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ESG Reporting and Consumer Product Choice – Evaluating Corporate Sustainability Branding in Fast Moving Consumer Goods

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ABSTRACT

A conjoint-based study was conducted with identical chocolate bars displaying varying sustainability labels and prices. The study distinguishes between a state-certified ESG label and a third party, privately organized ESG label. Analyzing respondents' behavior, the willingness-to-pay of the different labels are estimated. ESG labels have the highest importance for consumers, followed by the Organic and the Fairtrade label. The premium respondents are willing to pay is reduced if too many labels are displayed together. The results remain robust across gender, age, and income, pointing to the importance for companies to incorporate ESG labels and policymakers to institutionalize ESG labelling.

1. Introduction

"Consumer knowledge and use of ESG would be a meaningful area of research" (Ferrell & Ferrell, 2021, p. 20). This statement addresses the relevance of the topic of sustainability in companies' business models and characterizes a problem becoming increasingly critical in light of current European legislation.

Consumer expectations of companies' sustainability management are rising (Buerke et al., 2017; Handelsverband Deutschland [Trade Association Germany], 2022b). Trends show that interest in and the importance of environmental, social, and governance (ESG) reporting (Mintel, 2022b) is growing among German consumers. Of brands active in the fast-moving consumer goods (FMCG) industry, they demand transparent communication and measurable actions regarding environmental and ethical matters. Hence, to remain sustainably competitive, companies must ensure that environmentally friendly, social, and ethical practices do not remain theoretical concepts but get integrated into companies' business models and are communicated accordingly.

"Consumers will want proof of a brand's ethical credentials, which could go beyond environment-friendly positioning and include corporate practices too" (Mintel, 2022a, p. 24). Hence, consumers require that companies proactively address and act upon environmental and socially relevant issues such as the climate crisis and ethical behavior.

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An international study by PwC reveals that most consumers will abstain from buying products by brands that aren't concerned about the environment, their employees, or the community (PwC, 2021). Further, German consumers, especially younger people, inform themselves about environmental, social and governmental sustainability regarding their purchases (PwC, 2022b).

In 2019, the European Union established the "Green Deal" as a concept of European climate policy (European Commission, 2019). It represents the Union's new growth strategy. It aims to protect natural capital and make the European Union a resource efficient and competitive economy with zero net greenhouse gas emissions by 2050. The Green Deal also obligates the European Commission to review non-financial reporting.

In April 2021, the European Commission presented a proposal for a directive called the "Corporate Sustainability Reporting Directive" (CSRD) to amend the requirements for corporate sustainability reporting (European Commission, 2023). The directive was then published in December 2022 and announced significant changes to the existing non-financial reporting regulations concerning environmental, social, and governance factors (ESG), which entered into force in January 2023 (European Commission, 2023).

Looking at the FMCG industry, first attempts to produce a holistic sustainability concept, which combines sustainability activities concerning products and current profit-oriented business models, can be observed (Arvidsson & Dumay, 2022; PwC, 2022a). One example is the reporting of ESG criteria. However, ESG reports are currently used primarily out of financial and marketing-oriented interests (Arvidsson & Dumay, 2022).

As of today, only little academic literature on ESG in relation to consumer preference can be found. While articles about the increasing importance of ESG criteria for consumers do exist, few distinctly address the value-added that companies receive from publishing ESG relevant ratings, i.e., displaying ESG ratings on their products.

This study addresses this issue and presents a solution-oriented proposal for the implied problem and developments in the consumer goods market applied to the FMCG industry. It aims to obtain the consumer perspective on corporate sustainability branding, explicitly on ESG reporting, and to elicit recommendations for FMCG companies as well as policymakers.

Methodologically, the focus lies on the impact a hypothetical ESG label would have on consumer preferences. However, unlike most existing organic labels, such as the "Bio-Siegel", the information does not relate to the product itself but to the sustainability performance of the producer.

To achieve this objective, the second section presents the current state of research on sustainability labelling of FMCG. In particular, it provides a concise introduction to the FMCG sector and argues the case of using chocolate bars as a suitable representative FCMG. Based on this discussion the research methodology is deduced and conjoint analysis is chosen to empirically analyze participants', i.e., consumers' preferences for ESG labels. The results of the study are presented in the third section and calculation of the marginal willingness-to-pay (WTP) puts a price tag on the preference structures. Those results are critically reflected and discussed in the fourth section. Finally, the fifth section concludes, i.e., insights for practitioners are deduced. Thus, offering valuable support to producers in their decision-making to adopt a label or not. A discussion of limitations and future research options concludes the study scientifically.

