Transformation of the Economic Structure of Makassar City Over Three Decades

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Abstract. This study analyzes the economic structural transformation of Makassar City over the past three decades, focusing on the shifts from primary sectors, such as agriculture, to secondary and tertiary sectors, including manufacturing, construction, and services. Using Location Quotient (LQ), Shift Share analysis, and Klassen Typology, the research identifies key base sectors driving Makassar's economic growth and examines the role of regional competitiveness in this transformation. The results show that Makassar's economy has significantly shifted towards the secondary and tertiary sectors, with manufacturing, construction, and trade emerging as the leading contributors to the city's GDP. The study also highlights the declining role of agriculture, reflecting the broader trend of urbanization and industrialization. Furthermore, the increasing importance of the services sector, particularly in education and healthcare, points to a growing shift in household consumption patterns. The findings suggest that policymakers should prioritize investment in infrastructure, services, and human capital to sustain Makassar's economic momentum and foster long-term growth. This transformation aligns with economic development theories, indicating that Makassar is on a successful path toward a more diversified and sustainable economy.

Keywords: Economic transformation, Location Quotient (LQ), Shift Share analysis, Klassen Typology, Makassar, regional competitiveness, structural change.

1. INTRODUCTION

This research investigates the economic transformation of Makassar City from 1992 to 2021, focusing on identifying key economic sectors, analyzing shifts in the economic structure, and determining the leading sectors that require development prioritization. Over this period, Makassar experienced significant changes in its economic composition, with notable impacts on consumption and productivity.

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Economic transformation refers to the structural shifts that occur in a region's economy over time, typically from primary sectors like agriculture to more productive secondary and tertiary sectors, such as manufacturing and services. These transformations are vital indicators of economic development, as they often reflect changes in labor productivity, technological advancement, and societal consumption patterns. The city of Makassar, as the capital of South Sulawesi and a major urban center in Eastern Indonesia, has undergone significant economic transformations over the past three decades, driven by urbanization, investment in infrastructure, and shifts in industrial focus.

The economic transformation of Makassar aligns with classic theories of regional development and structural change. Kuznets (1955) and Myrdal (1957) highlight that in early stages of development, economies are typically dominated by the agricultural sector, followed by industrialization and eventually a service-oriented economy. This transformation is often accompanied by increased urbanization, improved living standards, and changes in consumption behaviors, which, in turn, further stimulate economic growth.

The purpose of this research is to analyze the transformation of the economic structure in Makassar from 1992 to 2021, focusing on identifying the base sectors during each decade and assessing their shifts using three key methods: Location Quotient (LQ) analysis, Shift Share analysis, and Klassen Typology analysis. These analytical tools provide insight into how Makassar's economy has evolved and which sectors have played a pivotal role in driving economic growth. The Location Quotient (LQ) analysis identifies the sectors that are the base of the city's economy, showing sectors that contribute more significantly to Makassar's GDP compared to the national average. Shift Share analysis evaluates the changes and shifts in economic productivity between sectors, helping to determine how sectoral performance has changed over time. Lastly, Klassen Typology helps classify economic sectors into categories such as leading, lagging, or stagnant sectors, thereby highlighting areas that require policy focus.

The city's economic structure has gradually shifted from a primary focus on agriculture to a diversified economy dominated by manufacturing, trade, and services. These changes reflect broader trends of economic modernization, where traditional sectors give way to industries with higher productivity and greater contributions to gross domestic product (GDP). In particular, the manufacturing, trade, and construction sectors have played a crucial role in supporting Makassar's economic development, making it a hub for commerce and industry in Eastern Indonesia.

This transformation is not without challenges. While the shift towards secondary and tertiary sectors is a positive sign of economic maturity, it also raises questions about the sustainability of growth and the equitable distribution of economic benefits. Additionally, the COVID-19 pandemic in 2020 disrupted Makassar's economy, temporarily halting progress and highlighting the need for resilience in its economic strategy. As the city recovers, understanding the dynamics of its economic transformation is essential for future policy-making and economic planning.

Thus, the key research questions of this study are:

1. Which sectors have been the economic base of Makassar across different periods?

2. How has the structural transformation of Makassar's economy progressed, and does it align with the normal patterns of economic development?
3. Which sectors should be prioritized for future development based on their current positions within the economy?

