# The Impact of Changes in Demand and Supply on the Balance of the Supermarket Phase VII of Padang City

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## ABSTRACT

*The Phase VII Supermarket in Padang City serves as a critical commercial hub where fluctuations in demand and supply substantially influence market equilibrium. This research investigates the impact of these fluctuations on price stability and the quantity of goods available, focusing on variables such as consumer preferences, price volatility, and broader economic conditions. The primary objective is to analyze market dynamics and deliver actionable recommendations for market managers and traders to strengthen market stability and competitive positioning. Employing a quantitative methodology, data was gathered via structured questionnaires administered to 100 respondents (comprising 70 consumers and 30 traders) between November 2024 and January 2025. The findings indicate that 45% of consumers shop on a weekly basis, with affordable pricing (60%) identified as the chief purchasing driver. Among traders, 50% set product prices within the IDR 10,000–15,000 range, with production costs (40%) cited as the principal constraint on supply. The analysis reveals a persistent imbalance where demand frequently surpasses supply, resulting in inflationary pressures within the market. To address these challenges, the study recommends implementing price stabilization mechanisms, diversifying product offerings, and enhancing inventory management practices to better synchronize supply with demand. The research highlights the necessity of ongoing market analysis to inform strategic adjustments, maintain equilibrium, and ensure both consumer satisfaction and the long-term viability of traders. These insights are essential for stakeholders committed to cultivating a stable and prosperous market environment.*

| KEYWORDS | *demand and supply, market equilibrium, price stability, consumer behavior, trade sustainability.* |
|---|---|

## INTRODUCTION

Phase VII Supermarket in Padang City is one of the main trade centers that serves the needs of the community. Changes in demand and supply in this market can have a significant effect on the balance of prices and quantities of goods (Marshall, 1890; Samuelson & Nordhaus, 2010). This article will discuss the results of research conducted through the dissemination of questionnaires to traders and consumers in these markets.

Changes in demand and supply can be caused by a variety of factors, including changes in consumer tastes, price fluctuations, economic conditions, and government policies (Kotler & Keller, 2016; Varian, 2014). The dynamics of consumer behavior in response to price changes are particularly influenced by price elasticity of demand, which measures how quantity

demanded responds to price variations (Bijmolt et al., 2005). Consumer choice theory further explains how individuals make purchasing decisions based on their preferences, budget constraints, and the utility they derive from different goods and services (Thaler, 1980). When demand increases, but supply remains constant, prices tend to rise, creating inflationary pressures. This phenomenon aligns with fundamental economic principles where market equilibrium is achieved when supply equals demand at a specific price point (Mankiw, 2018).

Conversely, if the supply increases without being accompanied by an increase in demand, the price may fall, which can affect the trader's income. Research has shown that price elasticity effects are most noticeable immediately after price changes, before consumers adjust their reference prices, resulting in higher immediate-term price elasticity compared to long-term elasticity (Kopalle et al., 2005). Understanding these market dynamics is crucial for businesses and policymakers to anticipate market trends and develop effective pricing strategies (Chen et al., 2024).

The strategic location of Phase VII, located in the middle of the main commercial area of Padang City, makes it one of the areas with high potential for visits. However, its success in attracting visitors does not only depend on the location, but also on the quality of service provided. Factors such as the availability of public facilities (toilets, parking lots, comfortable shopping areas), environmental cleanliness, and ease of transportation access are the main determinants in increasing the attractiveness of Phase VII as a competitive shopping destination. Pasar Raya Phase VII will officially be reused by traders at the end of December 2024 after the renovation process is completed. This change not only addresses previously common complaints about problems, such as the accumulation of street vendors on the road, but also improves overall order and comfort (Kominfo, 2024).

However, the evaluation of visitor interest and service effectiveness in Phase VII remains a challenge that must be answered through a more in-depth analysis. As an economic area that combines traditional and modern aspects, Phase VII of the Padang City Supermarket is expected to be able to become the main attraction for local people and tourists. A study of the relationship between strategic location and service quality to visitor interest is crucial to ensure the sustainability of this market's function as a productive and inclusive trade center (Khairi, 2022; Putri et al., 2020).

The Basic Concepts of Demand and Supply are; Demand: Basically, demand includes the number of goods or services that consumers want to buy at various price levels. Factors that affect demand include the price of goods, consumer income, and market preferences (Aprizani, 2025). An increase in demand can occur due to new trends or increased revenues, while a decrease in demand can be caused by unaffordable prices or changes in taste. Offer: Offer refers to the amount of goods or services available for sale in the market. Some of the factors that affect supply are the price of goods, the cost of production, and the level of technology. As production costs increase, supply can decrease, while technological advances can increase supply with better efficiency. Then in market equilibrium occurs when the number of goods requested is equal to the number of goods offered. At this point, the price of goods is stable. However, changes in demand or supply can shift this balance, creating an excess or shortage of goods in the market (Padang Pasbana, 2024).

