



## **Does behaviour of heavy and light wine buyers differ?**

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### ***Abstract***

***Purpose:*** The aim of this paper is to explore the differences in behaviour between heavy and light wine buyers. This is conducted by comparing heavy and light buyers of wine in terms of their repertoires including the size, purchase frequency and market shares across brands, as well as loyalty exhibited towards particular wine attributes.

***Design/methodology/approach:*** Using panel data of wine purchases in the UK for each buyer group (light and heavy) market shares and loyalty to wine attributes were examined. The polarisation index  $\phi$  (phi) was used as a measure of loyalty.

***Findings:*** The light buyers' market share for small brands is slightly greater than for the heavy wine buyers. Moreover, attributes such as brand type and brand share seem to drive loyalty more than expected for light wine buyers in comparison to heavy wine buyers.

***Practical implications:*** Despite their small purchase volume and contribution to a brand's sales, light wine buyers comprise an important target group for small share wine brands. Winemakers of small brands should acknowledge this fact, trying to meet expectations of light buyers as well. In addition, direct marketing strategies could be adapted for each group individually based on the attributes that drive greater loyalty for each group.

Key words: Wine, Heavy buyers, Light buyers, Repertoire, Market share, Loyalty.

## 1. INTRODUCTION

A large body of early marketing literature has focused on researching buyers based on the frequency and volume they purchase or consume (Cook and Mindak, 1984; Shoemaker et al., 1977; Twedt, 1964). Viewed from this perspective, Twedt (1964) was among the first to characterize and distinguish buyers into heavy, light and non-buyers based on their purchase frequency. One of his key findings was the heavy buyer group (i.e. “heavy half”) accounted for approximately 80% of the overall purchases within a category. This phenomenon became known as the Pareto Effect (or “80/20 rule”). Nevertheless, recent research has shown the heaviest 20% of buyers to account for approximately 50%-60% of sales in a year (Sharp, 2010). In the case of wine, Habel et al. (2003) found the proportion to be 75% of sales in a year.

Gaining an increased understanding of differences between heavy and light buyers can assist in developing strategies to meet the needs of each segment more effectively. Prior research exploring their profiles suggests heavy buyers are likely to be price conscious, deal prone, disloyal to the brands they buy, loyal to the brands they buy, similar to everyone else in the category in their demographic and media use profiles, and more heterogeneous than homogeneous in their choices in comparison to light buyers (Clancy and Shulman, 1994). These characteristics were not found to be consistent (Wansink and Park, 2000); questioning these characteristics’ generalisability even within the same product category.

When considering the distribution of buying rates and purchase probabilities, prior research has proposed them to be independent across buyers (Chatfield and Goodhardt, 1975; Massy et al., 1970). Other research by Shoemaker et al. (1977) did, however, find some differences within some of the major brands’ purchase probabilities particularly for heavy category buyers. Yet, these differences lacked consistency and thus a rationale could not be provided as to why certain brands were purchased more (or less) often by heavy buyers.

In the case of wine, little research has been conducted in profiling the heavy and light wine buyers. A study by Goldsmith and d’Hauteville (1998) found heavy wine buyers to differ from light buyers by showing more interest and involvement in wine. Another more recent study by Chrysochou and Krystallis (2010) also revealed differences between the two groups, with light wine buyers having greater market shares for the smaller brands, whereas heavy wine buyers had greater market shares for the bigger brands. This study also found heavy wine buyers to exhibit greater loyalty towards the brand name and specific wine attributes. However, these findings were based on stated preference data. Therefore, the use of actual purchase data is deemed important to provide further empirical support to this phenomenon.

The aim of this paper is to further extend the Chrysochou and Krystallis study in exploring the differences in behaviour between heavy and light wine buyers by using actual purchase data. The objective is to compare heavy and light buyers of wine in terms of their repertoires including their size, purchase frequency and market shares across brands, as well as loyalty exhibited towards particular wine attributes.

## 2. DATA & METHOD

Data was taken from a well-established consumer panel provider in the UK, consisting of wine purchase records for a one-year time period (2007). Due to the significantly large number of small brands it was decided to only retain the top 100 brands for further analyses.

