# The Governance of Industrial Parks in Africa: Contributions From BRICS and Other Emerging Economies

Binyam Fikru Kebede<sup>1</sup>

<sup>1</sup> School of International Development and Cooperation, University of International Business and Economics. Beijing, China

Correspondence: Binyam Fikru Kebede, School of International Development and Cooperation, University of International Business and Economics. Beijing, China. E-mail: binyamfikru2@gmail.com. ORCID ID: https://orcid.org/0009-0009-1283-8795

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# Abstract

This study investigates the governance of industrial parks in Africa, with a particular focus on the contributions from BRICS nations and other emerging economies. Employing a comparative method through a thorough review of secondary sources, this research aims to analyze how diverse governance models influence the capacity of industrial parks to attract investments, ensure operational efficiency, and promote sustainable economic growth. The findings reveal that BRICS countries, notably China and India, have played a pivotal role in shaping governance structures, exemplified by successful case studies in 11 selected African countries.

This research enriches existing theories on institutional governance and developmental states while identifying critical challenges, including bureaucratic inefficiencies and corruption. Furthermore, it offers actionable recommendations for policymakers aimed at enhancing industrial park governance in Africa. By establishing a roadmap for future research, this study lays the foundation for examining the long-term effects of BRICS engagement and the adaptation of governance models across various African regions. Ultimately, the results underscore the significance of effective governance in driving industrial growth and supporting the broader economic development aspirations of the continent.

Keywords: industrial parks, governance, emerging economies, sustainable development

## 1. Introduction

Industrial parks are becoming essential tools for industrialization and economic change in many emerging nations. These parks function as concentrated hubs for manufacturing, logistics, and other industries with the goals of attracting foreign direct investment (FDI), facilitating knowledge transfer, and creating jobs. Industrial parks are viewed by governments and international organizations as essential to promoting economic growth because they enhance infrastructure, enable access to international markets, and create localized economies of scale. However, not all of these parks have been able to achieve their goals, and their usefulness varies greatly. One important but frequently overlooked aspect causing this difference is industrial park governance. In this sense, "governance" refers to the structures, guidelines, and institutional frameworks that control the development, management, and regulation of these parks (UNIDO, 2019). The governance systems within industrial parks have a considerable impact on their overall effectiveness, especially in developing nations where institutional capacities may be weaker and regulatory environments less predictable. Good governance is crucial to ensuring that industrial parks meet their social and economic objectives, from investor interactions to environmental standard enforcement and decision-making processes.

Industrial parks in Africa are frequently laid as vital engines for economic development, job creation, and industrialization (AEZO, 2022). Nevertheless, the performance of these parks is markedly heterogeneous across the continent, with some successfully attracting foreign direct investment (FDI) and generating significant employment, while others grapple with inefficiency, underutilization, and even abandonment (Farole & Moberg, 2017; Zeng, 2010). Governance, or the absence thereof, is often highlighted as a critical determinant of these disparate outcomes (World Bank, 2010; UNIDO, 2016). In many African countries, challenges such as weak regulatory frameworks, inadequate institutional capacity, and limited stakeholder engagement undermine the effective management of industrial parks (Farole, 2011; Simbanegavi, 2019). Moreover, the experiences of

BRICS nations (Brazil, Russia, India, China, and South Africa) and other emerging economies present valuable governance models that could positively influence Africa's industrial park landscape. These countries have established diverse governance frameworks ranging from state-led initiatives to public-private partnerships, facilitating successful industrialization processes in various contexts (Farole & Moberg, 2017). Research indicates that these governance structures have significantly enhanced operational efficiencies and fostered investment, thereby contributing to their success in industrial park management (Oqubay & Ohno, 2019).

However, a critical gap in the literature exists around how African industrial parks can effectively leverage the lessons learned from these emerging economies to improve their governance and overall performance (Kaplinsky & Morris, 2000; Pegels, 2014). This study seeks to address this gap by analyzing the governance frameworks of African industrial parks and distilling actionable insights from BRICS and other emerging economies that could inform a more effective governance strategy for the continent's industrial parks. This research aims to investigate the role of governance in the success of industrial parks in Africa, with a particular focus on contributions from BRICS and other emerging economies. By analyzing governance structures and practices, this study seeks to identify the most effective governance models for improving the performance of industrial parks in Africa. The research also explores how governance lessons from BRICS countries can be adapted to African contexts.

