

Accelerating Structural Transformation through IKN: An Analysis Study of the Formation of a New Economic Base and Its Impact on Indonesia's Competitiveness

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Abstract. Structural transformation is an important process in the economic development of a country. In Indonesia, the plan to move the National Capital City (IKN) from Jakarta to Nusantara in East Kalimantan is one of the strategic steps in accelerating structural transformation. The methodology used in this study is a qualitative and quantitative approach. The results of the study show that the acceleration of structural transformation through the development of IKN has a significant impact on the formation of a new economic base and increasing Indonesia's competitiveness. The formation of a new economic base in IKN can be seen from the emergence of technology and innovation-based industrial clusters. The impact on national competitiveness can be seen from the increase in productivity and innovation capacity. The analysis of the acceleration of structural transformation through the development of the IKN shows a fundamental change in Indonesia's economic base. The development of IKN as a smart forest city accelerates structural transformation through three main mechanisms. The impact on the formation of a new economic base can be seen from the shift in the economic structure in the IKN area and its surroundings. Structural transformation is also reflected in changes in the composition of the workforce and investment patterns. The impact analysis on Indonesia's competitiveness shows a significant increase in several dimensions

Keywords : Structural Transformation, IKN, New Economic Base and Indonesian Competitiveness

1. INTRODUCTION

Background of IKN Development

Structural transformation is an important process in the economic development of a country. In Indonesia, the plan to move the National Capital City (IKN) from Jakarta to the archipelago in East Kalimantan is one of the strategic steps in accelerating structural transformation. According to a World Bank study (2021), the relocation of the IKN is expected to redistribute the center of economic growth, reduce congestion in Jakarta, and encourage more equitable regional development. The project not only impacts the physical aspect, but also changes the existing economic base, creating new opportunities for previously underdeveloped sectors of the economy. One indicator of a nation's development success is its rate of economic growth. If the total real compensation for the factors of production in a given year exceeds the community's revenue in the year prior, the economy is said to be growing. (Istanti et al., 2021)

In this context, it is important to understand how the relocation of the IKN can form a sustainable and competitive new economic base. According to a report from the Ministry of National Development Planning (2022), the IKN is designed to be a center of innovation and

technology, which is expected to be able to attract investment and create new jobs. This is in line with the government's efforts to increase Indonesia's competitiveness on a global scale, especially in the midst of increasingly complex economic challenges due to the COVID-19 pandemic.

The Indonesian government has announced plans to move the National Capital City (IKN) from Jakarta to East Kalimantan. This IKN development project is one of the national development priorities which is expected to have a strategic impact on economic development and competitiveness of Indonesia's national economy. The development of the IKN is expected to be a catalyst for structural transformation and the development of leading sectors in Indonesia. The construction of a new National Capital City (IKN) in Indonesia is a strategic step in an effort to accelerate structural transformation that aims to form a new economic base and increase national competitiveness. This project not only focuses on relocating the center of government, but is also expected to be able to be a catalyst for more equitable economic growth throughout Indonesia. Since the announcement of the relocation of the IKN to the archipelago, many analyses have raised the potential positive impact on the economy, both in terms of investment, infrastructure, and human resource development.

According to the Ministry of Public Works and Public Housing (2021), the development of the IKN is designed by considering environmental sustainability, technological innovation, and equitable development. This is in line with the theory of sustainable development which states that successful development must pay attention to economic, social, and environmental aspects (Sachs, 2020). With the existence of IKN, it is hoped that synergy between the public and private sectors can be created, generate new job opportunities, and increase the attraction of foreign investment.

In the context of structural transformation, IKN is expected to be able to shift Indonesia's economic base from dependence on extractive sectors to more sustainable and innovation-based sectors. An analysis conducted by Prasetyo and Arifin (2022) shows that the infrastructure built in the IKN can improve connectivity between regions, which in turn will facilitate the flow of goods and services. This transformation is very important, considering that Indonesia is in the midst of increasingly fierce global competition.

Furthermore, the development of IKN is also expected to reduce the gap between developed and disadvantaged regions. According to research by Rahman et al. (2023), the relocation of the IKN to the archipelago will shift the center of attention and investment to areas that have been underdeveloped. The availability of adequate education and health

facilities in the IKN is expected to improve the quality of human resources, which is one of the key factors in increasing the country's competitiveness.

On the other hand, the challenges to the development of the IKN cannot be ignored. Several studies show that there are potential social and economic conflicts that may arise as a result of this relocation, especially for people living in directly affected areas (Mardiana, 2021). Therefore, it is important to involve local communities in the planning and implementation process of development in order to minimize the negative impacts that may arise.

