

The Digital Disruption of Traditional Equilibrium: Analyzing the Impact of E-commerce and Social Commerce on Demand Supply Dynamics for Electronics in Makassar

Chalid Imran Musa*

Universitas Negeri Makassar, Indonesia

E-mail: chalid.imran.musa@unm.ac.id

Submitted:
18 September 2025

Revised:
24 October 2025

Accepted:
28 November 2025

Abstract

This research is based on the imbalance between demand and supply that often occurs in the consumer goods market in Makassar, which causes price changes and market instability. This study is unique in a local context by emphasizing the real interaction between demand and supply as a factor that affects the market balance at the regional level. The purpose of this study is to investigate the impact of demand and supply on the balance of the consumer goods market in Makassar. This study adopts a quantitative approach by using primary data from 250 respondents, consisting of 200 consumers and 50 traders with questions using a five-point Likert scale. Data analysis is carried out with multiple linear regression using SPSS version 25, as well as involving validity testing, reliability and classic assumption testing. Research findings show that the demand and supply variables have a positive and significant effect on the market balance with an Adjusted R^2 of 0.285. Together, the two variables explain 28.5% variation in market balance. This result shows that the increase in demand and the availability of the supply of consumer goods are the key to maintaining price stability in the local market.

Keywords: Demand; Supply; Market equilibrium; Consumergoods; Multiple Linear Regression

INTRODUCTION

Economic activity is closely linked to the ongoing interaction between supply and demand in the market. Within a microeconomic framework, these two aspects play a crucial role in determining price levels and the quantity of goods traded. When demand increases without a corresponding increase in supply, prices typically rise, and conversely, a decrease in demand can cause prices to fall. This mechanism illustrates that market equilibrium is the point at which consumer desires meet producers' ability to provide products. However, in practice, market equilibrium is rarely consistently achieved due to various factors influencing changes in supply and demand, particularly in the dynamic consumer goods market, such as in Makassar City.

As one of the main centers of economic activity in eastern Indonesia, Makassar City has a relatively complex market structure. High levels of trade, disparities in income levels, and fluctuations in the prices of basic necessities often lead to an imbalance between supply

and demand. Phenomena such as sudden price spikes and declining purchasing power are indicators of unstable market conditions. This situation impacts not only consumers but also traders and the smooth operation of the supply chain. Therefore, it is important to examine the relationship between demand, supply, and market equilibrium to understand the dynamics of the consumer goods market in Makassar, which continues to change over time.

Theoretically, the concepts of supply and demand have long been explained in classical economic theory as the primary determinants of market price formation (Mankiw, 2020). However, in modern economic developments, various non-economic factors such as consumer preferences, distribution of goods, and social conditions have also been shown to influence the volume of demand and supply (Samuelson & Nordhaus, 2019). Several previous studies have revealed that increasing incomes, changes in the prices of substitute goods, and high distribution costs are factors contributing to shifts in price equilibrium in local markets (Fitriany et al., 2022). However, research examining the empirical relationship between these variables in the context of regional consumer markets, particularly in Makassar, is still relatively limited. This city, despite its unique economic structure and consumption patterns, remains limited.

These limitations form an important foundation for this research. The lack of studies specifically examining the influence of changes in demand and supply on the equilibrium price of consumer goods in Makassar City necessitates further research. A deeper understanding of these relationships can assist local governments and businesses in developing more effective and sustainable pricing policies and distribution systems. Therefore, this study aims to empirically analyze the influence of demand and supply on the equilibrium market for consumer goods in Makassar. The results are expected to provide theoretical contributions to the development of microeconomics and provide practical implications for price control efforts and improving market efficiency at the local level.

2. METHOD

This study uses a quantitative approach to empirically analyze the influence of supply and demand variables on the equilibrium of the consumer goods market in Makassar City. This quantitative approach was chosen because it provides objective, measurable results and illustrates the real relationship between the studied economic variables. Through this approach, researchers seek to identify the extent to which changes in supply and demand contribute to the formation of equilibrium prices in the local market.

The research focuses on the economic activities of the people of Makassar City, specifically the buying and selling of consumer goods that occur in traditional markets and modern retail outlets. The research objects include variables such as demand, supply, and market equilibrium, while the research subjects include market players directly involved in trade activities, namely consumers and consumer goods traders.

