

Consumer's Price Sensitivity and Shrinkflation Strategy as A Trailblazer of Chocolate Market

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Abstract

The chocolate industry is a multifaceted and constantly evolving landscape in which price sensitivity and shrinkflation are paramount in determining sales and profitability. This article sheds light on how changes are marked and prices are adjusted to cater to the discerning tastes of modern-day consumers. Examining new pricing strategies, product innovation, and branding gives an in-depth analysis of recent trends shaping this exciting industry. Therefore chocolate manufacturers need to consider the impact of marking changes on the market and consumer behaviour. The sample size of the study is 100, out of which 4 questionnaires are incomplete. Hence, the sample size of the study is 96, and the sample units are the consumers of chocolates in Kerala. the sample is large and widespread, a purposive sampling method is adopted. In this study, ANOVA, Multiple comparisons, and Chi-square tests are applied and tested. Shrinkflation marketing is one of the untouched areas by the researchers. It is vital to understand the way consumers behave on price sensitivity and do they accept package downsizing. This research aims to uncover how packaging and portion size alterations impact consumer behavior and preferences, to provide a deeper understanding of consumer psychology, which can have a big impact on how consumers perceive value. The effect of marking modifications on the market and customer behaviour must therefore be taken into account by chocolate manufacturers.

Keywords: shrinkflation, marketing strategy, price sensitivity, chocolate, consumer behavior

1.Introduction of the study

The main cocoa producers in India are Kerala, Karnataka, Tamil Nadu, and Andhra Pradesh. Kerala ranks second in overall production, with 10,904 tonnes. Due to the increasing demand for chocolate and other cocoa products in the domestic market, the country has witnessed a surge in cocoa imports. Chocolate is known to have health benefits, such as boosting serotonin levels and releasing endorphins, which can help with mood elevation and anti-depressant effects. The chocolate industry is also being influenced by the rising popularity of vegan and plant-based diets, which has led to the introduction of new chocolate formulations with natural flavors and ingredients. The demand for chocolates is also fueled by their consumption during festive occasions, such as Christmas and Easter, and religious events.

1.1 Understanding Consumer Price Sensitivity and Package Downsizing: A Trailblazing Approach in the Chocolate Industry

Chocolate manufacturers are finding innovative ways to address consumer price sensitivity through package downsizing. By reducing the size of their chocolate packages, companies can maintain or even lower price points while still offering a desirable product. The chocolate market is constantly evolving, with consumers becoming increasingly sensitive to price changes and package downsizing. They are looking for ways to stretch their budget without sacrificing their love for chocolate. This shift in consumer behavior has forced chocolate manufacturers to reconsider their pricing strategies and packaging options in order to stay competitive in the market. Shrinkflation is defined as the practice of reducing the size of a product while maintaining the sticker price. It proliferates in times of increased inflation since companies must tackle rising costs for ingredients, packaging, labor, and transportation. (Durbin, 2022)

As a trailblazer in the chocolate market, companies must recognize and address this growing price sensitivity. Failure to do so may result in declining sales and loss of market share. In order to successfully navigate this changing landscape, companies must conduct thorough market research and understand the factors that drive consumer price sensitivity. This includes analyzing consumer demographics, preferences, and purchasing patterns to identify opportunities for pricing optimization and package downsizing. By understanding consumer price sensitivity, chocolate manufacturers can make

informed decisions about pricing and packaging that meet the needs and preferences of their target market. With this knowledge, companies can develop effective strategies to address price sensitivity, such as offering value packs, introducing smaller package sizes at lower price points, or implementing loyalty programs and promotional discount

