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Does Price Matter in Mainland China? Examine the Factors Influencing Broiler Chicken Purchase Intention

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Abstract: Sustainable marketing emphasizes how businesses convey the concept of sustainability to consumers through marketing techniques. Previous research has focused on identifying the drivers that influence consumers' purchase intentions for agricultural products. However, there is a lack of research on the quality of the messages that firms convey to consumers from a pricing perspective. To fill this gap, this study builds on the hedonic pricing theory using structural equation modeling to develop a formative model that enables the identification of the determinants that influence the market price of the broiler chicken industry in mainland China. By analyzing the information on 486 raw whole chicken samples in China, the results indicate that the basic, responsible production, and quality assurance attributes of broilers have a substantial effect on their selling price, whereas the marketing message attributes do not. The results of this study are enlightening for producers and marketers of agricultural products who are developing pricing strategies. This study raises important questions about the pricing of agricultural products in sustainable marketing practices, particularly in emerging economies, and suggests avenues for future research conducted in this area.

Keywords: sustainable marking; pricing strategies; price determinates; responsible production; agri-business; broiler industry

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1. Introduction

Supply and demand determine the pricing of goods in the marketplace. While the pricing of goods is determined through information about market demand [1], it is also important to convey to customers the value and characteristics of a product or service [2,3]. In contrast to electrical products, which are mass-produced and of uniform quality, the quality of agricultural products (agri-products) is highly impacted by climate, season, and location [4]. It would be difficult for the seller if their prices were standardized similarly to those of electronics. Consequently, organizations must account for fluctuations occurring in supplier quality and changes in consumers' demands when pricing their agri-products.

Mainland China, representative of emerging economies, has not been very profitable for the agri-products industry. Chinese consumers, in particular, are influenced by the concept of the high-price–performance ratio and prefer low-price items [5,6], which has led to many enterprises deliberately increasing their market share and competitive advantage through the price-dumping strategy. With the increasing interest in food products embedded in social and ethical attributes [7], businesses are driven to implement corporate social responsibility (CSR) practices to improve the quality of their products and maintain their sustainability [8,9]. Considering the hidden nature of agri-products, consumers are unable to visually assess their quality [10]. Consequently, addressing the marketing dilemma of mainland China's quality agri-products through CSR practices has become the key to promoting sustainable agricultural marketing practices.

Traditionally, marketing ideology has been profit-driven [11], which has overlooked social and environmentally sustainable factors. Nevertheless, the effectiveness of a pure price-dumping strategy is dwindling as consumers grow more knowledgeable and sustainably conscious, especially when targeting younger consumers [12,13]. Contemporary marketing theory is preoccupied with more than profit maximization; it is also engaged with the marketing notion of sustainable development. The concept of responsible production and sustainable development can be communicated to the consumers through a variety of marketing channels [14,15]. A large amount of research has been conducted on sustainable marketing from the standpoint of consumer [16,17]. Consumer education [18,19], social perception [20], and income [21] are the most influential elements of sustainable marketing. However, because customers are price-sensitive, appropriate product pricing can effectively influence the promotion of the sustainable marketing notion by product manufacturers or marketers.

The broiler sector is mainland China's largest and most marketable agricultural industry with the greatest potential development [22]. As a lucrative industry, the broiler industry has also held its own in the global market. Since consumers are not directly involved in the broiler production process, there is an information asymmetry between them and the broiler manufacturer. To avoid purchasing substandard broilers, consumers are more willing to pay a premium for a superior-quality broiler product; however, they have a price ceiling in mind. The hedonic pricing model (HPM) emphasizes the influence of product characteristics in product pricing, whereas consumers (buyers) evaluate products based on their own psychological price and the distinctive characteristics of the product, especially when consuming unfamiliar products for the first time [23]. Accordingly, in order to create more efficient marketing strategies that promote the sustainable development of broiler products, it is necessary to understand the major factors that influence broiler prices in the market at present, as determined by the hedonic pricing model.

Previous researches have focused on identifying the factors that influence consumer broiler purchase intentions [24–26]. Nevertheless, there is a dearth of research on the quality messages that businesses transmit to consumers from a pricing standpoint. To fill this void, the purpose of the present study is to develop a formative model using structural equation modeling to identify the determinants that influence broiler listing prices. To accomplish the above-mentioned purpose, this study's objectives are contributing to the prior research focused on examining the effect of the factors (i.e., basic, responsible production, marketing message, and quality assurance attributes) on broilers' listing price to determine the price information that producers or sellers expect to convey. The results of this study not only enrich the literature on broiler sustainable marketing, but also shed light on broiler corporate pricing practices, enabling the development of a profitable and sustainable broiler marketing strategy.

The remaining sections of the study are structured as follows. First, the hedonic pricing theory is addressed, followed by a review of the relevant literature on factors affecting broiler prices. Next, the hypotheses and research model are developed based on the theoretical framework. Third, the sample size and data collection procedures are specified. Fourth, the data analysis results are presented. Afterwards, relevant theoretical and practical implications are discussed based on the findings. Finally, the limitations of the research are highlighted along with future directions in this domain.

2. Literature Review

2.1. Hedonic Pricing Theory

Hedonic pricing theory focuses on the decomposition of the price of a commodity in order to reveal the price impact associated with each characteristic [27]. These characteristics are usually easily observable attributes. Hedonic pricing theory is frequently utilized in real estate and fixed assets sales [28], but it has also been applied to the tourism industry, for example, in the pricing of hotel rooms [29]. The majority of hedonic pricing theory-related articles are based on simple parametric models and are analyzed using

ordinary least squares (OLS) regression techniques. However, as OLS is a parametric approach, the interpretation of its coefficients in practice might be misleading [30]. Partial least squares (PLS), as a non-parametric-based data analysis technique, can effectively offset the limitations of OLS [31]. Therefore, although this study was not analyzed using a traditional OLS approach, hedonic pricing theory provides a sound theoretical basis for the study of price mechanisms and adequately explains the social value provided by the various characteristics of the broilers entering the market in this study.

2.2. Broiler Industry Overview

The predominant broiler breeds circulating in the market at present can be categorized as white-, yellow-, and silkie-feathered [32]. The white-feather broilers hold the largest market share for commercial use due to their superior growth efficiency and short breeding cycles [33,34]. Yellow-feather broilers are older and have a lower feed conversion ratio than white-feather broilers [34]. However, for Chinese households, it is the most popular broiler breed because it fulfils the meat preference and nutritional needs of Asians [34]. Silkie broiler has a small market share due to its medicinal benefits, but its price is significantly higher [34].

In general, the production of broilers involves three major factors, breeding, quarantine and inspection, and market circulation [35]. Among these, the breeding of broilers is a crucial component of determining their quality. Inspection and quarantine define the broilers' access to different tiers of markets, which, in conjunction with the quality of broilers, determines their selling price (Figure 1).

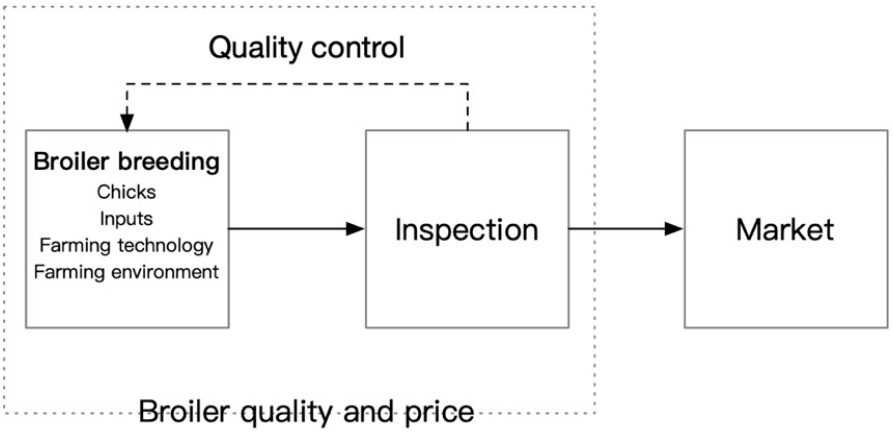

Figure 1. Broiler access to market process.