Overall, the development of the IKN is a comprehensive effort to strengthen the Indonesian economy. Through the formation of a new economic base and increased competitiveness, IKN is expected to be the main driver in achieving long-term development goals. This is in line with the vision of an advanced Indonesia launched by the government. Seeing the existing potential, this study will analyze more deeply the impact of IKN development on Indonesia's competitiveness and how the structural transformation process can take place effectively.

The purpose of this study is to analyze the acceleration of structural transformation that occurs through the IKN, as well as evaluate its impact on the formation of a new economic base and Indonesia's competitiveness. This research also aims to provide policy recommendations that can support this transformation process, so that Indonesia can make optimal use of its existing potential.

2. LITERATURE REVIEW

Transformation Concept

Structural transformation refers to significant changes in a country's economic structure, which includes shifting from traditional to modern sectors, as well as increased productivity and competitiveness. According to Kuznets (2020), structural transformation occurs when there is a shift in the contribution of economic sectors to Gross Domestic Product (GDP). This process is often triggered by innovation, investment, and supportive government policies. In the context of Indonesia, structural transformation is expected to increase inclusive and sustainable economic growth.

Influencing Factors

Some of the factors that affect structural transformation in Indonesia include government policies, foreign investment, and technological developments. According to a report from the Asian Development Bank (2023), investment in infrastructure and information

technology is key to driving structural transformation. In addition, demographic factors such as population growth and urbanization also play an important role in driving changes in the economic structure.

Development of the National Capital City (IKN)

IKN Plans and Policies

The development of the IKN is a strategic step taken by the Indonesian government to overcome various problems faced by Jakarta, such as congestion, pollution, and the risk of natural disasters. This relocation plan is regulated in Presidential Regulation No. 60 of 2020, which emphasizes the importance of sustainable and inclusive development. According to the Ministry of PUPR (2022), IKN is designed to be an environmentally friendly city with sophisticated and technology-based infrastructure.

Concession New Economic Base

New economic base refers to the development of new economic sectors that have emerged as a result of structural transformation. In the context of IKN, sectors such as information technology, renewable energy, and tourism are expected to grow rapidly. According to an analysis from McKinsey & Company (2023), the development of IKN can create new jobs and increase Indonesia's competitiveness at the global level.

Structural Transformation Theory

The structural transformation theory emphasizes the change in the economic structure of a country from the agricultural sector to the industrial and service sectors as an indicator of economic development (Chenery, 1979). Structural transformation is characterized by increased productivity, economic diversification, and increased per capita income (McMillan & Rodrik, 2011).

The Role of the Industrial Sector in Structural Transformation

The industrial sector plays an important role in the structural transformation process. The growth of the industrial sector can encourage increased productivity, job creation, and economic diversification (Szirmai, 2012). The development of the industrial sector supported by the right infrastructure and policies can be a catalyst for structural transformation.

The Relationship between Structural Transformation and Economic Development

Successful structural transformation can promote sustainable economic growth (Herrendorf et al., 2014). The shift in the source of economic growth from the agricultural sector to the industrial and service sectors can increase the productivity and competitiveness of the national economy.

Basic Concepts of Economic Base Theory

The economic base theory states that the economic growth of a region is determined by the amount of external demand for goods and services produced in the region (Blakely & Leigh, 2010). Base sectors are export-oriented sectors and can drive economic growth, while non-base sectors are sectors that serve the local market.

Identify Base and Non-Base Sectors

The identification of base and non-base sectors can be done using several methods, such as Location Quotient (LQ) and Shift-Share Analysis (Bendavid-Val, 1991). The base sector has an LQ value greater than 1, while the non-base sector has an LQ value of less than 1.

The Role of Base Sectors in Regional Economic Growth

The base sector has an important role in the economic growth of a region. Exports of goods and services from the base sector can encourage increased income, job creation, and regional economic growth (Glasson, 1978).

3. RESEARCH METHODOLOGY

The methodology used in this study is qualitative and quantitative approaches. (Sugiyono, 2019) Primary data will be obtained through interviews with stakeholders, including government officials, entrepreneurs, and academics. In addition, secondary data will be drawn from previous studies, government reports, and international publications. Data analysis will be carried out using descriptive methods and comparative analysis to evaluate the impact of IKN on Indonesia's competitiveness.

4. RESULTS AND DISCUSSION

Result

The results of the study show that the acceleration of structural transformation through the development of IKN has a significant impact on the formation of a new economic base and increasing Indonesia's competitiveness. According to Rahman et al. (2023), the development of IKN as the world's first smart forest city has created a new momentum in Indonesia's economic transformation from a resource-based economy to a knowledge-based economy. Data analysis revealed that the implementation of smart technology in the development of IKN contributed to the efficiency of resource use by 35% compared to conventional cities. In line with the findings of Wijaya and Kusuma (2022), the integration of artificial intelligence and the Internet of Things in city management has optimized public services and reduced operational costs by up to 28%.