2.Literature Review

Metin C, Akira & Joseph V. Balagtas (2013) "Consumer Response to Package Downsizing: Evidence from the Chicago Ice Cream Market" This article investigates the extent to which consumers have different managerial implications of package size than to price. The demand elasticity concerning package size is approximately one-fourth the magnitude of the demand elasticity concerning price. This result implies that marketing managers can use downsizing as a hidden price increase to pass through an increase in production costs, that is the cost of raw materials and maintain, or increase their profits. The paper investigates the extent to which consumers have different sensitivities to package price and package size in the context of package downsizing, consumers are less sensitive to package size than to price. **Stikeleathere, J. A.. (2017)**. While several studies have been conducted on the impact of shrinkflation from a Western perspective, there has been a limited study conducted separately from the Indian perspective. In 2017, James A. Stikeleather published a paper presenting exploratory and descriptive results that suggest a systematic approach to governance and strategic management. The paper identifies issues with stakeholder theory and highlights the unintended consequences of shareholder theory. Stikeleather argues that the rise of philanthrocapitalism indicates a shift towards appreciating the responsibility of businesses to address social issues. The paper recommends the elimination or reduction of shareholder primacy in favor of broader stakeholder contributions, participation, and rewards.. **Subhojt Sarkar (2022)** "The effects of inflation on the FMCG sector in India" As to the survey, companies are opting for shrinkflation with the expectation that customers won't detect the reduction in the quantity of products right away. **C Jensen et al (2021)** "Sales trends and industry perspectives on carbonate and confectionery product package sizes." This study aimed to determine market trends and offer perspectives from the food industry regarding changing soda and confectionary food package sizes. The main conclusions are that customers are not very aware of the sizes of the packages of luxuries and understand why the sizes of packages are being changed, especially when it comes to smaller items. The food industry's views on modifications to soda and candy packaging sizes were shaped by things like government or industry initiatives, convenience, portion control, customer health consciousness, and market expansion. In an effort to encourage portion management and moderation, confectionary has introduced smaller box sizes and portion-controlled packaging. This study sheds light on the variations in carbonate package sizes. This study sheds light on the differences in carbonate and confectionery package sizes, showing a decline in sales of chocolates. **Jordan Melmeis (2023)** Examining downsizing, shrinkflation, and hidden price increases from a macroeconomic standpoint, the article focuses on the industrial practice of lowering the size/weight of goods or the quantity of input without lowering pricing. The study draws attention to the practice's macroeconomic ramifications, including how it affects consumer welfare and income distribution. The study applies the post-Keynesian theory of the company and provides equations to the model of how businesses behave, such as the calculation of the rate of profit before distribution and the determination of C B as a share of household consumption. The study also points out that academic economics research hasn't given much attention to product downsizing, with the majority of these instances being covered by non-scientific media. **Priya Malik (2016)** The study aimed to investigate the consumer preferences between Nestle and Cadbury chocolates. The researcher surveyed to determine the product performance and buying behavior of the two popular brands that are consumed by people of all ages which aimed to reveal how people perceive these products based on various variables such as price, quality, advertisement, satisfaction, taste, packaging, and brand loyalty. The results showed that most people preferred Cadbury Dairy Milk due to its flavor/taste, quality, and image, as well as its hard form. In contrast, some people opted for Nestle's Kit Kat and Munch because of their taste and crunchiness

It is mentioned in the paper as

3.Data and Methodology

Chocolate consumers from Kerala were taken as samples. The study was conducted in various taluks of Thiruvananthapuram, capital of kerala Repeat consumers of chocolates (Departmental stores and Independent Shops) who have just finished their shopping at these outlets constitute the sampling unit. A pilot study was done using 10 respondents. Later after a correction of the questionnaire, convenience sampling was used to distribute the questionnaire among 100 respondents among 4 is incomplete hence sample size 96.

3.1 Objectives of the Study

- *To study the satisfaction of consumers towards shrinkflation strategy in chocolate manufacturer brands*
- *To analyze the opinion of consumers regarding consumer price metrics.*

3.2 Basic Profile of the Respondents

Basic demographic information about respondents, such as Gender, Marital Status, Educational Qualification, Region, and Residential Area, aids in contextualizing the data used to analyze Chocolate producer brands. This context can help to better comprehend the respondents' backgrounds and characteristics. Basic profile analysis can help to uncover potential sources of data bias.