Next, buyers were divided into heavy and light according to Pareto, with the heaviest 20% of buyers compared to the rest of the sample. Finally, each brand was categorized based on the following attributes: a) brand type (private label or national brand); b) grape type (red, rose or white); c) brand share (big brands, 4% market share or greater; and small brands, less than 4% market share: based on observing the buying frequency counts in Figure 1); and d) country of origin (Australian, French, Californian, Italian, Chilean, South African, Spanish, German or other).

For each buyer group, market shares were calculated for each individual brand as well as each attribute. In order to measure each attribute's level of loyalty, the polarisation index  $\varphi$  was used. The polarisation estimations came from the Dirichlet model by using the following equation:  $\varphi=1/(1+S)$ , where  $S$  is a parameter of the Dirichlet model (Ehrenberg, 1988). Both indices ( $\varphi$  and  $S$ ) capture changes in the heterogeneity of consumer choice as purchase incidence changes. The primary benefit of  $\varphi$  is that it is easier to interpret, as it varies from zero to one, whereas  $S$  varies from zero to infinity. Values of  $\varphi$  close to zero indicate pure homogeneity in consumer choice, denoting high switching levels within a product category, whereby all buyers have the same propensity to buy individual brands. Values of  $\varphi$  close to one signify the existence of maximum heterogeneity, indicating high levels of loyalty in a product category within which each consumer buys only his/her favourite brand (Fader and Schmittlein, 1993; Stern and Hammond, 2004). All estimations were performed in the DIRICHLET software (Kearns, 2000).

### 3. RESULTS & DISCUSSION

#### 3.1. General purchase characteristics for each buyer group

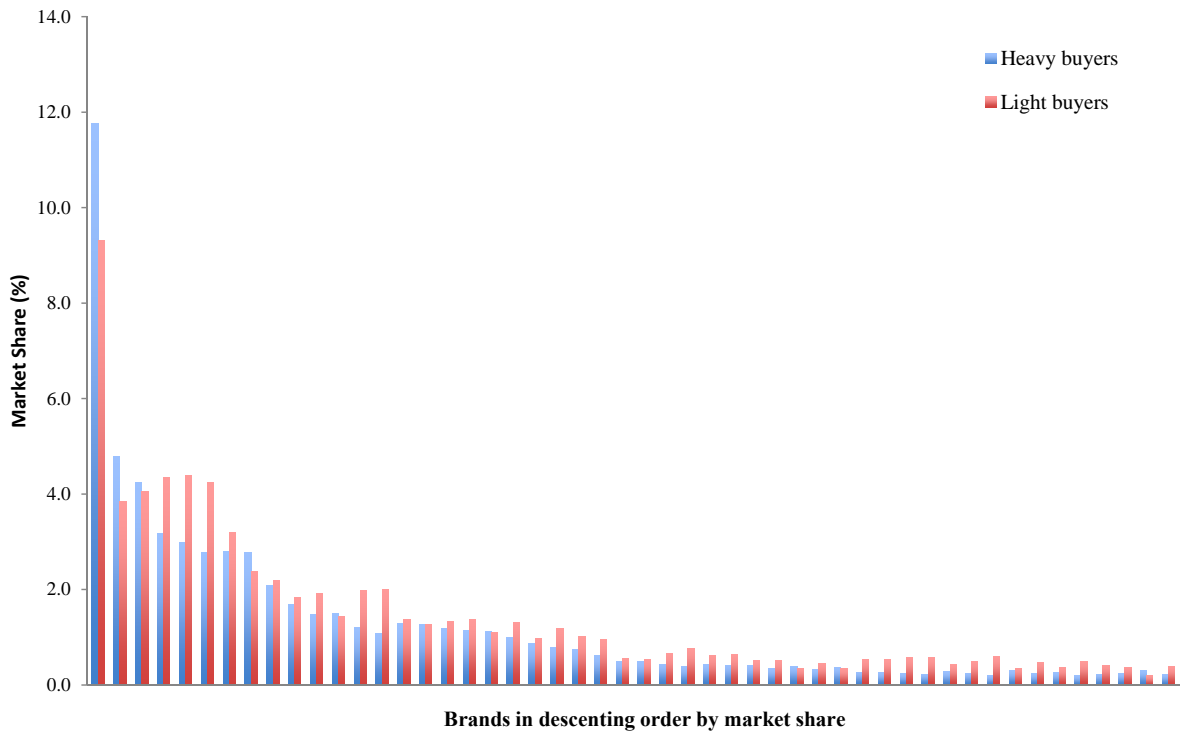
Based on the Pareto, the heavy wine buyers accounted for 69% of the total purchases and the light wine buyers for 31%. The average repertoire size for heavy wine buyers was 6.1 brands, whereas for light wine buyers it was 4.2. Furthermore, the category purchase frequency for heavy wine buyers was 39.5 whereas for light wine buyers it was 4.6.