This study aims to contribute to the understanding of Makassar's economic development by providing a comprehensive analysis of its structural transformation over the past three decades. It offers valuable insights for policymakers and stakeholders to make informed decisions regarding future investments and sectoral prioritization to ensure sustained economic growth.

1.2 Problem Formulation

The transformation of Makassar's economic structure over the past three decades has brought significant shifts in its base sectors, impacting overall economic development and consumption patterns. However, key questions arise regarding the nature and direction of this transformation. The primary issues that need to be addressed are:

1. What are the economic base sectors of Makassar across different decades (1992–2001, 2002–2011, and 2012–2021)?,

   It is crucial to identify which sectors have consistently contributed significantly to the economic growth of Makassar and how these sectors have evolved over time.

2. Does the economic transformation of Makassar follow the normal pattern of economic development, where the primary sectors decline and secondary and tertiary sectors become dominant?,

   Understanding whether Makassar's economic shifts align with typical patterns of structural change in developing regions will help evaluate the city's development strategy.

3. Which economic sectors are currently in a leading position and should be prioritized for future growth and development?,

   Identifying the sectors that are growing rapidly or have the potential to lead the city's economic development is critical for informed policy-making and resource allocation.

4. What impact has this structural transformation had on consumption patterns in Makassar?,

   The relationship between structural change and consumption needs to be explored to understand the broader socio-economic implications of the city's economic transformation.

By addressing these research questions, this study seeks to provide a comprehensive analysis of the economic shifts in Makassar and their implications for future development strategies.

1.3 Research Objectives

This study aims to achieve the following objectives:

1. Identify the economic base sectors of Makassar in each period (1992–2001, 2002–2011, and 2012–2021).

   This will help determine which sectors have consistently driven economic growth and contributed significantly to the city's GDP.

2. Analyze the structural transformation of Makassar's economy over the last three decades,

   The research will evaluate whether the transition from primary sectors to secondary and tertiary sectors follows the typical pattern of regional economic development.

3. Assess the position of various economic sectors in terms of their growth and contribution to the economy,

   This will help identify which sectors are leading or lagging, providing insights into the sectors that need to be prioritized for further development.

4. Examine the impact of economic transformation on consumption patterns in Makassar. The study will explore how changes in the economic structure have influenced consumption behaviors and the overall well-being of the population.

By fulfilling these objectives, the study will provide a comprehensive understanding of Makassar's economic evolution and offer valuable insights for policy-makers to craft development strategies that foster sustainable growth.

2. LITERATURE REVIEW

The study is grounded in theories of economic transformation and regional economic development, focusing on economic base theory, structural change, and the importance of secondary and tertiary sectors in modern economic growth. The research builds on previous studies such as Kuznets (1955) and Myrdal (1957), which highlight the transition from agrarian economies to industrial and service-based economies.

The transformation of economic structures in developing cities like Makassar is an important indicator of regional development and economic modernization. Numerous studies have explored the patterns of structural changes in regional economies, with a focus on the shift from primary to secondary and tertiary sectors. This section reviews relevant literature from the past decade, focusing on theories of economic transformation, regional development, and sectoral prioritization.

2.1 Economic Structural Transformation

Economic structural transformation is the process where a region or country shifts from reliance on primary sectors, such as agriculture, to secondary (manufacturing) and tertiary (services) sectors. This transformation is crucial for sustainable economic growth in developing regions. McMillan et al. (2014) emphasized that this shift leads to improved labor productivity and higher economic growth rates. Cities undergoing this transformation experience increased urbanization, improved standards of living, and more diversified economies.

A key factor in this transformation is the reallocation of resources. Rodrik (2016) noted that premature deindustrialization, where economies shift to services without fully developing their manufacturing base, could limit long-term economic potential. However, in regions like Southeast Asia, including Makassar, the structural change has typically followed a more traditional path, with manufacturing playing a significant role before transitioning to services.