2. Materials and Methods

2.1. Chocolate as a Representative FMCG Good

FMCG goods, often referred to as well as consumer goods, account for the largest share of total offline retail sales in Germany, with around 43 percent (Handelsverband Deutschland [Trade Association Germany], 2022b). They account as well for 14.8% of private consumption expenditures of households. In Germany, in 2022, the FMCG market generated a turnover of €29 bn. which is continuously increasing despite the slinks during the COVID-19 crisis (Allied Market Research, 2024).

Opposed to common misconceptions, the FMCG market does not exclusively consist of food products, but in 2021 food products made up 84.8% of the FMCG market in Germany (Allied Market Research, 2024) and 37.2% of overall consumer goods market (Germanyworks, 2025).

Various trends determine this market. A trend report by McKinsey (2021) classifies digitization as the strongest disruptive trend in the consumer goods industry, which will continue to dominate the market over the next ten years. This is also the result and forecast of the German Retail Association (Handelsverband Deutschland [Trade Association Germany], 2022a). Although the German FMCG industry has a relatively small online volume compared to offline, the market has recorded a distinct growth of online sales since 2021 (Handelsverband Deutschland [Trade Association Germany], 2022b). This is mainly caused by the strong online performance of the food segment (Handelsverband Deutschland [Trade Association Germany], 2022b).

Worldwide, consumers are increasingly opting for products that are branded as sustainable or socially responsible. This trend is also reported by the Handelsverband Deutschland (HDE), as the study shows that most consumers prefer to shop for more sustainable products than buy less or second-hand (Handelsverband Deutschland [Trade Association Germany], 2022b). In 2021, sales of food retail products with a Bio/Organic or Fairtrade label were at an all-time high in Germany (Handelsverband Deutschland [Trade Association Germany], 2022a). Thereby, the Organic label in Germany achieved much higher sales with 15.78 billion euros (2021) compared to the Fairtrade label, which generated sales of 1.9 million euros (2021) (Bund Ökologische Lebensmittelwirtschaft [Association for Ecological Food Goods], 2022; Forum Fairer Handel [Fair Trade Forum], 2022). Sustainable labelled products account for around half of a consumers' total purchases by now (Cheung et al., 2022). The study further reveals that half of the respondents are willing to pay a premium of an average of 70 percent for more sustainable products (Cheung et al., 2022). These results are comparable with the ones by Gericke et al. (2023) for the German market.

Research indicates that clear communication from companies about their sustainability efforts beyond the product are an important factor in consumers' purchasing decisions. A Mintel study predicts that consumers' expectation for more transparency from companies regarding the brand's climate friendly and ethical commitments and suggests that "Brands can add accountability with third-party verification or measurements via rating systems" (Mintel, 2022b). Therefore, labels, certificates, seals or indirectly QR codes could serve as a tool to access more information about a brand.

A study on consumers' attitudes toward eco- and organic labels reveals that the relevance for German consumers has increased steadily over the past years (VuMA, 2021); compared to 8.37 million people who fully agree to considering eco labels when shopping for food products, 18.92 million people fully disagree.

2.2. Corporate Sustainability Branding and ESG Reporting

Compared to other sectors, FMCG producers, i.e., in particular food producers in the European Union for a long time are used to report on ingredients and sustainability of their products. Recently, this changed, many European companies are now obligated to report on corporate sustainability activities by the various regulations such as the Global Reporting Initiative (GRI), the Sustainable Development Goals (SDG) of the United Nations and the Corporate Sustainability Reporting Directive (CSRD) of the EU (KPMG, 2022). These regulations are intended to oblige companies to contribute to achieving the goals of the United Nations "2030 Agenda for Sustainable Development" (European Commission, 2022).

Hereby, corporate social responsibility reporting can be understood as a sustainability marketing tool, as it has a positive effect on brand perception (Dathe et al., 2022; Torelli et al., 2012). Hence, many companies published a CSR report even before it became mandatory in 2025, e.g., 62% in 2021 (IÖW, 2021). Sustainability reporting, such as ESG, could also represent an effective marketing tool that is more adapted to current global developments, such as the United Nations "2030 Agenda", to promote corporate sustainability activities. According to Ferrell and Ferrell (2021), ESG disclosure can also be a beneficial tool for a stakeholder-oriented marketing strategy.

ESG reporting stands for the disclosure of environmental, social and governmental information and creates value for different stakeholder groups, such as investors or society (Alareeni & Hamdan, 2020). Further research shows that ESG disclosure increases a company's performance (Alareeni & Hamdan, 2020; Alsayegh et al., 2020). It provides interest groups with detailed data regarding a company's sustainability performance. Moreover, ESG scores act as a simpler way to communicate non-financial information (Khaled et al., 2021).