#### 3.2. Distribution of market shares for each buyer group

When considering the buyer market shares, the results indicate that the distribution of the brands' market shares across both groups is the same. However, there is an interesting difference between the two groups (see Figure 1). Big brands (brands with market share over 4%) have a greater market share among the heavy wine buyers. Conversely, small brands (brands with market share below 4%) have a greater market share among the light wine buyers. Theoretically the distribution of brands' market shares between the two groups should be the equal (Chatfield and Goodhardt, 1975; Massy et al., 1970). This analysis reveals the preference of the light wine buyers for smaller rather than big brands, a result also found in the Chrysochou and Krystallis (2010) study.

#### 3.3. Loyalty to wine attributes for each buyer group

Table 1 presents the market shares and polarization scores across each buyer group for each wine attribute and their respective levels. In relation to polarization scores, heavy wine buyers exhibit higher loyalty across all attributes and levels, in comparison to light wine buyers. This is expected as heavy wine buyers purchase more often (as shown above) and contribute more to total wine purchases. Brand type and brand share showed greater polarization scores for both groups, followed by grape type and country of origin.



**Figure 1: Distribution of market shares for heavy and light wine buyers for the top 50 wine brands**

A ratio of the polarization scores was estimated in order to reveal how much greater heavy buyers' loyalty is in comparison to light wine buyers. For example, in the case of brand type the ratio is 1.9, which suggests that heavy wine buyers are 1.9 times more loyal than light wine buyers. Across attributes, heavy wine buyers exhibit greater loyalty for the country of origin and grape type than light wine buyers, whereas for brand type and brand share they exhibit less. In other words, heavy wine buyers are more loyal than expected to country of origin and grape type, whereas light wine buyers are more loyal than expected to brand type and brand share. This could be attributed to light wine buyers having less knowledge about country of origin and grape type, thus their decisions are primarily based on other generic extrinsic cues such as brand type and brand share. Moreover, this explains further why light wine buyers show greater market shares across smaller brands. In fact, for small share brands the polarization ratio is 1.4, which is among the lowest ones across each attribute level.

In relation to the specific levels of each attribute, there are some notable differences. For brand type, in comparison to heavy wine buyers, light wine buyers are more loyal (than expected) to national brands than for private labels (i.e. the ratio for national brands is 1.1, whereas for private label is 2.4). In the case of grape type, light wine buyers show greater loyalty to red varieties, followed by white and rosé varieties. As noted above, in the case of brand share, light wine buyers show greater loyalty for small share brands. Finally, for country of origin, light wine buyers show greater loyalty for Australian, Chilean and South African wine, whereas they shower lower loyalty to Spanish, German and Californian wine. For the latter attribute, this may reflect the popularity of these wines and the awareness among light wine buyers.