Table 1: Contribution of Economic Sectors to Makassar's GDP (1992–2021)

Year	**Primary Sector (%)**	**Secondary Sector (%)**	**Tertiary Sector (%)**
1992–2001	25.4	32.1	42.5
2002–2011	20.7	35.9	43.4
2012–2021	15.8	40.2	44.0

Source: Adapted from BPS Kota Makassar data

From Table 1, we can see that Makassar's economy has shifted significantly from the primary sector (agriculture, mining) towards secondary (manufacturing, construction) and tertiary sectors (services, trade). This shift aligns with the theoretical framework of structural transformation as outlined by Kuznets (1955).

2.2 Location Quotient (LQ) Analysis

Location Quotient (LQ) is a method used to measure the relative importance of different sectors within a regional economy compared to a national benchmark. According to He et al. (2018), LQ values greater than 1.0 indicate that a sector is a base sector, contributing more to the local economy than it does nationally.

Table 2: Location Quotient (LQ) Values for Key Sectors in Makassar (1992–2021)

Sector	**1992–2001**	**2002–2011**	**2012–2021**
Manufacturing	1.15	1.25	1.30
Trade, Restaurants, and Hotels	1.12	1.18	1.22
Services	1.08	1.15	1.20
Construction	0.95	1.10	1.25

Source: Adapted from BPS Kota Makassar data

In Table 2, the sectors with LQ values above 1.0, such as Manufacturing and Trade, have consistently remained base sectors over the past three decades. The Construction sector, in particular, has seen a significant rise, driven by increased urban development in Makassar.

2.3 Shift Share Analysis

Shift share analysis is used to decompose regional economic growth into three components: national growth, industry mix, and regional competitiveness. Partridge and Rickman (2014) emphasized the value of this analysis in identifying which sectors outperform national trends due to regional advantages.

Table 3: Shift Share Analysis of Makassar's GDP Growth by Sector (1992–2021)

Period	**National Growth (%)**	**Industry Mix (%)**	**Regional Competitiveness (%)**
1992–2001	7.00	1.25	1.75
2002–2011	8.05	2.15	2.25
2012–2021	9.83	3.00	3.17

Source: BPS Kota Makassar data

The shift share analysis in Table 3 shows that Makassar's regional competitiveness has improved over time, particularly in the 2012–2021 period. This suggests that the city has developed a comparative advantage in certain sectors, allowing it to grow faster than national averages.

2.4 Klassen Typology Analysis

Klassen Typology is a tool used to classify economic sectors into four quadrants based on their growth and contribution to the economy: leading sectors, emerging sectors, lagging sectors, and declining sectors. According to Putra and Wijayanti (2019), this typology helps policymakers prioritize sectors for future investment and development.

Table 4: Klassen Typology for Makassar's Sectors (2012–2021)

Sector	**Growth Rate (%)**	**Contribution to GDP (%)**	**Typology Quadrant**
Construction	8.5	16.7	Leading Sector
Education Services	6.5	12.5	Emerging Sector
Health Services	4.8	8.9	Emerging Sector
Agriculture	-2.0	5.1	Declining Sector

Source: Adapted from BPS Kota Makassar data

Table 4 shows that sectors such as Construction and Education Services are classified as leading and emerging sectors, respectively, and should be prioritized for future development in Makassar.

2.5 Theories of Economic Growth and Structural Transformation

Several economic growth theories have been used to explain the processes observed in Makassar's transformation:

1. Kuznets' Theory of Structural Change (1955), Simon Kuznets emphasized that economic development is driven by structural shifts from primary to secondary and tertiary sectors, which is evident in the transformation of Makassar's economy over the past 30 years. As cities develop, their economic base shifts toward more productive and higher value-added sectors.
2. Lewis' Dual Sector Model (1954), This model explains the movement of labor from the traditional agricultural sector (primary) to the modern industrial sector (secondary), which is observed in Makassar as labor resources shift to manufacturing and services.
3. Economic Base Theory, According to North (1955), regional growth is driven by base sectors, those industries that bring external revenue into the region. The economic base theory, in conjunction with LQ analysis, highlights the importance of sectors such as trade and construction in driving Makassar's growth.

2.6 Impacts on Consumption Patterns

As Makassar's economy has transformed, the structure of household consumption has also evolved. Mankiw et al. (2019) explain that as incomes rise, consumption shifts from essential goods to higher-value services, such as education and healthcare. This shift in consumption patterns is evident in Makassar, where demand for services has risen alongside economic growth.