2.3. Factors Affecting Broiler Prices

Prior studies conducted on consumers' willingness to pay for the broiler products are based on their preferences and individual consumer characteristics [24,26]. Among these, breed [36], age [37], freshness [38], flavor [39,40], skin cleanliness [41], bone condition [41], weight [39], and meat color [42,43] are significant factors in enhancing the consumer's willingness to pay a higher price. Chinese consumers, in particular, prefer to pay for broiler products with better freshness or taste [22,44]. In this study, the basic characteristics of broilers were directly accessible to consumers through their perception of authenticity (e.g., sight, touch, and taste) and were the most intuitive criteria for judging the quality of broilers, which were defined as basic attributes. Therefore, the basic attributes of broilers are crucial in determining their selling price [45,46]. Based on this reasoning, we proposed the following hypothesis:

H1. *The basic attributes have significantly impacted the broiler's price.*

CSR practices have been proven by many scholars to be a means of achieving a sustainable competitive advantage for industrial companies [47,48]. For agribusinesses,

responsible production as an aspect of CSR can be a topic of focus for sustainable development practices. The process of consumer identification of production and consumption (e.g., purchasing intentions, trust, and contentment) effectively influences the price and sales of the products [49,50]. When an organizational production practice is aligned with consumers' CSR preferences, this can be mutually beneficial and lead to sustainability. The use of various inputs for chicks, such as organic and green fodder, may impact the quality and price of broilers [51]. Broiler producers are acting responsibly with their products by using sustainable breeding techniques, creating better broiler-farming conditions and using green feed. Therefore, the following hypothesis was proposed:

H2. *Broiler responsible production attributes have significantly impacted the broiler's price.*

The marketing message factor includes producer brand, retailer brand, additional services, and packaging [52,53]. The brand and reputation of agri-producers and vendors contribute to the higher price point [54]. A producer is able to obtain a sustainable competitive advantage when it reaches a certain level of production volume and social reputation [55]. To ensure high product quality, most reputational merchants have their own quality assurance and safety access criteria, which affects sales pricing [56]. Product packaging in terms of novelty, as well as detailed descriptions of the product and related services, can influence the selling price of the product [57–60]. Hence, the following hypothesis was proposed:

H3. *Marketing message attributes have significantly impacted the broiler's price.*

The system of product certification includes producer and third-party certification, which is tightly correlated with product quality [61,62]. Guarantees of broiler producers enhance confidence in the production process's quality control. Broiler producer guarantee is an endeavor to disclose the indicators of their production process [63] and make a commitment to the quality of their products [51] based on the quality standards in the market. The third-party certificate (provided by a reputable organizations or government institutions) will determine whether the broiler can be sold on the market, the various levels of market circulation, and ultimately, the price on the market [64]. Thus, both government-led third-party certifications [65] and producers' own commitments to their products [66,67] are effective at boosting consumers' confidence in the quality of broilers and, as a result, influence the market selling price. Therefore, we proposed the following hypothesis:

H4. *Broiler's quality assurance attributes have significantly impacted the broiler's price.*

3. The Model

The broiler business is the largest poultry meat industry in the world and is an important part of mainland China's livestock industry [22]. This study builds on the prior research to establish a formative indicator model that identifies the factors that influence the price-setting behavior of enterprises in the broiler industry [68]. The pricing and attribute information for broilers were obtained from major supermarkets. Based on the attributes listed by the supermarkets, we classified broiler attributes into four categories, namely basic, responsible production, marketing message, and quality assurance. We thus developed a structural equation model using the price per kilogram of broilers (in RMB) as the dependent variable and the four variables mentioned above as independent variables (Figure 2).

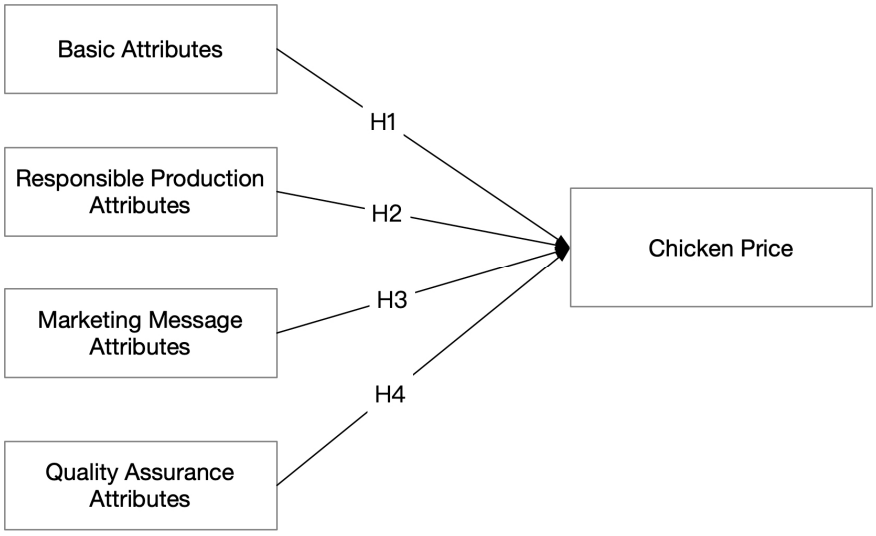

Figure 2. Conceptual framework.

4. Methods

4.1. Data and Sample

To determine the viability of this study, 10 supermarkets, 7 fresh-produce outlets and, 5 trade markets were randomly selected for the purpose of pre-testing. In this phase, we excluded products sold on meat open markets, as these products have uncertain prices and lack accurate product information. In other words, we only considered fresh chicken sold on offline channels, as it is the most popular platform when customers intend to buy fresh products.

The data were collected from supermarkets and fresh-goods stores in Guangzhou City, Guangdong province, China, where explicit price information was available from August to October 2021. The supermarkets and fresh goods stores selected were mostly extensive and well-known to the general public. As a result, a wider range of broiler products were sold, allowing for the collection of increased sample data. A total of 486 data related to raw, whole chickens that had been slaughtered and preserved, excluding cooked, processed broiler products and broiler product pieces, such as chicken wings and legs, were considered. After removing the data with excessive repetitions (e.g., the same products from the same chain outlets in different regions) and the possibility of information bias (e.g., products that were displayed at discounted prices for a limited time), a total of 435 valid data were retained.

As presented in Table 1, approximately 57% of the broilers were sold in supermarkets and 43% were sold in fresh-food outlets. Of these fresh-food outlets, the majority of the samples were distributed in small-sized outlets (19%), followed by large-scale (17%) and medium-sized (7%) ones. However, for the supermarkets, most items were sold in large-scale outlets (43%), compared to medium- (10%) and small-sized outlets (4%) (see Figure 3).

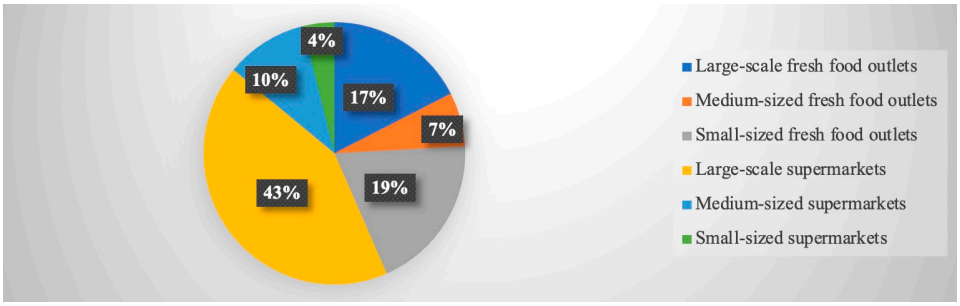

Figure 3. Categories and percentages.

