| Instant coffee | Carte Noire | 3 | **1** | 0 | 0 | 1 | 1 | 1 | **1** | 13 | 0 | 0 | 0 | -1 | 0 | **0** | -11 |
| Toilet tissue | Triple Softy | 0 | **0** | 0 | 1 | 0 | 0 | 0 | **0** | 21 | -1 | -1 | 0 | 0 | -1 | **-1** | -17 |
| Instant DeCaf | Clipper Ftrd. | 2 | **-1** | 0 | 0 | 0 | 0 | 0 | **0** | 27 | 0 | 0 | -1 | -1 | -1 | **0** | -17 |
| **Over 3 years, but not sequential** | | | | | | | | | | | | | | | | | |
| Instant DeCaf | Carte Noire | 4 | **1** | 0 | 0 | 0 | 0 | 0 | **0** | 13 | 0 | 0 | 0 | 0 | -1 | **0** | -11 |
| Butter | President | 1 | **0** | 0 | 0 | 0 | 0 | 1 | **0** | 9 | 0 | 0 | 0 | 0 | -1 | **0** | -7 |
| Average | | 2 | **0** | 1 | 1 | 1 | 1 | 1 | **1** | 33 | -1 | -1 | -1 | -1 | -1 | **-1** | -23 |

t = 5 years; 15 categories (N = 66 small brands)

Source: Kantar WorldPanel
(rounded figures)

## (3) Loyalty performance of other brands

***Table 52: Annual loyalty rates of large brands short term & year-on-year***

| Length of the analysis period | Brand loyalty performance | Annual proportion (%) of brands per performance group | | | | | |
|---|---|---|---|---|---|---|---|
| | | Y1 | | | | | Avg. Y1 |
| t = 1 year | Excess | 21 | | | | | 21 |
| | DJ* | 57 | | | | | 57 |
| | Deficit | 22 | | | | | 22 |
| Length of the analysis period | Brand loyalty performance | Annual proportion (%) of brands per performance group | | | | | |
| | | Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-5 |
| t = 5 years | Excess | 14 | 16 | 16 | 16 | 12 | 15 |
| | DJ* | 62 | 62 | 62 | 66 | 68 | 64 |
| | Deficit | 24 | 22 | 22 | 18 | 20 | 21 |

t = 1 year; 36 categories (N = 134 high-share brands)
t = 5 years; 15 categories (N = 50 continuously listed high-share brands)
Source: Kantar WorldPanel
*DJ: Double Jeopardy
(rounded figures)

***Table 53: Persistent loyalty performance of large brands (Y1-5)***

| Loyalty performance | Proportion (%) of brands per performance group over: | | |
|---|---|---|---|
| | ≤3 years | ≤4 years | ≤5 years |
| Excess | 12 | 10 | 8 |
| DJ* | 66 | 52 | 44 |
| Deficit | 22 | 12 | 12 |
| Total | 100 | 74 | 64 |

t = 5 years; 15 categories (N = 50 high share continuously listed brands)
Source: Kantar WorldPanel
*DJ: Double Jeopardy

## *Table 54: Annual loyalty rates of small & large PLs short term & year-on-year*

**High-share Pls (N = 46 in Y1 & N = 25 continuously listed PLs Y1-5)**

| Length of the analysis period | Brand loyalty performance | Annual proportion (%) of brands per performance group | |
|---|---|---|---|
| | | Y1 | Avg. Y1 |
| t = 1 year (36 categories) | Excess | 74 | 74 |
| | DJ* | 24 | 24 |
| | Deficit | 2 | 2 |

| Length of the analysis period | Brand loyalty performance | Annual proportion (%) of brands per performance group | | | | | |
|---|---|---|---|---|---|---|---|
| | | Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-5 |
| t = 5 years (15 categories) | Excess | 76 | 72 | 64 | 56 | 48 | 63 |
| | DJ* | 20 | 20 | 28 | 40 | 36 | 29 |
| | Deficit | 4 | 8 | 8 | 4 | 16 | 8 |

**Low-share Pls (N = 180 in Y1 & N = 123 continuously listed PLs Y1-5)**

| Length of the analysis period | Brand loyalty performance | Annual proportion (%) of brands per performance group | |
|---|---|---|---|
| | | Y1 | Avg. Y1 |
| t = 1 year | Excess | 36 | 36 |
| | DJ* | 32 | 32 |
| | Deficit | 32 | 32 |

| Length of the analysis period | Brand loyalty performance | Annual proportion (%) of brands per performance group | | | | | |
|---|---|---|---|---|---|---|---|
| | | Y1 | Y2 | Y3 | Y4 | Y5 | Avg. Y1-5 |
| t = 5 years | Excess | 32 | 39 | 40 | 37 | 37 | 37 |
| | DJ* | 34 | 37 | 32 | 35 | 33 | 34 |
| | Deficit | 34 | 24 | 28 | 28 | 30 | 29 |

* DJ: Double Jeopardy | PL: Private label Source: Kantar WorldPanel

## *Table 55: Persistent loyalty performance of large & small store brands (Y1-5)*

t = 5 years; 15 categories (N = 25 high-share continuously listed PLs)

| Loyalty performance | Proportion (%) of brands per performance group over: | | |
|---|---|---|---|
| | ≤3 years | ≤4 years | ≤5 years |
| Excess | 64 | 60 | 48 |
| DJ* | 32 | 24 | 8 |
| Deficit | 4 | 4 | 4 |
| Total | 100 | 88 | 60 |

t = 5 years; 15 categories (N = 123 low-share continuously listed PLs)

| Loyalty performance | Proportion (%) of brands per performance group over: | | |
|---|---|---|---|
| | ≤3 years | ≤4 years | ≤5 years |
| Excess | 40 | 29 | 18 |
| DJ* | 30 | 19 | 9 |
| Deficit | 30 | 19 | 12 |
| Total | 100 | 67 | 39 |

Source: Kantar WorldPanel
*DJ: Double Jeopardy

# (4) Distribution of deviating brands across *MSoD* (Y1 & Y1-5)

***Table 56: Distribution of deviating brands across categories (annual; Y1)***

| Category | Total brands* (No.) | Cat. performance | | No. of high share | | No. of private labels | | No. of small brands | |
|---|---|---|---|---|---|---|---|---|---|
| | | Y1; B (%) | Y1; W | Excess | Deficit | Excess | Deficit | Excess | Deficit |
| Toilet tissue | 23 | 96 | 21 | | 1 | 12 | 3 | 1 | 5 |
| Laundry | 10 | 91 | 6 | | 1 | 2 | 1 | | |
| Biscuits | 10 | 90 | 19 | 1 | 3 | 2 | | | 2 |
| Fabrics | 16 | 89 | 7 | | | 4 | 1 | 1 | |
| Margarine | 18 | 89 | 13 | 2 | 1 | 1 | 3 | 4 | 1 |
| Juices | 15 | 85 | 21 | 1 | | 6 | | | 4 |
| Dentifrice | 15 | 83 | 6 | 1 | 2 | 1 | 3 | | 2 |
| Kitchen towels | 23 | 79 | 7 | | 1 | 5 | 2 | 1 | 4 |
| Cooking sauce | 16 | 76 | 11 | 1 | | 1 | 3 | | 1 |
| Butter | 16 | 71 | 12 | 1 | | 3 | 5 | | 3 |
| Instant coffee | 19 | 69 | 7 | | 1 | 5 | | | 3 |
| Colas | 14 | 67 | 14 | | 2 | 1 | 6 | | 1 |
| Facial skin care (F) | 10 | 64 | 6 | 1 | | 4 | | 1 | |
| Facial tissue | 24 | 62 | 6 | | | 8 | 6 | | 3 |
| Deodorant (F) | 10 | 55 | 4 | | 2 | 1 | | | 4 |
| Premium ice cream | 15 | 55 | 5 | 1 | 1 | | 4 | 1 | 1 |
| Pizzameals | 13 | 54 | 9 | | 1 | 5 | 3 | 1 | 1 |
| Deodorant (M) | 10 | 51 | 4 | 1 | 1 | | | | 3 |
| Non-medicated | 19 | 49 | 6 | | 1 | 4 | 1 | 2 | 4 |
| Shampoo | 10 | 34 | 3 | 3 | | 1 | | | |
| Pasta sauce | 10 | 32 | 8 | 2 | | 2 | | | 1 |
| Razor (M) | 10 | 30 | 2 | | | 3 | 1 | | |
| Chocolate ice cream | 10 | 25 | 3 | 1 | | 5 | 1 | | 1 |
| Dogfood (adult) | 10 | 24 | 19 | 2 | 1 | 3 | 1 | | |
| Dogfood (dry) | 10 | 20 | 8 | 1 | 2 | 2 | 1 | 1 | 1 |
| Beer | 19 | 19 | 3 | | 1 | | 1 | | 12 |
| Cappuccino | 13 | 18 | 5 | 1 | 1 | 1 | 2 | | 4 |
| Instant DeCaf | 18 | 17 | 5 | | 1 | 3 | 3 | | 3 |
| Dogfood (wet) | 10 | 17 | 21 | 1 | 1 | 2 | 1 | | |
| Razor (F) | 10 | 16 | 2 | | | | 1 | | 1 |
| Shampoo & Condit. | 10 | 12 | 2 | | | 1 | | | 1 |
| Special instant cof. | 9 | 10 | 4 | | 2 | 1 | 2 | | 1 |
| Facial skin care (M) | 10 | 10 | 2 | 1 | 1 | 2 | | | 2 |
| Hot milk drink | 10 | 8 | 10 | 2 | | 4 | | | 2 |
| Catfood (adult) | 10 | 5 | 34 | 2 | 1 | 2 | 2 | | 1 |
| Catfood (wet) | 10 | 4 | 36 | 2 | | 1 | 2 | | 2 |
| Total | 485 | 47 | 10 | 28 | 29 | 98 | 59 | 13 | 74 |

* Listed in the categories

Source: Kantar WorldPanel

t = 1 year; 36 categories (N = 301 deviating brands only)

M = Male; F = Female

## *Table 57: Distribution of deviating brands across categories (long-term; Y1-5)*

| Category | Total brands* (No.) | Cat. performance | | No. of high share | | No. of private labels | | No. of small brands | |
|---|---|---|---|---|---|---|---|---|---|
| | | Y1; B (%) | Y1; W | Excess | Deficit | Excess | Deficit | Excess | Deficit |
| Toilet tissue | 23 | 96 | 21 | | 1 | 12 | 3 | 1 | 4 |
| Fabrics | 16 | 89 | 7 | | 1 | 5 | 1 | | |
| Margarine | 18 | 89 | 13 | | 1 | | 3 | 4 | |
| Juices | 15 | 85 | 21 | 1 | | 9 | | | 4 |
| Dentifrice | 15 | 83 | 6 | 1 | 2 | | 2 | | 1 |
| Kitchen towels | 23 | 79 | 7 | | | 7 | 4 | 2 | 3 |
| Cooking sauce | 16 | 76 | 11 | 1 | | 3 | 1 | | |
| Butter | 16 | 71 | 12 | 1 | 1 | 4 | 5 | | 3 |
| Instant coffee | 19 | 69 | 7 | | 1 | 3 | 2 | | 3 |
| Colas | 14 | 67 | 14 | 1 | 1 | 2 | 5 | | 1 |
| Facial tissue | 24 | 62 | 6 | | | 6 | 4 | 1 | 3 |
| Premium ice cream | 15 | 55 | 5 | 1 | 1 | 2 | 3 | 1 | 1 |
| Pizzameals | 13 | 54 | 9 | | | 5 | 2 | 1 | 1 |
| Non-medicated | 19 | 49 | 6 | | 1 | 5 | | 2 | 5 |
| Instant DeCaf | 18 | 17 | 5 | | 1 | 2 | 3 | | 4 |
| Total | 264 | 69 | 10 | 6 | 11 | 65 | 38 | 12 | 33 |

* Listed in the categories

Source: Kantar WorldPanel

t = 5 years; 15 categories (N = 165 deviating brands only)