Table 3.2.1
Basic profile of the Respondents

Category		Frequency	Percent
Gender	Male	46	47.9
	Female	50	52.1
	Total	96	100.0
Marital Status	Married	31	32.3
	Unmarried	64	66.9
	Divorced	1	.8
	Total	96	100.0
Educational Qualification	Plus Two	14	14.8
	Graduate	45	46.6
	Postgraduate	28	28.9
	Professional	9	9.6
	Total	96	100.0
Employment	Employee	28	29.2
	Professionals	9	9.9
	Business	2	2.3
	Students	53	55.7
	Others	3	2.9
	Total	96	100.0
Region	Southern Region	36	38.0
	Central Region	32	32.8
	Northern Region	28	29.2
	Total	96	100.0
Locality	Urban	21	22.4
	Semi-Urban	39	40.9
	Rural	36	36.7
	Total	96	100.0

Source: Primary data

The above table shows the distribution of respondents in accordance with the Gender. It indicates that out of 96 respondents in Kerala, (52.1%) respondents in the sample are female and males accounted to (47.9%). The marital status of the respondents indicates that the majority are unmarried (66.9%), with smaller proportions being widowed/divorced (0.8%). The married respondents accounted to (32.3%). The educational details showed that (46.6%) of respondents completed their Degree education and (14.8%) did up to Up to Higher Secondary Education. (28.9%) and (9.6%) completed their post graduation and professional course respectively. The employment details showed that (29.2%) respondents are Employees and (9.9%) are Professionals. (55.7%) and 9(2.3%) are Students and Business men respectively. With regard to the zone, (32.8%) come from the Central zone and (38%) and (29.2%) respondents are from the South and North zone respectively. The distribution of respondents by their Locality shows that the largest group in the sample belongs to the Semi-Urban area of (40.9%), followed by the Rural area(36.7%) and respondents from Urban area is (22.4%).

Figure 3.2.1

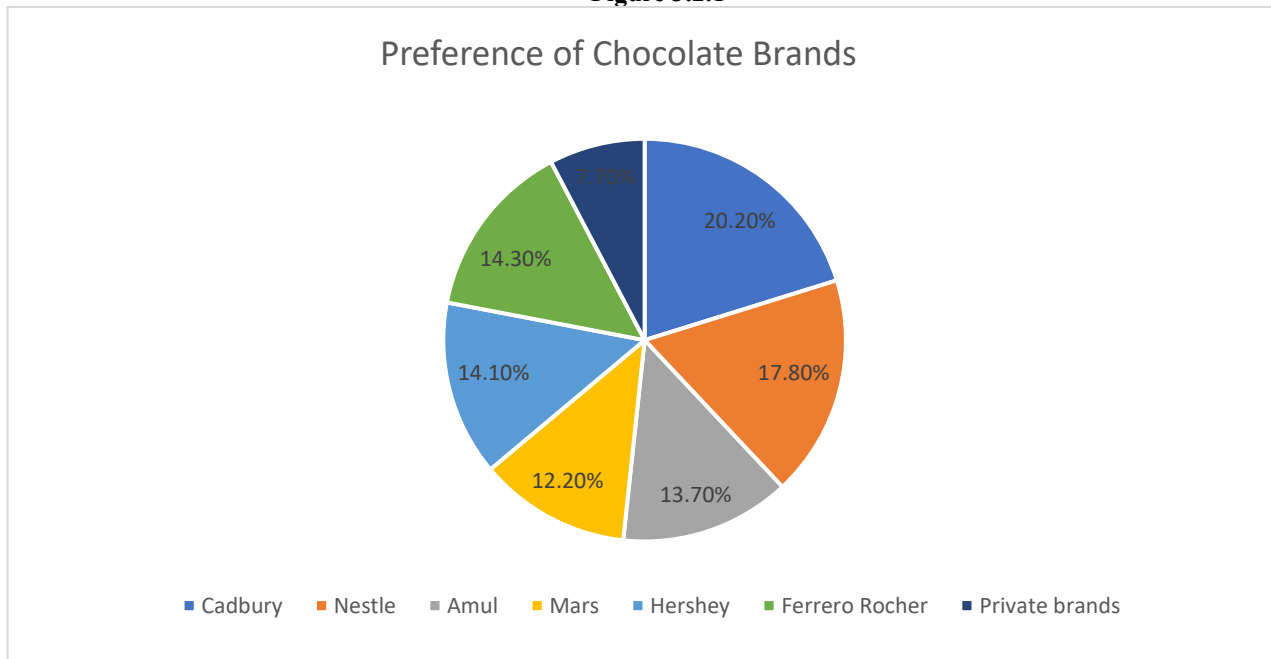


Table 3.2.2

Chocolate brand Frequencies		Responses		Percent of Cases
		N	Percent	
Chocolate brand	Cadbury	90	20.2%	94.0%
	Nestle	80	17.8%	82.8%
	Amul	61	13.7%	63.5%
	Mars	54	12.2%	56.5%
	Hershey	63	14.1%	65.6%
	Ferrero Rocher	64	14.3%	66.4%
	Private Brands	35	7.7%	35.9%
Total		447	100.0%	464.8%
a. Dichotomy group tabulated at value 1.				

