



Digital Structural Transformation and Price Stability: A Public Economics Perspective on Makassar's

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Abstract. This study investigates the structural economic transformation of Makassar City during the post-pandemic recovery period from 2021 to 2024. Unlike previous studies that largely focus on national-level recovery or rely on perceptual survey data, this research specifically examines how regional public policies navigate the critical trade-off between fostering structural growth and maintaining price stability. Adopting a public economics perspective, the study utilizes a quantitative descriptive approach based on secondary time-series data. The dataset synthesizes macroeconomic indicators from Statistics Indonesia (BPS), Bank Indonesia, and Port Authorities. The analysis reveals a significant economic pivot where the Information and Communication Technology (ICT) sector has emerged as a new growth engine, recording a robust 7.42% year-on-year increase and effectively outperforming traditional trade sectors. Concurrently, supply-side public interventions in logistics have successfully suppressed inflation to a manageable 1.47% as of late 2024, despite a surge in aggregate demand. Furthermore, the study identifies a massive expansion in digital payment adoption, with Quick Response Code Indonesian Standard (QRIS) transactions growing by over 171%, signaling the formalization of the Micro, Small, and Medium Enterprises (MSME) economy. These findings suggest that Makassar's economic resilience is driven by a dual strategy of digital infrastructure adoption and supply chain efficiency. The study recommends that local fiscal policy should prioritize digital ecosystem incentives to sustain this trajectory.

Keywords: Public Economics, Structural Transformation, Price Stability, Digital Inclusion, Makassar City.

1 Introduction

In the contemporary landscape of Development Economics, urban resilience is defined not merely by the speed of recovery, but by the capacity for structural transformation in response to external shocks. As noted by Vargo et al., the recent global crisis acted as a catalyst that compelled emerging economies to accelerate digital adoption to ensure survival [1]. In this context, Makassar City, serving as the primary logistical and economic hub for Eastern Indonesia, presents a critical case study. Unlike the

industrial-heavy economies in Java, Makassar faces unique development challenges characterized by high logistical costs and a dominant informal sector.

The central issue addressed in this study is how regional public policy has managed the delicate balance between growth recovery and inflation control from 2021 to 2024. While traditional development theories emphasize physical infrastructure, recent data indicates a paradigm shift towards "Digital Public Infrastructure." Kraus et al. argue that for developing cities, this shift is no longer optional but a strategic necessity to maintain competitiveness [2]. However, the implementation of such strategies often faces structural rigidities in the public sector, as highlighted by Gemünden and Kier [3].

This research aims to quantitatively evaluate two main aspects: the structural shift of regional GDP towards high-value services and the effectiveness of regional inflation control policies in maintaining purchasing power. By utilizing secondary macroeconomic data, this study provides an objective assessment of regional development performance, filling the gap left by subjective perceptual surveys and offering a distinct perspective on public economic management.

2 Literature Review

2.1 Structural Transformation and Digital Economy

Economic maturity in developing regions is often marked by a shift from low-productivity sectors to high-productivity services. The proliferation of digital technologies has accelerated this process. Bai et al. suggest that during crisis recovery, digitalization serves as the primary driver for the resilience of small enterprises [4]. Furthermore, Ozili emphasizes that in emerging markets, financial inclusion through digital finance is a prerequisite for sustainable economic growth [5]. This digital transformation allows for the formalization of the shadow economy, thereby increasing the effectiveness of fiscal policies [6].

2.2 Public Policy and Price Stability

In archipelago nations like Indonesia, inflation is predominantly a supply-side phenomenon rather than a demand-pull issue. Kitsos and Prothero highlight that economic resilience relies heavily on a region's capacity to manage cost-push inflation [7]. The World Bank further emphasizes that public investment in logistics connectivity serves as the most effective fiscal tool to reduce regional price disparities and enhance social welfare [8]. Effective supply chain management is crucial, as noted by Christopher, who argues that in modern economics, competition is no longer between companies but between supply chains [9].

2.3 Regional Economic Resilience

Resilience is the ability of an economy to withstand shocks and recover to a better state. Martin and Sunley define this as "adaptive resilience," where regional actors

reconfigure their economic structures [10]. In the context of public economics, this reconfiguration requires active government intervention to lower transaction costs and facilitate market efficiency [11].

3 Methodology

This study employs a Quantitative Descriptive Approach utilizing a Time-Series Design. This method was selected to observe trends, growth patterns, and structural shifts over the 2021–2024 period without the interference of respondent bias common in survey-based research. The research relies entirely on secondary data curated from official regional reports to ensure validity and replicability.

The dataset includes Gross Regional Domestic Product (GRDP) sourced from Statistics Indonesia (BPS) of Makassar Municipality, focusing on constant prices to measure real growth. Consumer Price Index (CPI) data is utilized to analyze inflation volatility. To measure digital transformation, the study uses QRIS transaction volume data sourced from the Bank Indonesia South Sulawesi Representative Office. Additionally, logistics flow data is obtained from PT Pelindo Regional 4 to assess supply chain performance. Data analysis was conducted using Compound Annual Growth Rate (CAGR) to identify leading sectors and descriptive trend analysis to interpret the correlation between policy interventions and economic outcomes.