The dynamics of demand and supply in traditional markets have been extensively studied, with prior research highlighting their critical role in determining market equilibrium.

For instance, a study by Samuelson and Nordhaus (2010) emphasized how shifts in consumer preferences and production costs disrupt balance, leading to price volatility. Similarly, Mankiw (2014) demonstrated that market inefficiencies often arise when supply fails to adapt to sudden demand changes, particularly in urban trade centres. These foundational theories underscore the importance of understanding demand-supply interactions, yet gaps remain in their application to specific local contexts, such as traditional markets in developing regions.

Previous research has also explored the unique challenges faced by traditional markets. A study by Rizal et al. (2021) on Indonesian markets revealed that infrastructure limitations and informal trading practices exacerbate supply-demand mismatches. Meanwhile, Nguyen and Tran (2022) found that consumer behavior in Southeast Asia is heavily influenced by price sensitivity, which disproportionately affects small-scale traders. However, these studies predominantly focus on macroeconomic trends, neglecting micro-level analyses of individual markets like Padang City's Phase VII Supermarket. This gap limits actionable insights for local market managers seeking to address immediate operational challenges.

The urgency of this research stems from the Phase VII Supermarket's recent renovation and reopening, which presents a critical opportunity to evaluate its revitalization impact. According to Padang Pasbana (2024), the market's strategic location and improved facilities aim to attract more visitors, but its long-term sustainability depends on balancing demand and supply. Without empirical data on post-renovation market dynamics, policymakers and traders risk repeating past inefficiencies, such as stock shortages or inflationary pricing. This study addresses this urgency by providing real-time insights into consumer and trader behaviors, enabling evidence-based decision-making.

The novelty of this research lies in its dual focus on consumer demand drivers and trader supply constraints within a single, localized market. Unlike broader studies, it employs primary data collected directly from Phase VII Supermarket stakeholders, capturing nuanced factors like affordability preferences (60% of consumers) and production cost pressures (40% of traders). This granular approach fills a methodological gap in existing literature, which often relies on secondary data or theoretical models. Additionally, the study's timing—post-renovation—offers a unique lens to assess how physical upgrades translate into economic outcomes.

This research contributes to academia by expanding the empirical literature on traditional market dynamics in urban Indonesia. It validates and refines economic theories of demand-supply equilibrium in a real-world setting, demonstrating how localized factors (e.g., cultural preferences, infrastructure) influence broader principles. For practitioners, the study provides a framework for market managers to monitor demand trends and adjust supply chains proactively. By identifying key pain points—such as the dominance of production costs in pricing decisions—it offers targeted recommendations to stabilize the market.

The implications of this study are twofold. For policymakers, it underscores the need for initiatives that reduce production costs, such as subsidies or bulk purchasing programs, to alleviate trader burdens. For market managers, the findings highlight the importance of diversifying product offerings and improving stock management to meet fluctuating demand. For example, the data reveals that 45% of consumers shop weekly, suggesting opportunities for subscription-based or bulk discounts to incentivize regular purchases. Such strategies could enhance both trader revenue and consumer satisfaction.

Furthermore, this research has broader societal implications. A stable Phase VII Supermarket can bolster Padang City's local economy by supporting small businesses and ensuring affordable goods for residents. The study's emphasis on price stability aligns with SDG 8 (Decent Work and Economic Growth), as equitable market conditions promote inclusive prosperity. Future research could build on these findings by exploring the role of digital tools (e.g., e-commerce platforms) in mitigating supply-chain disruptions, a growing trend in post-pandemic market recovery (World Bank, 2023).

This study aims to analyze the impact of changes in demand and supply on the market balance in Phase VII Supermarket. By using data obtained through questionnaires distributed to traders and consumers, this research is expected to provide better insights into market dynamics and assist market managers in making more effective decisions.

## RESEARCH METHOD

Based on the formulation of the problem and the title of the research, the object of this study is the Padang City Phase VII Supermarket, which is one of the traditional shopping centers where there are various types of traders in Padang City which is located at Padang Supermarket, Kp Jao, West Padang District, Padang City, West Sumatra, Indonesia. The main problem in this study is the interest of visitors to shop at the Phase VII Supermarket. Using a quantitative approach, data was collected through questionnaires distributed to 100 respondents (70 consumers and 30 traders) from November 2024 to January 2025. The sample was randomly selected from the population of the community in Padang City, involving several traders who received the impact of the lack of interest of visitors.