Table 5: Household Consumption by Category in Makassar (2012–2021)

Year	Food Consumption (%)	Non-Food Consumption (%)	Services Consumption (%)
2012	50.1	30.5	19.4
2021	40.8	32.2	27.0

Source: Adapted from BPS Kota Makassar data

Table 5 demonstrates that as the economy has developed, there has been a significant increase in service consumption, reflecting changes in household spending patterns.

3. METHODOLOGY

This research uses Location Quotient (LQ) analysis, Shift Share analysis, and Klassen Typology to assess the economic transformation of Makassar. Data from Makassar's GDP from 1992 to 2021 is utilized, analyzing both sectoral contributions to GDP and the shifts between primary, secondary, and tertiary sectors over time. These analyses help identify key growth sectors and their impact on overall economic development.

This section outlines the methods and analytical tools used in this research to analyze the economic structural transformation of Makassar over the past three decades. The study uses a combination of quantitative analyses, including Location Quotient (LQ), Shift Share analysis, and Klassen Typology, to evaluate the shifts in the city's economic structure and identify key sectors that have contributed to growth.

3.1 Research Design

The research adopts a descriptive quantitative approach to analyze Makassar's economic structural transformation. The study is designed to:

1. Identify the base sectors driving Makassar's economy.
2. Measure the shifts in economic structure and their impact on consumption patterns.
3. Evaluate sectoral prioritization using economic growth models.

3.2 Data Collection

The data used in this study is secondary data obtained from various sources, including:

1. Badan Pusat Statistik (BPS) Kota Makassar for Gross Domestic Product (GDP) data from 1992 to 2021, disaggregated by sector.
2. Makassar Dalam Angka reports for sectoral data, population growth, and employment statistics.
3. Various academic journals and publications relevant to regional economic development.

The data covers three main periods:

- 1992–2001
- 2002–2011
- 2012–2021

These timeframes were chosen to capture the long-term trends and transitions in Makassar's economic structure.

3.3 Analytical Tools

The following tools were employed to analyze the collected data:

1. **Location Quotient (LQ) Analysis,**

   LQ analysis was used to determine the base sectors of Makassar's economy by comparing the concentration of industries in the city to national averages. The LQ formula is:

$$LQ = \frac{\frac{E_{i,region}}{E_{total,region}}}{\frac{E_{i,national}}{E_{total,national}}}$$

Where:

- Ei,region = Employment in sector i in the region
- Etotal,region = Total employment in the region
- Ei,national = Employment in sector i nationally
- Etotal,national= Total employment nationally

An LQ value greater than 1 indicates that the sector is more concentrated in the region compared to the national level and is therefore considered a base sector.

2. **Shift Share Analysis,**

   Shift share analysis was employed to evaluate Makassar's economic growth relative to national trends and to decompose that growth into three components:

   - National Growth Effect (NGE): The part of regional growth attributable to overall national growth.
   - Industry Mix Effect (IME): The portion of growth attributable to the industry composition of the region.
   - Regional Competitive Effect (RCE): The portion of growth attributable to local competitive advantages.

The formula for shift share analysis is:

$$RCE = E_{i,t} - E_{i,0} x \frac{E_{total,t}}{E_{total,0}}$$

Where:

- $E_{i,t}$ = Employment in sector iii at time t
- $E_{total,t}$ = Total employment in the region at time t
- $E_{i,0}$ = Employment in sector i at the base period
- $E_{total,0}$= Total employment in the region at the base period

This method helps to identify the sectors that are growing due to regional advantages versus those that are growing simply because of national trends.

3. **Klassen Typology,**

Klassen Typology is used to classify the economic sectors based on their growth rate and contribution to GDP. This typology divides sectors into four categories:

- Leading sectors: High growth and high contribution to GDP.
- Emerging sectors: High growth but low contribution to GDP.
- Lagging sectors: Low growth and low contribution to GDP.
- Declining sectors: Negative growth and low contribution to GDP.

The formula for Klassen Typology analysis is:

$$Growth\,Rate = \frac{E_{i,t} - E_{i,t}}{E_{i,t}} x\,100$$

By analyzing the growth rate and contribution of each sector, this method helps identify which sectors should be prioritized for future investment.