# Appendix III – Duplication of Purchase & Double Jeopardy outcomes

## *Table 58: Duplication tables across categories with deviating small brands (Y1-5)*

| Colas | | Who also buy | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | b(%) | P | CC | DC | CC Z | Vive | Tsc* | Morr | Frw | SainB | Barrs | As Sm | Co-op |
| Pepsi | 36 | | 45 | 45 | 21 | 6 | 5 | 5 | 4 | 3 | 2 | 1 | 1 |
| Coca-Cola | 34 | 49 | | 40 | 16 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 |
| Diet Coke | 31 | 53 | 44 | | 22 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 1 |
| Coca-Cola Zero | 11 | 67 | 47 | 60 | | 6 | 6 | 5 | 3 | 3 | 2 | 1 | 1 |
| Vive | 4 | 58 | 38 | 40 | 18 | | 12 | 14 | 15 | 7 | 3 | 4 | 2 |
| Tesco* | 3 | 53 | 39 | 40 | 18 | 13 | | 14 | 10 | 10 | 3 | 7 | 3 |
| Morrisons | 3 | 64 | 40 | 44 | 19 | 16 | 15 | | 11 | 9 | 4 | 3 | 3 |
| Freeway | 2 | 60 | 39 | 36 | 16 | 21 | 13 | 15 | | 8 | 4 | 3 | 3 |
| Sainsbury | 2 | 56 | 44 | 42 | 21 | 12 | 15 | 13 | 10 | | 2 | 5 | 3 |
| Barrs | 1 | 68 | 60 | 45 | 21 | 10 | 10 | 10 | 8 | 3 | | 2 | 3 |
| Asda Smartprice | 1 | 49 | 37 | 31 | 15 | 14 | 15 | 11 | 8 | 6 | 3 | | 1 |
| Co-op | 1 | 63 | 47 | 47 | 20 | 16 | 20 | 22 | 15 | 15 | 7 | 3 | |
| **Average duplication** | | **58** | **44** | **43** | **19** | **11** | **11** | **11** | **8** | **6** | **3** | **3** | **2** |
| | % (b) | 36 | 34 | 31 | 11 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 |

| Facial tissues | | Who also buy | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | K | V | Aldi | Tsc* | Morr | SainB* | Lidl | Asda* | WHw | Palo | TP | Cher | Boots | Visc | CT | Co-op | Wait | SuDr |
| Kleenex | 33 | | 16 | 8 | 8 | 8 | 6 | 5 | 5 | 5 | 4 | 4 | 2 | 3 | 2 | 1 | 2 | 2 | 1 |
| Velvet | 8 | 68 | | 10 | 10 | 13 | 7 | 5 | 9 | 6 | 3 | 5 | 2 | 4 | 2 | 2 | 3 | 3 | 1 |
| Aldi | 7 | 40 | 12 | | 7 | 9 | 5 | 9 | 6 | 7 | 7 | 5 | 5 | 2 | 4 | 3 | 2 | 1 | 1 |
| Tesco* | 5 | 47 | 14 | 10 | | 6 | 9 | 7 | 7 | 6 | 3 | 4 | 3 | 3 | 2 | 1 | 8 | 2 | 1 |
| Morrisons | 5 | 58 | 23 | 13 | 7 | | 7 | 7 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 2 | 1 |
| Sainsbury* | 4 | 44 | 13 | 8 | 10 | 6 | | 7 | 8 | 6 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 |
| Lidl | 4 | 38 | 11 | 14 | 8 | 8 | 7 | | 7 | 6 | 6 | 14 | 4 | 2 | 3 | 3 | 2 | 2 | 1 |
| Asda* | 4 | 46 | 18 | 10 | 8 | 7 | 7 | 7 | | 6 | 5 | 3 | 4 | 2 | 3 | 3 | 2 | 1 | 1 |
| Wilkin. Hardw. Ltd | 3 | 45 | 14 | 13 | 8 | 9 | 8 | 7 | 7 | | 8 | 7 | 8 | 4 | 5 | 4 | 3 | 1 | 2 |
| Paloma | 3 | 37 | 8 | 14 | 5 | 6 | 4 | 8 | 6 | 9 | | 7 | 14 | 2 | 9 | 10 | 1 | 0 | 1 |
| Tempo | 3 | 50 | 15 | 12 | 6 | 6 | 6 | 21 | 5 | 9 | 9 | | 6 | 4 | 6 | 5 | 4 | 2 | 2 |
| Cherish | 2 | 39 | 10 | 17 | 7 | 8 | 5 | 7 | 8 | 14 | 22 | 8 | | 2 | 13 | 15 | 1 | 1 | 2 |
| Boots | 2 | 62 | 20 | 7 | 8 | 9 | 9 | 5 | 4 | 7 | 3 | 6 | 3 | | 2 | 1 | 5 | 5 | 4 |
| Viscount | 2 | 37 | 8 | 16 | 6 | 8 | 4 | 9 | 6 | 11 | 18 | 9 | 16 | 3 | | 21 | 2 | 1 | 1 |
| Countess | 1 | 34 | 12 | 15 | 5 | 7 | 4 | 9 | 9 | 9 | 24 | 11 | 22 | 2 | 26 | | 1 | 0 | 1 |
| Co-op | 1 | 62 | 19 | 12 | 11 | 10 | 8 | 7 | 5 | 7 | 2 | 10 | 2 | 7 | 2 | 1 | | 4 | 1 |
| Waitrose | 1 | 60 | 18 | 6 | 8 | 6 | 11 | 6 | 3 | 4 | 1 | 4 | 1 | 7 | 1 | 0 | 4 | | 3 |
| Superdrug | 1 | 56 | 16 | 11 | 8 | 9 | 10 | 8 | 5 | 11 | 6 | 11 | 5 | 11 | 3 | 2 | 3 | 6 | |
| **Average duplication** | | **48** | **15** | **11** | **8** | **8** | **7** | **8** | **6** | **8** | **8** | **7** | **6** | **4** | **5** | **5** | **3** | **2** | **1** |
| | % (b) | 33 | 8 | 7 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 |

| Butter | | Who also buy | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | Lur | CL | Anch | Kerry | Tsc* | Sain* | Aldi | Asd** | Mor* | Lidl | Pres | M+S | YVO |
| Lurpak | 32 | | 40 | 33 | 20 | 15 | 7 | 8 | 6 | 6 | 7 | 5 | 4 | 3 |
| Country Life | 26 | 49 | | 44 | 31 | 20 | 10 | 9 | 8 | 8 | 7 | 5 | 4 | 5 |
| Anchor | 23 | 46 | 49 | | 26 | 18 | 8 | 7 | 7 | 6 | 7 | 4 | 4 | 4 |
| Kerrygold | 13 | 49 | 63 | 47 | | 21 | 10 | 9 | 9 | 9 | 8 | 5 | 5 | 6 |
| Tesco* | 12 | 42 | 46 | 36 | 24 | | 11 | 10 | 9 | 8 | 9 | 5 | 3 | 4 |
| Sain* | 6 | 42 | 48 | 35 | 26 | 23 | | 9 | 9 | 8 | 8 | 7 | 5 | 5 |
| Aldi | 5 | 48 | 43 | 31 | 22 | 20 | 10 | | 11 | 12 | 18 | 4 | 3 | 3 |
| Asda* | 5 | 40 | 48 | 37 | 26 | 22 | 11 | 13 | | 10 | 10 | 4 | 2 | 4 |
| Morrisons* | 4 | 46 | 54 | 35 | 28 | 23 | 11 | 16 | 12 | | 14 | 4 | 3 | 3 |
| Lidl | 4 | 48 | 43 | 39 | 23 | 23 | 10 | 23 | 11 | 13 | | 4 | 4 | 3 |
| President | 3 | 56 | 47 | 36 | 24 | 22 | 13 | 8 | 5 | 7 | 7 | | 9 | 9 |
| M+S | 2 | 59 | 42 | 37 | 29 | 17 | 12 | 7 | 4 | 6 | 7 | 10 | | 8 |
| Yeo Valley Organic | 2 | 52 | 56 | 48 | 36 | 20 | 14 | 7 | 8 | 6 | 7 | 11 | 9 | |
| **Average duplication** | | **48** | **48** | **38** | **26** | **20** | **11** | **11** | **8** | **8** | **9** | **6** | **5** | **5** |
| | % (b) | 32 | 26 | 23 | 13 | 12 | 6 | 5 | 5 | 4 | 4 | 3 | 2 | 2 |

**(Table continued on next page)**

**(Table 58 continued)**

| Juices | | Who also buy | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | Tropi | Tsc* | Inno | Morr | Asda* | Princ | Aldi | Lidl | Ocean | Cope | SainB* | Don |
| Tropicana | 23 | | 26 | 35 | 22 | 15 | 16 | 12 | 12 | 16 | 25 | 15 | 15 |
| Tesco* | 21 | 26 | | 19 | 16 | 17 | 21 | 15 | 15 | 15 | 14 | 15 | 9 |
| Innocent | 16 | 50 | 28 | | 22 | 14 | 16 | 13 | 13 | 16 | 31 | 17 | 15 |
| Morrisons | 14 | 36 | 26 | 26 | | 16 | 27 | 17 | 17 | 17 | 19 | 14 | 11 |
| Asda* | 13 | 24 | 28 | 18 | 17 | | 21 | 19 | 16 | 13 | 12 | 14 | 20 |
| Princes | 14 | 27 | 32 | 20 | 28 | 19 | | 19 | 20 | 21 | 15 | 14 | 13 |
| Aldi | 12 | 23 | 26 | 17 | 21 | 19 | 22 | | 23 | 14 | 12 | 12 | 12 |
| Lidl | 11 | 24 | 26 | 18 | 20 | 16 | 23 | 23 | | 18 | 14 | 13 | 11 |
| Ocean Spray | 11 | 32 | 28 | 23 | 21 | 15 | 24 | 15 | 18 | | 18 | 15 | 12 |
| Copella | 11 | 53 | 28 | 45 | 24 | 14 | 18 | 13 | 15 | 19 | | 19 | 17 |
| Sainsbury* | 11 | 30 | 31 | 23 | 17 | 16 | 18 | 14 | 15 | 16 | 19 | | 9 |
| Don Simon | 8 | 46 | 25 | 33 | 20 | 34 | 23 | 19 | 16 | 17 | 26 | 13 | |
| **Average duplication** | | **34** | **28** | **25** | **21** | **18** | **21** | **16** | **16** | **17** | **19** | **15** | **13** |
| | % (b) | 23 | 21 | 16 | 14 | 13 | 14 | 12 | 11 | 11 | 11 | 11 | 8 |

| Instant Coffee | | Who also buy | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | Nesc | Kenco | NesG | DoEg | Cart | Rapp | Aldi | Tsc* | MaxH | Lidl | MaxHC | Morr | RedM | SainB*** | Asda** |
| Nescafe | 30 | | 30 | 19 | 17 | 10 | 9 | 4 | 4 | 7 | 4 | 4 | 3 | 3 | 2 | 2 |
| Kenco | 22 | 41 | | 22 | 27 | 16 | 11 | 4 | 4 | 6 | 3 | 3 | 3 | 3 | 3 | 2 |
| Nescafe Gold Blend | 13 | 44 | 36 | | 25 | 11 | 7 | 5 | 4 | 5 | 4 | 2 | 3 | 2 | 3 | 2 |
| Douwe Egbert | 13 | 39 | 46 | 25 | | 16 | 11 | 5 | 4 | 6 | 3 | 2 | 4 | 2 | 3 | 2 |
| Carte Noire | 6 | 47 | 53 | 22 | 33 | | 10 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | 3 | 2 |
| Rappor | 6 | 48 | 41 | 17 | 25 | 11 | | 7 | 7 | 17 | 5 | 8 | 9 | 7 | 4 | 4 |
| Aldi | 4 | 34 | 24 | 16 | 17 | 7 | 11 | | 8 | 7 | 11 | 8 | 9 | 7 | 5 | 5 |
| Tesco* | 4 | 26 | 20 | 11 | 11 | 6 | 11 | 8 | | 7 | 6 | 7 | 7 | 7 | 6 | 6 |
| Maxwell House | 4 | 56 | 34 | 18 | 21 | 9 | 26 | 8 | 7 | | 6 | 12 | 9 | 10 | 3 | 3 |
| Lidl | 3 | 36 | 26 | 17 | 15 | 8 | 10 | 14 | 7 | 7 | | 7 | 8 | 9 | 6 | 5 |
| Maxwell House Clas. | 3 | 45 | 21 | 10 | 11 | 6 | 17 | 11 | 8 | 16 | 8 | | 8 | 25 | 4 | 5 |
| Morrisons | 3 | 35 | 24 | 13 | 17 | 6 | 18 | 12 | 10 | 12 | 8 | 8 | | 8 | 7 | 6 |
| Red Mountain | 2 | 41 | 23 | 12 | 12 | 5 | 17 | 11 | 10 | 15 | 10 | 29 | 9 | | 5 | 5 |
| Sainsbury*** | 2 | 30 | 24 | 15 | 16 | 7 | 9 | 8 | 10 | 5 | 6 | 5 | 8 | 6 | | 4 |
| Asda** | 2 | 29 | 19 | 12 | 12 | 5 | 10 | 9 | 10 | 5 | 7 | 7 | 8 | 7 | 5 | |
| **Average duplication** | | **39** | **30** | **16** | **18** | **9** | **13** | **8** | **7** | **9** | **6** | **8** | **6** | **7** | **4** | **4** |
| | % (b) | 30 | 22 | 13 | 13 | 6 | 6 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 |