There are various ESG accounting standards around the world. At the international level, e.g., standards exist from the US Securities and Exchange Commission (SEC) or the International Sustainability Standards Board (ISSB). The EU has also published ESG reporting standards, which require more comprehensive reporting by companies than the international standards, as they address, for example, issues such as water, pollution, biodiversity and circular economy in addition to climate issues, for example (Gnändiger et al., 2022). In the European Union, the most reporting frameworks with the highest impact on national governance are the Global Reporting Initiative (GRI) standards, the Sustainable Development Goals (SDGs) of the United Nations, the Corporate Sustainability Reporting Directive (CSRD) of the EU as well as the EU taxonomy (KPMG, 2022).

A study by PwC (2019) found that 72 percent of companies state that they are considering SDGs in their reports. However, only eight percent of the companies have provided measurable actions.

For companies active in the European Union, in 2017 first guidelines were published, which were adopted multiple times (European Commission, 2023). The importance of ESG reporting was then reinforced by the publication of the European Green Deal in 2019. Recently, publishing an ESG report has become an established way of communicating these practices.

In 2021, a legislative proposal of the CSRD was made to amend the reporting requirements of the Non-Financial Reporting Directive (NFRD). The CSRD was entered into force in 2022.

At the beginning of 2023, the European Commission issued new rules which extend to mandatory ESG reporting for all large companies, regardless of their capital market orientation. Compared to previous rules, SMEs are now also required to report environmental, social and governance information, starting from the financial year of 2024 (European Commission, 2023). These new regulations require more than 50,000 EU companies to prepare a

sustainability statement by 2025 at the latest, which must be integrated into the management report.

2.3. Literature Review on Sustainability Labels in Europe

Reporting, and consequently labels as a related tool, are considered essential for providing consumers with relevant information and influencing their consumption decisions (Dangelico & Vocalelli, 2017; Testa et al., 2015). Thus, a broad range of literature on labelling of food products exists, the Nutri-Score label alone spawned over 200 articles (Skretkowicz & Perret, 2024a). Equally plentiful is the scope of articles implementing choice- or scale-based conjoint analyses measuring consumer preferences for food products.

Thus, to limit the scope of research, Table 1 summarizes those articles that consider sustainability-oriented labels, implement conjoint analyses and focus on Europe. Even these limitations already yielded eight studies, addressing consumer preferences in the three countries, Belgium, Germany, and Italy, as well as a cross-country study.

Table 1. Literature Review - Sustainability Labels

Study	**Country Focus**	**Results**
Janssen and Hamm (2012)	Europe	Highest WTP for Bio Label
Rousseau (2015)	Belgium	Fairtrade Label more important than the Organic Label
Vecchio and Annunziata (2015)	Italy	Gender, Age and Income significantly impact the WTP
Meyerding (2016)	Germany	Low prices are important / Bio Label has higher part-worth utilities than Fairtrade Label
Meyerding et al. (2018)	Germany	Quality label increase WTP / Labels are of less importance than origin and price
Balderjahn et al. (2018)	Germany	Fairtrade Label more important than Bio Label
Meyerding and Merz (2018)	Germany	Low prices and local origin have the highest part-wort utilities
Aprile and Punzo (2022)	Italy	WTP is higher for labels with higher market penetration / no difference between private and public certification
Song et al. (2024)	China	ESG activities positively impact purchase intentions, even without a label

If distinct labels are considered, the two most common ones are considered. This is in line with the results of Aprile and Punzo (2022) that better known labels result in stronger effects. At this point, it can be noted that the mentioned Bio label is an equivalent to other Organic labels used in other countries, henceforth referred to as Organic.

Aside from the Fairtrade and the Organic label, authors consider the effects of the issuing body of a label (private vs. public) and socio-demographic and -economic differences. It can be noted that regarding the order of relevance of the two considered labels, no conclusive results exist. While both are shown to be effective, even for Germany alone, results are ambiguous about which is the more important label.

While not explicitly mentioned in Table 1, the most common example used within the listed studies is chocolate, since it ideally fulfils the requirements for being an FMCG sold in all forms of markets. It is furthermore a good that almost every participant will have a personal reference to.

Looking at product attributes of chocolate, research shows that among product labels, organic labels and Fairtrade labels influence the buying behavior for chocolate most (Del Prete &

Samoggia, 2020). In the case of chocolate, information about the origin is not as critical for consumers. The study by Vecchio and Annunziata (2015) found that consumers who are willing to pay more for sustainable labelled chocolate are generally female, older and have a higher household income.

The studies in Table 1 reflect the state of research on the topic from a consumer perspective focusing on consumers' WTP. In comparison, Lu (2024) establishes positive direct effects of ESG certification on brand perception and loyalty and Liang et al. (2024) a corresponding moderating effect.