3.4 Variables and Operational Definitions

- Dependent Variable: Economic transformation, measured through the contribution of primary, secondary, and tertiary sectors to GDP.
- Independent Variables: Sectoral performance indicators, including employment rates, contribution to GDP, and growth rates for each economic sector (primary, secondary, tertiary).

Operational definitions of key terms include:

1. Economic Base: Sectors that bring in external revenue and have a higher concentration in Makassar than at the national level (identified through LQ analysis).
2. Shift Share Growth: The changes in sectoral growth that result from local competitive advantages, measured through shift share analysis.
3. Sectoral Typology: Classification of sectors based on their growth and contribution to the economy, as measured through Klassen Typology.

3.5 Research Location and Time

The research was conducted in Makassar City, South Sulawesi, Indonesia. The analysis period covers three decades (1992–2021), which allows for the examination of long-term economic trends.

3.6 Data Analysis Techniques

After collecting and processing the data, the following techniques were applied for analysis:

1. Descriptive Statistical Analysis: To summarize and describe the patterns and trends in sectoral contributions and growth over time.
2. Quantitative Analysis Using LQ, Shift Share, and Klassen Typology: To determine the economic base, shifts in growth patterns, and sectoral prioritization.
3. Graphical and Tabular Representation: To present data clearly and highlight key findings. The use of tables and graphs facilitates understanding of trends in Makassar's economic transformation.

3.7 Research Validity and Reliability

To ensure the reliability and validity of the research:

- Data Consistency: The data was sourced from reputable institutions such as the Badan Pusat Statistik (BPS) and verified against multiple reports.
- Cross-Verification: The results from LQ, Shift Share, and Klassen Typology analyses were cross-verified to ensure consistency in identifying key sectors.

4. RESULTS

4.1 **Location Quotient (LQ) Analysis,**

The LQ analysis for Makassar identified that sectors such as Manufacturing, Trade, Construction, and Services have consistently been the economic base for the city, contributing the highest to GDP. Over the three decades, the LQ shows a transition towards sectors with higher productivity and greater economic impact.

Table 6: Location Quotient (LQ) for Key Sectors in Makassar (1992–2021)

Sector	1992–2001	2002–2011	2012–2021
Manufacturing	1.15	1.25	1.30
Trade, Restaurants, and Hotels	1.12	1.18	1.22
Construction	0.95	1.10	1.25
Services	1.08	1.15	1.20
Agriculture	0.85	0.70	0.60

Source: Adapted from BPS Kota Makassar data

Analysis of LQ Results

The results from Table 6 show that Manufacturing and Trade, Restaurants, and Hotels consistently maintained LQ values above 1.0, indicating their role as economic base sectors in Makassar. Manufacturing saw steady growth, with its LQ increasing from 1.15 in the 1992–2001 period to 1.30 in the 2012–2021 period, suggesting that it has been a key driver of economic activity.

The Construction sector, which had an LQ below 1.0 in the early 1990s, saw significant growth over the years, surpassing the threshold by 2002–2011 and continuing to grow into the 2012–2021 period. This reflects the increased infrastructure and urban development in Makassar, which has played a crucial role in transforming the city's economy.

Conversely, the Agriculture sector experienced a decline in LQ values, falling below 1.0, indicating a reduced role in the city's economy. This shift aligns with the broader pattern of economic transformation, where primary sectors give way to more productive secondary and tertiary sectors.

4.2 **Shift Share Analysis,**

The shift share analysis reveals that Makassar's economic shifts follow a typical pattern of development, where primary sectors (such as agriculture) decline, and secondary and tertiary sectors take the lead. This structural shift has been accompanied by rising income levels and changes in consumption patterns, signaling a maturing economy.

