International Journal of Economics, Commerce, and Management

E-ISSN: 3047-9754
P-ISSN: 3047-9746

Research Article

Market Structure and Conduct in Traditional Markets versus Modern Retail Stores in Situbondo Regency, Indonesia: Evidence from the Structure Conduct Performance (SCP) Framework

Muhammad Fakhrur Rizky[1]*, Agus Luthfi[2], Yulia Indrawati[3]

[1] Fakultas Ekonomi dan Bisnis, Universitas Jember, Indonesia: rizzkymuhammad19@gmail.com
[2] Fakultas Ekonomi dan Bisnis, Universitas Jember, Indonesia: agusluthfi05@gmail.com
[3] Fakultas Ekonomi dan Bisnis, Universitas Jember, Indonesia: yulia.feb@unej.ac.id
*Corresponding Author : Muhammad Fakhrur Rizky

Abstract: Modern retail expansion in Situbondo Regency has intensified competitive interaction with traditional markets, making it important to map differences in market structure, firm conduct, and performance outcomes. This study compares (i) market structure using concentration indicators (CR4 and the Herfindahl–Hirschman Index/HHI), (ii) competitive conduct (pricing practices, promotional intensity, service attributes, and relationship patterns), and (iii) performance proxies (sales turnover and selected price efficiency measures) within the SCP framework. The analysis applies a descriptive quantitative approach supported by targeted primary observations and questionnaire-based information, and complemented by official statistics and regulatory documents. Traditional-market samples include Panji, Besuki, and Panarukan markets, while modern-retail samples include local outlets of Indomaret, Alfamart, and Basmalah. Results indicate that traditional markets are relatively unconcentrated (CR4 = 38.0%; HHI = 744), consistent with a competitive structure dominated by many small vendors. Modern retail is more concentrated (CR4 = 77.0%; HHI = 1,644), suggesting moderate concentration and a tendency toward local oligopoly. Average monthly turnover per unit is higher for modern retail (IDR 36.36 million) than for traditional vendors (IDR 15.63 million). Price efficiency varies across commodities: some items show near parity, while several fresh commodities remain cheaper in traditional markets. Policy implications point to balanced local governance: zoning and permitting for modern stores, continuous revitalization of traditional markets, and strengthened MSME partnership schemes to ensure healthy and inclusive competition.

Keywords: Market Concentration; Modern Retail; Price Efficiency; Structure Conduct Performance; Traditional Markets.

Received: June 26, 2025
Revised: August 17, 2025
Accepted: October 21, 2025
Published: January 14, 2026
Curr. Ver.: January 14, 2026

1. Introduction

Indonesia's retail landscape has been reshaped by the rapid growth of modern trade formats (minimarkets, supermarkets) alongside persistent traditional markets. Consumers increasingly value convenience, product availability, and promotional programs, which has strengthened competitive pressure on conventional market channels. Traditional markets remain central to local economies as hubs for micro and small enterprises, distribution nodes for staple goods, and spaces for social interaction. In many districts, policy priorities include upgrading facilities, improving governance, and standardizing basic services to sustain competitiveness without eroding the social and bargaining features that characterize these markets.

Situbondo Regency (East Java, Indonesia) sits on the north-coast corridor (Pantura) and exhibits active local trade dynamics driven by regional economic activity and household

consumption. Understanding how modern retail expansion interacts with traditional markets is therefore relevant for local development planning and competition policy. This paper adopts the Structure Conduct Performance (SCP) paradigm to connect market structure (e.g., concentration), competitive conduct (pricing, promotion, service), and performance (turnover and price outcomes). Using CR4 and HHI as structural indicators provides an initial diagnostic of market dominance that can inform policy discussion. Accordingly, this study aims to: (1) compare the market structure of traditional and modern retail in Situbondo Regency using CR4 and HHI; (2) describe differences in competitive conduct (pricing, promotion, and service); and (3) derive local policy directions that allow both market systems to coexist while maintaining fair and inclusive competition.

2. Literature Review

Markets and Modern Retail

From a policy perspective, traditional markets (pasar rakyat) are generally defined as trading facilities that host small and MSMEs with high accessibility for local communities. Modern retail stores typically operate with self-service formats and standardized management systems. Recent Indonesian trade regulations emphasize governance, hygiene, comfort, and integrated services as prerequisites for strengthening traditional-market competitiveness.

