

EXPLORING PRICE UNFAIRNESS IN MULTI-CHANNEL RETAILING AND ITS IMPACT ON COMPLAINT BEHAVIOUR

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As retail companies expand their presence across multiple channels, they face the crucial question of whether to offer uniform pricing for their products across all channels or implement some form of price differentiation strategy. While there are arguments for both approaches, there is a lack of research on how consumers perceive such pricing strategies. The present study investigates the influence of perceived price unfairness on consumer complaint behaviour and the effect of the interaction between the place of purchase and the place of the reference transaction on this relationship. We conducted a scenario-based experiment involving 190 participants with a 2×2 factorial design. We analysed the data using the PLS method, by applying the MIMIC approach. Our findings suggest that consumers' perception of price unfairness is not affected by the interaction of the place of purchase and the place of reference transaction. However, the context may play a role in determining whether consumers will seek sanctions against the "unfair" providers. We discuss the theoretical and managerial implications of our findings.

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1 Introduction

Multi-channel retailing is on the rise. With the advent and growth of online shopping, consumers are now faced with an additional alternative in their decision process – the choice of a shopping channel. According to Eurostat (2024), more than two-thirds of Europeans (69,4 %) made at least one purchase online in 2023 and this number has grown by almost 5 p.p. compared to 2020 (64,7 %). Consumers view online shopping as a more convenient option (Al-Debei et al., 2015) and often expect that they will be able to pay less for a certain product online, compared to traditional, physical channels (Baker et al., 2018; Fassnacht & Unterhuber, 2016). Companies, on the other hand, view online channels as an opportunity to increase their market, improve their ability to access different target groups more efficiently, build relationships with their customers and as an opportunity to maximise their profits. The latter goal often spurs a dilemma about the pricing of a company's products. Managers should decide either to apply some form of dynamic pricing, to differentiate prices between their marketing channels, or to use a uniform approach, keeping price levels the same across their channels. Studies show that companies frequently avoid differentiating their prices, as consumers may perceive this as unfair, and possibly retaliate (Wolk & Ebling, 2010). However, companies that use price differentiation often do so, by aligning the price levels to consumer expectations: keeping prices online lower, and prices in brick-and-mortar stores higher. Our study aims to investigate, whether this is necessary. In a scenario-based experiment, we varied the observed price in an online and a physical store, as well as the reference price in both contexts to assess how consumers perceive the (un)fairness of price differences. Furthermore, our additional goal was to explore whether the perceived price unfairness would lead to various forms of complaint behaviour.

2 Theoretical Background / Literature Review

Multichannel retailing refers to the practice of performing retailing activities through two or more marketing channels (Levy et al., 2019). Nowadays, companies serve their customers with various physical, online and mobile marketing channels for them to interact with the company and shop in an integrated and seamless manner (Liu et al., 2018). However, to do so effectively, managers must consider different factors that may benefit, or harm their multichannel efforts. Prices are at the

forefront of such considerations. When it comes to multichannel retailing, companies usually choose between two main pricing alternatives: uniform pricing and price differentiation. Uniform pricing means, that a company prices their products the same, no matter the channel (Bertrandie & Zielke, 2019). In contrast, price differentiation involves modifying the price level of the same product (Stole, 2007) based on factors like individuals' willingness to pay or customer market segment membership.

Researchers agree that multichannel price differentiation is an example of what Pigou (1920) classifies as a second-degree differentiation. Second-degree price differentiation allows the company to segment their customers into different groups based on their willingness to pay. These groups are self-selective, meaning that each customer can freely choose to keep or change their membership. This type of price differentiation can be achieved by modifying prices based on the quantity purchased, product characteristics or place of purchase.

Channel-based price differentiation, similar to other forms of differentiation, can lead to a perceived sense of unfairness in pricing (Bertrandie & Zielke, 2019; Schneider & Zielke, 2021).

However, past research indicates that the direction of price differences between the online and physical stores could matter significantly when it comes to price unfairness perceptions. Consumers often associate online retailing with lower costs, hence expecting lower prices online, compared to the prices in physical stores. Therefore, our first hypothesis suggests that the perceived price unfairness may not only be influenced by the actual prices paid but also by the context of the reference transaction.