From a company perspective Wong et al. (2021) and Bai et al. (2024) can show that ESG certification can also be beneficial to producers by raising their firm value. Montaz and Parra (2024) establish the positive effect that ESG disclosure has on financial performance of SMEs.

2.4. Methodology

2.4.1 Deduction of the Research Questions

The literature review provided in the previous section already set the starting point for this study's research framework. Even though, ESG certification emits positive effects on consumer behaviour and firm performance, this study will only focus on the consumer side, i.e., the consumers' WTP resulting from ESG activities being reported via respective labels.

Since the literature is not in line regarding the Fairtrade and the Organic label and ESG are not yet fully established in the German market, herein an exploratory approach has been selected. With the research objective set on studying consumer preferences regarding sustainability-oriented labelling in the FMCG market, i.e., chocolate bars, this study poses three research questions focussing on the three types of labels elicited in the previous section.

The Fairtrade and the Organic labels are already well-established among German consumers, whereas ESG labels only in rare cases occurred on the market. Thus, the first research question focuses on the perception of established labels as compared to the more hypothetical ESG labels.

RQ_1: How do ESG labels compare in their marginal WTP compared to the Fairtrade and the Organic label?

Considering the inconclusiveness concerning the relevance of the Fairtrade as compared to the Organic label, a design is chosen that allows for comparison of both labels as well.

Whereas for Italy Aprile and Punzo (2022) could establish that no preferential differences exist whether the label is issued by a private or a public institution, Skretkowicz and Perret (2024b) argue that at least regarding the Nutri-Score, another food-related quality label, German consumers are skeptical if the label is not publicly certified. Consequently, the second research question considers the origin of the label.

RQ_2: In how far do privately and publicly issued ESG labels differ in their impact on consumers' WTP?

Finally, Vecchio and Annunziata (2015) and more recently Aamodt et al. (2023) indicate for Italy that the WTP would be significantly impacted by consumers' gender, age, and income. The third research question picks up on this issue and asks:

RQ_3: In how far is the WTP impacted by participants' socio-demographic and socio-economic characteristics?

2.4.2 Research Design

Preference research generally examines complex interrelationships between numerous variables (Kuß et al., 2021, p. 279). For example, consumers' choice of product is rarely explained by just a single factor. Hence, there is not just one factor influencing the success of a product. This implies that the choice of a product usually does not depend on only one attribute, such as the price. Since, in this work, a purchase situation as realistic as possible is to be simulated, further relevant attributes are used for the investigation in this quantitative study in addition to the ESG label. A conjoint analysis appears to be a suitable method since it allows to determine the utility of individual attributes in a hypothetical market situation (Rao, 2014, p. 1).

Conjoint analyses are a complex group of techniques that often cannot be clearly distinguished from each other in their application (McCullogh, 2002). However, their introduction into marketing practice in 1971 is considered revolutionary.

Following up on the arguments given in the previous section and the results of the literature analysis, four attributes can be deduced for the design of this study's choice cards. Table 2 summarizes the attributes and their respective levels. The default level for each attribute is marked in bold face.

Prices have been determined by taking a snapshot of retail prices for 100g bars of chocolate in German supermarkets across different cities. The average has been rounded to €1.39 to allow for a price as expected in a supermarket. The lower and higher prices were calculated as an approximate 30% decrease and increase in the original price.

Table 2. Research Design - Attributes and Labels

Attribute	**Level**
Fairtrade Label	**No** Yes
Bio/Organic Label	**No** Yes
ESG Label	**No** Yes, private institution Yes, public institution
Price	0.99€ **1.39€** 1.79€

Based on these attributes and levels, an orthogonal design has been calculated using IBM's SPSS and the implemented Orthoplan function. A design with nine cards resulted, which has been extended by four hold-out cards to increase not only the number of observations, but more importantly the robustness of the results in light of the hypothetical nature of the ESG labels. In particular, the four holdout cases are used to increase the internal validity of the results (Rao, 2014, p. 64).

While 13 cards might pose a distinct cognitive burden on the participants, Backhaus et al. (2023, p. 585) reports that up to 20 evaluations can be considered appropriate without skewing the results. To furthermore reduce biases in the results, participants are shown the cards in random order. This also helps to alleviate the common method bias inherent in this type of analysis.

Every participant was asked to evaluate each of the 13 cards on a seven-point Likert rating scale.

Table 3 summarizes the 13 implemented cards, and Figure 1 illustrates the design by which they were presented to the participants during the survey. Note, that the original use of German language has been kept. The chocolate bar was intentionally designed without showing ingredients, brand names or any motives that might allow participants to link the chocolate bar to any existing brand. Thus, participants must evaluate the products based on the provided attributes alone.