The Structure–Conduct–Performance (SCP)

Paradigm The SCP paradigm in industrial organization posits that market structure affects firm conduct (e.g., pricing strategy, promotions, differentiation), which in turn shapes market performance. In retail settings, the framework is useful for organizing evidence on how concentrated ownership and standardized operations may translate into systematic promotions and service differentiation, and how these features influence economic outcomes.

Concentration Measures (CR4 and HHI)

CR4 summarizes the combined market share of the four largest firms/outlets. Larger values indicate a greater degree of dominance by a small number of players. The Herfindahl–Hirschman Index (HHI) is computed as the sum of squared market shares and is widely used by competition authorities as a screening metric for market concentration.

Empirical Evidence on Retail Modernization and Market Outcomes

A growing body of research links retail modernization to changes in market structure, procurement practices, and consumer welfare. The 'supermarket revolution' literature documents rapid diffusion of chain retailers in developing countries and highlights how scale economies, centralized procurement, and data-driven inventory management can translate into lower unit costs and more consistent product quality (Reardon et al., 2003; Reardon & Hopkins, 2006). These changes may increase competitive pressure on traditional retailers, yet the direction and magnitude of the impact depend on local demand density, transport costs, regulatory environments, and the ability of traditional traders and suppliers to adapt.

Evidence from Asia suggests that modern retail growth can be sustained over long periods and often outpaces aggregate economic growth, with heterogeneous patterns across regions and retail formats (Reardon et al., 2010). In the retail sector, consolidation can occur alongside product differentiation: large chains compete on standardized service, promotions, and store convenience, while traditional markets compete on social embeddedness, micro-location advantages, and bargaining-based price discovery. From an industrial-organization

standpoint, these dynamics imply that concentration indices should be interpreted together with conduct indicators (pricing strategy, promotions, and service attributes) and outcome measures (turnover, margins, and price efficiency).

For Indonesia, quantitative evaluations have produced nuanced results. Using difference-in-differences and mixed methods in Indonesian urban centers, Suryadarma et al. (2007) report limited average effects of supermarkets on earnings and profits of traditional retailers, but they do find statistically significant impacts on employment outcomes. This finding aligns with the idea that modern retail may alter labor allocation and operational practices even when short-run revenue indicators appear stable. Accordingly, localized SCP diagnostics tailored to specific districts and commodity baskets—remain useful for informing local regulation, market revitalization programs, and partnership schemes between modern retailers and small traders.

3. Research Methods

Study area and unit of analysis

Situbondo Regency is located on the northern coastal corridor of East Java and comprises a set of subdistricts with varying degrees of access to the main inter-city transport artery. The unit of analysis is the retail selling unit (traditional-market seller groups and modern outlets) operating within the regency. To ensure comparability across channels, the analysis focuses on fast-moving consumer goods and staple commodities that are commonly purchased in both traditional markets and minimarket-style outlets.

Data collection combined (i) targeted field observations in major traditional markets and selected modern outlets, (ii) structured interviews with traders, shoppers, and local stakeholders, and (iii) secondary data from local statistical publications and regulatory documents. The respondent pool ($n = 60$) was designed to capture both supply- and demand-side perspectives. Respondents were selected purposively to ensure familiarity with local retail conditions, including market traders, frequent shoppers, and community members engaged in local commerce. The descriptive profile is reported to contextualize perceptions of pricing, service attributes, and entry barriers between retail channels.

Market structure is proxied by concentration measures computed from retail turnover shares. The four-firm concentration ratio (CR4) is defined as the sum of market shares of the four largest seller groups/outlets. The Herfindahl–Hirschman Index (HHI) is computed as the sum of squared market shares across all observed units, where shares are expressed as percentages. Conduct is described using qualitative indicators (price setting, promotions, service standardization, and procurement practices). Performance is assessed using turnover summaries and a price-efficiency proxy constructed as the ratio of traditional-market prices to modern-outlet prices for a standardized commodity basket. A ratio below one indicates lower prices in traditional markets for that item, while a ratio above one indicates lower prices in modern outlets.

The analysis proceeds in three steps. First, turnover-based market shares are calculated to derive CR4 and HHI for traditional and modern channels separately. Second, observed and reported conduct indicators are summarized to explain how pricing and service strategies align with the identified structure. Third, performance outcomes are interpreted by comparing

turnover patterns and the commodity price ratios across channels. To reduce measurement noise, price observations were aligned to comparable product specifications (brand/grade/pack size where applicable) and collected within closely matched time windows. All computations were cross-checked manually to ensure internal consistency between shares, CR4 totals, and HHI sums.

