

# Analysis of Customer Satisfaction with Short Food Supply Chain Method Purchases

Rummedio Gazza Fidela, Gilang Sugianto and Iyus Wiadi

Faculty of Economics and Business, Paramadina University

email: [cened.rgf@gmail.com](mailto:cened.rgf@gmail.com)

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## Abstract

This study was conducted to determine the scale of comparison of the value of exports and imports of Migas and non-Migas in Indonesia. The research time period is 10 years with a sample population of Indonesian export and import data. Data was obtained through the Central Bureau of Statistics (BPS) and processed through descriptive qualitative methods and using economic line graphs. This research results in 1) The volume of Migas exports is on a stable scale, while the volume of non-Migas exports is on a more fluctuating scale and has a larger volume. 2) The volume of Migas imports is on a stable scale, while the volume of non-Migas imports is on a more fluctuating line and has a larger volume. 3) The value of Migas exports is on a stable scale, while the value of non-Migas exports fluctuates and increases and has a larger value. 4) The value of Migas imports is on a stable line scale, while the value of non-Migas imports fluctuates more and has a greater import value than Migas. Researchers concluded a suggestion that focuses on the government as the authority of international trade policy to further maximize policies related to the maximum value of exports rather than imports in order to maximize state revenue.

## 1. Introduction

The challenge of sustainability and the need to ensure high-quality, affordable and healthy food production has led to the creation of alternative solutions based on technological or organizational innovation that can increase food production without polluting the environment. This led to the emergence of food production and distribution. Smart agriculture and short food supply chains (SFSC) are considered promising solutions to achieve this goal. Based on a theoretical perspective, the application of smart agricultural technology in short food supply chains or Short Food Supply Chain Method Purchases is able to generate value for systems that are currently experiencing food scarcity.

Short Food Supply Chain (SFSC), on the other hand, is a food supply scheme in which farmers sell their products to consumers directly or with the intervention of just one additional node. In this vein, SFSC is an umbrella term referring to different food marketing arrangements, such as

farmers' markets, on-farm sales, direct sales from farmers to local markets, forms of community supported farming, box delivery schemes. Such alternative configurations have gained considerable momentum in recent years in response to increasing consumer sustainability and food quality concerns, the desire of farmers to regain a central position in food networks, and the willingness of producers and consumers to re-establish value-laden relationships between them.

In the process, several indications confirm that SFSC can not only increase farmers' incomes, but also reduce the environmental impact of packaging and transportation associated with long supply chains, while leading to the creation of new jobs. closely related to the compatibility between smart agriculture and SFSC. Compatibility is a determining factor in the innovation adoption process. Rogers (1995) defines compatibility as the perceived consistency between an innovation and the

values, experiences, and needs of potential adopters.

Short food supply chains have the potential to provide various benefits for both producers and consumers in Indonesia. For farmers, selling directly to consumers can provide more stable income and reduce their dependence on middlemen. For consumers, short food supply chains can offer fresher, locally sourced food options, as well as increase transparency and traceability in the food system. There are many examples of short food supply chains in Indonesia, from traditional farmers' markets in big cities to innovative online platforms that connect farmers with consumers. This alternative food supply chain model has the potential to transform Indonesia's food system, encouraging more sustainable and equitable practices that benefit producers and consumers.

For SFSC, it is very important to pay attention to consumer satisfaction. Consumer satisfaction is the accumulation of results obtained by consumers or customers in using products and services. Customers feel satisfied if after purchasing a product and using the product it turns out that the product quality is good (Swastha and Irawan, 2008). Consumer satisfaction is a post-purchase evaluation where the chosen alternative at least provides results (outcomes) equal to or exceeding consumer expectations, while dissatisfaction arises if the results obtained do not match consumer expectations. Consumer satisfaction at SFSC can be in the form of main product attributes, namely taste, organic production method, local origin, ethical content, authenticity, fragrance and freshness (Carzedda et al., 2018; Lülfs-Baden et al., 2008; Rosa & Nasivera, 2013).

## 2. Literature Review

### 2.1 SFSC theory

SFSC is defined as 'a supply chain involving a number of economic operators

committed to cooperation, local economic development, and close geographical and social relationships between producers, processors and consumers (European Union, 2013). Another key element that defines SFSC is minimal or, ideally, absence of intermediaries (Kneafsey et al., 2013). Therefore, SFSC combines elements of geographic, social, and organizational proximity (Malak- Rawlikowska et al., 2019; Vittersø et al., 2019). There are several types of SFSC, including farmers' markets, roadside sales, home delivery, cooperative stores and solidarity groups (Renting et al., 2003; Vittersø et al., 2019). In the literature, such retail formats (e.g. farmers' markets and direct purchasing from producers) are also known as alternative food networks, alternative distribution channels, alternative food channels, or short supply chains (Carzedda et al., 2018; Dhaoui et al., 2020; Lombardi et al., 2015).