Table 3. Orthogonal Design

Card	Bio/Organic	Fairtrade	ESG	Price
1	No	Yes	Private	1.39
2	Yes	No	Public	1.39
3	Yes	No	Private	0.99
4	Yes	Yes	None	1.79
5	No	No	None	1.39
6	No	No	Private	1.79
7	No	No	None	0.99
8	No	No	Public	1.79
9	No	Yes	Public	0.99
10	No	No	Public	0.99
11	Yes	Yes	Public	0.99
12	Yes	No	Public	0.99
13	No	No	None	1.79

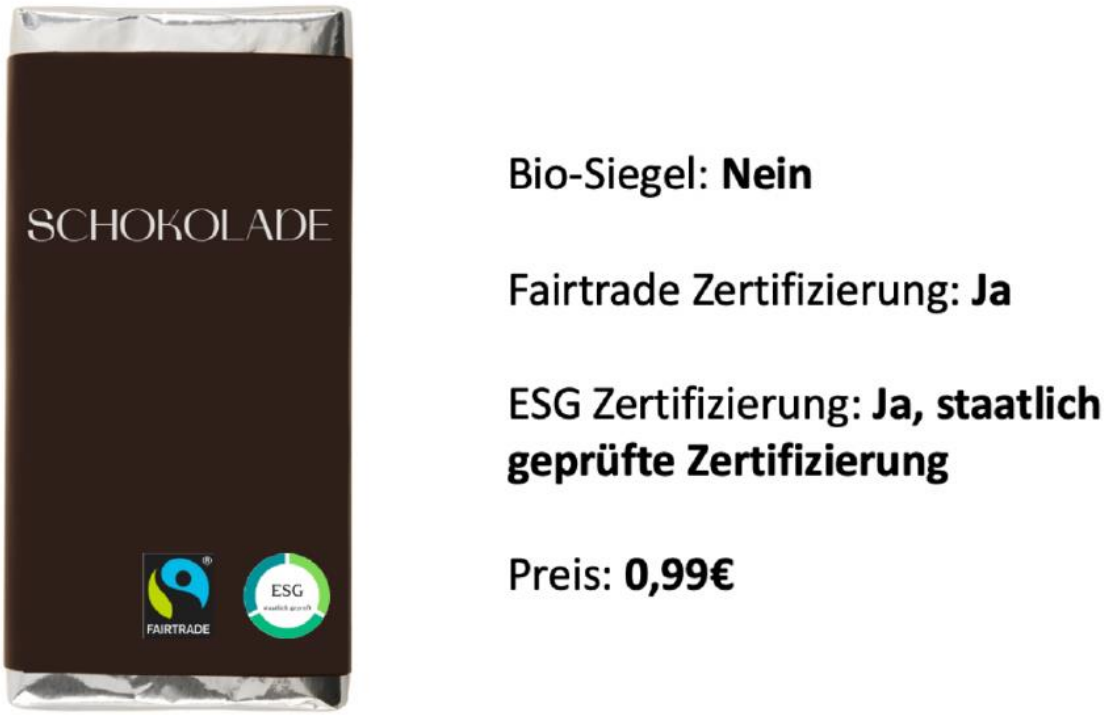

Figure 1. Examplary Card Design

3. Results

3.1. Description of the Sample

The study presented in the previous section has been carried out and in total, data for 286 participants has been collected. During rigorous pre-processing of the data set, participants who did not fully answer the questionnaire (132 participants) or answered too fast or too slow (58 participants), were excluded, reducing the number of valid participants to 96. Those 96 participants are of German nationality and took part in the German language survey.

Of the participants, 65% stated their gender as female and 35% as male, without any diverse participants. While this distribution is not representative for Germany as a whole, women are more involved with issues of sustainability (Meinzen-Dick et al., 2014) and in the age group 18 to 50 consume more chocolate than men (Heseker, 1999).

A median age of 27.5 years reflects well on the situation that the majority of participants stem from the generations Y and Z. Consequently, the yearly net median income of €22,353.94 lies below the median income for Germany which lies at €25,308 (Sparkasse, 2024). Considering that a distinct share of the participants is still involved with their education, and cannot work full-time, the net median income implies that those participants in the sample that already work are in higher earning segments. Those results resonate with the overall education level of the participants, of whom 65% have one kind of tertiary university-based education or another.

Summarizing, the study does not represent the German population in total, but primarily the highly educated and those higher earning segments of the generations Y and Z, whereby women are overrepresented. Incidentally, those are participants who are primarily invested in issues of sustainability (Cheung et al., 2022) and thus would report the strongest reactions regarding sustainability labels.