Table 1. Sample distribution.

Name	Size	Frequency	Total
Fresh-Food Outlets	Large-scale fresh-food outlets	76	189
	Medium-sized fresh-food outlets	29	
	Small-sized fresh-food outlets	84	
Supermarkets	Large-scale supermarkets	185	246
	Medium-sized fresh-food outlets	44	
	Small-sized fresh-food outlets	17	

4.2. Measures

In this study, the attributes were coded according to their characteristics. Taking prior research as the reference, this study made two improvements by taking into account the broiler production process and the market status at present. First, we adopted subjective measures to classify the attributes based on the characteristics that were easily quantifiable. Second, we excluded those attributes that were not directly accessible to respondents in the actual purchasing process, such as physical and chemical indicators. Altogether, the attributes included four factors: basic, broiler responsible production, quality assurance, and marketing message (Table 2).

Table 2. Measurements.

Variables	Indicators	Definition	Coding	References
Price	Low price, medium price, high price	Price positioning	0–50/kg = 1 low price, 51–100/kg = 2 medium price, >100/kg = 3 high price	[36]
Basic attributes	Age	Age of the broiler	Age fast = 1 (up to 65 days), medium = 2 (65–95 days), and slow = 3 (over 95 days)	[36,69,70]
	Breeds	Breed of the broiler	White broiler = 1, Yellow broiler = 2, Silkie broiler = 3	
	Origins	Origins of the broiler	Missing information on place of origin = 0, Guangdong Province = 1, non-Guangdong Province = 2	
Broiler responsible production attributes	Fodder	Includes clean water, grain feeding, organic feeding, green feeding, feed with amino acids, no drug residues, no drugs, no hormone residues, no additional hormones, no excessive heavy metals	None = 0, with one technique = 1, with two techniques = 2, . . .	[71–74]
	Inspection	Includes compliance with quarantine for animal products, mandatory inspection of slaughterhouses, and various disease testing	None = 0, with one inspection = 1, with two inspections = 2, . . .	
	Welfare	Includes ecological stocking, central temperature control, suitable temperature and humidity regulation, ecological farm, ecological breeding base	None = 0, with one technique = 1, with two techniques = 2, . . .	

Table 2. *Cont.*

Variables	Indicators	Definition	Coding	References
Marketing message attributes	Producer brand	Whether the manufacture is a market leader?	Yes = 1, No = 0	[71]
	Retailer brand	Whether the retailer is a market leader?	Yes = 1, No = 0	
	Packaging	Includes normal packaging, quality packaging, no packaging	No packaging = 1, normal packaging = 2, quality packaging = 3	
	Additional service	Whether the broiler has additional related services?	Yes = 1, no = 0	
Quality assurance attributes	Producer guarantees	Includes traceable information, food safety, liability insurance	None = 0, with one = 1, with two = 2, . . .	[75–77]
	Third-party certificate	Includes Organic Certification, Green Certification, National Geographical Indication Protection Product, Halal, GPA, HACCP Management System Certification for Production Enterprises, ISO, Qualification Certification for Hong Kong, Pollution-free Agri-product Certification, National Certified Export Registration Farm	None = 0, with one = 1, with two = 2, . . .	

5. Results

In this study, SPSS 28 and SmartPLS 3.3.3 were employed to analyze the data. SPSS 28 was utilized for the analysis of demographic statistics, while SmartPLS 3.3.3 software was used to examine the hypothesized relationships [78,79]. The reasons for selecting PLS-SEM are as follows: (i) this technique is widely used in marketing and has become mainstream, particularly when the research model includes formative indicators; (ii) the PLS-SEM approach is more appropriate for performing prediction-oriented research; and (iii) this technique works well when normality distributional assumption is not met. In this study, the results of multivariate skewness (i.e., 9.740) and kurtosis (i.e., 40.122) are far from the recommended values (i.e., <3 for skewness and <10 for kurtosis) [80], indicating the data are non-normally distributed (see Table 3). Thus, it is appropriate to use PLS-SEM in this study.

Table 3. Multivariate normality tests.

Mardia's Multivariate Skewness and Kurtosis			
	b	**z**	***p*-Value**
Skewness	9.740	706.179	0
Kurtosis	40.122	6.385	1.719

5.1. Descriptive Statistics

Of the 435 valid sample data, the broiler products that contained the most attributes had 34 relevant pieces of information indicated, while the ones that contained fewest had only 3. There were also notable pricing discrepancies between the highest (RMB 254.3/kg) and lowest (RMB 12.5/kg) sample prices. These differences were reflected in all aspects of the basic, responsible production, quality assurance, and marketing message attributes of the broiler products (See Table 4). Specifically, among the basic attributes, 68% of broilers mature quickly, the majority of breeds are yellow-feathered (84%), and approximately half come from Guangdong Province. Regarding responsible production attributes, most of the broilers lacked responsible production expressions in terms of fodder (59%), 51% of the samples were inspected, and the majority of the broilers did not employ technology to

improve the living conditions of the broilers (60%). For marketing message attributes, 77% of the samples included packaging, 218 of the samples' producers were without brands, 69% had retail brands, and the majority of the broilers offered additional services (84%). In terms of quality assurance attributes, 59% of producers did not offer a guarantee and 73% of broilers did not have third-party certification.

Table 4. Descriptive statistics.

Variables	Indicators	Classification	Frequency	Percentage
Price		Low price (0–50/kg)	201	46%
		Medium price (50–100/kg)	190	44%
		High price (>100/kg)	44	10%
Basic attributes	Age	Fast (up to 65 days)	296	68%
		Medium (65–95 days)	34	8%
		Slow (over 95 days)	105	24%
	Breeds	White broiler	10	2%
		Yellow broiler	365	84%
		Silkie broiler	60	14%
	Origins	Missing information	66	15%
		Guangdong Province	246	57%
		Non-Guangdong Province	123	28%
Responsible production attributes	Fodder	No responsible fodder	257	59%
		One responsible fodder	89	20%
		Two responsible fodders	52	12%
		Three responsible fodders	15	3%
		Four responsible fodders	8	2%
		Five responsible fodders	4	1%
		Six responsible fodders	10	2%
	Inspection	No inspections	214	49%
		One inspection	199	46%
		Two inspections	22	5%
	Welfare	None	261	60%
		One welfare	131	30%
		Two welfares	43	10%
Marketing message attributes	Packaging	No packaging	99	23%
		Normal packaging	106	24%
		Quality packaging	230	53%
	Producer brand	No	218	50%
		Yes	217	50%
	Retailer brand	No	134	31%
		Yes	301	69%
	Additional service	No	69	16%
		Yes	366	84%
Quality assurance attributes	Producer guarantees	None	256	59%
		One guarantee	132	30%
		Two guarantees	24	6%
		Three guarantees	23	5%
	Third-party certificates	None	316	73%
		One certificate	52	12%
		Two certificates	32	7%
		Three certificates	6	1%
		Four certificates	1	0%
		Five certificates	15	3%
		Six certificates	7	2%
		Seven certificates	6	1%

5.2. Assessment of the Formative Measurement Model

In this study, all the measures were specified as formative constructs. First, we evaluated the collinearity issue on the basis of VIF. As shown in Table 5, the values of VIFs ranged from 1.000 to 2.042 (<3.33), indicating that the collinearity issue was not significant [81]. Second, we tested the outer weight and significance. From Table 5, the results show that all the outer weights are significant except the inspection → responsible production attributes ($p > 0.05$). However, the outer loading of inspection is above 0.50 and statistically significant. According to relevant research, the inspection indicator can be retained [82]. Hence, no indicator should be removed from our model.