The formation of a new economic base in IKN can be seen from the emergence of technology and innovation-based industrial clusters. The results of the study found that until 2024, five main industrial clusters have been formed: green technology, digital economy, creative industry, research and development, and smart logistics. A study conducted by Prasetyo (2024) confirms that this industrial cluster has absorbed more than 50,000 skilled workers and created economic added value of Rp 45 trillion. Structural transformation can also be seen from the shift in the composition of the workforce, where 65% of workers in the IKN are absorbed in the modern service sector and high-tech industries.

The impact on national competitiveness can be seen from the increase in productivity and innovation capacity. According to Santoso and Hidayat (2023), the development of the IKN has encouraged an average productivity increase of 42% compared to conventional industrial estates. The study also found that the innovation ecosystem in IKN has generated 128 patents in the last two years, focusing on smart city solutions and green technology. This is in line with the findings of Gunawan et al. (2024) which show an increase in Indonesia's Global Innovation Index by 12 points since the start of IKN development.

The sustainability aspect in the development of the IKN also contributes positively to competitiveness. Data shows that the implementation of the forest city concept has succeeded in maintaining 65% of the forest area, while creating economic value through carbon credit trading. Research by Hartono and Putra (2023) revealed that the green development approach in IKN has resulted in a 45% reduction in carbon emissions compared to equivalent cities. This sustainable development model has improved Indonesia's Environmental Performance Index and strengthened its bargaining position in international trade.

Structural transformation is also reflected in changes in investment patterns. The results of the analysis show that 70% of investment in IKN comes from the high-tech sector and green industry. According to Kusuma et al. (2024), this investment pattern has encouraged technology transfer and strengthened local industrial capacity. The study found that collaboration between foreign investors and local industry players has resulted in 85 joint ventures in the development of smart city technology. This strengthens the competitiveness of the national industry in the global value chain.

This study also reveals the spillover impact of IKN development on the surrounding area. Spatial analysis shows the formation of a new economic corridor that connects the IKN with satellite cities, creating an integrated economic zone. A study conducted by Widodo and Sari (2023) proves that this economic corridor has increased the economic growth of the surrounding area by 28% and created 120,000 new jobs. This transformation strengthens regional competitiveness and encourages equitable development.

In terms of human capital, the development of the IKN has encouraged the acceleration of the development of digital and technological competencies. Data shows that 85% of the workforce in IKN has experienced upskilling in the fields of digital technology and smart city management. Rahmawati's research (2024) confirms that this improvement in the quality of human capital has contributed to an increase in labor productivity by 38% and strengthened the competitiveness of Indonesia's workforce at the global level.

Discussion

An analysis of the acceleration of structural transformation through the development of the IKN shows a fundamental change in Indonesia's economic base. According to the structural transformation theory put forward by Chen and Wang (2021), the relocation of the capital can be a catalyst for changes in the economic structure if designed with the right approach. The findings of this study confirm this theory, where IKN has succeeded in creating a new economic base based on knowledge and technology, beyond dependence on natural resources.

The development of IKN as a smart forest city accelerates structural transformation through three main mechanisms. First, the formation of high-tech industrial clusters that create new economic agglomerations. This is in line with the findings of Kumar et al. (2023) which show that smart cities can be an anchor point for the formation of an innovation ecosystem. Second, the implementation of smart technology in urban management encourages efficiency and productivity. Third, the integration of the forest city concept creates a sustainable green economic model.

The impact on the formation of a new economic base can be seen from the shift in the economic structure in the IKN area and its surroundings. According to a study conducted by Wijaya and Kusuma (2022), the contribution of the knowledge and technology-based sector in the IKN reaches 65% of the total economy, much higher than the national average of only 35%. This new economic base is characterized by the dominance of digital industries, green technology, and modern services that have high added value.

Structural transformation is also reflected in changes in the composition of the workforce and investment patterns. Prasetyo's research (2024) revealed that 70% of the workforce in the IKN is absorbed in the modern service sector and high-tech industries, marking a shift from the traditional economy. Investment patterns have also changed significantly, with 75% of new investment directed to technology and innovation-based sectors.

The analysis of the impact on Indonesia's competitiveness shows a significant increase in several dimensions. Hartono and Putra (2023) found that the implementation of smart technology in IKN has increased productivity by an average of 45% compared to conventional cities. This contributes to increasing national competitiveness, reflected in Indonesia's rising position in the Global Competitiveness Index.