Cadbury brand is the most preferred Chocolate brand, accounting for 20.2%. This implies that a sizable proportion of people purchase chocolate based on the Cadbury brand. Nestle and Ferrero Rocher are the second and the third -most

preferred Chocolate brand, responses, accounting for 17.8% and 14.3% respectively. Hershey also plays an important role, accounting for 14.1% of the instances, and private brands lowest 7.7% showing brand preferences among consumers, so on indicating the diversity of preference for Chocolate brands.

H₀₁: There is no significant difference in the satisfaction of consumers regarding brand chocolate towards downsizing based on their gender.

Table 3.2.3
Table showing significant difference in satisfaction of consumers regarding brand chocolate towards downsizing based on their gender of the respondents

Satisfaction	N	Mean	Std. Deviation	t	Sig.
I am satisfied with the quality.	96	4.135	0.8534	10.905	0.000
I am satisfied with the price of the product charged as per quantity.	96	3.784	0.9464	2.554	0.011
I use the product regularly.	96	3.56	1.1132	-1.771	0.077
I recommend this brand to my friends and acquaintances.	96	3.729	1.0544	1.276	0.203
Downsizing does not affect me.	96	3.383	1.1882	-4.58	0.000
Dimension as a whole I am satisfied with my brand of chocolate	96	3.628	1.0343	-0.623	0.534

(Source: Computed from Primary data)

The above table reveals that the P value of the items “I am satisfied with the quality”, I am satisfied with the price of the product charged as per quantity, and “Downsizing does not affect me” are to be significant at 5% level of significance. Hence, Null hypothesis is rejected and inferred that there is significant difference between the mean score of these three items and gender. The P value of the other variables are more than 0.05 at 5% level of significance. Hence, the null hypothesis are accepted and inferred that there is no significant difference between the mean score of the items “I use the product regularly”, “I recommend this brand to my friends and acquaintances” and “Dimension as a whole I am satisfied with my brand of chocolate”.

H₀₂: There is no significant difference in the opinion of consumers regarding consumer price metrics based on their gender.

Table 3.2.4
Table showing significant difference in the opinion of consumers regarding consumer price metrics based on their gender.

Details	Gender	Mean	Std. Deviation	t	Sig.
Price Knowledge	Male	3.91	.728	2.137	0.143
	Female	3.75	.806		
Price Sensitivity	Male	3.74	.816	1.164	0.697
	Female	3.65	.799		
Price Fairness	Male	3.89	.675	2.830	0.041
	Female	3.73	.783		

(Source: Computed from Primary data)

The above table reveals that the P value of the variable price fairness are to be significant at 5% level of significance. Hence, Null hypothesis is rejected and inferred that there is significant difference between the mean score of the variable price fairness and gender.

H₀₃: There is no significant difference between marital status and opinion of consumers regarding consumer price metrics.

Table 3.2.5

Table showing significant difference in the opinion of consumers regarding consumer price metrics based on the marital status of the respondents

Details		Sum of Squares	Mean Square	F	Sig.
Price Knowledge	Between Groups	.233	.117	.194	.823
	Within Groups	228.854	.601		
	Total	229.088			
Price Sensitivity	Between Groups	4.327	2.164	3.361	.036
	Within Groups	245.224	.644		
	Total	249.551			
Price Fairness	Between Groups	.535	.267	.491	.612
	Within Groups	207.255	.544		
	Total	207.789			

(Source: Computed from Primary data)

The result states that the educational qualification and opinion of consumers regarding consumer price metrics. The P value of the variable Price Sensitivity is 0.006. Hence, Null hypothesis is rejected in case of Price Sensitivity..

H₀₄: There is no significant difference between educational qualification and opinion of consumers regarding consumer price metrics.