H₁: The interaction between the place of purchase and the place of reference transaction significantly affects the perceived price unfairness.

Perceived price unfairness has garnered the attention of academics primarily because of its role in affecting consumer behaviour. Perceptions of price unfairness affect purchasing decisions (Xia et al., 2004), negative word of mouth (Zeelenberg & Pieters, 2004) as well as different types of vengeful behaviours (Bougie et al., 2003; Kahneman et al., 1986). Our study aims to extend these findings, by investigating a

broader set of complaint behaviours, ranging from public and private complaints to sanctions aimed at the provider.

H₂: Perceived price unfairness affects consumers' complaint behaviour.

Finally, past research has highlighted that place of purchase could also affect the nature of complaint behaviours, although the results are somewhat inconclusive. More specifically, some authors have identified a so-called "lock-in" effect, meaning that the place of purchase usually predicts the place of complaining (Lee & Cude, 2012). On the other hand, others (e.g. Miquel-Romero et al., 2020) were unable to replicate these findings. The present research investigates whether the interaction of the place of purchase and the place of reference transaction affects the complaint behaviour.

H₃: The interaction between the place of purchase and the place of reference transaction significantly affects consumers' complaint behaviour.

3 Methodology

Sample

To test our hypotheses, we used a convenience sample of 190 business and economics students. 68 % of the respondents were female, the average age was 22,6 years ($SD = 3,16$) and 54 % were undergraduate students. We randomly assigned each respondent to a specific experimental group, ensuring that all groups were comparable in terms of gender, age, and education.

Instruments and data collection procedure

Following our 2 x 2 between-subject experimental design, each of the four experimental groups received a specific scenario, describing a shopping experience and post-purchase interaction with a respondent's friend. Scenario example: *You are shopping for a laptop [online/in a local store]. After reviewing the offers, you choose a product, that suits you, and make a purchase (product brand and the provider are not important). You paid 899,00 € for the laptop. After your purchase, you talked with your friend, and realized, that they bought the same laptop [online/in a local store] for 629,00 €.*

After reading the scenario, we assessed respondents' perceived price unfairness with a brief price unfairness scale, developed specifically for our study which consists of three Likert-type items (e.g., *The price I paid is fair*; Cronbach $\alpha = 0,839$). Additionally, to assess the probability of complaint behaviour, each respondent indicated the probability of them reacting in a certain way on a scale from 1 (Very unlikely) to 5 (Very likely). The 11 items for this scale were adapted from the taxonomy of complaint behaviour (Istanbulluoglu et al., 2017), and cover an array of behaviours applicable to the physical and online environment. Initial exploratory factor analysis revealed that the items load onto three factors, labelled private complaint behaviour (e.g., I would switch this company with another provider; Cronbach $\alpha = 0,834$), direct complaint behaviour (e.g., I would notify the company about the event verbally; Cronbach $\alpha = 0,785$), and public complaint behaviour (e.g., I would expose the event publicly on my own online channels; Cronbach $\alpha = 0,741$).

To ensure the efficiency of experimental manipulation, we also included three manipulation checks, specifically to ensure that the respondents recognised the price difference direction, the respective place of purchase, as well as the respective place of reference transaction.

Data analysis

In our study, we performed data analysis in several stages. Firstly, we conducted exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to check the dimensionality, validity, and reliability of our data. Secondly, we used SmartPLS 4 to test our measurement model, which allowed us to assess model fit, as well as convergent and discriminant validity. Finally, we tested the structural model to examine our hypotheses.

4 Results

To test our measurement model, we analysed the factor loadings, construct reliability, convergent validity, and discriminant validity. We present the key indicators in Table 1.