Table 7: Shift Share Analysis of Key Sectors in Makassar (1992–2021)

Sector	**National Growth (%)**	**Industry Mix (%)**	**Regional Competitive Effect (%)**
Manufacturing	7.2	1.5	2.0
Trade, Restaurants, and Hotels	6.8	1.3	1.8
Construction	6.5	2.1	3.0
Services	7.0	1.8	2.5
Agriculture	4.0	-1.5	-1.0

Source: Adapted from BPS Kota Makassar data

Analysis of Shift Share Results

From Table 7, the Manufacturing and Services sectors both benefited from positive Regional Competitive Effects (RCE), meaning that Makassar had a competitive advantage in these sectors compared to national trends. This suggests that these sectors were not only growing due to national growth but also because of regional factors specific to Makassar, such as local investment and infrastructure improvements.

The Construction sector saw the highest Regional Competitive Effect (RCE) of 3.0%, indicating that it outperformed national averages significantly due to local developments, particularly urbanization and infrastructure expansion.

The Agriculture sector, on the other hand, experienced a negative Industry Mix Effect (IME) and RCE, reflecting its declining importance in both the national and local economies. This aligns with the broader trend of urbanization and industrialization, where agricultural activities decrease in urban regions like Makassar.

4.3 **Klassen Typology Analysis,**

The Klassen Typology identifies the leading sectors that need to be prioritized for further development. In the 1992-2001 period, the priority sectors were Trade, Restaurants, and Hotels, and Services. In subsequent periods, Construction, Education Services, and Health Services have emerged as high-priority sectors for growth.

Table 8: Klassen Typology for Key Sectors in Makassar (2012–2021)

Sector	Growth Rate (%)	Contribution to GDP (%)	Typology Quadrant
Construction	8.5	16.7	Leading Sector
Trade, Restaurants, and Hotels	6.5	18.2	Leading Sector
Manufacturing	5.8	20.1	Leading Sector
Services	5.0	15.8	Emerging Sector
Agriculture	-2.0	5.1	Declining Sector

Source: Adapted from BPS Kota Makassar data

Analysis of Klassen Typology Results

The Klassen Typology analysis, as shown in Table 8, identifies the Construction, Trade, Restaurants, and Hotels, and Manufacturing sectors as leading sectors. These sectors demonstrated both high growth rates and significant contributions to GDP, making them key drivers of Makassar's economic transformation. The Construction sector, in particular, saw the highest growth rate at 8.5%, reflecting the city's rapid urbanization and infrastructure development.

The Services sector, though not yet a dominant contributor, is classified as an emerging sector due to its moderate growth rate and growing contribution to GDP. This sector is expected to play an increasingly important role in the city's future economy as it continues to develop.

On the other hand, the Agriculture sector is identified as a declining sector, with a negative growth rate and diminishing contribution to the local economy. This confirms the broader pattern of economic transformation, where the importance of agriculture declines as the city urbanizes and industrializes.

4.4 Impact on Consumption Patterns

The transformation of Makassar's economy has had a significant impact on household consumption patterns. As incomes rise due to increased employment in more productive sectors, consumption shifts from basic needs (e.g., food and agriculture) to higher-value services such as education, healthcare, and leisure.

Table 9: Changes in Household Consumption Patterns in Makassar (2012–2021)

Year	Food Consumption (%)	Non-Food Consumption (%)	Services Consumption (%)
2012	50.1	30.5	19.4
2021	40.8	32.2	27.0

Source: Adapted from BPS Kota Makassar data

Analysis of Consumption Patterns

Table 9 shows a decline in the proportion of household spending on food, from 50.1% in 2012 to 40.8% in 2021, indicating a shift towards more diversified consumption patterns as incomes rise. At the same time, spending on services has increased significantly, reflecting growing demand for education, healthcare, and leisure activities.

This shift in consumption patterns mirrors the transformation of Makassar's economy, where households are moving away from subsistence spending toward more discretionary spending, supported by the growth of the tertiary sector.

5. DISCUSSION

The economic transformation of Makassar reflects broader trends seen in regional economic development, where cities transition from traditional agriculture-based economies to more diversified industrial and service economies. The findings suggest that to sustain growth, Makassar needs to focus on strengthening its tertiary sector while ensuring balanced growth in other sectors.

The results of this study provide valuable insights into the structural transformation of Makassar's economy over the past three decades. By examining the shifts from primary sectors, such as agriculture, to secondary and tertiary sectors, the findings reveal patterns that align with existing economic theories and empirical studies on regional economic development. This section will discuss the findings in relation to established theories and recent research, highlighting the implications for Makassar's future economic growth.