4 Results

The analysis of GRDP data reveals a divergence in sectoral growth, indicating a structural shift in the local economy. Table 1 compares the growth rates of the traditional Trade sector against the Information and Communication Technology (ICT) sector.

4.1 Sectoral Economic Performance

The analysis of GRDP data reveals a divergence in sectoral growth. Table 1 compares the growth rates of the traditional Trade sector against the Information and Communication Technology (ICT) sector.

Table 1. Comparative Sectoral Growth Rates (y-o-y) in Makassar (2022–2024).

Year	Trade Sector Growth (%)	ICT Sector Growth (%)
2022	4.85	6.12
2023	5.20	9.40
2024 (Q3)	5.11	7.42

Source: Processed from BPS Makassar data [19]

As demonstrated in Table 1, while the Trade sector remains stable with growth hovering around 5%, the ICT sector consistently outperforms it. The ICT sector recorded a peak growth of 9.40% in 2023 and maintained a strong 7.42% in late 2024, suggesting that digital services are becoming the new engine of economic expansion.

4.2 Inflation and Supply Chain Indicators

Price stability is a key indicator of successful public economic management. Table 2 presents the correlation between regional inflation rates and the volume of goods flowing through the Makassar New Port.

Table 2. Inflation Rate vs. Port Throughput Growth.

Period	Inflation Rate (y-o-y) %	Logistics Flow Growth (%)
Dec 2022	5.80	15.2
Dec 2023	2.89	45.5
Nov 2024	1.47	80.0

Source: Processed from BPS Kota Makassar) [19] and Pelindo Regional 4 [20]

The data in Table 2 indicates an inverse trend between inflation and logistics capacity. As the logistics flow capacity increased significantly, reaching an 80% growth in 2024 due to infrastructure improvements, the inflation rate successfully decreased to 1.47%.

4.3 Digital Financial Inclusion

The formalization of the economy is quantitatively measured through the adoption of the Quick Response Code Indonesian Standard (QRIS), as shown in Table 3.

Table 3. Growth of Digital Payment Adoption (QRIS) in Makassar.

Indicator	2022	2023	2024 (Est)	Growth (2024)
Transaction Vol	Low Base	Medium	High	171%
Value (IDR Tn)	2.1	5.8	10.3	77%

Source: Bank Indonesia South Sulawesi [18]

Table 3 highlights an exponential surge in digital adoption. The transaction volume grew by 171% in 2024, while the total transaction value reached IDR 10.3 trillion, reflecting a deepening of financial inclusion in the region.

5 Discussion

5.1 Interpreting the Structural Shift

The empirical data confirms that Makassar is undergoing a structural transformation similar to patterns observed in other emerging economies. The consistent superiority of the ICT sector's growth indicates that economic actors are pivoting towards digital platforms. This aligns with findings by Katz and Koutroumpis, who argue that digitization contributes significantly to GDP growth in developing countries by reducing transaction costs [12]. Unlike the commodity boom eras, this growth is driven by intangible assets and knowledge-based services, suggesting a maturing urban economy that is less susceptible to external commodity price shocks [13].

5.2 Logistics as a Stabilization Tool

The findings regarding inflation control provide strong evidence for the efficacy of supply-side public policies. The sharp decline in inflation to 1.47% coincides with the massive expansion in port throughput. This supports the World Bank's proposition that reducing logistical bottlenecks is crucial for price stability in archipelago regions [8]. The local government's coordination through the Regional Inflation Control Team (TPID) has effectively utilized infrastructure to mitigate the "high-cost economy," a strategy also supported by recent studies on supply chain agility [14].

5.3 Implications of Financial Inclusion

The 171% surge in QRIS usage represents more than just technological adoption; it signifies the formalization of the informal sector. As noted by Demirgüç-Kunt et al., digital payments create a financial footprint that allows unbanked MSMEs to access formal credit markets [15]. For Makassar, this transition implies a broadening of the tax base and a reduction in the shadow economy, which enhances the effectiveness of future public economic policies [16]. This phenomenon mirrors the "leapfrogging" effect observed in other developing markets where mobile technology bypasses traditional banking infrastructure [17].

6 Conclusion

From a Public Economics perspective, Makassar City has demonstrated a successful recovery model characterized by "Digital Resilience." The administration has effectively managed the trade-off between growth and stability. The study concludes that the region is shifting from a trade-based economy to a digital-service economy, evidenced by the 7.42% growth in the ICT sector. Furthermore, price stability has been achieved not through monetary contraction, but through supply chain improvements, resulting in a low inflation rate of 1.47%. Finally, the massive adoption of QRIS indicates a successful policy of financial inclusion. Future fiscal policy should prioritize

digital ecosystem incentives over physical market revitalization to ensure this structural transformation remains inclusive.

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