Table 1: Results of convergent validity analysis and reliability analysis

Construct	Indicator	λ	α	CR	AVE
Perceived price unfairness	PF1*	0,860	0,839	0,903	0,756
	PF2*	0,853			
	PF3*	0,894			
Private complaint behaviour	CB3	0,855	0,835	0,883	0,603
	CB7	0,763			
	CB4	0,779			
	CB5	0,769			
	CB6	0,712			
Direct complaint behaviour	CB1	0,878	0,795	0,872	0,697
	CB2	0,908			
	CB11	0,705			
Public complaint behaviour	CB8	0,797	0,761	0,843	0,646
	CB9	0,931			
	CB10	0,660			

* Reverse coding.

SRMR = 0,06; NFI = 0,82

The results of the measurement model analysis presented in Table 1 indicate that the latent variables, as measured by their respective indicators, are reliable and exhibit convergent validity. The factor loadings exceed the threshold of 0.6, and both the values of Cronbach's alpha and the CR index are above the required cut-off point of 0.7. The AVE values also exceed the threshold of 0.5. The overall model fit is acceptable, with SRMR below 0.8, while the NFI of 0.82 shows an acceptable fit, which could be improved.

Furthermore, to test the discriminant validity, we calculated the Heterotrait-monotrait ratio (HTMT). The results are available in Table 2.

Table 2: HTMT analysis to test the discriminant validity

	1.	2.	3.	4.
1. Perceived price unfairness	-			
2. Private complaint behaviour	0,469	-		
3. Direct complaint behaviour	0,138	0,269	-	
4. Public complaint behaviour	0,133	0,231	0,668	-

HTMT analysis shows that all ratios are below the threshold value of 0,85 indicating that our constructs are truly unique and cover distinct phenomena.

After establishing a well-fitting measurement model, we focused on the analysis of the structural model to test the hypothesized relationships. Due to the experimental design of our study, we applied multiple indicators, and a multiple causes approach – MIMIC (Breitsohl, 2019). According to this approach, the structural model should also include dummy variables to account for experimental conditions as well as their products and manipulation checks. Our proposed model is presented in Figure 1.

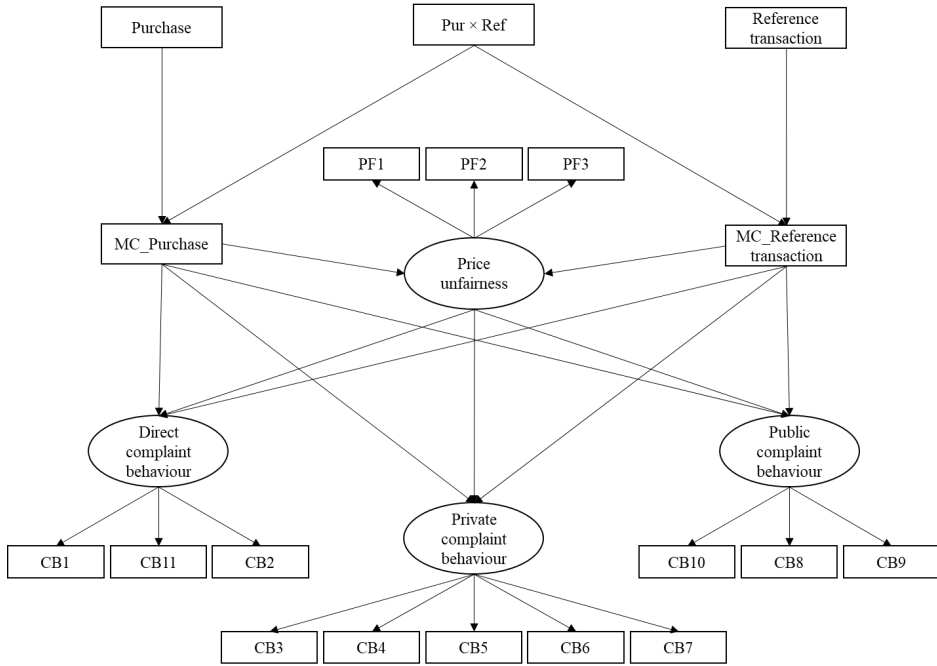


Figure 1: The proposed MIMIC structural model

We analysed our data by calculating the coefficient R^2 (Table 3). According to the values of 95 % confidence intervals, the R^2 coefficients are all significant. However, except for the construct Private complaint behaviour, which has the highest R^2 value and thus the highest share of variance explained, the rest are low. The model shows an acceptable fit ($SRMR = 0,063$; $NFI = 0,818$).