Table 5. Assessment of the formative measurement model.

	Weights	T-Values	VIFs
Age → Basic attributes	0.898 ***	19.594	1.073
Breeds → Basic attributes	0.192 ***	2.585	1.010
Origins → Basic attributes	0.270 ***	3.202	1.068
Fodder → Responsible production attributes	0.322 ***	3.544	1.337
Inspection → Responsible production attributes	0.087	0.915	1.414
Welfare → Responsible production attributes	0.774 ***	11.525	1.322
Additional Service → Marketing message attributes	0.250 ***	2.695	1.115
Packaging → Marketing message attributes	0.458 ***	3.968	1.636
Producer Brand → Marketing message attributes	0.448 ***	3.907	1.342
Retailer Brand → Marketing message attributes	0.252 *	1.985	1.547
Third-party Certificate → Quality assurance attributes	0.457 ***	4.664	2.042
Producer guarantee → Quality assurance attributes	0.621 ***	6.663	2.042

* Significant at: $p < 0.05$, *** significant at: $p < 0.025$.

5.3. Assessment of Structural Model

The evaluation of the structural model began with a collinearity analysis of the predictors. The VIF values of all exogenous latent variables are between 1.517 and 1.688 (<3.33) (see Table 6) (Becker et al., 2015) [81]. Again, this signifies that collinearity between predictors was not a concern. As presented in Table 6, the basic attributes revealed a positive relationship with the broiler price ($\beta = 0.288$; $p < 0.000$), supporting H1. The impact of responsible production ($\beta = 0.219$; $p < 0.000$) and quality assurance ($\beta = 0.306$; $p < 0.000$) attributes on broiler price was also observed to be significantly positive. Thus, both H2 and H4 were supported. Given that marketing message attributes exhibited a positive but insignificant impact ($\beta = 0.016$; $p > 0.05$) on broiler price, H3 was rejected (see Table 6 and Figure 4).

Table 6. Structural model results.

Hypotheses	Relations	Std Beta	Std Error	T-Values	BCa 97.5% CI		VIF	f^2	R^2	Q^2	Decisions
					LB	UB					
H1	Basic attributes → Price	0.288 ***	−0.004	6.021	0.199	0.386	1.517	0.094	0.421	0.404	Supported
H2	Responsible production attributes → Price	0.219 ***	0.004	4.276	0.112	0.312	1.629	0.051			Supported
H3	Marketing message attributes → Price	0.016	0.012	0.369	−0.079	0.091	1.690	0.000			Rejected
H4	Quality assurance attributes → Price	0.306 ***	−0.005	5.977	0.209	0.411	1.688	0.096			Supported

*** significant at: $p < 0.025$.

Overall, approximately 42.1% of broiler prices can be explained through basic, responsible production, marketing message, and quality assurance attributes. In terms of effect size analysis, basic, responsible production, and quality attributes presented a small (f^2 ranged from 0.051–0.096) but meaningful effect [83] when explaining the price. A trivial effect size was observed between marketing message attributes ($f^2 < 0.02$) and price. Lastly, the predictive relevance of the model was assessed using the blindfolding procedure [84].

The value of Q^2 for the endogenous construct, i.e., broiler price, was greater than zero, indicating the model's predictive relevance (see Table 6).

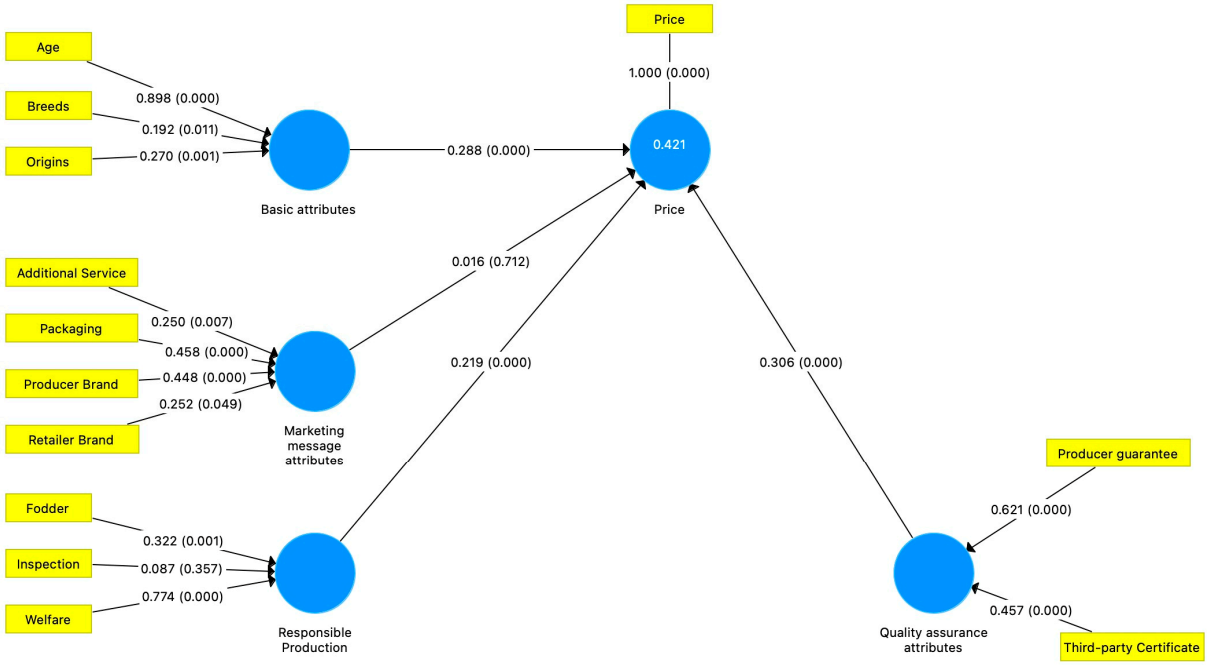

Figure 4. Path coefficients.

6. Discussion

The aim of this study was to examine the relationship between broiler attributes and broiler marketing pricing in mainland China. Based on the hedonic pricing model, our results indicate that the basic, responsible production, and quality assurance attributes of broilers significantly affect their selling price, whereas marketing message attributes have no significant effect on their selling price. The most influential attributes of the selling price of broilers are quality assurance, followed by basic and responsible production attributes.

Firstly, the basic attributes of the broiler are positively correlated with its market price. Prior research has demonstrated that the perception of a product's authenticity is a necessity for its sales and pricing [44,85]. Consumers are more likely to trust the quality of the product as perceived by their senses, and to have a positive perception of the product's production attributes (e.g., origin) [86]. Thus, the chicken can be offered at a premium price if its basic attributes satisfy the consumer's expectation of authenticity regarding taste and provenance.

Secondly, there is a positive relationship between the responsible production attributes of broilers and their selling price. The result indicates the importance of responsible broiler production attributes as a reflection of consumers' expectations. As evidenced by the pricing of the chicken, consumers are willing to pay a premium price for chickens that are raised using sustainable and responsibly produced attributes. In other words, consumers are able to foster the sustainable development of the broiler industry. This result is in line with the results obtained by Lerro [87], who stated that Italian customers are willing to pay a premium price for food with a corporate social responsibility concept. As a result, consumers are increasingly including sustainable products in their considerations and preferring socially responsible-related products [88]. Hence, agri-producers should enhance the promoting of the responsible attributes of their products in order to achieve customer acceptability and, ultimately, their own sustainable development. It also demonstrates the need for sustainable marketing practices.