| Dentifrice | | Who also buy | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | Col | Aqua | Senso | McLa | OrB | A+H | Tsc* | AsdaP | Morr | Aldi | Lidl | Wilk | Corso |
| Colgate | 57 | | 32 | 16 | 17 | 15 | 12 | 3 | 3 | 2 | 2 | 2 | 1 | 1 |
| Aquafresh | 26 | 69 | | 15 | 23 | 16 | 12 | 4 | 3 | 3 | 2 | 2 | 1 | 1 |
| Sensodyne | 15 | 60 | 26 | | 12 | 17 | 13 | 3 | 2 | 2 | 1 | 1 | 1 | 2 |
| Macleans | 14 | 71 | 44 | 13 | | 19 | 16 | 4 | 3 | 4 | 2 | 2 | 2 | 1 |
| Oral B | 13 | 69 | 37 | 20 | 20 | | 16 | 5 | 3 | 3 | 2 | 2 | 2 | 2 |
| Arm+Hammer | 10 | 65 | 31 | 20 | 21 | 21 | | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| Tesco* | 3 | 58 | 38 | 15 | 19 | 15 | 10 | | 5 | 4 | 3 | 3 | 2 | 1 |
| Asda Protect | 2 | 63 | 39 | 12 | 19 | 18 | 15 | 7 | | 7 | 4 | 4 | 3 | 1 |
| Morrisons | 2 | 62 | 36 | 14 | 23 | 14 | 14 | 7 | 7 | | 5 | 4 | 4 | 1 |
| Aldi | 2 | 56 | 26 | 11 | 16 | 10 | 13 | 5 | 5 | 6 | | 9 | 3 | 1 |
| Lidl | 2 | 52 | 28 | 12 | 18 | 12 | 15 | 5 | 5 | 5 | 9 | | 2 | 1 |
| Wilkin. Hardw. Ltd | 1 | 54 | 26 | 14 | 16 | 12 | 14 | 4 | 5 | 6 | 4 | 3 | | 1 |
| Corsodyl | 1 | 64 | 28 | 27 | 13 | 22 | 15 | 3 | 1 | 3 | 1 | 2 | 1 | |
| **Average duplication** | | **62** | **33** | **16** | **18** | **16** | **14** | **4** | **4** | **4** | **3** | **3** | **2** | **1** |
| | % (b) | 57 | 26 | 15 | 14 | 13 | 10 | 3 | 2 | 2 | 2 | 2 | 1 | 1 |

**(Table continued on next page)**

**(Table 58 continued)**

| Premium Ice Cream | | Who also buy | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | WalCD | B+J | HaaD | Kellys | Mac | Icel | Lidl | FC | Tsc* | Aldi | Wait | SG | Morr | Co-op |
| Walls Carte Noire | 20 | | 18 | 13 | 19 | 8 | 4 | 5 | 3 | 7 | 5 | 2 | 1 | 4 | 1 |
| B+Jerr | 13 | 29 | | 24 | 15 | 7 | 3 | 3 | 5 | 7 | 5 | 2 | 1 | 4 | 1 |
| HaaD | 8 | 33 | 42 | | 17 | 9 | 2 | 3 | 5 | 7 | 4 | 3 | 2 | 3 | 1 |
| Kellys | 9 | 38 | 19 | 13 | | 12 | 3 | 4 | 4 | 8 | 5 | 3 | 1 | 4 | 1 |
| Mackies | 5 | 32 | 19 | 14 | 25 | | 3 | 8 | 3 | 6 | 6 | 3 | 1 | 4 | 1 |
| Iceland | 3 | 32 | 14 | 7 | 13 | 5 | | 5 | 3 | 6 | 7 | 1 | 1 | 3 | 1 |
| Lidl | 2 | 36 | 13 | 9 | 16 | 16 | 5 | | 2 | 6 | 10 | 2 | 1 | 4 | 1 |
| FredCad | 2 | 35 | 36 | 20 | 18 | 9 | 4 | 3 | | 8 | 6 | 2 | 1 | 5 | 1 |
| Tesco* | 4 | 38 | 28 | 19 | 21 | 9 | 3 | 4 | 5 | | 5 | 3 | 2 | 3 | 1 |
| Aldi | 4 | 29 | 16 | 8 | 14 | 8 | 5 | 7 | 3 | 6 | | 1 | 1 | 4 | 1 |
| Wait | 1 | 37 | 22 | 19 | 27 | 11 | 2 | 4 | 3 | 7 | 3 | | 3 | 2 | 1 |
| SwedGl | 1 | 22 | 15 | 11 | 11 | 5 | 1 | 2 | 2 | 5 | 4 | 3 | | 2 | 1 |
| Morr | 2 | 43 | 22 | 11 | 23 | 10 | 3 | 5 | 4 | 7 | 8 | 1 | 1 | | 1 |
| Co-op | 1 | 32 | 22 | 11 | 20 | 14 | 5 | 3 | 2 | 7 | 6 | 1 | 1 | 4 | |
| **Average duplication** | | **34** | **22** | **14** | **18** | **9** | **3** | **4** | **3** | **7** | **6** | **2** | **1** | **4** | **1** |
| | % (b) | 20 | 13 | 8 | 9 | 5 | 3 | 2 | 2 | 4 | 4 | 1 | 1 | 2 | 1 |

| Non-medicated | | Who also buy | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | b(%) | Niv | Vas | Simp | Oil OO | GSN | E45 | JohnB | Aldi | Dove | John | Tsc* | L'Oreal | Asda | Boots | Pal | Lidl | The San | MJ |
| Nivea | 13 | | 21 | 19 | 20 | 15 | 10 | 9 | 7 | 12 | 11 | 6 | 10 | 5 | 6 | 5 | 3 | 4 | 3 |
| Vaseline | 8 | 36 | | 17 | 18 | 13 | 11 | 10 | 6 | 11 | 9 | 6 | 8 | 5 | 6 | 6 | 3 | 4 | 3 |
| Simple | 7 | 38 | 20 | | 19 | 17 | 10 | 7 | 7 | 11 | 11 | 6 | 9 | 6 | 7 | 6 | 4 | 4 | 4 |
| Oil Of Olay | 6 | 39 | 21 | 19 | | 18 | 10 | 8 | 8 | 12 | 11 | 7 | 13 | 7 | 8 | 5 | 4 | 4 | 3 |
| Garnier Skin Nat. | 5 | 44 | 22 | 24 | 26 | | 10 | 9 | 8 | 13 | 15 | 8 | 17 | 7 | 9 | 7 | 4 | 4 | 4 |
| E45 | 4 | 30 | 19 | 16 | 16 | 11 | | 8 | 6 | 9 | 7 | 5 | 7 | 4 | 6 | 5 | 3 | 3 | 2 |
| Johnsons Baby | 4 | 29 | 20 | 12 | 14 | 10 | 8 | | 5 | 9 | 8 | 5 | 6 | 5 | 5 | 6 | 2 | 3 | 3 |
| Aldi | 4 | 25 | 12 | 12 | 14 | 10 | 7 | 6 | | 8 | 6 | 6 | 7 | 6 | 5 | 3 | 7 | 3 | 3 |
| Dove | 4 | 41 | 23 | 19 | 22 | 17 | 11 | 9 | 8 | | 10 | 6 | 11 | 6 | 9 | 7 | 4 | 5 | 3 |
| Johnsons | 3 | 47 | 23 | 26 | 23 | 23 | 10 | 10 | 8 | 13 | | 7 | 12 | 6 | 8 | 6 | 3 | 4 | 4 |
| Tesco* | 3 | 30 | 16 | 14 | 15 | 13 | 7 | 7 | 8 | 8 | 7 | | 7 | 7 | 4 | 4 | 4 | 2 | 3 |
| L'Oreal Dermo Exp. | 3 | 46 | 21 | 22 | 32 | 28 | 10 | 8 | 9 | 14 | 13 | 7 | | 7 | 11 | 7 | 4 | 6 | 4 |
| Asda Skin System | 2 | 30 | 17 | 17 | 19 | 14 | 7 | 9 | 10 | 9 | 8 | 8 | 8 | | 3 | 5 | 4 | 2 | 5 |
| Boots No.7 | 2 | 36 | 20 | 21 | 22 | 17 | 10 | 8 | 9 | 14 | 11 | 4 | 14 | 3 | | 6 | 4 | 12 | 3 |
| Palmers | 2 | 39 | 26 | 21 | 19 | 18 | 12 | 13 | 7 | 13 | 11 | 6 | 11 | 6 | 8 | | 4 | 4 | 4 |
| Lidl | 2 | 29 | 15 | 16 | 15 | 11 | 8 | 6 | 18 | 9 | 6 | 6 | 7 | 6 | 6 | 4 | | 3 | 3 |
| The Sanctuary | 1 | 36 | 21 | 19 | 21 | 15 | 9 | 9 | 9 | 14 | 9 | 4 | 12 | 3 | 20 | 6 | 3 | | 5 |
| Montagne Jeunesse | 1 | 33 | 18 | 19 | 18 | 16 | 7 | 10 | 8 | 10 | 9 | 6 | 9 | 10 | 6 | 6 | 4 | 5 | |
| **Average duplication** | | **36** | **20** | **18** | **19** | **16** | **9** | **8** | **8** | **11** | **9** | **6** | **10** | **6** | **7** | **5** | **4** | **4** | **3** |
| | % (b) | 13 | 8 | 7 | 6 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 |

| Instant DeCaf | | Who also buy | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | b(%) | Nesc | Kenco | Tsc* | NesGB | Morr | SainB* | Aldi | CT | DE | Asda | Lidl | Clip | Wait | Perc | Co-op | M+S |
| Nescafe | 5 | | 20 | 8 | 15 | 5 | 5 | 4 | 7 | 4 | 5 | 4 | 1 | 1 | 1 | 1 | 1 |
| Kenco | 4 | 20 | | 7 | 13 | 4 | 4 | 5 | 10 | 5 | 5 | 4 | 2 | 2 | 2 | 1 | 1 |
| Tesco* | 2 | 17 | 13 | | 7 | 8 | 8 | 8 | 3 | 2 | 9 | 7 | 1 | 1 | 1 | 2 | 1 |
| Nescafe Gold Blend | 2 | 33 | 28 | 8 | | 6 | 5 | 4 | 8 | 6 | 6 | 4 | 1 | 2 | 1 | 1 | 1 |
| Morrisons | 1 | 21 | 16 | 15 | 10 | | 8 | 7 | 5 | 2 | 11 | 9 | 0 | 1 | 1 | 2 | 1 |
| Sainsbury* | 1 | 20 | 14 | 16 | 8 | 9 | | 6 | 5 | 3 | 9 | 6 | 1 | 3 | 1 | 2 | 3 |
| Aldi | 1 | 14 | 16 | 13 | 6 | 6 | 5 | | 3 | 2 | 12 | 14 | 1 | 1 | 0 | 2 | 1 |
| Carte Noire | 1 | 25 | 36 | 7 | 14 | 4 | 4 | 3 | | 10 | 6 | 4 | 4 | 2 | 4 | 1 | 2 |
| Douwe Egbert | 1 | 24 | 32 | 7 | 18 | 3 | 5 | 4 | 15 | | 7 | 4 | 3 | 2 | 4 | 1 | 3 |
| Asda Great Value | 1 | 21 | 17 | 15 | 10 | 10 | 7 | 13 | 6 | 5 | | 7 | 1 | 1 | 1 | 2 | 1 |
| Lidl | 1 | 19 | 16 | 15 | 8 | 10 | 6 | 18 | 5 | 3 | 9 | | 1 | 1 | 1 | 3 | 1 |
| Clipper Fairtrade | 0 | 17 | 20 | 7 | 7 | 2 | 4 | 4 | 12 | 7 | 3 | 3 | | 5 | 14 | 5 | 1 |
| Waitrose | 0 | 17 | 21 | 9 | 9 | 3 | 9 | 4 | 8 | 5 | 4 | 3 | 6 | | 3 | 3 | 3 |
| Percol Ftrd | 0 | 14 | 25 | 7 | 7 | 3 | 6 | 2 | 16 | 12 | 5 | 4 | 18 | 4 | | 2 | 5 |
| Co-op Granules | 0 | 25 | 21 | 13 | 8 | 9 | 6 | 10 | 2 | 1 | 8 | 11 | 6 | 2 | 2 | | 5 |
| M+S Fairtrade I.Cof. | 0 | 20 | 21 | 10 | 8 | 4 | 13 | 3 | 9 | 8 | 4 | 4 | 2 | 5 | 6 | 6 | |
| **Average duplication** | | **20** | **21** | **10** | **10** | **6** | **6** | **6** | **8** | **5** | **7** | **6** | **3** | **2** | **3** | **2** | **2** |
| | b(%) | 5 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