Table 3.2.6

Table showing significant difference in the opinion of consumers regarding consumer price metrics based on the Educational qualification of the respondents

Details		Sum of Squares	Mean Square	F	Sig.
Price Knowledge	Between Groups	2.601	.867	1.454	.227
	Within Groups	226.487	.596		
	Total	229.088			
Price Sensitivity	Between Groups	8.101	2.700	4.250	.006
	Within Groups	241.450	.635		
	Total	249.551			
Price Fairness	Between Groups	2.581	.860	1.593	.191
	Within Groups	205.208	.540		
	Total	207.789			

(Source: Computed from Primary data)

The result states that the educational qualification and opinion of consumers regarding consumer price metrics. The P value of the variable Price Sensitivity is 0.006. Hence, Null hypothesis is rejected in case of Price Sensitivity.

H₀₅: There is no significant difference between occupation and opinion of consumers regarding consumer price metrics.

Table 3.2.7

Table showing significant difference in the opinion of consumers regarding consumer price metrics based on the occupation of the respondents

Details		Sum of Squares	Mean Square	F	Sig.
Price Knowledge	Between Groups	5.137	1.284	3.174	.041
	Within Groups	223.950	.591		

	Total	229.088			
Price Sensitivity	Between Groups	16.192	4.048	6.574	.000
	Within Groups	233.359	.616		
	Total	249.551			
Price Fairness	Between Groups	2.838	.709	1.312	.265
	Within Groups	204.951	.541		
	Total	207.789			

(Source: Computed from Primary data)

The above table reveals that the P value of the variables Price Knowledge, Price Sensitivity are to be significant at 5% level of significance. Hence, Null hypothesis is rejected and inferred that there is significant difference between the mean score of the variables Price Knowledge,

H₀₆: There is no significant difference between Region of the respondents and their opinion of consumers regarding consumer price metrics.

Table 3.2.8

Table showing significant difference in the opinion of consumers regarding consumer price metrics based on the region of the respondents

Details		Sum of Squares	Mean Square	F	Sig.
Price Knowledge	Between Groups	1.587	.794	1.329	.266
	Within Groups	227.500	.597		
	Total	229.088			
Price Sensitivity	Between Groups	3.451	1.726	2.671	.070
	Within Groups	246.100	.646		
	Total	249.551			
Price Fairness	Between Groups	.304	.152	.279	.757
	Within Groups	207.485	.545		
	Total	207.789			

(Source: Computed from Primary data)

It is clear from the above table, the P value of the variable Price Knowledge, Price Sensitivity and Price Fairness are more than 0.05 that is 0.266, 0.070 and 0.757 respectively. Hence, the null hypothesis are accepted and inferred that there is no significant difference between the mean score of these three factors of consumer price metrics and Region of the respondents.

H₀₇: There is no significant difference between area of residence of the respondents and their opinion of consumers regarding consumer price metrics.

Table 3.2.9

Table showing significant difference in the opinion of consumers regarding consumer price metrics based on the area of residence of the respondents

		Sum of Squares	Mean Square	F	Sig.
Price Knowledge	Between Groups	1.409	.705	1.179	.309
	Within Groups	227.679	.598		
	Total	229.088			
Price Sensitivity	Between Groups	4.976	2.488	3.876	.022
	Within Groups	244.575	.642		
	Total	249.551			
Price Fairness	Between Groups	.169	.085	.155	.856

	Within Groups	207.620	.545		
	Total	207.789			

(Source: Computed from Primary data)

The result shows that there is a difference in the mean score obtained from the variable Price Sensitivity and area of residence of the respondents gives the F value of 3.876 that found to be 5% level ($P < 0.05$). Hence, the null hypothesis is rejected.

4. Results and Discussion

This article focuses on shrinkflation strategy and important but neglected concepts that shape price sensitivity. Specifically, we focus on three types of price metrics price knowledge, price fairness and price sensitivity – and their effect on consumer preference and purchase decisions as a mediation vehicle. To retain customers, firms must carefully manage price tactics, balancing brand loyalty with competitive pricing. Businesses should engage in effective supply chain management to avoid stockouts, which can harm brand loyalty