Table 3: The assessment of the model's predictive power (R²) with confidence intervals

Construct	R ²	95 % CI
Perceived price unfairness	0,020	[0,001; 0,065]
Private complaint behaviour	0,178	[0,088; 0,282]
Direct complaint behaviour	0,054	[0,016; 0,117]
Public complaint behaviour	0,048	[0,015; 0,106]

Finally, we investigated path coefficients to test our hypothesised relationships. The results in Table 4 show only one significant positive relationship – the relationship between perceived price unfairness and private complaint behaviour ($\beta = 0,397$; $p < 0,01$). All remaining relationships were insignificant.

Table 4: Hypothesis testing with path analysis

Hypothesis	Relationship	β	t	Total effect
H ₁	Purchase context → Perceived price unfairness	0,009	0,120	0,016
	Reference transaction context → Perceived price unfairness	0,006	1,235	0,163
H ₂	Perceived price unfairness → Private complaint behaviour	0,397**	6,333	0,397
	Perceived price unfairness → Direct complaint behaviour.	0,120	1,451	0,120
	Perceived price unfairness → Public complaint behaviour.	0,130	1,148	0,130
H ₃	Purchase context → Private complaint behaviour	0,020	0,287	0,042
	Reference transaction context → Private complaint behaviour	-0,006	0,079	-0,055
	Purchase context → Direct complaint behaviour	0,134	1,592	0,240
	Reference transaction context → Direct complaint behaviour	-0,024	0,283	0,022
	Purchase context → Public complaint behaviour.	0,055	0,665	0,095
	Reference transaction context → Public complaint behaviour.	0,068	0,835	-0,096

** $p < 0,01$

5 Discussion

Our research attempted to provide deeper insights into the practice of price differentiation in a multi-channel environment. Our goal was to investigate whether price differences between online and physical channels affect consumers'

perceptions of price unfairness and consumer complaint behaviour. According to our results, this is not the case. Our experimental manipulation of the place of purchase and place of reference transaction had no impact on perceived price unfairness. Hence, we rejected hypothesis 1. Consumers' expectations of price levels in different retail channels reported in previous research (Baker et al., 2018; Fassnacht & Unterhuber, 2016; Liu et al., 2018), might affect the choice of a particular place of purchase. However, when the purchase is completed, the actual price discrepancy might be the only thing that matters in price fairness perceptions. Similarly, we found no significant impact of the place of purchase and place of reference transaction on consumer complaint behaviour (H_3). We detected only a small, however statistically insignificant effect of purchase context on the probability to complain directly to the provider. Some authors (e.g., Lee & Cude, 2012; Miquel-Romero et al., 2020) investigated a so-called "lock-in" effect, reporting that the place of purchase often predicts the place of complaint behaviour. Our goal was to see, whether the place of purchase in interaction with the place of reference transaction might affect the type of consumer complaint behaviour and found no support for such claims. Finally, we were able to accept our hypothesis, that perceived price unfairness affects consumers' complaint behaviour (H_2). This was the case only when it came to private complaint behaviour, and not for direct complaining or public complaining. This is an important conclusion. Private complaint behaviour will go unnoticed by the company thwarting any chance of improvement for future interactions (Istanbulluoglu et al., 2017).

We recommend that our findings should be interpreted in light of some limitations. We used a convenience sample of business and economics students, which limits the generalisability of our findings. The use of scenarios, while practical, may lack the realism and emotional engagement of real-life situations, necessitating future field replication. Finally, our model provided a very limited explanatory power, which certainly suggests other factors should be accounted for when explaining perceptions of price unfairness and complaint behaviours in future studies.