**(Table continued on next page)**

**(Table 58 continued)**

| Pizzameals | | Who also buy | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | b(%) | GF | Dr OR | Icel | CT | Asda | Tsc* | Morr | GFT | LA D | Lidl | Aldi* |
| Goodfellas | 24 | | 29 | 19 | 32 | 19 | 14 | 11 | 10 | 5 | 9 | 6 |
| Dr Oetker Ristorante | 13 | 53 | | 16 | 29 | 16 | 13 | 11 | 9 | 4 | 6 | 6 |
| Iceland | 13 | 36 | 17 | | 30 | 18 | 11 | 9 | 6 | 7 | 7 | 7 |
| Chicago Town | 17 | 48 | 24 | 23 | | 17 | 11 | 9 | 12 | 5 | 5 | 5 |
| Asda Chosen By You | 9 | 48 | 21 | 24 | 30 | | 12 | 10 | 9 | 7 | 6 | 7 |
| Tesco* | 6 | 54 | 29 | 24 | 30 | 19 | | 10 | 7 | 5 | 8 | 7 |
| Morrisons | 5 | 55 | 28 | 23 | 28 | 19 | 12 | | 13 | 6 | 7 | 7 |
| Goodfellas Takeaway | 3 | 73 | 36 | 22 | 51 | 26 | 13 | 18 | | 5 | 6 | 7 |
| LA Diner (GFG) | 3 | 41 | 18 | 32 | 30 | 24 | 12 | 12 | 6 | | 10 | 10 |
| Lidl | 4 | 49 | 20 | 23 | 21 | 15 | 10 | 9 | 5 | 6 | | 10 |
| Aldi* | 4 | 36 | 24 | 20 | 21 | 15 | 10 | 8 | 6 | 6 | 10 | |
| **Average duplication** | | **49** | **25** | **23** | **30** | **19** | **12** | **11** | **8** | **5** | **7** | **7** |
| | b(%) | 24 | 13 | 13 | 17 | 9 | 6 | 5 | 3 | 3 | 4 | 4 |

| Kitchen towels | | Who also buy | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | % (b) | Lotus | Plenty | Asda* | Tsc* | Reg | Nicky | Aldi | SainB* | Morr | Lidl | Inter | TB | Mega | TS | Wait | Wilk | Co-op | Handy |
| Lotus | 27 | | 47 | 10 | 11 | 13 | 10 | 8 | 8 | 8 | 5 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 2 |
| Plenty | 25 | 48 | | 10 | 9 | 13 | 7 | 7 | 7 | 6 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 1 |
| Asda* | 9 | 30 | 27 | | 10 | 7 | 8 | 10 | 7 | 5 | 4 | 5 | 3 | 3 | 2 | 1 | 2 | 2 | 2 |
| Tesco* | 8 | 42 | 33 | 9 | | 9 | 6 | 7 | 8 | 5 | 4 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 1 |
| Regina | 7 | 48 | 44 | 8 | 8 | | 13 | 8 | 7 | 8 | 4 | 5 | 3 | 6 | 5 | 4 | 5 | 2 | 4 |
| Nicky | 7 | 39 | 26 | 9 | 7 | 13 | | 12 | 5 | 4 | 5 | 6 | 5 | 6 | 4 | 2 | 5 | 2 | 7 |
| Aldi | 7 | 33 | 25 | 12 | 8 | 8 | 12 | | 7 | 6 | 7 | 4 | 3 | 4 | 3 | 1 | 3 | 3 | 3 |
| Sainsbury* | 6 | 35 | 29 | 10 | 11 | 9 | 6 | 8 | | 5 | 5 | 4 | 3 | 2 | 2 | 4 | 3 | 3 | 1 |
| Morr | 4 | 52 | 40 | 11 | 9 | 15 | 8 | 11 | 7 | | 5 | 4 | 3 | 3 | 6 | 2 | 3 | 3 | 2 |
| Lidl | 4 | 36 | 31 | 10 | 8 | 8 | 10 | 14 | 7 | 5 | | 4 | 3 | 3 | 2 | 2 | 2 | 4 | 2 |
| Intertissue | 3 | 30 | 22 | 12 | 8 | 11 | 13 | 9 | 7 | 5 | 5 | | 6 | 7 | 4 | 2 | 4 | 2 | 3 |
| Thirsty Bubbles | 2 | 37 | 28 | 11 | 8 | 13 | 18 | 10 | 7 | 5 | 6 | 9 | | 9 | 4 | 2 | 6 | 3 | 4 |
| Mega | 2 | 39 | 34 | 10 | 8 | 20 | 20 | 11 | 6 | 5 | 6 | 9 | 8 | | 4 | 2 | 5 | 4 | 9 |
| The Snowman | 2 | 57 | 45 | 10 | 10 | 20 | 16 | 10 | 7 | 13 | 4 | 6 | 4 | 5 | | 3 | 11 | 2 | 4 |
| Wait | 2 | 40 | 39 | 6 | 10 | 14 | 6 | 5 | 13 | 5 | 4 | 3 | 2 | 2 | 3 | | 2 | 5 | 1 |
| Wilk | 2 | 42 | 36 | 10 | 8 | 18 | 18 | 10 | 8 | 5 | 5 | 7 | 7 | 7 | 11 | 2 | | 4 | 3 |
| Co-op | 2 | 55 | 43 | 10 | 11 | 10 | 7 | 10 | 10 | 7 | 7 | 4 | 3 | 5 | 3 | 5 | 4 | | 2 |
| Handy | 2 | 37 | 21 | 10 | 5 | 16 | 29 | 11 | 3 | 3 | 5 | 5 | 5 | 11 | 4 | 1 | 4 | 2 | |
| **Average duplication** | | **41** | **34** | **10** | **9** | **13** | **12** | **9** | **7** | **6** | **5** | **5** | **4** | **5** | **4** | **2** | **4** | **3** | **3** |
| | % (b) | 27 | 25 | 8 | 8 | 7 | 7 | 7 | 6 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

| Margarine | | Who also buy | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Buyers of** | b(%) | Flora | ICB | St IU | Stork | Clover | Bert | Sains | Asda | Tsc* | Will | Vita | Aldi | Morr | Lidl | PDF | Bene |
| Flora | 50 | | 38 | 38 | 28 | 28 | 18 | 11 | 11 | 8 | 7 | 8 | 6 | 5 | 5 | 3 | 5 |
| I C B I N B | 31 | 63 | | 59 | 29 | 38 | 16 | 14 | 17 | 10 | 8 | 9 | 7 | 6 | 6 | 3 | 2 |
| St Ivel Utterly B. | 30 | 64 | 59 | | 29 | 40 | 16 | 11 | 14 | 11 | 8 | 9 | 8 | 7 | 8 | 3 | 2 |
| Stork | 25 | 56 | 35 | 35 | | 25 | 18 | 13 | 13 | 9 | 9 | 8 | 6 | 6 | 5 | 4 | 4 |
| Clover | 23 | 62 | 51 | 54 | 28 | | 17 | 13 | 14 | 9 | 9 | 8 | 7 | 6 | 5 | 3 | 2 |
| Bertolli | 13 | 56 | 31 | 29 | 28 | 25 | | 16 | 11 | 10 | 7 | 7 | 6 | 7 | 7 | 5 | 4 |
| Sainsbury | 11 | 52 | 41 | 32 | 30 | 27 | 23 | | 14 | 11 | 8 | 6 | 7 | 7 | 7 | 5 | 3 |
| Asda | 10 | 54 | 50 | 43 | 33 | 31 | 18 | 15 | | 10 | 10 | 11 | 10 | 7 | 7 | 4 | 2 |
| Tesco* | 7 | 56 | 40 | 42 | 33 | 25 | 25 | 15 | 14 | | 7 | 11 | 9 | 7 | 8 | 5 | 4 |
| Willow | 6 | 54 | 40 | 39 | 36 | 31 | 18 | 13 | 16 | 8 | | 8 | 6 | 7 | 5 | 4 | 3 |
| Vitalite | 6 | 62 | 45 | 45 | 31 | 28 | 18 | 11 | 17 | 12 | 9 | | 9 | 7 | 6 | 10 | 3 |
| Aldi | 5 | 55 | 44 | 46 | 31 | 30 | 20 | 15 | 19 | 12 | 8 | 11 | | 9 | 14 | 5 | 3 |
| Morrisons | 4 | 59 | 41 | 47 | 38 | 30 | 26 | 17 | 17 | 12 | 11 | 10 | 11 | | 10 | 7 | 3 |
| Lidl | 4 | 54 | 43 | 54 | 30 | 27 | 27 | 16 | 17 | 13 | 8 | 9 | 17 | 10 | | 5 | 3 |
| Pure Dairy Free | 4 | 48 | 28 | 26 | 27 | 21 | 21 | 15 | 11 | 9 | 6 | 17 | 6 | 8 | 5 | | 5 |
| Benecol | 3 | 72 | 20 | 21 | 29 | 16 | 22 | 10 | 8 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | |
| **Average duplication** | | **58** | **40** | **41** | **31** | **28** | **20** | **14** | **14** | **10** | **8** | **9** | **8** | **7** | **7** | **5** | **3** |
| | b(%) | 50 | 31 | 30 | 25 | 23 | 16 | 11 | 10 | 7 | 6 | 6 | 5 | 4 | 4 | 4 | 3 |

**(Table continued on next page)**

**(Table 58 continued)**

Toilet tissue

| **Buyers of** | b(%) | Andr | Vel | Tsc* | Cush | Asda* | Aldi | Morr | Nicky | Lidl | Nou | SainB* | Reg | WHL | Icel | Wait* | TS | Bree |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Andrex | 46 | | 50 | 26 | 25 | 18 | 15 | 19 | 14 | 10 | 14 | 12 | 14 | 9 | 3 | 4 | 2 | 1 |
| Velvet | 35 | 64 | | 26 | 32 | 22 | 16 | 22 | 15 | 12 | 17 | 11 | 16 | 10 | 4 | 3 | 2 | 2 |
| Tesco* | 23 | 52 | 40 | | 22 | 18 | 16 | 14 | 14 | 12 | 15 | 11 | 11 | 9 | 4 | 3 | 2 | 2 |
| Cushelle | 19 | 61 | 59 | 27 | | 22 | 17 | 21 | 14 | 16 | 19 | 10 | 16 | 10 | 3 | 3 | 2 | 2 |
| Asda* | 18 | 45 | 42 | 23 | 22 | | 19 | 16 | 17 | 12 | 10 | 10 | 9 | 10 | 5 | 2 | 3 | 2 |
| Aldi | 16 | 44 | 37 | 23 | 20 | 22 | | 19 | 24 | 18 | 12 | 10 | 12 | 11 | 5 | 2 | 4 | 2 |
| Morrisons | 15 | 60 | 53 | 22 | 26 | 20 | 20 | | 18 | 14 | 20 | 10 | 17 | 10 | 4 | 2 | 3 | 2 |
| Nicky | 15 | 42 | 36 | 21 | 18 | 20 | 25 | 18 | | 15 | 13 | 8 | 15 | 15 | 7 | 2 | 6 | 3 |
| Lidl | 11 | 42 | 38 | 23 | 27 | 19 | 25 | 18 | 20 | | 16 | 11 | 12 | 10 | 5 | 3 | 3 | 2 |
| Nouvelle | 10 | 60 | 58 | 32 | 35 | 17 | 18 | 29 | 18 | 18 | | 13 | 18 | 11 | 5 | 4 | 3 | 2 |
| Sainsbury* | 10 | 59 | 39 | 25 | 19 | 16 | 15 | 15 | 12 | 12 | 13 | | 14 | 11 | 5 | 5 | 1 | 2 |
| Regina | 10 | 66 | 57 | 25 | 31 | 17 | 19 | 26 | 23 | 14 | 20 | 13 | | 17 | 6 | 5 | 4 | 2 |
| Wilkin. Hardw. Ltd | 8 | 52 | 44 | 24 | 24 | 21 | 21 | 18 | 27 | 14 | 13 | 13 | 20 | | 8 | 2 | 3 | 3 |
| Iceland | 4 | 38 | 37 | 26 | 17 | 22 | 20 | 17 | 28 | 15 | 15 | 12 | 17 | 17 | | 2 | 5 | 16 |
| Waitrose* | 3 | 65 | 41 | 23 | 21 | 11 | 11 | 13 | 12 | 12 | 13 | 18 | 18 | 7 | 2 | | 1 | 1 |
| Triple Softy | 2 | 41 | 37 | 22 | 17 | 22 | 31 | 21 | 47 | 17 | 15 | 7 | 18 | 14 | 9 | 1 | | 3 |
| Breeze | 2 | 37 | 41 | 30 | 22 | 23 | 20 | 15 | 24 | 15 | 14 | 13 | 14 | 16 | 37 | 2 | 4 | |
| **Average duplication** | | **52** | **44** | **25** | **24** | **19** | **19** | **19** | **20** | **14** | **15** | **11** | **15** | **12** | **7** | **3** | **3** | **3** |
| | b(%) | 46 | 35 | 23 | 19 | 18 | 16 | 15 | 15 | 11 | 10 | 10 | 10 | 8 | 4 | 3 | 2 | 2 |