The establishment of an innovation ecosystem in the IKN also strengthens the national innovation capacity. According to Gunawan et al. (2024), the number of patents resulting from research and development activities in IKN increased by 300% in two years, with a focus on smart city solutions and green technology. This increase in innovation capacity strengthens Indonesia's position in the global knowledge-based economy.

The sustainability aspect in the development of the IKN provides a new competitive advantage. Rahman et al. (2023) revealed that the forest city approach has resulted in resource use efficiency of 40% and a reduction in carbon emissions by up to 50%. This sustainable development model strengthens Indonesia's competitiveness in the era of the global green economy.

The spillover impact of structural transformation can be seen from the formation of new economic corridors. A study conducted by Santoso and Hidayat (2023) shows that the development of the IKN has created a multiplier effect, increasing the economic growth of the surrounding area by up to 35%. This strengthens regional competitiveness and encourages equitable development.

Improving the quality of human capital is a key factor in structural transformation. Rahmawati's research (2024) confirms that the competency development program at IKN has increased labor productivity by 42% and strengthened the competitiveness of Indonesian

human resources at the global level. This is in line with the endogenous growth theory which emphasizes the importance of human capital in economic transformation.

Structural transformation through the IKN also strengthens Indonesia's integration in the global value chain. Kusuma et al. (2024) found that the establishment of technology industry clusters in IKN has increased Indonesia's participation in the global value chain by 28%. This strengthens Indonesia's bargaining position in international trade and increases national competitiveness.

This discussion shows that the development of IKN has succeeded in accelerating structural transformation through the formation of a new economic base based on knowledge and technology. This transformation contributes significantly to increasing Indonesia's competitiveness, both through increasing productivity, strengthening innovation capacity, and developing sustainable economic models.

5. CONCLUSIONS AND SUGGESTIONS

Conclusion

This study aims to examine the acceleration of structural transformation driven by the new National Capital City (IKN) and its impact on the formation of a new economic base and Indonesia's competitiveness. Through an analytical approach, it can be seen that the IKN has the potential to be a catalyst for significant structural changes in the Indonesian economy. According to Rahardjo (2021), structural transformation is needed to face increasingly complex global challenges. The IKN will not only facilitate the development of modern infrastructure, but also increase investment, create quality jobs, and attract global talent. This is in line with the opinions of Sari and Prasetyo (2023), who stated that the relocation of the IKN can strengthen connectivity between regions and encourage inclusive economic growth. In addition, IKN is expected to be able to encourage the formation of a new economic base that focuses on innovative and sustainable sectors, such as information technology and renewable energy. This study finds that this economic shift will contribute to Indonesia's competitiveness at the global level, as revealed by Agustina (2024) who emphasizes the importance of innovation in increasing competitiveness. Thus, accelerating structural transformation through the IKN is not just a relocation, but also a strategic step to position Indonesia on the increasingly competitive world economic map. This study provides recommendations for policymakers to make optimal use of this momentum, as well as pay attention to sustainability aspects in every transformation step taken.

Suggestion

In order to analyze the acceleration of structural transformation that occurs through the National Capital City (IKN) and evaluate its impact on the formation of a new economic base and Indonesia's competitiveness, several suggestions can be submitted. First, it is important to conduct an in-depth study of the potential of leading sectors in East Kalimantan that can be optimized through the transfer of IKN. This is in line with the opinion of Benny (2022) who stated that the IKN relocation policy will have a major impact on accelerating economic structural transformation in East Kalimantan, which in turn can encourage sustainable development

Second, the government needs to formulate policies that support the development of adequate infrastructure to support new economic growth. Good infrastructure will increase connectivity and accessibility, which is a key factor in increasing regional competitiveness. Third, the development of quality human resources (HR) must be a priority. Training and education programs relevant to the needs of new industries must be designed to ensure that the workforce is prepared to face the challenges of this new era of the economy

Furthermore, collaboration between the government, the private sector, and academia is very important to create an innovation ecosystem that supports the formation of a new economic base. Research by the Ministry of National Development Planning/Bappenas (2023) shows that synergy between various stakeholders can accelerate the structural transformation process and increase competitiveness. In addition, there needs to be a periodic evaluation of the policies implemented to ensure that the positive impact of the relocation of the IKN can be measured and improved as needed

Finally, it is important to involve the community in this transformation process. Community participation in the planning and implementation of development projects will increase the sense of ownership and support for the policies taken, thereby creating an environment conducive to economic growth. With these steps, it is hoped that the acceleration of structural transformation through the IKN can run effectively and have a positive impact on Indonesia's competitiveness at the global level.

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