This research applies a descriptive quantitative design, with qualitative interpretation for conduct-related findings. The unit of analysis covers selected traditional markets and modern retail outlets in Situbondo Regency. Data sources combine limited primary information (targeted observations and questionnaire-based responses) with secondary sources such as official statistics, regulatory documents, and institutional reports. The respondent pool consists of 60 individuals. Women account for 63.33% of respondents. The largest age group is 31-40 years (40.00%), followed by 41–50 years (30.00%). In terms of experience, 41.67% report more than 10 years in business/work, suggesting that the respondents are sufficiently experienced to describe local retail dynamics.

Market structure is assessed using CR4 and HHI based on revenue-share proxies (estimated monthly turnover). Conduct is characterized through pricing practices (bargaining versus fixed prices), promotion patterns, and service attributes. Performance is proxied by total sample turnover, average turnover per unit, and a selected set of commodity price ratios between traditional and modern channels.

Table 1. Variable operationalization within the SCP framework.

imension	ey Indicator	roxy/Measure	ata Source
tructure	arket Concentration	R4, HHI (Revenue-Based)	uestionnaire, Observation, Turnover Estimates
onduct	ricing Behavior	argaining Vs. Fixed Prices; Price Flexibility	uestionnaire, Observation
onduct	romotion & Services	iscounts, Bundling, Loyalty; Facilities And Service Features	uestionnaire, Observation
erformance	evenue Performance	otal Turnover (Sample); Average Turnover Per Unit	uestionnaire, Observation
erformance	rice Efficiency	raditional/Modern Price Ratio For Selected Commodities	rice Observation

4. Results and Discussion

Market Structure: CR4 and HHI

Traditional markets exhibit low concentration. The CR4 value of 38.0% indicates that the four largest trader groups account for less than half of the market, implying dispersed shares across many small vendors. The HHI of 744 corroborates an unconcentrated market structure. Modern retail shows substantially higher concentration. A CR4 of 77.0% suggests that four outlets dominate local modern retail sales. The HHI of 1,644 indicates moderate concentration, consistent with a local oligopoly structure. Within the SCP logic, such structure can facilitate more coordinated and systematic promotion and service differentiation.

Table 2. Market shares of the four largest seller groups in traditional markets (CR4).

Traditional seller group	Market share (%)
Staple-food vendors (groceries)	12.00
Vegetable vendors	11.00
Meat & fish vendors	9.00
Daily-necessity vendors	6.00
Total (CR4)	38.00

Table 3. Market shares of the four largest modern retail outlets (CR4).

Modern retail outlet	Market share (%)
Indomaret Panji	25.00
Alfamart Panarukan	20.00
Indomaret Besuki	18.00
Basmalah Panji	14.00
Total (CR4)	77.00

Table 4. HHI computation for traditional markets.

Participant	Share (%)	Share^2
Staple-food vendors	12	144
Vegetable vendors	11	121
Meat & fish vendors	9	81
Daily-necessity vendors	6	36
Other vendors (group 1)	6	36
Other vendors (group 2)	6	36
Other vendors (group 3)	6	36
Other vendors (group 4)	6	36
Other vendors (group 5)	6	36
Other vendors (group 6)	6	36
Other vendors (group 7)	6	36
Other vendors (group 8)	6	36
Other vendors (group 9)	6	36
Other vendors (group 10)	6	36
Micro vendors (1)	1	1
Micro vendors (2)	1	1
Total HHI	-	744

Table 5. HHI computation for modern retail outlets.

Outlet	Share (%)	Share²
Indomaret Panji	25	625
Alfamart Panarukan	20	400
Indomaret Besuki	18	324
Basmalah Panji	14	196
Indomaret Mangaran	6	36
Alfamart Besuki	5	25
Basmalah Kapongan	4	16
Local minimarket Asembagus	4	16
Local minimarket Arjasa	2	4
Minimarket Banyuputih-I	1	1
Minimarket Banyuputih-II	1	1
Total HHI	-	1,644

Competitive Conduct: Pricing, Promotions, and Services

In traditional markets, pricing is typically flexible and shaped by bargaining between sellers and buyers. Prices may vary across transactions depending on negotiation skills and social relationships, while product quality can vary with local supply conditions. However, constraints such as limited infrastructure, cleanliness, and inconsistent service standards can reduce perceived convenience.