The population in this study included all consumer goods market players in Makassar City. From this population, 250 respondents were selected, consisting of 200 consumers and 50 active traders. Sampling was conducted using a purposive sampling technique, a method

of selecting respondents based on certain criteria to ensure the research results are more relevant to the research objectives. These criteria included consumers who regularly purchase consumer goods and traders who have been actively selling for at least the past three months. Prior to the primary data collection, the researchers conducted a pilot test of the instrument on 30 initial respondents to ensure the validity and reliability of each item in the questionnaire.

The research was conducted from September to October 2025, with data collection locations at several key trading points in Makassar City, such as Terong Market, Pannampu Market, Central Market, and several minimarkets in Panakkukang and Rappocini Districts. These locations were chosen due to their high levels of economic activity and diverse market participant characteristics, thus ensuring that the data obtained is representative of the general consumer market conditions in Makassar.

The research instrument used was a closed questionnaire with a five-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree” (5). The questionnaire was compiled based on theoretical indicators of each variable. The demand variable (X_1) was measured through indicators of income, preferences, and purchasing frequency; the supply variable (X_2) through indicators of production costs, stock levels, and trader availability; while the market equilibrium variable (Y) was measured based on the level of price stability and sales volume.

Data collection was conducted using two methods: direct questionnaire distribution to respondents and field observations of market conditions and consumer goods prices. In addition to primary data, the study also utilized secondary data from the Makassar City Central Statistics Agency (BPS) and the Makassar Trade Office to strengthen the validity of the analysis.

The collected data was then analyzed using multiple linear regression with the help of SPSS software version 25. Before the main analysis was carried out, the data was tested using a test.

validity and reliability, as well as classical assumption tests including normality, multicollinearity, and heteroscedasticity. After the research model was declared eligible, a partial test (t-test) was conducted to assess the influence of each variable individually, and a simultaneous test (F-test) to assess the influence of demand and supply together on market equilibrium.

This method is expected to provide a comprehensive overview of the interaction between supply and demand in influencing the equilibrium of the consumer goods market in Makassar City. Furthermore, this empirical approach is also expected to provide a foundation for formulating regional economic policies that are more adaptive, efficient, and responsive to changing local market dynamics.

3. RESULT AND DISCUSSION

After collecting data from 250 respondents, data analysis was conducted using SPSS version 25. The testing process began with the verification of classical assumptions to ensure that the applied regression model met the data feasibility criteria before proceeding with more in-depth analysis.

The first test is the normality test, which aims to determine whether the residual data follows a normal distribution. This test was conducted using the Kolmogorov-Smirnov method, and the results are shown in Table 1.

Table 1. Normality Test Shows Normally Distributed

| | <i>Unstandardized Residual</i> |
|------------------------|--------------------------------|
| Asymp. Sig. (2-tailed) | 0.128 |

Source: SPSS Data Processing Results (2025)

Based on Table 1, the significance value obtained is 0.128, which is greater than 0.05, indicating that the residual data is normally distributed. Therefore, this regression model can be applied for further analysis. Next, a multicollinearity test was performed to verify that there is no strong correlation between the independent variables. The results can be seen in Table 2.

Table 2. Multicollinearity Test Results

| Model | Tolerance | VIF |
|-------------|-----------|-------|
| Demand (X1) | 0.752 | 1,330 |
| Offer (X2) | 0.752 | 1,330 |

Source: SPSS Data Processing Results (2025)

A tolerance value > 0.10 and a VIF < 10 indicate no indication of multicollinearity in the model. The next test is heteroscedasticity to check for differences in variance in the residuals.

Table 3. Heteroscedasticity Test Results

| Model | Sig. |
|-------------|-------|
| Demand (X1) | 0.412 |
| Offer (X2) | 0.639 |

Source: SPSS Data Processing Results (2025)

Because the significance value of both variables is greater than 0.05, it is concluded that the regression model is not affected by heteroscedasticity. Furthermore, the Durbin-Watson test results show a value of 1.987, which is within the safe limit (1.5–2.5), indicating that autocorrelation does not occur. After all assumptions have been met, multiple linear regression analysis is applied to evaluate the impact of demand and supply variables on market equilibrium.