### 2.2 Characteristics of SFSC

Service-related characteristics of SFSCs were also reported as important drivers or barriers to purchase. Trust, information provision and social relationships with producers are shown to be drivers of SFSC success (Giampietri et al., 2018; Migliore et al., 2015; Polimeni et al., 2018; Vittersø et al., 2019). However, studies also report the lack of reliable producers and the provision of inadequate information as disadvantages of SFSC (Cembalo et al., 2015; Gonzalez-Azc arate et al., 2021). Limited variety and availability, inaccessible products, and inconvenience are discussed as further disadvantages of SFSC (Benos et al., 2022; Gonz´ alez-Azcarate et al., 2021; Qi et al., 2017).

### 2.3 Benefits of SFSC

SFSC reduces market intermediaries and bridges the gap between consumers and agricultural producers (Reich et al., 2018). However, although there is a general

consensus that SFSC is a form of sustainable supply chain (Vittersø et al., 2019; Wang et al., 2021), some studies show that its environmental performance is lower than that of conventional retail channels (Majewski et al., 2020 ; Malak-Rawlikowska et al., 2019), possibly due to logistical adequacy (Paciarotti & Torregiani, 2021). Nevertheless, SFSC contributes to economic and social sustainability by offering fair prices and bargaining power to producers, while encouraging territorial development (Malak-Rawlikowska et al., 2019; Mundler & Laughrea, 2016). SFSC combines elements of geographic, social, and organizational proximity (Malak- Rawlikowska et al., 2019; Vittersø et al., 2019). There are several types of SFSC, including farmers' markets, roadside sales, home delivery, cooperative stores and solidarity groups (Renting et al., 2003; Vittersø et al., 2019). In the literature, such retail formats (e.g. farmers' markets and direct purchasing from producers) are also known as alternative food networks, alternative distribution channels, alternative food channels, or short supply chains (Carzedda et al., 2018; Dhaoui et al., 2020 ; Lombardi et al., 2015)

#### 2.4 Customer satisfaction

Customer satisfaction is an important element of business strategy that influences post-purchase behavior (Churchill Jr & Surprenant, 1982; Gomez et al., 2004; Olsen et al., 2014). Customer satisfaction influences loyalty, word of mouth, and repurchase/revisit intentions; as a result, it can have an impact on the company's financial performance (Kumar et al., 2013). There are several ways to study customer satisfaction, including expectation disconfirmation and behavioral approaches (Grigoroudis & Siskos, 2010; Oliver, 2010). In a modeling context, customer satisfaction refers to an aggregate measure of customer evaluations of key elements and attributes of a company or brand (Gustafsson & Johnson,

2004). Likewise, most approaches to food Service-related characteristics of SFSC were also reported as important drivers or barriers to purchase. Trust, information provision and social relationships with producers are shown to be drivers of SFSC success (Giampietri et al., 2018; Migliore et al., 2015; Polimeni et al., 2018; Vittersø et al., 2019). However, studies also report the lack of reliable producers and the provision of inadequate information as disadvantages of SFSC (Cembalo et al., 2015; Gonzalez-Azcarate et al., 2021).

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In addition, important services in the tribute are convenience, accessibility, variety, opening hours, availability, cleanliness, information, cashiers, and waiting times (Goi'c et al., 2021; Hunneman et al., 2021; Wicaksono & Ill'es , 2022; Yokoyama et al., 2022). Customer satisfaction is an important element of business strategy that influences post-purchase behavior (Churchill Jr & Surprenant, 1982; Gomez et al., 2004; Olsen et al., 2014). Customer satisfaction influences loyalty, word of mouth, and repurchase/revisit intentions; as a result, it can have an impact on the company's financial performance (Kumar et al., 2013).

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## **2.5 The Influence of Product Quality on Customer Satisfaction**

Product quality is something that needs to receive primary attention from the company/manufacturer, considering that the quality of a product is closely related to the issue of consumer satisfaction, which is

the aim of the marketing activities carried out by the company. Each company must choose a level of quality that will help or support efforts to improve or maintain the product's position in its target market. Quality is one of the main tools to achieve product positioning. Quality states the level of ability of a particular brand or product to carry out its 12 expected functions (Assauri, 2007)

Research from Razak, et al (2016) with the title "The Impact of Product Quality and Price on Customer Satisfaction with the Mediator of Customer Value". The research results show that product quality influences consumer satisfaction.