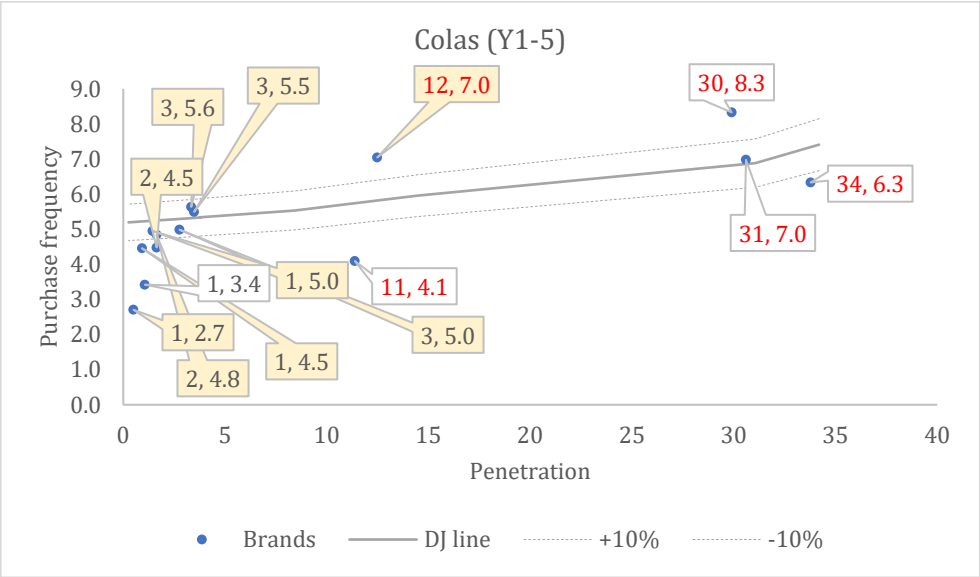
*Average of the respective individually listed retailer variants taken

(rounded figures)
Source: Kantar WorldPanel

***Table 59: Double Jeopardy tables & graphs for categories with deviating small brands (Y1-5)***

| Colas | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Pepsi | 27 | 30 | 34 | 8.3 | 7.4 |
| Coca-Cola | 22 | 34 | 31 | 6.3 | 6.9 |
| Diet Coke | 22 | 31 | 31 | 7.0 | 6.9 |
| Tesco | 10 | 12 | 14 | 7.0 | 6.0 |
| Coca-Cola Zero | 5 | 11 | 8 | 4.1 | 5.5 |
| Freeway | 2 | 3 | 4 | 5.5 | 5.3 |
| Vive | 2 | 3 | 4 | 5.6 | 5.3 |
| Morrisons | 1 | 3 | 3 | 5.0 | 5.3 |
| Sunsip Tesco | 1 | 2 | 1 | 4.5 | 5.2 |
| Sainsburys Basics | 1 | 2 | 1 | 4.8 | 5.2 |
| Tesco Value | 1 | 1 | 1 | 5.0 | 5.2 |
| Asda Smartprice | 0 | 1 | 1 | 4.5 | 5.2 |
| Barrs | 0 | 1 | 1 | 3.4 | 5.2 |
| Co-op | 0 | 1 | 0 | 2.7 | 5.2 |

Average BPMs Y1-5 Source: Kantar WorldPanel

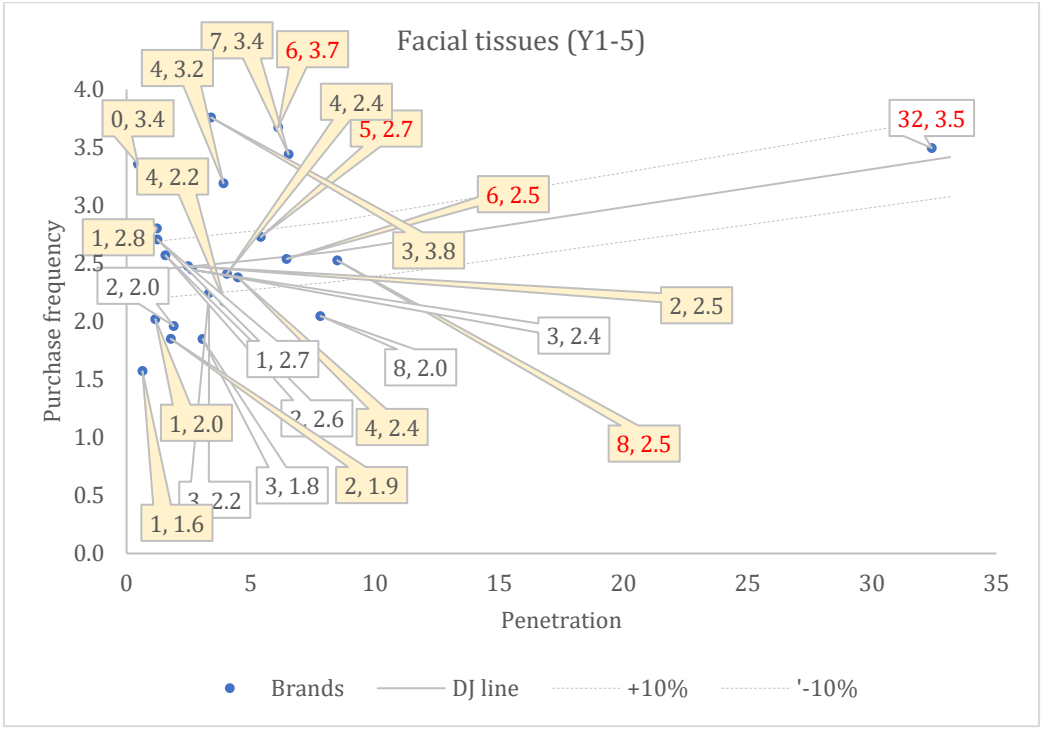



**(Table continued on next page)**

**(Table 59 continued)**

| Facial tissues | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Kleenex | 31 | 32 | 33 | 3.5 | 3.4 |
| Aldi | 6 | 7 | 9 | 3.4 | 2.6 |
| Tesco Value | 6 | 6 | 9 | 3.7 | 2.6 |
| Tesco | 6 | 8 | 8 | 2.5 | 2.6 |
| Velvet | 5 | 8 | 6 | 2.0 | 2.6 |
| Spring Force | 4 | 6 | 6 | 2.5 | 2.6 |
| Sainsbury | 4 | 5 | 6 | 2.7 | 2.5 |
| Sainsburys Basics | 4 | 3 | 5 | 3.8 | 2.5 |
| Asda Smartprice | 3 | 4 | 5 | 3.2 | 2.5 |
| Morrisons | 3 | 4 | 4 | 2.4 | 2.5 |
| Lidl | 3 | 4 | 4 | 2.4 | 2.5 |
| Asda | 2 | 4 | 4 | 2.2 | 2.5 |
| Wilkin. Hardw. Ltd. | 2 | 3 | 3 | 2.2 | 2.5 |
| Asda Ultra | 2 | 2 | 3 | 2.5 | 2.5 |
| Tempo | 2 | 3 | 3 | 2.4 | 2.5 |
| Paloma | 2 | 3 | 2 | 1.8 | 2.5 |
| Viscount | 1 | 2 | 2 | 2.6 | 2.5 |
| Cherish | 1 | 2 | 2 | 2.0 | 2.5 |
| Waitrose | 1 | 1 | 1 | 2.8 | 2.4 |
| Countess | 1 | 1 | 1 | 2.7 | 2.4 |
| Boots | 1 | 2 | 1 | 1.9 | 2.4 |
| Co-op | 1 | 1 | 1 | 2.0 | 2.4 |
| Everyday | 0 | 0 | 1 | 3.4 | 2.4 |
| Superdrug | 0 | 1 | 0 | 1.6 | 2.4 |

Average BPMs Y1-5 Source: Kantar WorldPanel

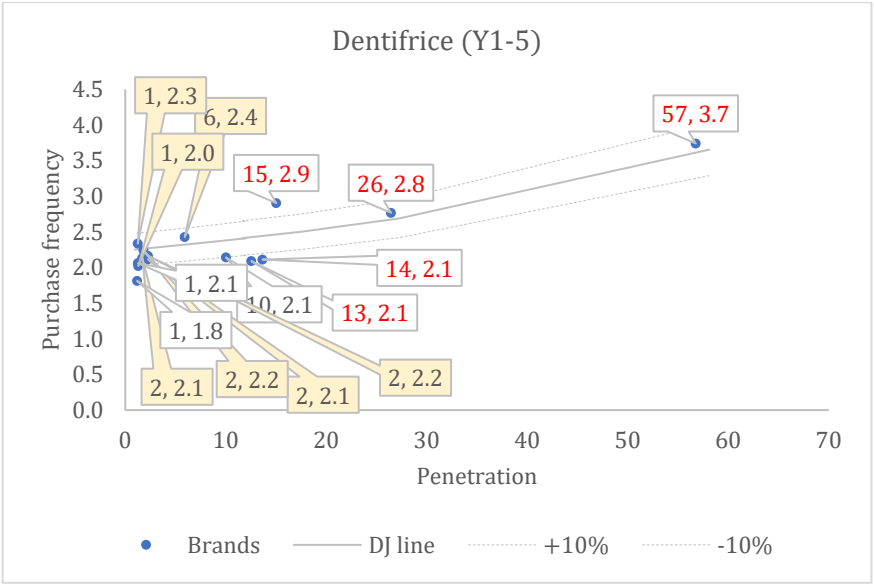



**(Table continued on next page)**

**(Table 59 continued)**

| Dentifrice | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Colgate | 44 | 57 | 58 | 3.7 | 3.7 |
| Aquafresh | 15 | 26 | 27 | 2.8 | 2.7 |
| Sensodyne | 9 | 15 | 17 | 2.9 | 2.5 |
| Oral-B | 6 | 13 | 12 | 2.1 | 2.4 |
| Macleans | 6 | 14 | 12 | 2.1 | 2.4 |
| Arm+Hammer | 4 | 10 | 9 | 2.1 | 2.4 |
| Tesco | 3 | 6 | 6 | 2.4 | 2.3 |
| Asda Protect | 1 | 2 | 2 | 2.2 | 2.3 |
| Morrisons | 1 | 2 | 2 | 2.1 | 2.3 |
| Aldi | 1 | 2 | 2 | 2.2 | 2.3 |
| Lidl | 1 | 2 | 2 | 2.1 | 2.3 |
| Tesco Value | 1 | 1 | 1 | 2.3 | 2.3 |
| Tesco Steps | 1 | 1 | 1 | 2.0 | 2.3 |
| Wilki. Hardw. Ltd. | 1 | 1 | 1 | 2.1 | 2.3 |
| Corsodyl | 0 | 1 | 1 | 1.8 | 2.3 |