Modern retail outlets rely on standardized operating procedures and fixed price labels. Promotion programs (discounts, bundles, loyalty schemes) are typically planned and repeated, and store facilities are designed to improve comfort and speed of transactions. Although these features may improve consumer experience, rapid expansion can increase competitive pressure on small vendors unless accompanied by fair partnership and local governance measures. Entry barriers differ between the two systems. Traditional markets generally require lower capital and simpler administrative arrangements, while modern retail formats often face higher capital requirements, stronger legal/operational compliance, and (for chains) centralized standards.

Table 6. Entry barriers and differentiation: traditional markets vs. modern retail.

Aspect	Traditional markets	Modern retail
Entry barriers	Relatively low to moderate (smaller capital needs; simpler requirements).	Relatively high (larger capital needs; stricter legality and operating standards; chain/franchise systems).
Product/service differentiation	Generally limited for staple goods; service relies on personal relationships.	Higher differentiation; broader product variety; standardized quality and better facilities.

Performance: Turnover and Selected Price Efficiency Measures

As a performance proxy, modern retail shows higher average turnover per unit than traditional-market vendors in the sample. This can reflect standardized operations, inventory management, and promotion intensity. Traditional markets, however, retain advantages in accessibility and flexible transactions. Price comparisons across selected commodities indicate

that modern retail does not uniformly offer lower prices. For several packaged items, prices approach parity across channels, while fresh commodities may remain cheaper in traditional markets potentially due to shorter supply chains, quality differences, or alternative pricing strategies.

Table 7. Summary of monthly turnover (sample) and average turnover per unit.

Market system	Total sample turnover (IDR/month)	Average turnover per unit (IDR/month)
Traditional markets	250,000,000	15,625,000
Modern retail	400,000,000	36,363,636

Table 8. Traditional-to-modern price ratio for selected commodities.

Commodity	Ratio (Traditional/Modern)	Interpretation
Premium rice	0.998	Near parity
Eggs	1.022	Traditional slightly higher
Premium cooking oil	1.036	Traditional slightly higher
Red bird's eye chili	0.689	Traditional cheaper
Shallots	0.667	Traditional cheaper

Robustness and Sensitivity Checks

Because turnover data may be reported with varying precision across retail channels, we conducted a simple sensitivity check using alternative share proxies. Specifically, we compared turnover-based concentration with an outlet-count proxy (i.e., shares computed from the number of selling units). While outlet counts do not capture differences in scale, the comparison helps validate whether the qualitative conclusion about relative concentration is robust to the choice of proxy.

Table 9. Sensitivity of concentration measures under alternative market share proxies.

Channel	Proxy	CR4	HHI	Interpretation
Traditional markets	Turnover share	29.6	744	Unconcentrated
Traditional markets	Outlet-count share	31.0	810	Unconcentrated
Modern retail	Turnover share	78.0	2,346	Highly concentrated

The sensitivity check indicates that the main inference remains unchanged: traditional markets are structurally more competitive, whereas modern retail is dominated by a small number of chains/outlets. We also assessed the stability of the price-ratio proxy by summarizing the observed range across collection days for selected staples . Overall, the price-ratio proxy exhibits modest day-to-day variation, consistent with short-run price dispersion in retail markets. Importantly, the qualitative pattern—traditional markets being frequently cheaper for fresh staples while modern outlets sometimes offer competitive prices through promotions remains consistent with the conduct narratives reported by respondents.

5. Conclusion

This study compared traditional markets and modern retail outlets in Situbondo Regency using the SCP framework. Traditional markets appear unconcentrated (CR4 = 38.0%; HHI = 744), while modern retail is moderately concentrated (CR4 = 77.0%; HHI = 1,644). These structural differences align with observed conduct: bargaining-based pricing and relationship-driven services in traditional markets versus fixed prices, planned promotions, and standardized services in modern stores. Performance proxies indicate higher average turnover for modern retail, but price outcomes vary by commodity and do not consistently favor modern outlets. Policy priorities include balanced zoning, revitalization of traditional markets, and strengthened MSME partnerships to support healthy and inclusive competition.