Hypothesis I	Rejected	“I am satisfied with the quality”, I am satisfied with the price of the product charged as per quantity, and “Downsizing does not affect me” are to be significant at 5% level of significance.
Hypothesis II	Rejected	On the basis of gender significant difference in price fairness decisions so that opinion of male and females are different.
Hypothesis III	Rejected.	On the basis of marital status significant difference in price sensitivity so that opinion of married and unmarried are different. Married people are more sensitive to price
Hypothesis IV	Rejected	Highly educated people are more sensitive to price rather than price fairness and price knowledge
Hypothesis V	Rejected	Occupied people are more eager in price knowledge and sensitive to price changes
Hypothesis VI	Accepted	On the basis of region no significant differences
Hypothesis VII	Rejected	Respondents are sensitive to prices regarding areas

While implementing shrinkflation methods, companies should carefully modify prices to maintain consumer trust and perceived value. This result implies that marketing managers can use downsizing as a hidden price increase to pass through an increase in production costs, that is the cost of raw materials and maintain, or increase their profits. consumers have different sensitivities to package price and package size in the context of package downsizing, consumers are less sensitive to package size than to price. It is critical to explain the modifications to consumers in a clear manner and to emphasise any other quality improvements, because results shows that consumer who are highly educated and earning member with family are aware of shrinkflation practices and they are affected with it .Companies should exercise caution while making just cosmetic changes to ensure that the perceived quality of the product is not jeopardised. Thus, it is clear that Chocolate makers should prioritise transparency in their shrinkflation plans by explicitly disclosing to consumers any changes in product size or quantity, along with valid justifications. Product perceived value can be increased by innovating and offering new value-added items, unique flavours, packaging, and promotional promotions. When price increases are required, they should be implemented cautiously and with clear reasons. Offering incentives, discounts, and special experiences can help to keep customers loyalty

5. Conclusion

Educating consumers on the causes of shrinkflation and how widespread it is will help mitigate its negative influence on brand loyalty. Furthermore, diversification into new product categories and the availability of multi-packs can provide consumers with more options and boost perceived value, thus strengthening brand loyalty. The chocolate market is influenced by various economic factors, with consumer price sensitivity and package downsizing emerging as trailblazers in the industry. Now more than ever, consumers are becoming increasingly conscious of their spending habits and looking for ways to stretch their budget without compromising on quality. "Consumer price sensitivity and package downsizing have emerged as a trailblazing approach in the chocolate market, driven by changing consumer behavior and the need for companies to adapt to the growing demand for affordable options without compromising on quality or taste. As consumers increasingly prioritize value for money, chocolate manufacturers must strike a delicate balance between maintaining profitability and meeting consumer expectations. This has led to the trend of package downsizing, where companies reduce the size of their chocolate packages while keeping the price points affordable. This approach allows manufacturers to cater to price-sensitive consumers while still offering a premium chocolate experience. Additionally, it helps companies manage

rising production costs and maintain competitive pricing in a market characterized by fluctuating cocoa prices and increasing overhead expenses

6. Practical Implications of the Research

Policymakers could make use of this study and create better implementation plans for the long-term sustainability of brands of the chocolate industry. By understanding consumer price sensitivity and implementing package downsizing, chocolate manufacturers have the opportunity to stay ahead of the competition and capture a larger share of the market while still meeting the needs and preferences of their target market. Finally, Chocolate Brands that use open communication, innovative methods, and customer-centric approaches are more likely to cover shrinkflation's problems and keep consumer trust and loyalty

7. Limitations and Future Scope

Not much research has been done on the use of shrinkflation strategy in chocolate confectionery products. The area where the study was conducted was minuscule, but it considered the maximum proportion of chocolate consumers from Kerala. The period taken to conduct the study and the sample size are very small. A future study could add more variables to use a particular model or could expand the area of the study.

Today, chocolate is a food product easily accessible, and purchased for personal pleasure, which provides a sense of indulgent luxury. A beneficial area for further research could be to investigate which health and nutritional aspects consumers are most concerned about when they buy chocolate. The role of transparency in the shrinkflation approach can be examined and analyzed. This may provide insights into the development of new products that satisfy the consumers' increasing price sensitivity and package downsizing. Future research may explore healthier chocolate reformulation and new product concepts, and innovative chocolate ingredients might be of interest to the consumer. In particular, future research may investigate consumers' perceptions of the price distribution between chocolate producers, processors and retailers. Ensuring a perceived fairer remuneration may lead consumers to make more economically sustainable choices.

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