**Table 1: Polarisation indices and market shares across wine attributes**

	<u>Total Buyers</u>		<u>Heavy Buyers</u>		<u>Light Buyers</u>		$\phi_{heavy}/\phi_{light}$ Ratio
	MS %		MS %	$\phi$	MS %	$\phi$	
<b>Brand Type</b>				<b>0.79</b>		<b>0.42</b>	<b>1.9</b>
National brand	67		66	1.00	69	0.88	1.1
Private label	33		34	0.66	31	0.27	2.4
<b>Grape type</b>				<b>0.51</b>		<b>0.10</b>	<b>4.9</b>
Red	47		48	0.93	46	0.52	1.8
White	44		44	0.69	43	0.15	4.5
Rose	9		8	0.30	11	0.05	6.1
<b>Brand share</b>				<b>0.67</b>		<b>0.31</b>	<b>2.2</b>
Big brands (>4% MS)	26		26	0.67	23	0.22	3.0
Small brands (<4% MS)	74		74	0.68	77	0.50	1.4
<b>Country of Origin</b>				<b>0.27</b>		<b>0.04</b>	<b>7.2</b>
Australian	21		21	0.49	21	0.20	2.5
French	16		16	0.37	15	0.07	5.3
Californian	14		14	0.16	14	0.02	8.4
Italian	12		12	0.32	11	0.06	5.3
Chilean	8		8	0.33	9	0.09	3.5
South African	8		8	0.28	10	0.07	3.8
Spanish	7		8	0.26	7	0.02	11.9
German	7		7	0.39	6	0.04	10.8
Other Countries	7		6	0.22	8	0.02	11.1

#### 4. CONCLUSION

This paper addressed the research question of how heavy and light wine buyers differ in terms of their repertoires including their size, purchase frequency and market shares across brands, as well as loyalty exhibited towards particular wine attributes. The findings show that the light buyers' market share for small brands is slightly greater than for the heavy wine buyers, suggesting that light wine buyers prefer small brands (Chrysochou and Krystallis, 2010). The greater loyalty levels that light wine buyers showed towards small share brands further supported this finding.

The phenomenon of smaller brands having greater market shares among light wine buyers could be attributed to light wine buyers' perception of smaller brands being of higher quality. In fact, small to medium sized brands are positioned as quality wines with premium prices (Johnson and Bruwer, 2004). Another reason for this phenomenon is the role of price as an extrinsic quality cue for wine (Johnson and Bruwer, 2004; Spawton, 1991), which in conjunction to the light wine buyers' low involvement in wine, should have a greater effect on influencing their perception of these wines being of higher quality. Finally, another factor that may influence their inclination towards smaller brands is the usage occasion. Usage occasion has been found to influence purchase behaviour of wine (Hall and Lockshin, 2000; Ritchie, 2009), with light wine buyers being more likely to buy a wine for a special occasion (Olsen et al., 2007). Therefore, it is more likely these buyers purchased a more prestigious and, thus, a smaller brand, because their fewer purchase occasions were probably geared to celebrations or special holiday purchases.

With respect to loyalty to wine attributes, heavy and light wine buyers show different preferences. Attributes like brand type and brand share seem to drive loyalty more than expected for light wine buyers in comparison to heavy wine buyers. On the other hand, country of origin and grape type achieve less loyalty than expected among light wine buyers. This suggests that light wine buyers have different choice criteria when they buy wine. Apart from preferring small share brands, they tend to prefer more independent (not proprietary store) brands of red varieties and of well known origins.

All of the above leads to some managerial implications for wine marketing. First of all, despite their relative small purchase volume, light wine buyers comprise an important target group especially for small share brands. After all, light buyers are often the biggest group of buyers for a brand and form the potential heavy buyers (Sharp, 2010), thus they shouldn't be neglected. Winemakers of small brands should acknowledge this fact, trying to meet expectations of light buyers as well heavy buyers. In addition, direct marketing strategies could be adapted for each group individually based on the attributes that drive greater loyalty for each group. For example, for the attributes that heavy buyers show high loyalty to, reinforcing techniques such as strong branding and heavy advertising could be used. On the other hand, for those attributes that do not exhibit high loyalty, variety seeking techniques, such as sales promotions and featuring, could be applied instead. To conclude, wine practitioners could determine which product attributes "stimulate" loyalty and consequently create tailor-made products and apply strategies that fit each market better.

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