Average BPMs Y1-5 Source: Kantar WorldPanel

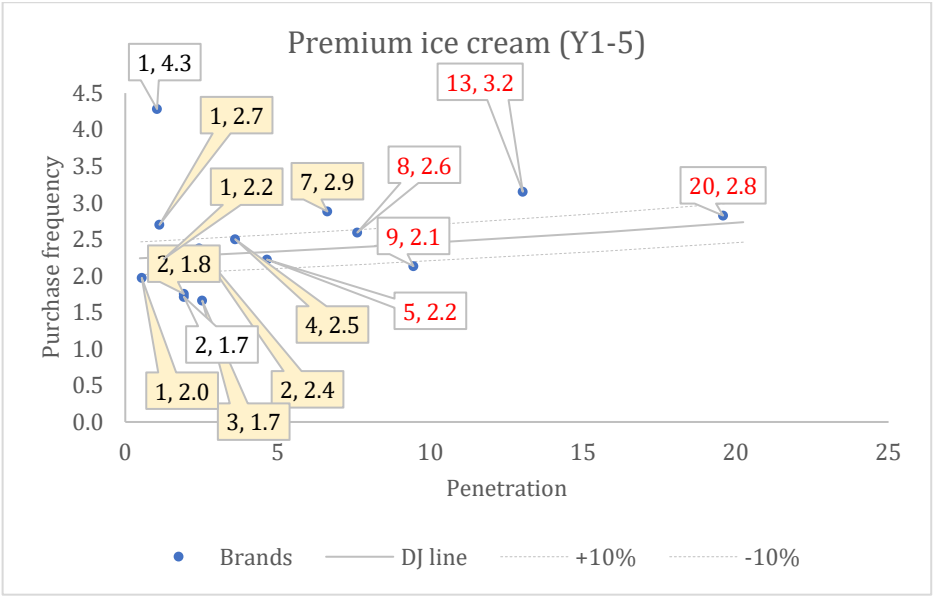



**(Table continued on next page)**

**(Table 59 continued)**

| Premium ice cream | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Walls Carte D Or | 21 | 20 | 20 | 2.8 | 2.7 |
| Ben+Jerrys | 16 | 13 | 16 | 3.2 | 2.6 |
| Kellys | 8 | 9 | 8 | 2.1 | 2.4 |
| Tesco | 8 | 7 | 8 | 2.9 | 2.4 |
| Haagen Dazs | 8 | 8 | 8 | 2.6 | 2.4 |
| Mackies | 4 | 5 | 4 | 2.2 | 2.3 |
| Aldi | 3 | 4 | 4 | 2.5 | 2.3 |
| Lidl | 2 | 2 | 3 | 2.4 | 2.3 |
| Swedish Glace | 2 | 1 | 2 | 4.3 | 2.3 |
| Iceland | 2 | 3 | 2 | 1.7 | 2.3 |
| Morrisons | 1 | 2 | 2 | 1.8 | 2.3 |
| Fredericks Cadburys | 1 | 2 | 1 | 1.7 | 2.3 |
| Waitrose | 1 | 1 | 1 | 2.7 | 2.3 |
| Tesco Finest | 1 | 1 | 1 | 2.2 | 2.3 |
| Co-op | 0 | 1 | 0 | 2.0 | 2.2 |

Average BPMs Y1-5 Source: Kantar WorldPanel

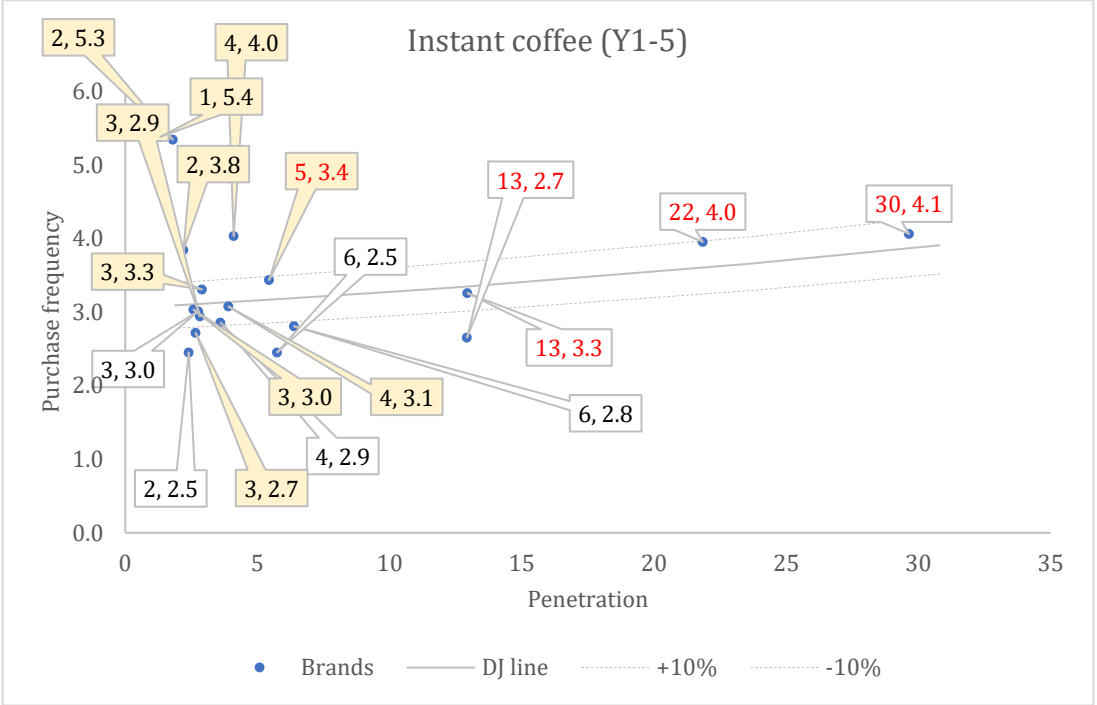



**(Table continued on next page)**

**(Table 59 continued)**

| Instant coffee | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Nescafe | 24 | 30 | 31 | 4.1 | 3.9 |
| Kenco | 17 | 22 | 24 | 4.0 | 3.7 |
| Nescafe Gold Blend | 9 | 13 | 13 | 3.3 | 3.3 |
| Douwe Egbert | 7 | 13 | 10 | 2.7 | 3.3 |
| Tesco Gold | 4 | 5 | 6 | 3.4 | 3.2 |
| Carte Noire | 4 | 6 | 6 | 2.8 | 3.2 |
| Tesco | 3 | 4 | 5 | 4.0 | 3.2 |
| Rappor | 3 | 6 | 4 | 2.5 | 3.1 |
| Aldi | 2 | 4 | 4 | 3.1 | 3.1 |
| Maxwell House | 2 | 4 | 3 | 2.9 | 3.1 |
| Lidl | 2 | 3 | 3 | 3.3 | 3.1 |
| Tesco Value | 2 | 2 | 3 | 5.3 | 3.1 |
| Sainsbury Full R. | 2 | 2 | 3 | 3.8 | 3.1 |
| Morrisons | 2 | 3 | 3 | 2.9 | 3.1 |
| Maxwell House Cl. | 2 | 3 | 3 | 3.0 | 3.1 |
| Sainsbury | 2 | 3 | 3 | 3.0 | 3.1 |
| Asda Great Value | 2 | 3 | 2 | 2.7 | 3.1 |
| Asda Smartprice | 1 | 1 | 2 | 5.4 | 3.1 |
| Red Mountain | 1 | 2 | 2 | 2.5 | 3.1 |

Average BPMs Y1-5 Source: Kantar WorldPanel

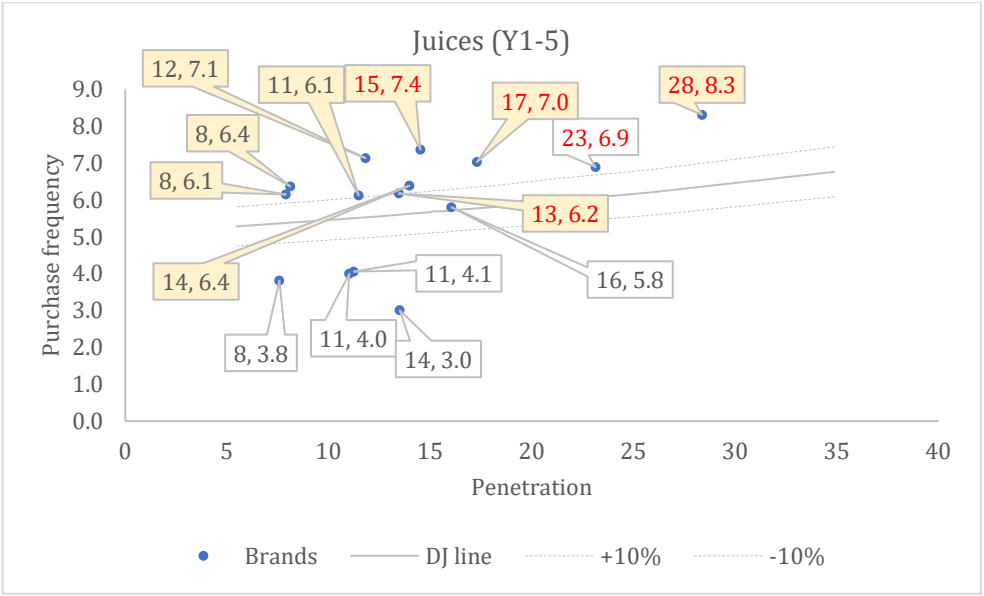



**(Table continued on next page)**

**(Table 59 continued)**

| Juices | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Tesco | 13 | 28 | 35 | 8.3 | 6.8 |
| Tropicana | 9 | 23 | 26 | 6.9 | 6.2 |
| Asda | 7 | 17 | 21 | 7.0 | 6.0 |
| Tesco Value | 6 | 15 | 18 | 7.4 | 5.8 |
| Innocent | 5 | 16 | 16 | 5.8 | 5.7 |
| Morrisons | 5 | 14 | 16 | 6.4 | 5.7 |
| Sainsbury | 5 | 13 | 15 | 6.2 | 5.7 |
| Aldi | 5 | 12 | 15 | 7.1 | 5.7 |
| Lidl | 4 | 11 | 13 | 6.1 | 5.6 |
| Asda Smartprice | 3 | 8 | 10 | 6.4 | 5.4 |
| Sainsburys Basics | 3 | 8 | 9 | 6.1 | 5.4 |
| Ocean Spray (Gerber) | 3 | 11 | 8 | 4.1 | 5.4 |
| Copella | 3 | 11 | 8 | 4.0 | 5.4 |
| Princes | 2 | 14 | 8 | 3.0 | 5.4 |
| Don Simon | 2 | 8 | 5 | 3.8 | 5.3 |

Average BPMs Y1-5 Source: Kantar WorldPanel

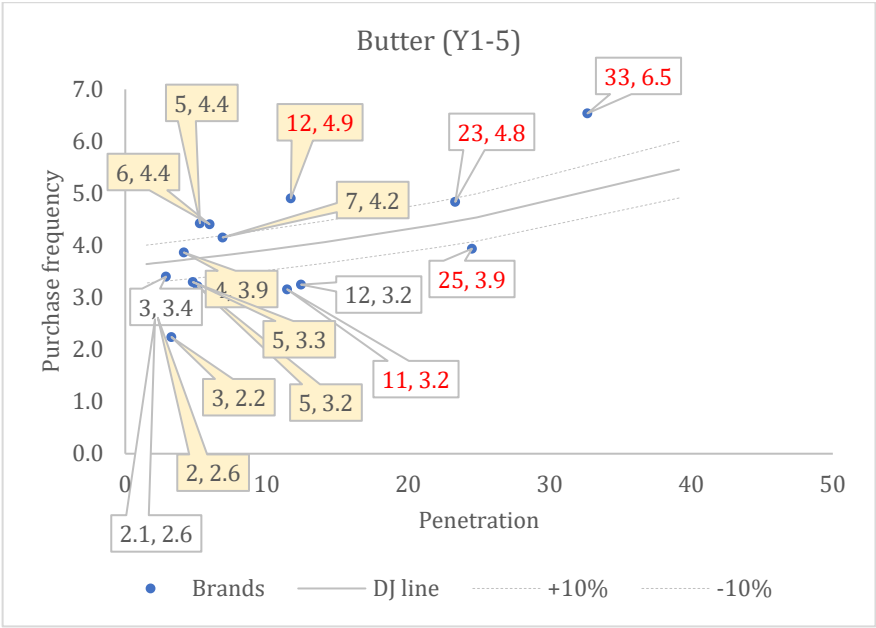



**(Table continued on next page)**

**(Table 59 continued)**

| Butter | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Lurpak | 27 | 33 | 39 | 6.5 | 5.5 |
| Anchor | 14 | 23 | 25 | 4.8 | 4.5 |
| Country Life | 12 | 25 | 22 | 3.9 | 4.4 |
| Tesco Value | 7 | 12 | 14 | 4.9 | 4.1 |
| Kerrygold | 5 | 12 | 10 | 3.2 | 3.9 |
| Tesco | 4 | 11 | 9 | 3.2 | 3.9 |
| Sainsburys Basics | 4 | 7 | 7 | 4.2 | 3.8 |
| Asda Smartprice | 3 | 6 | 7 | 4.4 | 3.8 |
| Aldi | 3 | 5 | 6 | 4.4 | 3.8 |
| Sainsbury | 2 | 5 | 4 | 3.2 | 3.7 |
| Lidl | 2 | 4 | 4 | 3.9 | 3.7 |
| Morrisons | 2 | 5 | 4 | 3.3 | 3.7 |
| President | 1 | 3 | 3 | 3.4 | 3.7 |
| Asda | 1 | 3 | 2 | 2.2 | 3.7 |
| M+S | 1 | 2 | 2 | 2.6 | 3.6 |
| Yeo Valley Organic | 1 | 2.1 | 1 | 2.6 | 3.6 |