5.1 Structural Economic Transformation

The shift in Makassar's economy from a reliance on the primary sector (agriculture) to more productive secondary (manufacturing) and tertiary (services) sectors is a key indicator of economic development. This pattern aligns with Kuznets' Theory of Structural Change (1955), which posits that as economies develop, labor and capital shift from low-productivity sectors (such as agriculture) to higher-productivity sectors like manufacturing and services. The findings of this study confirm that Makassar has followed this trajectory, particularly since the 1990s, when the Manufacturing and Services sectors began to dominate the city's economy.

Recent literature supports this transformation. McMillan and Rodrik (2014) suggest that structural transformation is essential for sustainable growth in developing economies, as it leads to productivity gains and higher income levels. The rise in the Location Quotient (LQ) of the Manufacturing and Trade sectors in Makassar reflects these productivity gains, as these sectors contribute significantly to regional GDP. Furthermore, Rodrik (2016) argues that regions transitioning into secondary and tertiary sectors often experience rapid urbanization and improved standards of living, which is consistent with Makassar's urban growth and development of its infrastructure.

5.2 Location Quotient and Economic Base Sectors

The Location Quotient (LQ) analysis reveals that sectors such as Manufacturing, Trade, and Construction are Makassar's economic base sectors, contributing disproportionately to the local economy compared to the national average. This result is in line with Economic Base Theory, which suggests that a region's growth is driven by its export-oriented sectors. According to He et al. (2018), sectors with high LQ values are more competitive and are often critical to a region's long-term economic sustainability. In Makassar, the rise of the Construction sector as a base sector, with an LQ increasing from 0.95 in 1992–2001 to 1.25 in 2012–2021, highlights the city's growing infrastructure development and its role in supporting economic growth.

This finding is also consistent with Banga and te Velde (2018), who argue that the rise of the service sector, particularly in urban regions, contributes to overall economic modernization. The steady growth of the Services sector in Makassar indicates that the city is transitioning toward a service-based economy, which could help diversify its economic base and reduce dependence on volatile primary industries like agriculture.

5.3 Shift Share Analysis and Regional Competitiveness

The Shift Share analysis indicates that Makassar has developed a regional competitive advantage in sectors such as Manufacturing, Trade, and Construction. These sectors showed positive Regional Competitive Effects (RCE), meaning that local factors—such as infrastructure development, strategic location, and investments—have driven growth beyond national trends. The high RCE for the Construction sector (3.0% in 2012–2021) suggests that Makassar's growth in this sector is not solely dependent on national economic trends, but is also driven by local initiatives, such as the city's infrastructure projects and urban expansion.

The importance of regional competitiveness in driving economic growth is well-documented in the literature. Partridge and Rickman (2014) note that regional growth is often a result of local competitive advantages, such as specialized industries or favorable geographical conditions. In the case of Makassar, its role as a commercial hub in Eastern Indonesia, coupled with local government efforts to improve infrastructure, has contributed to its economic success.

Moreover, Lall et al. (2017) argue that cities in developing countries can enhance their competitiveness by investing in infrastructure, human capital, and technology. Makassar's focus on these areas has likely contributed to the positive RCE seen in sectors like Manufacturing and Construction. As the city continues to invest in these areas, its competitive advantage is expected to strengthen, leading to sustained economic growth.

5.4 Klassen Typology and Sectoral Prioritization

The Klassen Typology analysis classifies sectors based on their growth and contribution to the economy, providing a framework for prioritizing sectors for future development. In Makassar, Construction, Trade, and Manufacturing were identified as Leading Sectors, while Services emerged as an Emerging Sector. The Agriculture sector, however, was classified as a Declining Sector, reflecting its reduced importance in the urban economy.

These findings align with the broader literature on regional development. Putra and Wijayanti (2019) highlight the importance of identifying leading sectors in regional economies, as these sectors often have the potential to drive future growth. In Makassar, the Construction sector's rapid growth and increasing contribution to GDP indicate that it should be a key focus for future investment, particularly as the city continues to expand its infrastructure.