3.2. Conjoint Analysis

In the context of the conjoint analysis, the 96 participants were presented with 13 cards each resulting in a total of 1.248 potential cases. To account for situations where participants felt unable to provide an evaluation, they were offered the option to not answer the question. This option has been selected 97 times, so that in total, 1.151 usable cases resulted, which translates into each participant on average evaluating 12 cards each. Thus, biases to the results due to high opting-out rates can be disregarded.

Calculating part-worths for the participants yields to the results summarized in Table 4. In total, three models are estimated. Model I is the base model, including only the attributes from the conjoint analysis, whereby the first four variables are binary, and the price variable is metric. Model II expands the base model by introducing an interaction term which indicates the presence of all labels being present at the same time. Finally, Model III additionally introduces socio-economic variables reporting on the participants' gender, age, and monthly net income as control variables. In all three models, the base category for each of the seal variables is that the seal is not present on the product.

Asterisks indicate the significance levels regarding t-tests for the coefficients and regarding the F-test – reported next to the R^2 values. *** indicate a significance level of $p < 0.001$, ** a significance level of $p < 0.05$ and * a significance level of $p < 0.1$. The values in the first row are unstandardized coefficients, and the values in parentheses are the respective standard errors.

Table 4. Results Conjoint Analysis

	Model I	**Model II**	**Model III**
Bio/Organic	1.017*** (0.105)	1.106*** (0.111)	1.106*** (0.110)
Fairtrade	0.932*** (0.102)	1.028*** (0.110)	1.028*** (0.108)
ESG (private)	1.588*** (0.124)	1.569*** (0.124)	1.569*** (0.122)
ESG (government)	2.134*** (0.119)	2.197*** (0.122)	2.197*** (0.120)
Price	-1.220*** (0.147)	-1.253*** (0.147)	-1.253*** (0.145)
All seals together		-0.510** (0.212)	-0.510** (0.209)
Gender			0.248*** (0.096)
Age			-0.228*** (0.048)
Income			0.035 (0.042)
Constant	3.791*** (0.239)	3.794*** (0.239)	0.3987 (0.310)
N	1151	1151	1151
R^2	0.480***	0.482***	0.497***

Using the coefficient estimates for the four types of seals, the interaction term and the coefficient of the price variable, the WTP for each seal and the interaction term were determined. These results are summarized in Table 5 below, differentiating again for the three models.

Table 5. Estimated Willingness-to-Pay

	Model I	**Model II**	**Model III**
Bio/Organic	0.83€	0.88€	0.88€
Fairtrade	0.76€	0.82€	0.82€
ESG (private)	1.30€	1.25€	1.25€
ESG (government)	1.75€	1.75€	1.75€
All seals together		-0.41€	-0.41€

All attributes are highly significant and report positive coefficients. The effect of each of the labels separately is therefore positive, they all increase consumer trust in the product and their willingness to buy the product.

Since all labels are represented via binary variables, the coefficients already indicate that the most preferred labels are the ESG labels, followed by the Organic and lastly the Fairtrade label. Considering that ESG labels (aside from the above mentioned Bio- and Fairtrade label) are not yet commonplace in the supermarkets, this strong preference by the customers does reflect on a leap of faith by the participants about their trust in those labels.

The price variable is significant, but with a negative sign. Considering that in this study an unbranded chocolate has been used, the negative sign, indicating that consumer avoid higher price and prefer lower prices, does not surprise.

The interaction variable is highly significant and negative. Comparing this result with the ones for the labels separately, could indicate that benefits from the labels do not stack additively, but each new label will contain a little less helpful information than the previous one. An alternative interpretation may be that individually the labels are perceived as beneficial and

helpful to the participants, but too many labels together might confuse or irritate them, detracting from their overall usefulness.

Of the three control variables, gender, and age are highly significant and income is not significant at all. In the presence of these three variables, the coefficients of the attributes, i.e., the labels, remain unchanged. Thus, it can be assumed that the results hold independent of consumers' gender, age, or income. Relating to the results from the previous section, the results can be expended to the better educated part of the generations Y and Z with a slightly above average income. It particularly shows that those consumers, that statistically speaking value sustainability more, prefer sustainability labels; first and foremost, ESG labels issued by official public institutions.

With a coefficient of determination (R^2) of almost 50% all three models report a high explanatory power. It indicates that the experimental design of trying to isolate the effect of labels has been successful, and that labels are an essential part of consumers purchase decisions. In addition, Pearson's rho is highly statistically significant ($p<0.001$), showing a strong linear correlation between the product attributes and the preferences of the participants. Thus, indicating high internal validity of the results.