Average BPMs Y1-5 Source: Kantar WorldPanel

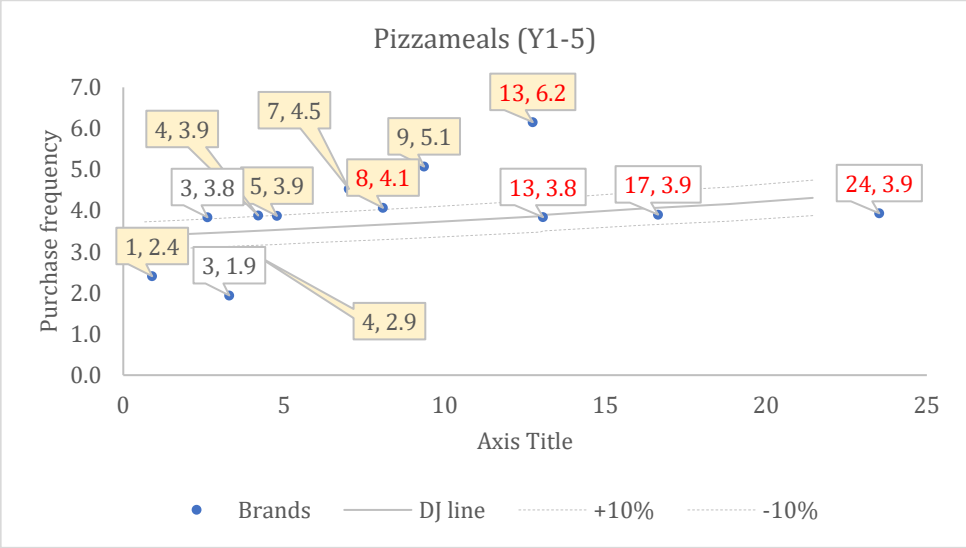



**(Table continued on next page)**

**(Table 59 continued)**

| Pizzameals | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Goodfellas | 17 | 24 | 21 | 3.9 | 4.3 |
| Iceland | 14 | 13 | 19 | 6.2 | 4.2 |
| Chicago Town | 12 | 17 | 16 | 3.9 | 4.1 |
| Asda Chosen By You | 9 | 9 | 13 | 5.1 | 3.9 |
| Dr Oetker Ristorante | 9 | 13 | 13 | 3.8 | 3.9 |
| Tesco | 6 | 8 | 9 | 4.1 | 3.7 |
| Aldi | 6 | 7 | 9 | 4.5 | 3.7 |
| Morrisons | 4 | 5 | 6 | 3.9 | 3.6 |
| Trattoria Verdi | 3 | 4 | 5 | 3.9 | 3.5 |
| Lidl | 2 | 4 | 3 | 2.9 | 3.5 |
| LA Diner | 2 | 3 | 3 | 3.8 | 3.5 |
| Goodfellas Takeaway | 1 | 3 | 2 | 1.9 | 3.4 |
| Aldi Specially Selected | 0 | 1 | 1 | 2.4 | 3.4 |

Average BPMs Y1-5 Source: Kantar WorldPanel

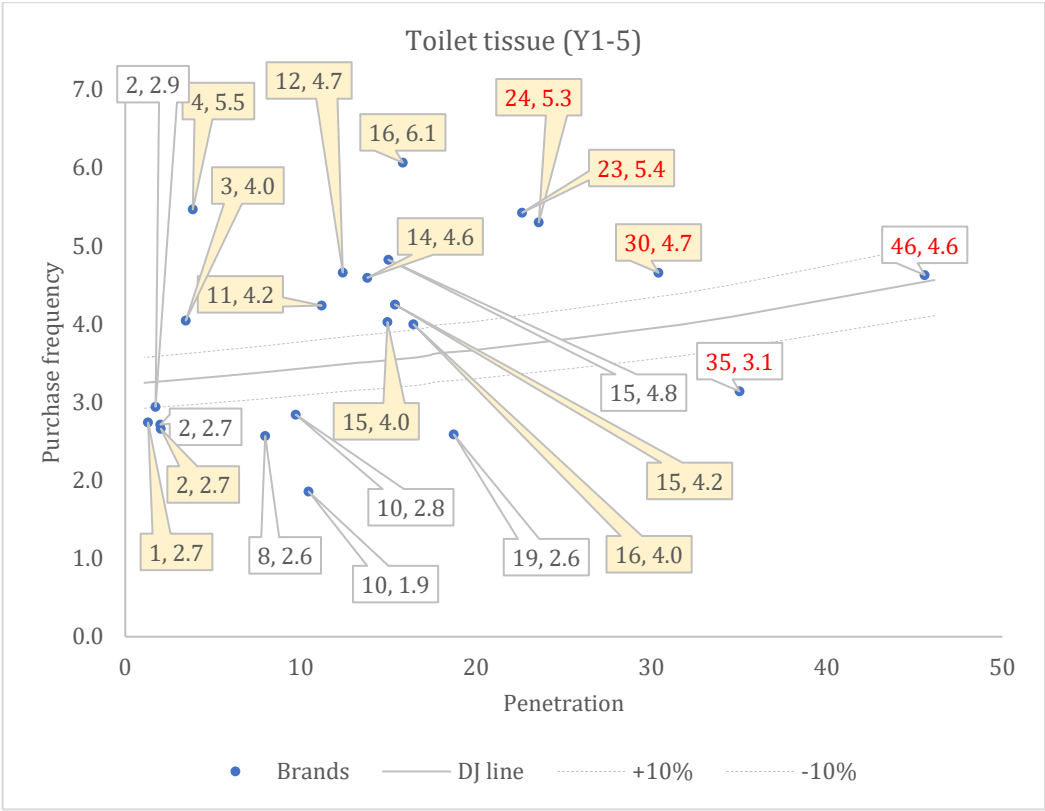



**(Table continued on next page)**

**(Table 59 continued)**

| Toilet tissue | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Andrex | 11 | 46 | 46 | 4.6 | 4.6 |
| Tesco | 7 | 30 | 35 | 4.7 | 4.1 |
| Tesco Value | 6 | 24 | 32 | 5.3 | 4.0 |
| Asda | 6 | 23 | 31 | 5.4 | 4.0 |
| Velvet | 6 | 35 | 28 | 3.1 | 3.9 |
| Aldi | 5 | 16 | 26 | 6.1 | 3.8 |
| Nicky | 4 | 15 | 20 | 4.8 | 3.7 |
| Sainsbury | 3 | 16 | 18 | 4.0 | 3.6 |
| Spring Force | 3 | 15 | 18 | 4.2 | 3.6 |
| Asda Smartprice | 3 | 14 | 17 | 4.6 | 3.6 |
| Morrisons | 3 | 15 | 17 | 4.0 | 3.6 |
| Sainsburys Basics | 3 | 12 | 16 | 4.7 | 3.6 |
| Cushelle | 2 | 19 | 14 | 2.6 | 3.5 |
| Lidl | 2 | 11 | 13 | 4.2 | 3.5 |
| Regina | 1 | 10 | 8 | 2.8 | 3.4 |
| Iceland | 1 | 4 | 6 | 5.5 | 3.3 |
| Wilk. Hardw. Ltd. | 1 | 8 | 6 | 2.6 | 3.3 |
| Nouvelle | 1 | 10 | 6 | 1.9 | 3.3 |
| Waitrose | 1 | 3 | 4 | 4.0 | 3.3 |
| Breeze | 0 | 2 | 2 | 2.9 | 3.3 |
| Triple Softy | 0 | 2 | 2 | 2.7 | 3.3 |
| Waitrose Essential | 0 | 2 | 2 | 2.7 | 3.3 |
| Sains Perform+Protect | 0 | 1 | 1 | 2.7 | 3.2 |

Average BPMs Y1-5 Source: Kantar WorldPanel

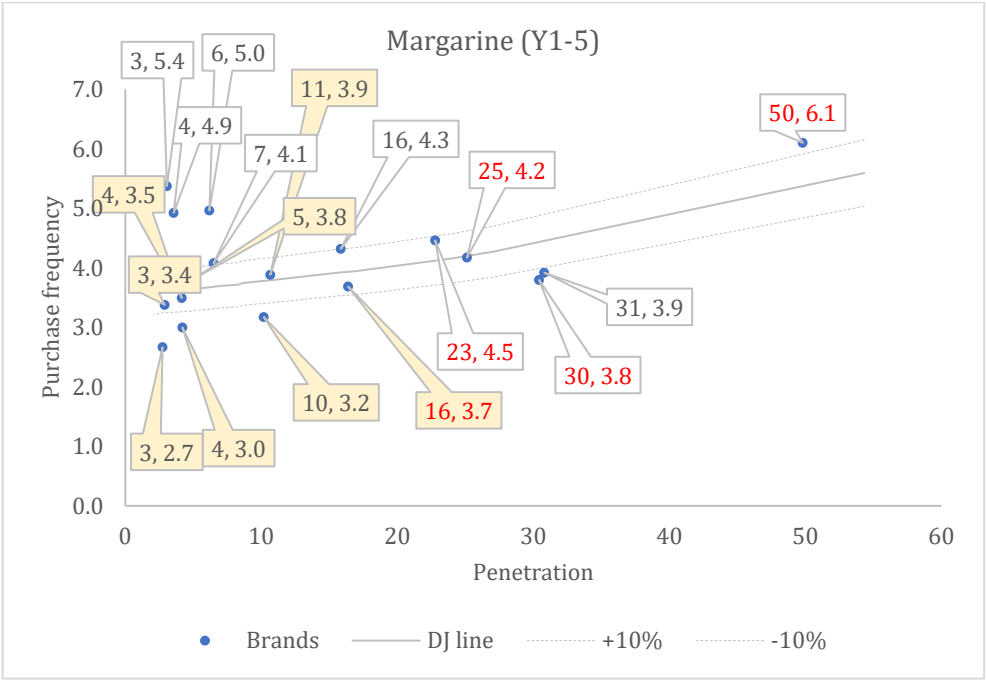



**(Table continued on next page)**

**(Table 59 continued)**

| Margarine | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Flora | 26 | 50 | 54 | 6.1 | 5.6 |
| I C B I N B | 11 | 31 | 28 | 3.9 | 4.3 |
| St Ivel | 10 | 30 | 27 | 3.8 | 4.3 |
| Stork | 9 | 25 | 25 | 4.2 | 4.2 |
| Clover | 9 | 23 | 24 | 4.5 | 4.2 |
| Bertolli | 6 | 16 | 17 | 4.3 | 3.9 |
| Tesco | 5 | 16 | 16 | 3.7 | 3.9 |
| Sainsbury | 4 | 11 | 11 | 3.9 | 3.8 |
| Asda | 3 | 10 | 9 | 3.2 | 3.7 |
| Vitalite | 3 | 6 | 8 | 5.0 | 3.7 |
| Willow | 2 | 7 | 7 | 4.1 | 3.7 |
| Aldi | 2 | 5 | 5 | 3.8 | 3.7 |
| Pure Dairy Free | 2 | 4 | 5 | 4.9 | 3.6 |
| Benecol | 1 | 3 | 4 | 5.4 | 3.6 |
| Lidl | 1 | 4 | 4 | 3.5 | 3.6 |
| Morrisons | 1 | 4 | 3 | 3.0 | 3.6 |
| Tesco Value | 1 | 3 | 3 | 3.4 | 3.6 |
| Tesco Healthy Living | 1 | 3 | 2 | 2.7 | 3.6 |