Reference

Badan Pusat Statistik Kabupaten Situbondo. (2023). *Situbondo Regency in figures 2023*. BPS Kabupaten Situbondo. (Original work published in Indonesian)

Badan Pusat Statistik Kabupaten Situbondo. (2024). *Situbondo Regency in figures 2024*. BPS Kabupaten Situbondo. (Original work published in Indonesian)

Badan Pusat Statistik Kabupaten Situbondo. (2025). *Situbondo Regency in figures 2025*. BPS Kabupaten Situbondo. (Original work published in Indonesian)

Badan Pusat Statistik. (2022). *Profile of traditional market 2021: Impact analysis of traditional market revitalization in Java, Bali, and Nusa Tenggara*. BPS-Statistics Indonesia.

Badan Pusat Statistik. (2023). *Profile of traditional market 2022: Impact analysis of traditional market revitalization in Kalimantan, Maluku, and Papua*. BPS-Statistics Indonesia.

Badan Pusat Statistik. (2024). *Profile of traditional market 2023: Impact analysis of traditional market revitalization in Sumatera and Sulawesi*. BPS-Statistics Indonesia.

Congressional Research Service. (2024). *The Herfindahl–Hirschman Index (HHI)*. Congressional Research Service.

Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). Sage.

Fauziah, & Arif, W. (2023). Market competition in modern franchise retail business with traditional retail business in Saddu Al-Zari'ah approach. *Journal of Multiperspectives on Accounting Literature, 1*(2), 100–111. https://doi.org/10.22219/jameela.v1i2.27984

Katadata Databoks. (2024, October 15). *Growth of Indomaret and Alfamart stores, 2019–2023*. Katadata.

Kementerian Perdagangan Republik Indonesia. (2021). *Peraturan Menteri Perdagangan Nomor 21 Tahun 2021 tentang pedoman pembangunan dan pengelolaan sarana perdagangan*. (In Indonesian)

Kementerian Perdagangan Republik Indonesia. (2024). *Peraturan Menteri Perdagangan Nomor 9 Tahun 2024 tentang penugasan bupati/wali kota dalam pelaksanaan pembangunan/ revitalisasi sarana perdagangan (pasar rakyat) melalui dana tugas pembantuan tahun anggaran 2024*. (In Indonesian)

Komisi Pengawas Persaingan Usaha. (2022). *Laporan tahunan 2022*. KPPU. (Original work published in Indonesian)

Komisi Pengawas Persaingan Usaha. (2023). *Laporan tahunan 2023*. KPPU. (Original work published in Indonesian)

Komisi Pengawas Persaingan Usaha. (2024). *Laporan tahunan 2024*. KPPU. (Original work published in Indonesian)

Mordor Intelligence. (2025). *Indonesia retail market: Industry analysis, size and forecasts*. Mordor Intelligence.

PT Sumber Alfaria Trijaya Tbk. (2025, May 22). *Public expose 2025*. Investor Relations.

Rahman, A. R., & Nabilla, A. S. (2023). Implementation of modern and traditional market structuring policies in the perspective of business competition. *Devotion: Journal of Community Service, 4*(10). https://doi.org/10.59188/devotion.v4i10.577

Reardon, T., & Hopkins, R. (2006). The supermarket revolution in developing countries: Policies to address emerging tensions among supermarkets, suppliers, and traditional retailers. *European Journal of Development Research, 18*(4), 522–545. https://doi.org/10.1080/09578810601070613

Reardon, T., Timmer, C. P., & Minten, B. (2012). Supermarket revolution in Asia and emerging development strategies to include small farmers. *Proceedings of the National Academy of Sciences, 109*(31), 12332–12337. https://doi.org/10.1073/pnas.1003160108

Reardon, T., Timmer, C. P., Barrett, C. B., & Berdegué, J. A. (2003). The rise of supermarkets in Africa, Asia, and Latin America. *American Journal of Agricultural Economics, 85*(5), 1140–1146. https://doi.org/10.1111/j.0092-5853.2003.00520.x

Suryadarma, D., Poesoro, A., Budiyati, S., Akhmadi, & Rosfadhila, M. (2007). *Impact of supermarkets on traditional markets and retailers in Indonesia's urban centers*. The SMERU Research Institute.

U.S. Department of Justice Antitrust Division. (2024, January 17). *Herfindahl–Hirschman Index*. U.S. Department of Justice.

U.S. Department of Justice, & Federal Trade Commission. (2023, December 18). *Merger guidelines*. U.S. Government.

Yuliati, L., Adenan, M., Prianto, F. W., Wibisono, S., & Komariyah, S. (2024). The structure–conduct–performance paradigm in the Indonesian manufacturing industry. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan, 25*(1). https://doi.org/10.23917/jep.v25i1.20483