Thirdly, the quality assurance attributes of broilers favorably affect the pricing of broilers in the marketplace. In accordance with the previous studies [1], the results indicate that government or third-party certification has a positive impact on product sales. Consumers

require external information to increase their confidence in purchasing products, especially when they are unfamiliar with them [89]. The research has also shown that an authoritative certification system is not only effective in regulating a range of production practices from within the manufacturer, but also in improving the quality of the product based on production [90]. For the broiler industry, third-party certification [65] is critical to ensure food safety throughout the production process (i.e., from chicks to broilers). Therefore, to increase the selling price of their products, broiler producers should use multiple channels to raise their credibility through trustworthy organizations.

Lastly, marketing message attributes did not appear to have a significant relationship with chickens' selling price in this study, which can be attributed to three primary reasons. Firstly, since the branding of agri-products in mainland China is still in its infancy, consumers are rather hesitant to trust agri-producer's brands [91,92]. Secondly, due to the high level of homogenization of agri-products, it is difficult for producers to preserve the viability of their existing brands by increasing the selling price of their products [93,94]. Thirdly, retailers in mainland China do not differentiate based on varying-income consumer groups. Despite its vast economy, mainland China is still a developing nation, and its per capita GDP is low. Supermarkets in this country mainly perform the function of distributing agri-products. It is difficult for supermarkets in different regions to set higher selling prices for their products through their own brands.

7. Implication

7.1. Theoretical Implication

The results of this study have several theoretical implications. First, this study extends the applicability of the hedonic pricing model to agricultural pricing from the perspective of structural equation modeling. Past research has applied HPM to the pricing of housing in the same area, with a particular focus on the attributes of stable products [95,96]. Our research extended the applicability of HPM to characteristically unstable commodity applications. According to our results, the basic attributes of broiler products, responsible production attributes, and quality assurance attributes can be significant product features and hence influence the pricing. The result parallels previous HPM-based studies [97], demonstrating the impact of the product's attributes on the pricing.

Second, past studies suggest the significance of agri-product quality from the consumer's perspective [98,99]. Based on the perspective of pricing attributes, this study revealed that the quality assurance of a product affects its price in the marketplace and that the price is directly proportionate to its quality assurance. Consequently, when agri-products obtain greater certification to ensure good quality, their prices will be higher. This outlines the critical area for future research in regard to understanding quality assurance systems and exploring mechanisms for third-party certifying organizations and agri-producers in the value co-creation of agri-products.

Third, this study examined product authenticity and pricing and clarified their relationship. The results indicate that product authenticity has a substantial effect on its pricing. The variety, origin, and production status of agri-products symbolize their authenticity [100]. For example, regional agri-brandings are frequently named after the place name and the agri-product, emphasizing the significance of the origin to the marketing of agri-products [54]. Therefore, this study provided theoretical evidence for regional agri-product brand authenticity in terms of its attributes.

Fourth, corporate social responsibility plays a vital role in the sustainable development of an organization [48]. Our results support our proposed hypothesis. Agri-products with CSR characteristics, such as responsible production, have a significant impact on their pricing. This also identifies a future research priority, namely that agri-products with CSR attributes will become increasingly important when Generation Z gradually replaces Generation Y as the main consumer in society.

Fifth, this study demonstrated that in developing countries or emerging nations, the marketing message attributes of agri-products are less crucial for its pricing. In particular,

the branding of agri-producers and retailers is not as effective in marketing as in developed countries. Thus, this study complements the study of agricultural marketing in developing countries and reflects the importance of cross-regional research.

7.2. Practical Implication

Our results also include practical implications for China's broiler industry marketing practices. Firstly, the fundamental priority of producers should be to ensure the quality of the broilers. For instance, the packaging should clearly indicate the information on the production process and the poultry farmers involved in the production. The producers can strengthen the credibility of their own products while relying on third-party certifications.

Secondly, producers need to pay attention to multi-faceted messaging to improve consumers' perceptions of the authenticity of poultry products. Broiler packaging is an important means of communicating information to consumers, and it can be effective in conveying basic information about broilers to consumers. It is necessary that agri-producers include a QR code on the packaging that traces the product's information [101], thus strengthening the consumer's perception of the authenticity of the product and ultimately increasing their willingness to purchase.

Thirdly, agri-producers need to focus on understanding consumers' purchasing patterns and habits and to strengthen their CSR practices efforts. Generation Z is more socially and environmentally responsible than their parents [13]. As they eventually replace their parents as society' primary consumers, agri-producers should focus on the purchasing preferences and mindset.

Finally, agricultural branding can be considered by transitioning from the development of regional agricultural brands to the construction of the producer's own brand. The results of this study do not support the development of agri-producers' own brands. Government-led regional branding of agri-products is beneficial to the sustainable development of products in emerging countries, such as mainland China. Therefore, agri-producers in developing countries can first collaborate to establish regional brands with the government and then concentrate on their own brand development once their socioeconomic conditions reach those of developed nations.

8. Conclusions, Limitations, and Future Research

Based on the hedonic pricing theory, we investigated the factors that influence broiler industry pricing. This study revealed four notable results: (i) broiler's basic attributes are significantly positively related to selling price; (ii) responsible production attributes have a significantly positive impact on market price; (iii) the impact of the quality assurance attributes on price is significantly positive; and (iv) the marketing message attribute has no significant relationship with the broiler's price.

In spite of the fact that this study presented some theoretical and practical implications, certain limitations were unavoidable. The present study used cross-sectional data to analyze the characteristics of broilers in an effort to portray consumer behavior and preferences from a pricing perspective. As a result, future studies can inquire into the attributes that consumers deem essential from their point of view. Moreover, we obtained the broiler attributes listed by companies mainly from supermarkets, without considering marketing strategies that may affect the pricing. For instance, organizations may reduce prices to increase their market share or deliberately raise prices to attract market attention; all of these actions could have had varied degrees of impact on the results of this study. Lastly, it is urgent that future researchers extend the current study with price preference models in other high-broiler-consuming nations in Asia (e.g., Malaysia, Thailand, and Singapore) or on a cross-country scale to identify the different cultural contexts influencing broiler pricing patterns.