Average BPMs Y1-5 Source: Kantar WorldPanel

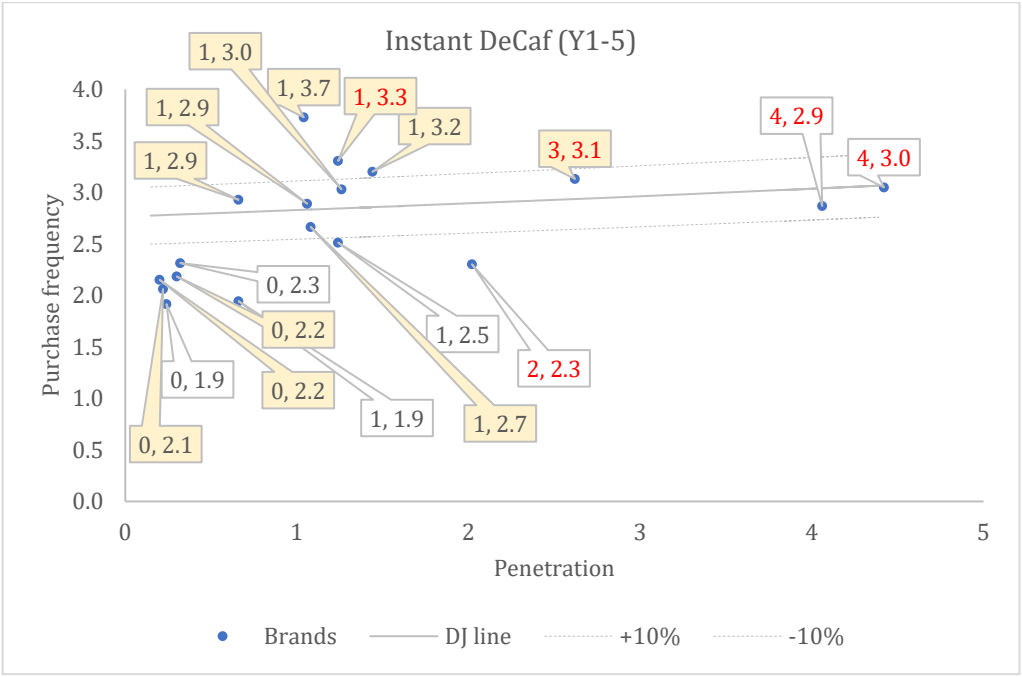



**(Table continued on next page)**

**(Table 59 continued)**

| Instant DeCaf | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Nescafe | 16 | 4 | 4 | 2.9 | 3.0 |
| Kenco | 19 | 4 | 4 | 3.0 | 3.1 |
| Tesco Classic Gold | 12 | 3 | 3 | 3.1 | 2.9 |
| Aldi | 7 | 1 | 2 | 3.2 | 2.9 |
| Nescafe Gold Blend | 7 | 2 | 2 | 2.3 | 2.9 |
| Lidl | 6 | 1 | 1 | 3.7 | 2.9 |
| Tesco | 6 | 1 | 1 | 3.3 | 2.9 |
| Sainsbury | 5 | 1 | 1 | 3.0 | 2.8 |
| Carte Noire | 4 | 1 | 1 | 2.5 | 2.8 |
| Morrisons | 4 | 1 | 1 | 2.9 | 2.8 |
| Asda Great Value | 4 | 1 | 1 | 2.7 | 2.8 |
| Sainsbury Full R. | 3 | 1 | 1 | 2.9 | 2.8 |
| Douwe Egbert | 2 | 1 | 0 | 1.9 | 2.8 |
| Clipper Fairtrade | 1 | 0 | 0 | 2.3 | 2.8 |
| Waitrose | 1 | 0 | 0 | 2.2 | 2.8 |
| Percol Ftrd | 1 | 0 | 0 | 1.9 | 2.8 |
| Co-op Granules | 1 | 0 | 0 | 2.1 | 2.8 |
| M+S Fairtrade I.C. | 1 | 0 | 0 | 2.2 | 2.8 |

Average BPMs Y1-5 Source: Kantar WorldPanel

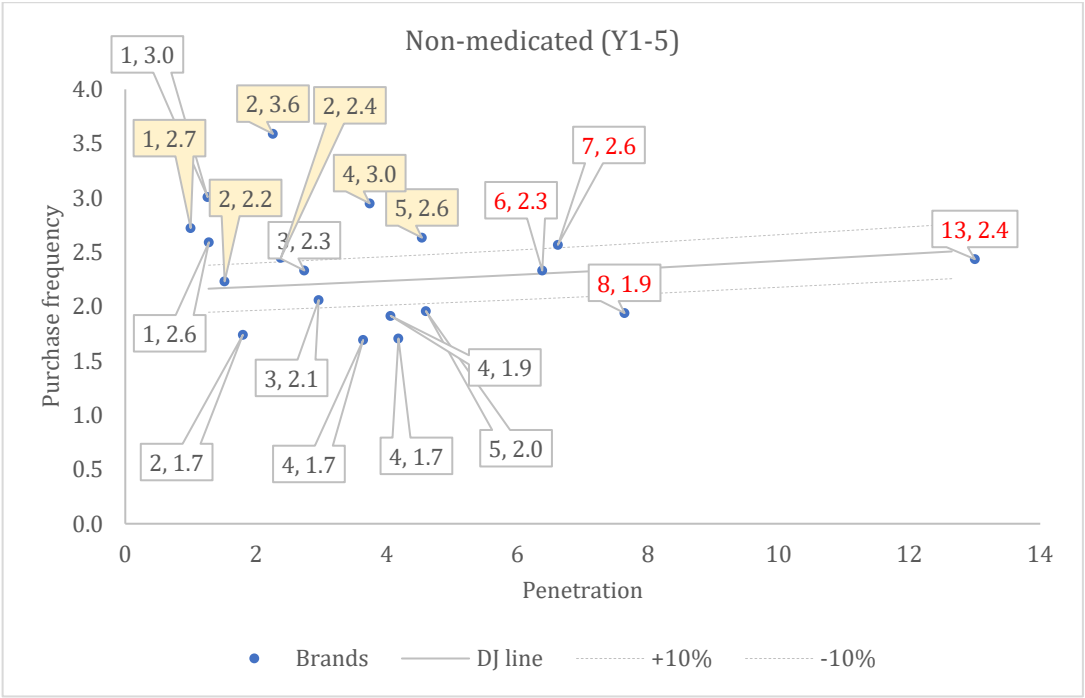



**(Table continued on next page)**

**(Table 59 continued)**

| Non-medicated | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Nivea | 12 | 13 | 13 | 2.4 | 2.5 |
| Simple | 6 | 7 | 7 | 2.6 | 2.3 |
| Oil Of Olay | 5 | 6 | 6 | 2.3 | 2.3 |
| Vaseline | 5 | 8 | 6 | 1.9 | 2.3 |
| Tesco | 4 | 5 | 5 | 2.6 | 2.3 |
| Aldi | 4 | 4 | 5 | 3.0 | 2.3 |
| Garnier Skin Naturals | 3 | 5 | 4 | 2.0 | 2.2 |
| Boots No.7 | 3 | 2 | 4 | 3.6 | 2.2 |
| Johnsons Baby | 3 | 4 | 4 | 1.9 | 2.2 |
| E45 | 3 | 4 | 3 | 1.7 | 2.2 |
| L'Oreal Dermo Exp. | 2 | 3 | 3 | 2.3 | 2.2 |
| Dove | 2 | 4 | 3 | 1.7 | 2.2 |
| Johnsons | 2 | 3 | 3 | 2.1 | 2.2 |
| Asda Skin System | 2 | 2 | 3 | 2.4 | 2.2 |
| The Sanctuary | 1 | 1 | 2 | 3.0 | 2.2 |
| Lidl | 1 | 2 | 2 | 2.2 | 2.2 |
| Montagne Jeunesse | 1 | 1 | 2 | 2.6 | 2.2 |
| Palmers | 1 | 2 | 1 | 1.7 | 2.2 |
| Tesco Value | 1 | 1 | 1 | 2.7 | 2.2 |

Average BPMs Y1-5 Source: Kantar WorldPanel

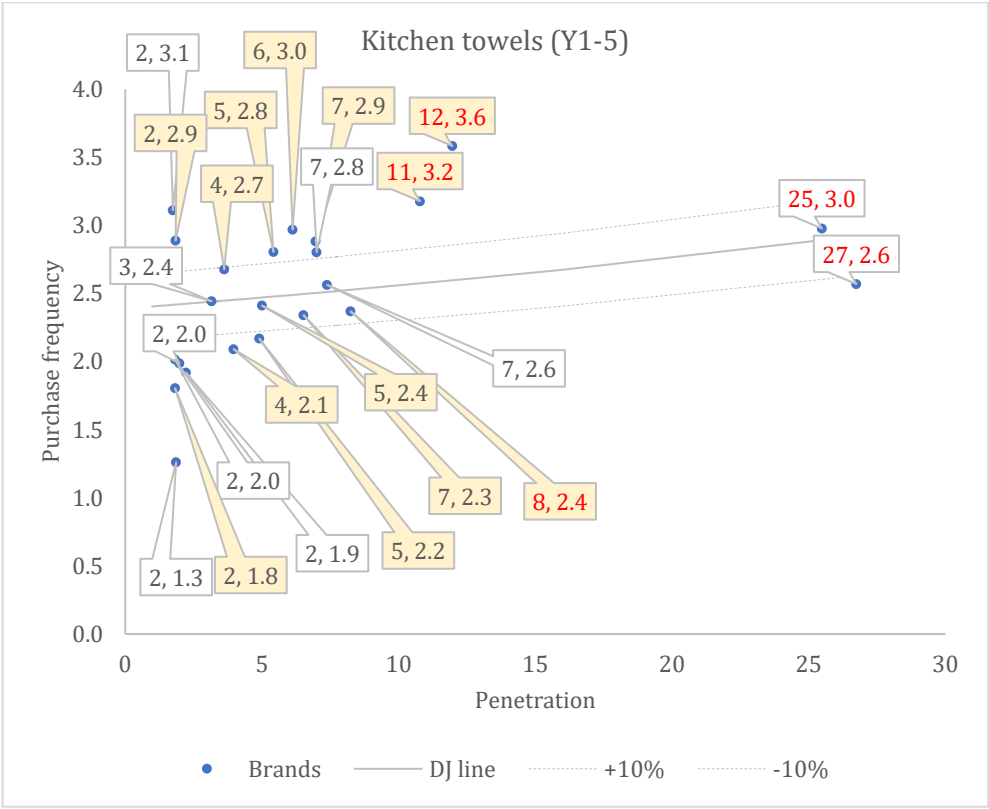



**(Table continued on next page)**

**(Table 59 continued)**

| Kitchen towels | Market share | Penetration (b, %) | | Purchase frequency (w) | |
|---|---|---|---|---|---|
| | % | O | T | O | T |
| Plenty | 16 | 25 | 26 | 3.0 | 2.9 |
| Lotus Thirst Pocket | 14 | 27 | 24 | 2.6 | 2.9 |
| Tesco Value | 9 | 12 | 16 | 3.6 | 2.7 |
| Asda | 7 | 11 | 13 | 3.2 | 2.6 |
| Aldi | 4 | 7 | 8 | 2.9 | 2.5 |
| Nicky | 4 | 7 | 8 | 2.8 | 2.5 |
| Regina | 4 | 7 | 8 | 2.6 | 2.5 |
| Tesco | 4 | 8 | 8 | 2.4 | 2.5 |
| Asda Smartprice | 4 | 6 | 7 | 3.0 | 2.5 |
| Sainsbury | 3 | 7 | 6 | 2.3 | 2.5 |
| Sainsburys Basics | 3 | 5 | 6 | 2.8 | 2.5 |
| Spring Force Tesco | 3 | 5 | 5 | 2.4 | 2.5 |
| Tesco Ultra | 2 | 5 | 4 | 2.2 | 2.5 |
| Lidl | 2 | 4 | 4 | 2.7 | 2.5 |
| Intertissue | 2 | 3 | 3 | 2.4 | 2.4 |
| Morrisons | 2 | 4 | 3 | 2.1 | 2.4 |
| Handy | 1 | 2 | 2 | 3.1 | 2.4 |
| Waitrose | 1 | 2 | 2 | 2.9 | 2.4 |
| Thirsty Bubbles | 1 | 2 | 2 | 2.0 | 2.4 |
| Mega | 1 | 2 | 2 | 1.9 | 2.4 |
| Wilk. Hardw. Ltd. | 1 | 2 | 2 | 2.0 | 2.4 |
| Co-op | 1 | 2 | 1 | 1.8 | 2.4 |
| The Snowman | 0 | 2 | 1 | 1.3 | 2.4 |

Average BPMs Y1-5 Source: Kantar WorldPanel



## Appendix IV - Publications

Below listed is the to date published work linked to this dissertation. The publications can be found on order of date on the following pages.

**Published 2017**

| | |
|---|---|
| Title | *'Deficit loyalty for small share brands'* |
| Authors | Franke, K., Bennett, D., Graham, C. |
| Type | Conference Paper |
| | Conference Proceedings Academy of Marketing, Hull, July 2017 |

| | |
|---|---|
| Title | *'Double Jeopardy - 50 Years on. Reviving a forgotten tool that still predicts brand loyalty.'* |
| Authors | Graham, C., Bennett, D., Franke, K., Henfrey, C.L., Nagy-Hamada, M. |
| Type | Journal Paper |
| | Australasian Marketing Journal (AMJ), November 2017 |

**Published 2018**

| | |
|---|---|
| Title | *'Deficit loyalty and the small brand syndrome'* |
| Authors | Franke, K., Graham, C., Bennet, D. |
| Type | Conference Paper |
| | Conference Proceedings ANZMAC, Adelaide, December 2018 |

**Published 2019**

| | |
|---|---|
| Title | *'Does Double Jeopardy hold for small share brands?'* |
| Authors | Franke, K., Graham, C., Bennet, D. |
| Type | Ehrenberg-Bass Institute Corporate Report No. 93 |
| | University of South Australia, Adelaide, February 2019 |