## **2.6 The Influence of Price Perceptions on Consumer Satisfaction**

Price perception is a consumer assessment regarding the comparison of the amount of sacrifice with what will be obtained from products and services (Kusdiyah, 2012: 25). Price perception is a view or perception of price, how consumers view a particular price (high, low, reasonable) has a strong influence on purchase intention and purchase satisfaction (Schiffman and Kanuk, 2008). Based on this definition, it can be concluded that price perception is the consumer's response to the price of the product purchased by the consumer

Ghezelbash and Khodadadi (2017) with the title "Evaluating the Impact of Promotion Price, Product Quality, Service Quality, Customer Satisfaction and Repeating Purchase Incentives (Case Study: Amiran Chain Stores)". The research results show that price promotions have an effect on satisfaction. Price for sensitive customers, usually low prices are an important source of satisfaction because customers will get high value for money. The product price set is affordable, but companies also need to consider the quality received by customers so that customers can feel that the price they

pay is in accordance with the results received by customers so that they can provide customer satisfaction. In this case the author has the following hypothesis:

H2 = Price influences consumer satisfaction with short food supply chain.

## 2.7 The Influence of Service Quality on Consumer Satisfaction

Service quality is the customer's perception and attitude towards a company's products in accordance with expectations (Aritonang, 2010). Service quality is an activity carried out by a person or group of people based on material factors through certain systems, procedures and methods in order to fulfill the interests of other people in accordance with their rights (Moenir, 2010). Endang and Endah (2017) with the title "The Influence of Product Quality, Facility and Service Quality Towards Customer Satisfaction: Case Study on Customer Satisfaction of Warung Apung Maritim Food Stall, West Surabaya". The research results show that service quality influences consumer satisfaction. From these results, it can be said that the service quality variable in its five dimensions has a significant influence on consumer satisfaction. These results show that the success of a company in building its business cannot be separated from the role of good service quality and satisfying consumers.

## 3. Research Methods

The survey took place in the Karawang Regional Government area in March–April 2022. The Karawang Regency Regional Government Area is a relevant area for this research because SFSC is popular among the surrounding community. The questionnaire consists of three parts. The first section includes questions that address the respondent's socio-demographic background (gender, age, education, income). The second section includes questions that measure customer

purchasing habits and satisfaction. Purchasing habits were obtained from questions about the frequency of purchasing food from SFSCs (with answers ranging from 'never' to 'very often'), the foods consumers usually purchase from SFSCs and the SFSCs they usually use. SFSC was explained to participants as a food chain without intermediaries.

Participants who reported never purchasing from SFSC were not included in the analysis. The third section assesses satisfaction using criteria and subcriteria measured on a five-point Likert scale (from very dissatisfied to very satisfied). For a detailed explanation of customer satisfaction assessment questions, see the distributed Google form. After that, examples of questions are presented that discuss satisfaction in relation to the criteria. At the end of this section, respondents were asked to state their overall level of satisfaction with the SFSC.

Next, the satisfaction index will be analyzed which is differentiated from the most important and least important criteria. These criteria are the sales process, producer, price, place, promotion, product and purchasing environment. Sub-criteria for the sales process are service during sales, waiting time, and delivery service. For producers, sub-criteria include a relationship of trust with the producer, politeness and friendliness, and a willingness to share information. Regarding price, product price and offers are the 2 things we analyze. For place, the sub-criteria are product availability and variety, working hours, access to sales points. For promotions, sub-criteria consist of product presentation, information during sales, and the opportunity to try for free. The product sub-criteria will look quite interesting because there are options for product freshness and appearance, quality attributes (taste, aroma, context and color), nutritional value, and packaging. Finally, regarding the



purchasing environment , appearance and cleanliness at the point of sale and quality certificates are sub-criteria.

From the analysis, 3 high levels of overall satisfaction will be obtained from the criteria mentioned above from the marketing mix elements studied. The theoretical framework in this research

states that consumer satisfaction is the dependent variable (Y), while product quality, price perception and service quality are the independent variables (X).