## 2. Methodology

#### 2.1 Research Method

This study adopts a comparative research design employing purposive sampling to analyze the governance frameworks of industrial parks across selected African countries and BRICS nations, utilizing secondary sources such as academic literature, government reports, and case studies. By systematically reviewing this literature, the research aims to investigate how diverse governance structures ranging from state-led initiatives to public-private partnerships (PPPs) affect key performance indicators (KPIs) such as foreign direct investment (FDI), job creation, operational efficiency, and economic output. The selected ten industrial parks, six in Africa (Ethiopia, Nigeria, Kenya, and South Africa) and four in BRICS nations (China, India, and South Africa), reflect a variety of governance models, mainly focusing on those significantly influenced by BRICS involvement. The analysis employs quantitative methods using descriptive statistics to compare industrial park performance across these governance types. In contrast, qualitative thematic analysis reveals patterns in governance structures, stakeholder engagement, successes, and challenges. Ultimately, this comprehensive approach aims to extract applicable best practices and provide evidence-based recommendations for enhancing industrial park governance in Africa, contributing to sustainable economic growth and development across the continent.

## 2.2 Ethical Considerations

This study adheres to rigorous ethical standards for research using secondary data. Ethical considerations remain important while this research does not involve direct interaction with human participants. All sources used are correctly cited to ensure academic integrity and avoid plagiarism. Where relevant, sensitivity is exercised when analyzing potentially sensitive data concerning governance issues, ensuring that any information disclosed in the published research does not compromise the anonymity of individuals or organizations. The researcher is mindful of potential biases within the secondary data and strives to critically evaluate the information, acknowledging the limitations of using secondary sources in this comparative case study.

## 2.3 Limitations

This study provides valuable insights into industrial park governance in Africa and BRICS countries through a rigorous comparative analysis of quantitative and qualitative secondary data. While the reliance on existing sources presents inherent limitations regarding data availability and potential biases, the study's methodology effectively mitigates these constraints. The qualitative focus of the analysis, comparing patterns across various governance models and contextual factors, offers a nuanced understanding of the complex relationships between governance structures and industrial park performance within the selected case studies. This approach contributes significantly to the existing literature, providing valuable insights for policymakers and researchers.

# 3. Situating Industrial Park Governance and BRICS in the Current Context

#### 3.1 Overview of Industrial Park Governance

The governance of industrial parks plays a crucial role in determining their success, particularly in developing countries where regulatory environments and institutional frameworks are often weak. In this context, governance refers to the structures and processes that manage decision-making, resource allocation, and regulatory enforcement within industrial parks (Rodrik, 2004). According to Institutional Theory, the

effectiveness of industrial parks is heavily influenced by the institutional environment rules, norms, and regulations that shape investor behavior and the operational efficiency of the parks (North, 1990).

Institutional Theory highlights the importance of formal and informal institutions in shaping economic outcomes. For industrial parks, this includes clear and enforceable regulatory frameworks, transparent management, and mechanisms for accountability. These elements are essential for fostering investor confidence, minimizing bureaucratic inefficiencies, and ensuring that parks contribute to sustainable economic development (DiMaggio & Powell, 1983). Poor governance, characterized by corruption, lack of accountability, and weak institutional capacity, is often cited as a significant factor leading to the failure of industrial parks in developing countries (Farole, 2011; Zhao, H., & Guo, S. 2017).

Another theoretical perspective relevant to industrial park governance is the Developmental State Theory, which emphasizes the state's role in guiding economic development. This theory suggests that in successful industrial parks, especially in emerging economies, the state often plays an active role in coordinating investment, providing infrastructure, and ensuring that governance structures are robust enough to support long-term industrialization (Johnson, 1982).

#### 3.2 Role of BRICS and Emerging Economies

BRICS countries (Brazil, Russia, India, China, and South Africa) and other emerging economies have played a significant role in Africa's industrialization and economic development, particularly in industrial parks. China has been at the forefront of this effort, investing heavily in African infrastructure and industrial parks through initiatives such as the Belt and Road Initiative (BRI) (Bräutigam & Tang, 2014). Chinese-funded industrial parks in countries like Ethiopia, Kenya, and Nigeria have become key drivers of economic growth, offering models of state-led governance structures that combine both public and private sector involvement.

India and Brazil have also contributed to Africa's industrialization through investments in industrial parks, albeit on a smaller scale. These countries promote governance models emphasizing public-private partnerships (PPP) and institutional strengthening, which have proven effective in their domestic and international projects (Iqbal, B. A., & Rawat, B. 2013). South Africa, as the only African member of BRICS, has worked to replicate these models within its borders, with several industrial parks benefiting from governance reforms aimed at improving efficiency and sustainability (World Bank, 2017; Madanhire, et al., 2018).