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References

1. Danes, J.E.; Lindsey-Mullikin, J. Expected Product Price as a Function of Factors of Price Sensitivity. *J. Prod. Brand Manag.* **2012**, *21*, 293–300. [CrossRef]
2. Geum, Y.; Park, Y. Designing the Sustainable Product-Service Integration: A Product-Service Blueprint Approach. *J. Clean. Prod.* **2011**, *19*, 1601–1614. [CrossRef]
3. Kuijken, B.; Gemser, G.; Wijnberg, N.M. Effective Product-Service Systems: A Value-Based Framework. *Ind. Mark. Manag.* **2017**, *60*, 33–41. [CrossRef]
4. Porfirio, L.L.; Newth, D.; Finnigan, J.J.; Cai, Y. Economic Shifts in Agricultural Production and Trade Due to Climate Change. *Palgrave Commun.* **2018**, *4*, 111. [CrossRef]
5. Gao, Z.; Li, C.; Bai, J.; Fu, J. Chinese Consumer Quality Perception and Preference of Sustainable Milk. *China Econ. Rev.* **2020**, *59*, 100939. [CrossRef]
6. Wang, O.; Somogyi, S. Consumer Adoption of Online Food Shopping in China. *Br. Food J.* **2018**, *120*, 2868–2884. [CrossRef]
7. Zander, K.; Hamm, U. Consumer Preferences for Additional Ethical Attributes of Organic Food. *Food Qual. Prefer.* **2010**, *21*, 495–503. [CrossRef]
8. Scott, S.; Si, Z.; Schumilas, T. *Organic Food and Farming in China*; Routledge: Oxfordshire, UK, 2018.
9. Tariq, A.; Wang, C.; Tanveer, Y.; Akram, U.; Akram, Z. Organic Food Consumerism through Social Commerce in China. *Asia Pac. J. Mark. Logist.* **2019**, *31*, 202–222. [CrossRef]
10. Alfatni, M.S.; Shariff, A.R.M.; Abdullah, M.Z.; Saeed, O.M.B.; Ceesay, O.M. Recent Methods and Techniques of External Grading Systems for Agricultural Crops Quality Inspection-Review. *Int. J. Food Eng.* **2011**, *7*. [CrossRef]
11. Svensson, G.; Wood, G. A Model of Cause-Related Marketing for "Profit-Driven" and "Non-Profit" Organizations. *Eur. Bus. Rev.* **2011**, *23*, 203–214. [CrossRef]
12. Munsch, A. Millennial and Generation Z Digital Marketing Communication and Advertising Effectiveness: A Qualitative Exploration. *J. Glob. Sch. Mark. Sci.* **2021**, *31*, 10–29. [CrossRef]
13. Su, C.-H.; Tsai, C.-H.; Chen, M.-H.; Lv, W.Q. US Sustainable Food Market Generation Z Consumer Segments. *Sustainability* **2019**, *11*, 3607. [CrossRef]
14. Gunawan, J.; Permatasari, P.; Tilt, C. Sustainable Development Goal Disclosures: Do They Support Responsible Consumption and Production? *J. Clean. Prod.* **2020**, *246*, 118989. [CrossRef]
15. Yue, S.; Munir, I.U.; Hyder, S.; Nassani, A.A.; Abro, M.M.Q.; Zaman, K. Sustainable Food Production, Forest Biodiversity and Mineral Pricing: Interconnected Global Issues. *Resour. Policy* **2020**, *65*, 101583. [CrossRef]
16. Bulearca, M.; Tamarjan, D. Augmented Reality: A Sustainable Marketing Tool. *Glob. Bus. Manag. Res. Int. J.* **2010**, *2*, 237–252.
17. Gordon, R.; Carrigan, M.; Hastings, G. A Framework for Sustainable Marketing. *Mark. Theory* **2011**, *11*, 143–163. [CrossRef]
18. Zhou, Y.; Xiong, Y.; Jin, M. Less Is More: Consumer Education in a Closed-Loop Supply Chain with Remanufacturing. *Omega* **2021**, *101*, 102259. [CrossRef]
19. Kemper, J.A.; Ballantine, P.W. What Do We Mean by Sustainability Marketing? *J. Mark. Manag.* **2019**, *35*, 277–309. [CrossRef]
20. Peterson, M.; Minton, E.A.; Liu, R.L.; Bartholomew, D.E. Sustainable Marketing and Consumer Support for Sustainable Businsses. *Sustain. Prod. Consum.* **2021**, *27*, 157–168. [CrossRef]
21. Chou, S.-F.; Horng, J.-S.; Liu, C.-H.S.; Lin, J.-Y. Identifying the Critical Factors of Customer Behavior: An Integration Perspective of Marketing Strategy and Components of Attitudes. *J. Retail. Consum. Serv.* **2020**, *55*, 102113. [CrossRef]
22. Mao, H.; Zhou, L.; Ifft, J.; Ying, R. Risk Preferences, Production Contracts and Technology Adoption by Broiler Farmers in China. *China Econ. Rev.* **2019**, *54*, 147–159. [CrossRef]
23. Chau, K.W.; Chin, T.L. A Critical Review of Literature on the Hedonic Price Model. *Int. J. Hous. Sci. Its Appl.* **2003**, *27*, 145–165.
24. Droval, A.A.; Benassi, V.T.; Rossa, A.; Prudencio, S.H.; Paião, F.G.; Shimokomaki, M. Consumer Attitudes and Preferences Regarding Pale, Soft, and Exudative Broiler Breast Meat. *J. Appl. Poult. Res.* **2012**, *21*, 502–507. [CrossRef]
25. Aung, Y.M.; Chotiyaputta, V. Exploring customers' purchase intention on poultry products using protecton motivation theory. *Panyapiwat J.* **2020**, *12*, 145–165.

26. Park, S.; Kim, N.; Kim, W.; Moon, J. The Effect of Korean Native Chicken Breed Information on Consumer Sensory Evaluation and Purchase Behavior. *Food Sci. Anim. Resour.* **2022**, *42*, 111–127. [CrossRef]
27. Rosen, S. Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition. *J. Polit. Econ.* **1974**, *82*, 34–55. [CrossRef]
28. Wei, C.; Fu, M.; Wang, L.; Yang, H.; Tang, F.; Xiong, Y. The Research Development of Hedonic Price Model-Based Real Estate Appraisal in the Era of Big Data. *Land* **2022**, *11*, 334. [CrossRef]
29. Thrane, C. Examining the Determinants of Room Rates for Hotels in Capital Cities: The Oslo Experience. *J. Revenue Pricing Manag.* **2007**, *5*, 315–323. [CrossRef]
30. Potrawa, T.; Tetereva, A. How Much Is the View from the Window Worth? Machine Learning-Driven Hedonic Pricing Model of the Real Estate Market. *J. Bus. Res.* **2022**, *144*, 50–65. [CrossRef]
31. Leguina, A. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). *Int. J. Res. Method Educ.* **2015**, *38*, 220–221. [CrossRef]
32. Núñez-León, D.; Aguirre-Fernández, G.; Steiner, A.; Nagashima, H.; Jensen, P.; Stoeckli, E.; Schneider, R.A.; Sánchez-Villagra, M.R. Morphological Diversity of Integumentary Traits in Fowl Domestication: Insights from Disparity Analysis and Embryonic Development. *Dev. Dyn.* **2019**, *248*, 1044–1058. [CrossRef]
33. Leeson, S.; Walsh, T. Feathering in Commercial Poultry I. Feather Growth and Composition. *Worlds Poult. Sci. J.* **2004**, *60*, 42–51. [CrossRef]
34. Yang, N.; Jiang, R.-S. Recent Advances in Breeding for Quality Chickens. *Worlds Poult. Sci. J.* **2005**, *61*, 373–381. [CrossRef]
35. da Silva Lima, N.D.; de Alencar Nääs, I.; Garcia, R.G.; de Moura, D.J. Environmental Impact of Brazilian Broiler Production Process: Evaluation Using Life Cycle Assessment. *J. Clean. Prod.* **2019**, *237*, 117752. [CrossRef]
36. Bett, H.K.; Peters, K.J.; Bokelmann, W. Hedonic Price Analysis to Guide in Breeding and Production of Indigenous Chicken in Kenya. *Livest. Res. Rural Dev.* **2011**, *23*, 2011.
37. Ndenga, C.; Eric, K.B.; Lucy, W.K. Consumers' Preference Attributes for Indigenous Chicken in Kenya. *J. Agric. Econ. Dev.* **2017**, *6*, 001–011.
38. Glitsch, K. Consumer Perceptions of Fresh Meat Quality: Cross-National Comparison. *Br. Food J.* **2000**, *102*, 177–194. [CrossRef]
39. Dyubele, N.L.; Muchenje, V.; Nkukwana, T.T.; Chimonyo, M. Consumer Sensory Characteristics of Broiler and Indigenous Chicken Meat: A South African Example. *Food Qual. Prefer.* **2010**, *21*, 815–819. [CrossRef]
40. Sow, T.M.A.; Grongnet, J.-F. Sensory Characteristics and Consumer Preference for Chicken Meat in Guinea. *Poult. Sci.* **2010**, *89*, 2281–2292. [CrossRef]
41. Katiyo, W.; Coorey, R.; Buys, E.M.; de Kock, H.L. Consumers' Perceptions of Intrinsic and Extrinsic Attributes as Indicators of Safety and Quality of Chicken Meat: Actionable Information for Public Health Authorities and the Chicken Industry. *J. Food Sci.* **2020**, *85*, 1845–1855. [CrossRef]
42. Kennedy, O.B.; Stewart-Knox, B.J.; Mitchell, P.C.; Thurnham, D.I. Flesh Colour Dominates Consumer Preference for Chicken. *Appetite* **2005**, *44*, 181–186. [CrossRef]
43. Wideman, N.; O'bryan, C.A.; Crandall, P.G. Factors Affecting Poultry Meat Colour and Consumer Preferences—A Review. *Worlds Poult. Sci. J.* **2016**, *72*, 353–366. [CrossRef]
44. Xu, L.; Yu, M.; Chen, X. Decoy Effect on Consumers' Purchase Behaviors in Relation to Meat Products: Comparison of Pork and Chicken. *Front. Psychol.* **2021**, *12*, 679256. [CrossRef]
45. Abdul Hadi, A.H.I.; Shamsudin, M.N.; Radam, A.; Selamat, J. Consumer Preference for Food Attributes in Malaysia: Case Studies on Broiler and Beef. *J. Int. Food Agribus. Mark.* **2013**, *25*, 137–153. [CrossRef]
46. Husak, R.L.; Sebranek, J.G.; Bregendahl, K. A Survey of Commercially Available Broilers Marketed as Organic, Free-Range, and Conventional Broilers for Cooked Meat Yields, Meat Composition, and Relative Value1. *Poult. Sci.* **2008**, *87*, 2367–2376. [CrossRef]
47. McWilliams, A.; Siegel, D.S. Creating and Capturing Value: Strategic Corporate Social Responsibility, Resource-Based Theory, and Sustainable Competitive Advantage. *J. Manag.* **2011**, *37*, 1480–1495. [CrossRef]
48. Yu, H.-C.; Kuo, L.; Kao, M.-F. The Relationship between CSR Disclosure and Competitive Advantage. *Sustain. Account. Manag. Policy J.* **2017**, *8*, 547–570. [CrossRef]
49. Lorenz, B.A.; Hartmann, M.; Simons, J. Impacts from Region-of-Origin Labeling on Consumer Product Perception and Purchasing IntentionCausal Relationships in a TPB Based Model. *Food Qual. Prefer.* **2015**, *45*, 149–157. [CrossRef]
50. Wang, X.; Yu, C.; Wei, Y. Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework. *J. Interact. Mark.* **2012**, *26*, 198–208. [CrossRef]
51. El-Deek, A.; El-Sabrout, K. Behaviour and Meat Quality of Chicken under Different Housing Systems. *Worlds Poult. Sci. J.* **2019**, *75*, 105–114. [CrossRef]
52. Roggeveen, A.L.; Sethuraman, R. How the COVID-19 Pandemic May Change the World of Retailing. *J. Retail.* **2020**, *96*, 169–171. [CrossRef]
53. Gumparthi, V.P.; Patra, S. The Phenomenon of Brand Love: A Systematic Literature Review. *J. Relatsh. Mark.* **2020**, *19*, 93–132. [CrossRef]
54. Liu, H.; Su, X.; Wang, X.; Li, X. Complexity Analysis for Price Competition of Agricultural Products with Regional Brands. *Discret. Dyn. Nat. Soc.* **2021**, *2021*, e5460796. [CrossRef]