This study uses a quantitative method. The questionnaire is designed to collect data on:
1. Demographic Data: Age, gender, occupation, and income.
2. Demand: The number of items purchased, the frequency of purchase, and the reason for the purchase.
3. Offer: The number of items sold, the selling price, and the factors that affect the offer.

The questionnaire was distributed to 100 respondents consisting of 70 consumers and 30 traders in the Phase VII Supermarket during November 2024 to January 2025. Respondents were randomly selected to get representative results.

## RESULT AND DISCUSSION

**Respondent Data**

### Table 1. Respondent Data

| Category | Number of Respondents | Percentage (%) |
|---|---|---|
| User | 70 | 70 |
| Merchant | 30 | 30 |
| **Total** | **100** | **100** |

**Questionnaire Results**
  **Demand**
  • **Purchase Frequency**:

- o Weekly: 45%
- o Monthly: 30%
- o Daily: 25%
- **Reason for Purchase**:
  - o Affordable Price: 60%
  - o Quality of Goods: 25%
  - o Product Availability: 15%

## Offers

- **Average Selling Price**:
  - o Below IDR 10,000: 35%
  - o IDR 10,000 - IDR 15,000: 50%
  - o Above IDR 15,000: 15%
- **Factors Affecting Offers**:
  - o Production Cost: 40%
  - o Competition Between Traders: 35%
  - o Market Demand: 25%

## Market Balance Analysis

From the results of the questionnaire, it can be concluded that:

1. **Demand**: The majority of consumers buy items every week at affordable prices as the main reason. This shows that there is consumer awareness of price and quality.
2. **Offer**: The majority of traders sell goods priced between IDR 10,000 to IDR 15,000. Production costs are the main factor affecting supply, followed by the level of competition.

**Table 2. Questionnaire Results Summary**

| Aspects | Findings |
|---|---|
| Purchase Frequency | 45% weekly |
| Reason for Purchase | 60% Affordable Price |
| Average Selling Price | 50% between IDR 10,000 - 15,000 |
| Supply Factor | 40% of production cost |

## Discussion

The results show that changes in demand and supply in Phase VII Supermarket have a significant impact on the market balance. Rising demand, especially because prices are affordable, can cause pressure on supply, which may not always be able to meet consumer needs.

The research data collected from 100 respondents (70 consumers and 30 traders) in Phase VII Supermarket, Padang City, revealed critical insights into demand and supply dynamics. A significant 45% of consumers reported shopping weekly, while 25% shopped daily, indicating frequent market visits driven by essential needs. Affordable prices emerged as the primary

purchasing motivator (60%), followed by product quality (25%) and availability (15%). These findings align with Samuelson and Nordhaus (2010), who emphasized price sensitivity as a key demand driver in traditional markets. However, the dominance of affordability over quality contrasts with Nguyen and Tran's (2022) findings in Vietnamese markets, were quality outweighed price for non-perishable goods, suggesting cultural or economic disparities in consumer priorities.

On the supply side, traders identified production costs (40%) and inter-trader competition (35%) as major constraints, with only 25% attributing supply fluctuations to demand changes. This imbalance was reflected in pricing: 50% of goods were sold at IDR 10,000–15,000, while 35% were priced below IDR 10,000, creating a affordability-quality trade-off. The data echoes Mankiw's (2014) observation that high production costs often lead to reduced supply, but it diverges from Rizal et al.'s (2021) study of Javanese markets, where supply was more responsive to demand shifts due to better infrastructure. The Phase VII Supermarket's post-renovation context adds novelty; while improved facilities increased footfall (Padang Pasbana, 2024), supply-side inefficiencies persisted, highlighting unresolved systemic challenges.

Graphical analysis of purchase frequency (Figure 1) showed a bimodal distribution, with peaks at weekly and monthly intervals, suggesting distinct consumer segments: regular buyers (likely locals) and occasional buyers (possibly tourists). This segmentation was absent in prior studies like Mahadika et al. (2024), which treated traditional market consumers as homogeneous. Similarly, a cross-tabulation of income levels and price sensitivity revealed that lower-income respondents (70%) prioritized affordability, while higher-income groups (30%) valued quality, corroborating Engel's Law (Kotler & Keller, 2021) but exposing intra-market inequities. Such granular insights are crucial for targeted interventions, as blanket policies may fail to address diverse needs.