Switching to the values for the WTP, the results for the part-worths are reflected accordingly. Participants perceive ESG seals independent of the agency behind them as more relevant than the Organic or the Fairtrade label. Among ESG labels, participants value labels backed by a government-operated institution about 30% higher than ESG labels from privately operating agencies. This result highlights the mistrust that consumers have developed about the increasing number of sustainability-related labels on the market.

A government-backed ESG label also is valued approximately twice as much as the already existing Organic or Fairtrade label. Thus, participants have high expectation regarding ESG labels, which underlines the relevance of the regulations implemented by the European Union.

The interaction term echoes the preceding thought. The coefficient is significantly negative, which translates into a lower WTP if all three types of seals are present at the same time. Thus, seals by themselves provide consumers with an informational advantage and thereby help them make decisions during their purchase, therefore providing a monetary advantage. If too many seals are present on a product, however, they start to confuse consumers and thereby make them less inclined to purchase the product, thereby reducing the monetary value of each seal.

Considering the implemented price range of €0.99 to €1.79 in the experiment, values for the WTP of up to €1.75 seem surprisingly high. In cases like this, Conjointly (2024) argues that the values are no longer to be interpreted at face value, but rather that they would be the single most important decision criterion for the consumer. An interpretation could, however, still take place when comparing different attributes and levels.

Since in the experiment the product had a generic design and aside from the price the labels were the only decision criterion for the participants, it does not surprise that the value for the strongest seal, the government backed ESG seal are close to the maximum price in the experiment.

4. Discussion

An ESG label informs not only about the product itself, but also about the sustainability of the corporation behind the product. Hence, reducing the lack of information regarding the sustainability of products. Additionally, the labelling of an ESG report makes manufacturers' sustainability awareness more transparent to the customer.

The empirical finding of this study confirms the theoretical trend. In the hypothetical scenario. Consumers are willing to pay a premium for ESG-certified products due to their perceived environmental and social benefits and their perceived higher quality, independent of the type of label.

The Organic label across all three implemented models is rated better than the Fairtrade label, thus this study's results are more in line with Janssen and Hamm (2012) and Meyerding (2016) and oppose the results by Balderjahn et al. (2018) and Rousseau (2015).

Disregarding the ESG labels, the results of this study coincide with those by Meyerding et al. (2018) and Meyerding and Merz (2018) who argue that origin and price are more important to consumers than labels. The ESG labels, independent of issuing institution, are both, however, rated as more relevant by the consumers than the product price.

This last result is of particular interest, since studies (Aprile & Punzo, 2022) suggest that well-known labels are more trustworthy for consumers than new labels (Boström & Klintman, 2008, p. 76 ff.; Sønderskov & Daugbjerg, 2011, p. 509 ff.). The ESG label, however, is just a hypothetical label representing new ideas and thus it is relatively unknown.

The results of Janssen and Hamm (2012) are furthermore mirrored by consumers evaluating the publicly issued label as more valuable than the privately issued one. This result would oppose the results by Aprile and Punzo (2022).

Contrary to Vecchio and Annunziata (2015), gender and age turn out to be impacting the decision to buy the chocolate bar, income remains insignificant, but none of the three variables impact the WTP or even the respective part-worths.

Due to the hypothetical buying scenario study participants face, where respondents incur no real monetary loss, it can be assumed that respondents would act more price sensitive in a real-world scenario (e.g., supermarket shopping). Additionally, as Meyerding et al. (2018) argue, consumers actual decision-making behavior will deviate from their stated decisions if just confronted with a choice experiment or simple conjoint analysis. Thus, the chosen approach may reduce the attitude-behavior gap, but it will not be able to fully close it.

In addition, since sustainability in relation to food products can be considered a critical issue for some consumers, effects of social desirability might become active as well (Crowne & Marlowe, 1960, p. 349 ff.).

Summarizing, most of the results for Germany are reflected in this study as well, which provides additional backing that even though this study reports some limitations, as detailed in the final section, the results in particular for the newly considered, yet still hypothetical ESG labels, would remain stable when the study would be replicated in the future.

The discussion also revealed that Italian consumers have a distinctly different perception of sustainability-oriented labels and preferences for food products in general. Similar insights emerge when alternate food quality labels like the Nutri-Score or NutrInform are considered.