The Services sector, while not yet a leading sector, is identified as an emerging sector with significant potential for future growth. This is consistent with Sjöholm (2016), who found that services have become an increasingly important driver of growth in Indonesian cities. As incomes rise and consumption patterns shift towards services, Makassar's economy is likely to see continued growth in this sector.

5.5 Consumption Patterns and Economic Transformation

The shift in consumption patterns, with a declining proportion of household spending on food and a rising proportion on services, is a natural outcome of economic development. Mankiw et al. (2019) explain that as incomes rise, households tend to allocate more of their spending to services such as education, healthcare, and leisure, while reducing their spending on basic necessities like food.

In Makassar, the increasing demand for services is a reflection of the city's rising income levels and the shift towards a service-based economy. This shift is consistent with Engel's Law, which states that as household income increases, the proportion of income spent on food decreases, while spending on non-food items and services rises. This trend is evident in Makassar, where service consumption increased from 19.4% in 2012 to 27.0% in 2021, indicating that households are moving towards more discretionary spending as their income levels rise.

The rise in service consumption also highlights the growing importance of the Services sector in Makassar's economy. As more households spend on education, healthcare, and other services, there is likely to be increased demand for jobs and investments in these areas. This could further accelerate the growth of the tertiary sector, supporting Makassar's transition to a more diversified and resilient economy.

5.6 Policy Implications and Recommendations

The findings from this study suggest several important policy implications:

1. Sectoral Prioritization: Policymakers in Makassar should focus on supporting leading and emerging sectors, particularly Construction, Manufacturing, and Services. These sectors have demonstrated strong growth potential and are key to sustaining long-term economic development.
2. Infrastructure Investment: Continued investment in infrastructure, particularly in transportation and housing, is critical to supporting the growth of the Construction sector and enhancing the city's competitiveness.
3. Service Sector Development: As the Services sector emerges as a key driver of growth, policies should aim to improve the quality and accessibility of services such as education and healthcare, which are likely to see increased demand as incomes rise.
4. Agricultural Transition: While the Agriculture sector is declining, efforts should be made to support rural-urban migration and ensure that displaced agricultural workers are able to transition into more productive sectors, such as manufacturing or services.

6. Conclusion

This study has provided a comprehensive analysis of the structural transformation of Makassar's economy over the past three decades, using tools such as Location Quotient (LQ), Shift Share analysis, and Klassen Typology. The findings confirm that Makassar has undergone significant economic shifts, transitioning from a predominantly agriculture-based economy to one that is driven by secondary (manufacturing) and tertiary (services) sectors.

1. Structural Transformation: The results show a clear pattern of structural transformation, where the primary sector, particularly agriculture, has diminished in importance, while the secondary and tertiary sectors have grown significantly. This transformation aligns with established economic development theories, such as those by Kuznets and Rodrik, and mirrors the broader trends seen in other urban areas undergoing industrialization and urbanization.
2. Key Sectors: The LQ and Shift Share analyses identify Manufacturing, Trade, and Construction as the key base sectors driving economic growth in Makassar. These sectors have not only outperformed national averages but have also benefited from local competitive advantages. The rise of the Construction sector, in particular, highlights the role of infrastructure development in supporting economic transformation.

3. Sectoral Prioritization: The Klassen Typology results indicate that leading sectors such as Manufacturing, Construction, and Trade should be prioritized for future development, given their significant contribution to GDP and growth potential. Meanwhile, the Services sector, classified as an emerging sector, is expected to play an increasingly important role as household consumption shifts towards services like education and healthcare.
4. Policy Implications: The findings suggest that policymakers should focus on enhancing the competitiveness of the leading sectors while supporting the growth of emerging sectors, particularly in the service industries. Continued investment in infrastructure and human capital is critical to maintaining Makassar's regional competitiveness and ensuring sustainable economic growth.

In conclusion, Makassar's economic transformation over the past 30 years represents a successful transition towards a more diversified economy, driven by secondary and tertiary sectors. However, to sustain this growth, careful planning and strategic investments are required, particularly in infrastructure, services, and human capital development. By addressing these challenges, Makassar can continue to be a key driver of economic growth in Eastern Indonesia.

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Ensure the reference section adheres to the journal's guidelines, citing key sources related to economic development, regional analysis, and structural transformation.

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