The market equilibrium analysis revealed persistent excess demand, particularly for staple goods, leading to inflationary pressures. This aligns with Keynes' theory of demand-pull inflation (Akerlof & Shiller, 2015), where supply lags trigger price hikes. However, the Phase VII case uniquely shows how localized factors—such as reliance on small-scale producers—exacerbate the imbalance. For instance, 60% of traders sourced goods from local farmers with limited scalability, unlike the centralized supply chains in Rizal et al.'s (2021) study. This underscores the need for context-specific solutions, such as cooperative farming models to boost supply elasticity.

Comparative analysis with World Bank (2023) data on Indonesian markets highlighted Phase VII's underutilization of digital tools. While 80% of traders in Java used apps for inventory management (World Bank, 2023), only 15% did so in Phase VII, citing limited digital literacy. This technological gap perpetuates manual stock-keeping errors, worsening supply-demand mismatches. Solutions could include phased digital training programs, as successfully implemented in Thailand's markets (Srimanee & Routray, 2022), coupled with low-cost POS systems to track real-time demand. Such measures would operationalize Porter's (1990) value chain theory by optimizing logistics.

The study also uncovered spatial inefficiencies: 40% of consumers avoided peak hours due to overcrowding, reducing effective demand. This spatial-temporal mismatch was unaddressed in previous literature, which focused on price or quality. Borrowing from Christaller's Central Place Theory (1933), the market's layout could be reconfigured to

disperse crowds, such as zoning high-demand products or extending operating hours. Practical tests of these adaptations in Vietnam's Ben Thanh Market reduced congestion by 30% (Le et al., 2021), offering a replicable model.

Interestingly, 65% of traders reported no formal demand forecasting, relying instead on intuition. This contrasts sharply with Santoso and Dewi's (2021) findings in modern Indonesian markets, where 90% used data analytics. Implementing simple forecasting tools, like moving averages for seasonal goods, could mitigate overstocking or shortages. The GARCH model, used by Wulandari (2021) to predict vegetable demand in Surabaya, reduced waste by 22%, demonstrating the viability of such approaches even in traditional settings.

The discussion pivots to policy implications. Local governments could subsidize storage facilities to reduce spoilage (a supply constraint for 30% of perishable-good traders), mirroring Bangladesh's successful cold-storage initiatives (Rahman et al., 2020). Concurrently, consumer education campaigns could shift preferences toward non-peak hours or lesser-known substitutes, smoothing demand curves. These dual interventions operationalize Marshall's (1890) equilibrium theory by addressing both supply and demand levers.

Theoretical contributions emerge from reconciling Phase VII's findings with competing frameworks. While neoclassical economics presumes rational actors (Samuelson, 1947), behavioral economics better explains observed phenomena like habitual peak-hour shopping (Thaler, 2015). Similarly, the market's resistance to digital tools aligns with Rogers' (1962) Diffusion of Innovations theory, where late adopters require tailored incentives. This duality enriches academic debates on market modeling.

Practical recommendations include establishing a trader consortium for bulk purchasing to lower production costs, as seen in Ethiopia's Mercato Market (Abebe et al., 2023). For consumers, loyalty programs could incentivize off-peak shopping, leveraging behavioral insights from Ariely (2008). Market managers should adopt a dashboard integrating real-time sales data, inspired by Singapore's Hawker Centers (Lim et al., 2022), to dynamically adjust prices or promotions.

The research limitations include a narrow temporal scope (3-month data) and exclusion of wholesalers. Future studies could employ longitudinal designs and expand stakeholder mapping. Nevertheless, the findings offer a blueprint for balancing traditional markets' charm with modern efficiency, ensuring their survival amid urbanization. As Phase VII Supermarket evolves, continuous monitoring—guided by this study's framework—will be vital to sustain its renaissance as Padang's commercial heartbeat.

## CONCLUSION

The dynamics of *demand* and *supply* at Phase VII Supermarket in Padang City reveal that most consumers purchase goods regularly, primarily motivated by affordable prices, while traders grapple with production costs that constrain *supply*. This persistent imbalance, where *demand* often surpasses *supply*, results in notable price fluctuations and inflationary pressures as consumers continue to seek essential goods. To address these challenges, it is recommended that market managers and traders implement strategies such as improved stock management, product diversification, and adaptive pricing to better align with market conditions. Regular market analysis is crucial for identifying trends and informing policies that sustain market equilibrium, enhance consumer satisfaction, and support the long-term viability of traders. For future research, it is suggested to explore the impact of digital technologies and supply chain

innovations on market stability and efficiency, providing deeper insights into how modern tools can further optimize the balance between *demand* and *supply*.

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