#### 4. Results and Discussion

##### 4.1 Research result

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Product Quality (X1) ->Consumer Satisfaction (Y)	0.390	0.390	0.188	2,067	<b>0.039</b>
Price(X2)->Consumer Satisfaction (Y)	0.198	0.188	0.125	1,588	<b>0.113</b>
Service Quality (X3) ->Customer Satisfaction (Y)	0.391	0.403	0.145	2,697	<b>0.007</b>

Source: Author Data

Hypothesis shows that the results of data processing show that the path coefficient value is 0.390 (positive), the t-statistic value is 2.067 ( $> 2.003$ ), and the p value ( $0.039 < 0.05$ ) meets the requirements. So H1 is accepted. This means that the product quality variable (X1) influences consumer satisfaction using the Short Food Supply Chain method. The second hypothesis shows that the results of data processing show that the path coefficient value is 0.198 (positive), the t-statistic value is 1.588 ( $< 2.003$ ), and the p value ( $0.113 > 0.05$ ) does not meet the requirements. So H2 is rejected. This means that the Price variable (X2) has no effect on Consumer Satisfaction using the Short Food Supply Chain method

The third hypothesis shows that the results of data processing show that the path coefficient value is 0.91 (positive), the t-statistic value is 2.697 ( $> 2.003$ ), and the p value ( $0.007 < 0.05$ ) meets the

requirements. So H3 is accepted. This means that the variable Service Quality (X3) influences Consumer Satisfaction using the Short Food Supply Chain method .

#### 4.2 Research Discussion

##### H1: Product quality influences short food supply chain consumer satisfaction.

In the path coefficient table, it was found that the product quality variable (X1) had an effect on consumer satisfaction using the Short Food Supply Chain method with a statistical value of 2,067  $>$  than the t table 2,003, and a p value ( $0.039 < 0.05$ ). This research is in line with Razak, et al (2016) with the title "The Impact of Product Quality and Price on Customer Satisfaction with the Mediator of Customer Value" which shows that product quality influences consumer satisfaction. The research results show that product quality encourages increased customer perception. These results show that by considering the functional value of

the product it can increase customer satisfaction so that customers are interested in buying again. Product quality is a potential strategic weapon to defeat competitors. So only companies with the best product quality will grow rapidly, and in the long term these companies will be more successful than other companies. Consumers who feel satisfied will have a positive impact on the sustainability of a business, with product quality that meets consumer desires being an indicator of fulfilling consumer desires, satisfaction and a good company's positive image or reputation will have an effect on the views of the general public, especially consumers (Windarti & Ibrahim, 2017).

## **H2: Price perception influences short food supply chain consumer satisfaction**

In the path coefficient table it was found that the Price Perception variable (X2) had no effect on Consumer Satisfaction using the Short Food Supply Chain method with a statistical value of  $1.588 < t$  table 2.003, and a p value of  $(0.133 > 0.05)$ . This result is not in line with Kusdiyah's (2012: 25) statement that price perception is a consumer assessment regarding the comparison of the amount of sacrifice with what will be obtained from products and services. Likewise, Ghezelbash and Khodadadi (2017) show that price promotions have an effect on satisfaction. Price for sensitive customers, usually low prices are an important source of satisfaction because customers will get high value for money. The product price set is affordable, but companies also need to consider the quality received by customers so that customers can feel that the price they pay is in accordance with the results received by customers so that they can provide customer satisfaction.

## **H3: Service quality influences short food supply chain consumer satisfaction**

In the path coefficient table it was found that the Service Quality variable (X3) had an effect on Consumer Satisfaction using the Short Food Supply Chain method with a statistical value of  $2.697 >$  than the t table 2.003, and a p value of  $(0.007 > 0.05)$ . These results are supported by Endang and Endah (2017) who show that service quality influences consumer satisfaction. These results show that the success of a company in building its business cannot be separated from the role of good service quality and satisfying consumers. This means that if the service received meets what was expected, the service can be said to be good, but on the other hand, the service received is worse than the expected service, so the quality of service is perceived as bad.

## **5.1 Closing**

## **5.2 Conclusion**

Based on the study and results of research related to customer satisfaction analysis regarding purchases of the Short Food Supply Chain Method in the Karawang Regional Government Area, it is concluded that product quality significantly influences Consumer Satisfaction in the Karawang Regional Government Area, meaning that the better the product quality, the more consumer satisfaction will increase, in addition to price perceptions. does not significantly affect Consumer Satisfaction in the Karawang Regional Government Area, meaning that price perception is not able to provide consumer satisfaction. Service quality has a significant effect on consumer satisfaction in the Karawang Regional Government Area, meaning that the better the quality of service provided, the higher the consumer satisfaction.

## **5.3 Suggestion**

This research suggests that the Karawang Regional Government should continue to pay attention to instruments that can encourage consumer satisfaction. For

further research, it is recommended to develop this research by adding other variables outside those examined in this research in order to obtain maximum results.

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