5. Conclusions

5.1. Recommendations for Practitioners

An important finding of this study is that consumers have a higher MTWP for a government-certified ESG label than for a privately organized label. The reason for this preference for government-certified ESG labels is the trust and credibility that consumers associate with such labels. State-approved ESG labels are considered impartial and independent because they are

awarded by government agencies or nonprofit organizations that have no direct self-serving monetary interest in the companies they certify. This independence ensures that the standards used to certify a product are rigorous and impartial, giving consumers confidence that the product they buy is sustainable and socially responsible. So, from a consumer's perspective, an ESG label on product packaging is a credible and trustworthy indicator of a company's commitment to sustainability and social responsibility (Cheng & Huang, 2024). It also provides consumers an easy way to identify products that align with their values. This is particularly important in an increasingly complex and confusing marketplace, where consumers choose from many product options. By purchasing products with an ESG label, consumers can be assured that they positively impact the environment and society and can take a better picture of their personal sustainability behavior.

From the perspective of FMCG companies, using an ESG label on product packaging can be a competitive advantage, as it can help differentiate their products from competitors and attract environmentally and socially conscious consumers. It can also help build consumer trust and credibility by providing transparency about a company's ESG practices. In addition, incorporating ESG practices and obtaining a government-certified ESG label can help companies mitigate reputational risks and improve their overall perception by stakeholders and shareholders. In addition, when consumers feel they positively impact the environment and society, it can lead to stronger customer loyalty and repeat purchases.

Therefore, FMCG companies should prioritize obtaining a government-certified ESG label for their products to differentiate themselves from their competitors and attract a group of sustainability-aware consumers. This increased demand for products with an ESG label can drive sales growth, improve customer loyalty, and contribute to better company financial performance. Additionally, to receive an ESG label, companies need to integrate and apply ESG practices in their operations. These may include reducing the environmental footprint, improving working conditions for employees, and responsible sourcing practices. Furthermore, FMCG companies should use the results of this work to align their current business model and marketing strategies with today’s and future market needs to adapt their marketing strategies. Detailed studies will reveal which kind of label fits their brand the best and enacts the most beneficial reaction from their customers.

The role of policymakers and politicians in promoting ESG standards in the FMCG industry cannot be overstated. By implementing policies and regulations that encourage companies to adopt ESG practices and providing government-certified ESG labels, they can ensure that the industry operates sustainably and responsibly, which benefits both the environment and society. From 2024 onwards, large European companies must obligatorily (2025) publish an ESG report (European Commission, 2023). Policymakers should seize this opportunity, and the feasibility of ESG labels should be on the agenda. This can include implementing policies and regulations that promote ESG labels and encourage companies to adopt ESG practices. Governments can also provide funding and support for government-certified ESG label programs to ensure that they are adequately resourced and have the necessary resources to operate effectively. By promoting the use of government-certified ESG labels and encouraging companies to adopt ESG practices, governments can help create a more sustainable and socially responsible FMCG industry, benefiting consumers, stakeholders, and shareholders eventually.

5.2. Limitations and Outlook

Internal validity suffers from the non-random sampling method used and the self-selection inherent in most online surveys. Self-selection may affect the internal validity of the results

because participants may have hidden characteristics that are not random and, therefore, not evenly distributed across the study population, which may bias the results.

External validity, in comparison, suffers because the implemented sample does not represent the general population. An additional problem with external validity is the hypothetical purchase decision. Study participants may respond differently to real products than to hypothetical ones, leading to limitations in the generalizability of the results. Besides, participants do not incur actual costs during the scenarios and are thus not as price sensitive as in real-world scenarios.

For further studies on the topic, it would be interesting to use a discrete choice-based conjoint analysis method and a more representative sample concerning the socio-demographic factors. Alternatively, a more detailed weighting scheme of the existing cases could be implemented.

Consequently, the study results should serve as a first contribution to research about corporate sustainability communication towards consumers via labels. As outlined, the relevance of this topic is high, as the pressure on FMCG companies to implement a proper corporate sustainability strategy strongly increases. Hence, further studies on corporate sustainability practices towards consumers are suggested. Especially, studies on how to create more transparency towards consumers in corporate sustainability and the perception of ESG reports by consumers appears to be necessary.

As outlined in this work, the subject of ESG reporting is in a critical phase of change. Adaptations in governmental regulations and standards were published recently, which will affect the operations of many companies. As the disclosure of an ESG report becomes mandatory for more than 50,000 EU companies by 2025 at the latest, it is recommended to investigate the effects of an ESG labels again in the near future.

Based on the proposed corporate sustainability branding tool, further research could investigate extensions of the used hypothetical ESG label. For example, the ESG label could be adjusted to an integrated rating system. This would allow consumers to distinguish good ESG practices from bad ones.

A further extension of this study and the proposed ESG label could be to investigate the integration of QR codes. As a Mintel report detailed, QR codes represent a tool for consumers to access information about a product (Mintel, 2022b). Hence, QR codes represent a valuable tool in corporate sustainability branding when consumers can access the ESG report or a summarized consumer version through a QR code on the product packaging.

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