55. Gallardo-Vázquez, D.; Valdez-Juárez, L.E.; Castuera-Díaz, Á.M. Corporate Social Responsibility as an Antecedent of Innovation, Reputation, Performance, and Competitive Success: A Multiple Mediation Analysis. *Sustainability* **2019**, *11*, 5614. [CrossRef]
56. Ranjan, A.; Jha, J.K. Pricing and Coordination Strategies of a Dual-Channel Supply Chain Considering Green Quality and Sales Effort. *J. Clean. Prod.* **2019**, *218*, 409–424. [CrossRef]
57. Bhavsar, A.; Diallo, C.; Ülkü, M.A. Towards Sustainable Development: Optimal Pricing and Sales Strategies for Retailing Fair Trade Products. *J. Clean. Prod.* **2021**, *286*, 124990. [CrossRef]
58. Dörnyei, K.R. Limited Edition Packaging: Objectives, Implementations and Related Marketing Mix Decisions of a Scarcity Product Tactic. *J. Consum. Mark.* **2020**, *37*, 617–627. [CrossRef]
59. Jabarzare, N.; Rasti-Barzoki, M. A Game Theoretic Approach for Pricing and Determining Quality Level through Coordination Contracts in a Dual-Channel Supply Chain Including Manufacturer and Packaging Company. *Int. J. Prod. Econ.* **2020**, *221*, 107480. [CrossRef]
60. Raja, J.Z.; Frandsen, T.; Kowalkowski, C.; Jarmatz, M. Learning to Discover Value: Value-Based Pricing and Selling Capabilities for Services and Solutions. *J. Bus. Res.* **2020**, *114*, 142–159. [CrossRef]
61. Delmas, M.A.; Gergaud, O. Sustainable Practices and Product Quality: Is There Value in Eco-Label Certification? The Case of Wine. *Ecol. Econ.* **2021**, *183*, 106953. [CrossRef]
62. Zhao, J.; Gerasimova, K.; Peng, Y.; Sheng, J. Information Asymmetry, Third Party Certification and the Integration of Organic Food Value Chain in China. *China Agric. Econ. Rev.* **2019**, *12*, 20–38. [CrossRef]
63. Carter, E. Desperately Seeking Happy Chickens: Producer Dynamics and Consumer Politics in Quality Agricultural Supply Chains. *Int. J. Soc. Econ.* **2020**, *48*, 933–946. [CrossRef]
64. Etilé, F.; Teyssier, S. Signaling Corporate Social Responsibility: Third-Party Certification versus Brands. *Scand. J. Econ.* **2016**, *118*, 397–432. [CrossRef]
65. Nie, Y.Y.; Liang, A.R.-D.; Wang, E.C. Third-Party Certification Labels for Organic Food: Consumers' Purchase Choice and Willingness-to-Pay. *Br. Food J.* 2021; *ahead-of-print*. [CrossRef]
66. Maani Hessari, N.; van Schalkwyk, M.C.; Thomas, S.; Petticrew, M. Alcohol Industry CSR Organisations: What Can Their Twitter Activity Tell Us about Their Independence and Their Priorities? A Comparative Analysis. *Int. J. Environ. Res. Public. Health* **2019**, *16*, 892. [CrossRef]
67. Nora, L. Trust, Commitment, and Customer Knowledge: Clarifying Relational Commitments and Linking Them to Repurchasing Intentions. *Manag. Decis.* **2019**, *57*, 3134–3158. [CrossRef]
68. Toader, V.; Negruța, A.L.; Bode, O.R.; Rus, R.V. Analysis of Price Determinants in the Case of Airbnb Listings. *Econ. Res.-Ekon. Istraž.* **2022**, *35*, 2493–2509. [CrossRef]
69. Kuttappan, V.A.; Lee, Y.S.; Erf, G.F.; Meullenet, J.-F.C.; McKee, S.R.; Owens, C.M. Consumer Acceptance of Visual Appearance of Broiler Breast Meat with Varying Degrees of White Striping. *Poult. Sci.* **2012**, *91*, 1240–1247. [CrossRef]
70. Sodjinou, E.; Henningsen, A.; Koudande, D.O.; Biaou, G.; Mensah, G.A. Consumers' Preferences for "Bicycle Poultry" in Benin: Implications for the Design of Breeding Schemes. *Rev. Agric. Environ. Stud.* **2015**, *96*, 389–409. [CrossRef]
71. Karipidis, P.I.; Tsakiridou, E.; Tabakis, N.M.; Mattas, K. Hedonic Analysis of Retail Egg Prices. *J. Food Distrib. Res.* **2005**, *36*, 68–73.
72. Carlsson, F.; Johansson-Stenman, O.; Martinsson, P. Do You Enjoy Having More than Others? Survey Evidence of Positional Goods. *Economica* **2007**, *74*, 586–598. [CrossRef]
73. Satimanon, T.; Weatherspoon, D.D. Hedonic Analysis of Sustainable Food Products. *Int. Food Agribus. Manag. Rev.* **2010**, *13*, 57–74.
74. Alphonce, R.; Alfnes, F. *Eliciting Consumer WTP for Food Characteristics in a Developing Context: Comparison of Four Methods in a Field Experiment*; IDEAS Working Paper Series from RePEc; Norwegian University of Life Sciences: As, Norway, 2015.
75. Larue, B.; West, G.E.; Gendron, C.; Lambert, R. Consumer Response to Functional Foods Produced by Conventional, Organic, or Genetic Manipulation. *Agribus. Int. J.* **2004**, *20*, 155–166. [CrossRef]
76. Gracia, E.; Bakker, A.B.; Grau, R.M. Positive Emotions: The Connection between Customer Quality Evaluations and Loyalty. *Cornell Hosp. Q.* **2011**, *52*, 458–465. [CrossRef]
77. Manning, L.; Baines, R.N.; Chadd, S.A. Quality Assurance Models in the Food Supply Chain. *Br. Food J.* **2006**, *108*, 91–104. [CrossRef]
78. Sarstedt, M.; Cheah, J.-H. Partial Least Squares Structural Equation Modeling Using SmartPLS: A Software Review. *J. Mark. Anal.* **2019**, *7*, 196–202. [CrossRef]
79. Wang, S.; Ye, Y.; Ning, B.; Cheah, J.-H.; Lim, X.-J. Why Do Some Consumers Still Prefer In-Store Shopping? An Exploration of Online Shopping Cart Abandonment Behavior. *Front. Psychol.* **2021**, *12*, 829696. [CrossRef]
80. Kline, R.B. *Principles and Practice of Structural Equation Modeling*; Guilford Publications: New York, NY, USA, 2015.
81. Becker, J.-M.; Ringle, C.M.; Sarstedt, M.; Völckner, F. How Collinearity Affects Mixture Regression Results. *Mark. Lett.* **2015**, *26*, 643–659. [CrossRef]
82. Hair, J.F., Jr.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; Sage Publications: Washington, DC, USA, 2021.
83. Cohen, J. Statistical Power Analysis. *Curr. Dir. Psychol. Sci.* **1992**, *1*, 98–101. [CrossRef]
84. Shmueli, G.; Sarstedt, M.; Hair, J.F., Jr.; Cheah, J.-H.; Ting, H.; Vaithilingam, S.; Ringle, C.M. Predictive Model Assessment in PLS-SEM: Guidelines for Using PLSpredict. *Eur. J. Mark.* **2019**, *53*, 2322–2347. [CrossRef]