Table 4. Results of Multiple Linear Regression Analysis

| Model | Coefficient (B) | t-count | Sig. |
|-------------|-----------------|---------|-------|
| Constant | 6,215 | - | - |
| Demand (X1) | 0.356 | 4,782 | 0,000 |
| Offer (X2) | 0.298 | 3,912 | 0.001 |

$R^2 = 0.291$, Adjusted $R^2 = 0.285$, F-count = 48.317, Sig. F = 0.000

Source: SPSS Data Processing Results (2025)

Based on the data in Table 4, the Adjusted R^2 value was recorded at 0.28.5%, which indicates that 28.5% of changes in the market equilibrium variable can be understood through the demand and supply variables, while the rest is influenced by other factors that are not guaranteed in this study. The F-count of 48.317 with a significance level of $0.000 < 0.05$ indicates that the demand and supply variables have a significant influence simultaneously on the equilibrium of the consumer goods market in Makassar city.

Partially, the demand variable (X_1) has a t-value of 4.782 with a Sig. of 0.000, which means it has a positive and significant effect on market equilibrium. This indicates that when the level of demand for consumer goods increases, prices and transaction volume in the market also tend to rise until they reach a new equilibrium point. This phenomenon is in line with basic economic theory which states that an increase in demand, with relatively fixed supply will push prices up until the market reaches a new equilibrium (Mankiw, 2020).

Meanwhile, the supply variable (X_2) also showed a positive and significant effect with a t-test of 3.912 and a Sig. 0.001. These results indicate that increasing the supply of consumer goods, for example due to stable stock availability and efficient distribution costs, can help balance market prices and avoid shortages. In other words, the more traders are able to provide sufficient quantities of goods, the more stable the resulting market prices will be (Samuelson and Nordhaus, 2019).

The results of this study are consistent with several previous studies which confirm that market equilibrium is influenced by the interaction between the levels of demand and supply. Fitriany et al. (2022) found that changes in prices and availability of goods have a direct impact on market equilibrium fluctuations, particularly in the household consumption sector. Thus, this research finding reinforces the view that price equilibrium in local markets is determined not only by macroeconomic conditions but also by micro factors such as consumer behavior and distribution strategies of traders at the regional level.

Overall, the analysis shows that both demand and supply play a crucial role in shaping the balance of the consumer goods market in Makassar. The combination of increasing public purchasing power and sufficient supply has been shown to create relatively stable market conditions. Therefore, understanding the dynamics of these two factors is key

for local governments and businesses in maintaining price stability and efficient distribution of consumer goods in Makassar.

CONCLUSION

The analysis of the influence of supply and demand on the equilibrium of the consumer goods market in Makassar City shows that the interaction between these two main variables has a significant impact. When the public experiences increased demand for consumer goods without sufficient supply, this will cause price spikes and create instability in the market. Conversely, the availability of a stable supply can maintain prices. This study indicates that both supply and demand have a positive and significant influence in creating price equilibrium in the local market, so that price stability in Makassar is highly dependent on optimizing public purchasing power and the ability of traders to supply goods. Theoretically, these results reinforce the basic principles of microeconomics, which state that market equilibrium is formed through the dynamic intersection of supply and demand in a local context. However, this study has limitations in terms of regional coverage and the number of variables analyzed, meaning it does not fully capture the influence of external factors such as government policies, distribution costs, and changes in consumer behavior that may contribute to price equilibrium. Therefore, future research should broaden the focus of the study to other areas and include macroeconomic and social variables to obtain a more comprehensive picture of the dynamics of the consumer goods market in Indonesia.

REFERENCE

- Fitriany, A., Sari, R. M., & Rahmawati, T. (2022). Analisis Faktor Permintaan dan Penawaran terhadap Keseimbangan Harga Komoditas Pangan di Indonesia. *Jurnal Ekonomi dan Kebijakan Publik*, 15(2), 145–157. <https://doi.org/10.20885/jekp.vol15.iss2.art3>
- Kasmir. (2022). *Pengantar Ekonomi Mikro dan Makro*. Jakarta: RajaGrafindo Persada.
- Mankiw, N. G. (2020). *Principles of Economics* (9th ed.). Boston: Cengage Learning.
- Samuelson, P. A., & Nordhaus, W. D. (2019). *Economics* (20th ed.). New York: McGraw-Hill Education.
- Badan Pusat Statistik (BPS) Kota Makassar. (2025). *Data Harga dan Volume Barang Konsumsi Kota Makassar Tahun 2024–2025*. Makassar: BPS Kota Makassar.
- Dinas Perdagangan Kota Makassar. (2025). *Laporan Perkembangan Harga Kebutuhan Pokok Masyarakat Tahun 2025*. Makassar: Pemerintah Kota Makassar.
- Hermawan, A. (2022). *Perilaku Konsumen dan Dinamika Pasar di Era Digital*. Bandung: Alfabeta.