References

- Al-Debei, M. M., Akroush, M. N., & Ashouri, M. I. (2015). Consumer attitudes towards online shopping: The effects of trust, perceived benefits, and perceived web quality. *Internet Research*, 25(5), 707–733. <https://doi.org/10.1108/IntR-05-2014-0146>

- Baker, W., Benmark, G., Chopra, M., & Kohli, S. (2018). Master the challenges of multichannel pricing. *MIT Sloan Management Review*, 60(1), 1–8.
- Bertrandie, L., & Zielke, S. (2019). The influence of multi-channel pricing strategy on price fairness and customer confusion. *International Review of Retail, Distribution and Consumer Research*, 29(5), 504–517. <https://doi.org/10.1080/09593969.2019.1664611>
- Bougie, R., Pieters, R., & Zeelenberg, M. (2003). Angry Customers don't Come Back, They Get Back: The Experience and Behavioral Implications of Anger and Dissatisfaction in Services. *Journal of the Academy of Marketing Science*, 31(4), 377–393. <https://doi.org/10.1177/0092070303254412>
- Breitsohl, H. (2019). *Beyond ANOVA: An Introduction to Structural Equation Models for Experimental Designs*. 22(3), 649–677. <https://doi.org/10.1177/1094428118754988>
- Eurostat. (2024). *Internet purchases by individuals (2020 onwards)*. E-Commerce. https://doi.org/10.2908/isoc_ec_ib20
- Fassnacht, M., & Unterhuber, S. (2016). Consumer response to online/offline price differentiation. *Journal of Retailing and Consumer Services*, 28. <https://doi.org/10.1016/j.jretconser.2015.09.005>
- Istanbulluoglu, D., Leek, S., & Szmigin, I. T. (2017). Beyond exit and voice: developing an integrated taxonomy of consumer complaining behaviour. *European Journal of Marketing*, 51(5–6), 1109–1128. <https://doi.org/10.1108/EJM-04-2016-0204>
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986). Fairness as a Constraint on Profit Seeking: Entitlements in the Market. *American Economic Review*, 76(4), 728–741.
- Lee, S., & Cude, B. J. (2012). Consumer complaint channel choice in online and offline purchases. *International Journal of Consumer Studies*, 36(1), 90–96. <https://doi.org/10.1111/j.1470-6431.2010.00992.x>
- Levy, M., Weitz, B., & Grewal, D. (2019). *Retailing Management* (10th ed.). McGraw-Hill.
- Liu, H., Lobschat, L., & Verhoef, P. C. (2018). Multichannel retailing: A review and research agenda. *Foundations and Trends in Marketing*, 12(1), 1–79. <https://doi.org/10.1561/17000000059>
- Miquel-Romero, M. J., Frasquet, M., & Molla-Descals, A. (2020). The role of the store in managing postpurchase complaints for omnichannel shoppers. *Journal of Business Research*, 109(September 2019), 288–296. <https://doi.org/10.1016/j.jbusres.2019.09.057>
- Pigou, A. C. (1920). *The Economics of Welfare*. Palgrave Macmillan.
- Schneider, P. J., & Zielke, S. (2021). Price versus service: Can retailers beat showrooming with competence? *Journal of Retailing and Consumer Services*, 61. <https://doi.org/https://doi.org/10.1016/j.jretconser.2021.102592>
- Stole, L. A. (2007). Price Discrimination and Competition. In M. Armstrong & R. H. Porter (Eds.), *Handbook of Industrial Organization* (pp. 2221–2299). Elsevier.
- Wolk, A., & Ebling, C. (2010). Multi-channel price differentiation: An empirical investigation of existence and causes. *International Journal of Research in Marketing*, 27(2), 142–150. <https://doi.org/10.1016/j.ijresmar.2010.01.004>
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The Price Is Unfair! A Conceptual Framework of Price Fairness Perceptions. *Journal of Marketing*, 68(4), 1–15. <https://doi.org/10.1509/jmkg.68.4.1.42733>
- Zeelenberg, M., & Pieters, R. (2004). Beyond valence in customer dissatisfaction. *Journal of Business Research*, 57(4), 445–455. [https://doi.org/10.1016/S0148-2963\(02\)00278-3](https://doi.org/10.1016/S0148-2963(02)00278-3)