85. van Giesen, R.I.; de Hooge, I.E. Too Ugly, but I Love Its Shape: Reducing Food Waste of Suboptimal Products with Authenticity (and Sustainability) Positioning. *Food Qual. Prefer.* **2019**, *75*, 249–259. [CrossRef]
86. Ditlevsen, K.; Denver, S.; Christensen, T.; Lassen, J. A Taste for Locally Produced Food-Values, Opinions and Sociodemographic Differences among 'Organic'and 'Conventional'Consumers. *Appetite* **2020**, *147*, 104544. [CrossRef]
87. Lerro, M.; Vecchio, R.; Caracciolo, F.; Pascucci, S.; Cembalo, L. Consumers' Heterogeneous Preferences for Corporate Social Responsibility in the Food Industry. *Corp. Soc. Responsib. Environ. Manag.* **2018**, *25*, 1050–1061. [CrossRef]
88. Le, T.T.; Ngo, H.Q.; Aureliano-Silva, L. Contribution of Corporate Social Responsibility on SMEs' Performance in an Emerging Market–the Mediating Roles of Brand Trust and Brand Loyalty. *Int. J. Emerg. Mark.* 2021; *ahead-of-print*. [CrossRef]
89. Zhao, Y.; Wang, L.; Tang, H.; Zhang, Y. Electronic Word-of-Mouth and Consumer Purchase Intentions in Social e-Commerce. *Electron. Commer. Res. Appl.* **2020**, *41*, 100980. [CrossRef]
90. Wang, J.; Tao, J.; Chu, M. Behind the Label: Chinese Consumers' Trust in Food Certification and the Effect of Perceived Quality on Purchase Intention. *Food Control* **2020**, *108*, 106825. [CrossRef]
91. Guo, J.; Hao, H.; Wang, M.; Liu, Z. An Empirical Study on Consumers' Willingness to Buy Agricultural Products Online and Its Influencing Factors. *J. Clean. Prod.* **2022**, *336*, 130403. [CrossRef]
92. Ji, C.; Chen, Q.; Zhuo, N. Enhancing Consumer Trust in Short Food Supply Chains: The Case Evidence from Three Agricultural e-Commerce Companies in China. *J. Agribus. Dev. Emerg. Econ.* **2020**, *10*, 103–116. [CrossRef]
93. Pu, M.; Zhong, Y. Rising Concerns over Agricultural Production as COVID-19 Spreads: Lessons from China. *Glob. Food Secur.* **2020**, *26*, 100409. [CrossRef]
94. Zheng, X.; Huang, Q.; Zheng, S. The Identification and Applicability of Regional Brand-Driving Modes for Agricultural Products. *Agriculture* **2022**, *12*, 1127. [CrossRef]
95. Lisi, G. Property Valuation: The Hedonic Pricing Model–Location and Housing Submarkets. *J. Prop. Invest. Financ.* **2019**, *37*, 589–596. [CrossRef]
96. Soler, I.P.; Gemar, G.; Correia, M.B.; Serra, F. Algarve Hotel Price Determinants: A Hedonic Pricing Model. *Tour. Manag.* **2019**, *70*, 311–321. [CrossRef]
97. Ready, R.C.; Abdalla, C.W. The Amenity and Disamenity Impacts of Agriculture: Estimates from a Hedonic Pricing Model. *Am. J. Agric. Econ.* **2005**, *87*, 314–326. [CrossRef]
98. Nguyen, T.H.N.; Yeh, Q.-J.; Huang, C.-Y. Understanding Consumer' Switching Intention toward Traceable Agricultural Products: Push-Pull-Mooring Perspective. *Int. J. Consum. Stud.* **2022**, *46*, 870–888. [CrossRef]
99. Petrescu, D.C.; Vermeir, I.; Petrescu-Mag, R.M. Consumer Understanding of Food Quality, Healthiness, and Environmental Impact: A Cross-National Perspective. *Int. J. Environ. Res. Public. Health* **2020**, *17*, 169. [CrossRef]
100. Kendall, H.; Clark, B.; Rhymer, C.; Kuznesof, S.; Hajslova, J.; Tomaniova, M.; Brereton, P.; Frewer, L. A Systematic Review of Consumer Perceptions of Food Fraud and Authenticity: A European Perspective. *Trends Food Sci. Technol.* **2019**, *94*, 79–90. [CrossRef]
101. Machado, J.G.d.C.F.; Nantes, J.F.D.; Leonelli, F.C.V. Do I Know What I Eat? The Use of QR Code in Food Packaging to Provide Traceability Information. *Int. J. Adv. Eng. Res. Sci.* **2019**, *6*, 45–58. [CrossRef]