Emerging economies outside of BRICS, such as Turkey and Malaysia, have similarly invested in African industrial parks, providing alternative governance models that African policymakers can draw from. These countries often focus on capacity-building initiatives to strengthen the institutional frameworks that govern industrial parks (Farole & Moberg, 2017; Zhao, H., Zhao, H., & Guo, S., 2017).

#### 3.3 Previous Studies on Industrial Park Success

Several studies have analyzed the role of governance in industrial park success, particularly in developing regions. Zeng (2010) provides an overview of the factors contributing to industrial park success, highlighting governance as a critical element. The study emphasizes the importance of strong institutions, clear regulatory frameworks, and stakeholder engagement in ensuring that industrial parks attract investment and generate economic growth.

Farole and Akinci (2011) conducted a comparative analysis of industrial parks in Africa, Asia, and Latin America, finding that parks with more robust governance structures characterized by transparency, accountability, and regulation consistently perform better than those without. Their research also highlights the importance of public-private partnerships and the need for coordination between local and national governments to ensure the success of industrial parks.

In Africa, recent research by Oni et al. (2022), UNIDO (2020), and Aakas, R. (2022) has found that industrial parks that implement governance models inspired by BRICS countries, particularly China, are more likely to succeed in attracting foreign investment and generating employment. However, the study also notes that these governance models must be adapted to local contexts, considering the unique political, social, and economic challenges faced by African countries (Devonshire, 2023).

In summary, the success of industrial parks in developing economies is closely tied to governance structures that shape decision-making, regulatory enforcement, and institutional efficiency. Institutional Theory emphasizes that clear regulatory frameworks, transparency, and accountability are essential for fostering investor confidence and ensuring operational efficiency. Similarly, the Developmental State Theory underscores the role of proactive state involvement in industrial park governance, particularly in emerging economies. However, persistent governance challenges such as weak institutions, corruption, and bureaucratic inefficiencies remain significant

barriers to industrial park success in Africa (Farole, 2011; Zhao & Guo, 2017).

On the other side, BRICS nations, particularly China, have played a key role in shaping Africa's industrial landscape through investments in infrastructure and industrial parks. The Belt and Road Initiative (BRI) has introduced state-led governance structures that integrate both public and private sector efforts. India and Brazil, while contributing on a smaller scale, have focused on public-private partnerships (PPPs) to strengthen governance models. Other emerging economies like Turkey and Malaysia have introduced alternative governance approaches centered on capacity-building and institutional strengthening. While these models have proven effective, their adaptability to the African context remains a key question.

## 3.4 Gaps in Previous Studies and Research Contribution

While existing studies highlight the significance of governance in industrial park success, they primarily focus on case studies without systematically comparing governance models across regions. Research has demonstrated that industrial parks with robust governance structures perform better (Zeng, 2010; Farole & Akinci, 2011). However, studies often overlook the variations in governance models between BRICS-driven parks and those developed through local initiatives. Recent findings suggest that BRICS governance models, particularly China's, contribute to investment attraction and employment generation in Africa, but require contextual adaptation (UNIDO, 2020; Oni et al., 2022).

This study addresses these gaps by conducting a comparative analysis of governance frameworks across industrial parks in Africa and BRICS nations. Using a review-methods approach, it evaluates how different governance structures influence key performance indicators such as foreign direct investment (FDI), job creation, and economic output. By synthesizing best practices and identifying adaptable governance strategies, this research aims to provide evidence-based recommendations for improving industrial park governance in Africa, ultimately contributing to sustainable economic development on the continent.

## 4. Governance Models and Their Impact on Success

The governance structures of industrial parks in Africa play a critical role in determining their success. The involvement of BRICS countries has introduced diverse governance models, often blending local practices with foreign management strategies. This chapter examines the governance approaches adopted by African industrial parks, comparing those with BRICS involvement to those without significant external influence. It also explores how different governance models, such as public-private partnerships (PPP), centralized government control, and market-driven approaches, have impacted the success of industrial parks, using detailed case studies to highlight specific outcomes.

## 4.1 Comparison of Governance Approaches

The governance of industrial parks in Africa varies widely depending on the level of foreign involvement, national priorities, and the socio-economic context. Generally, African industrial parks fall into three broad categories of governance: public-private partnerships (PPPs), centralized government control, and market-driven approaches (AEZO, 2022). Each model offers distinct advantages and challenges, particularly in relation to BRICS countries' involvement.

Public-Private Partnerships (PPP)

Public-private partnerships are a shared governance model in African industrial parks, particularly those with BRICS involvement. Under this model, the government collaborates with private investors, both domestic and international, to develop and manage industrial parks. This approach has been widely adopted in industrial parks influenced by China, India, and South Africa, where state-owned enterprises (SOEs) or private firms from BRICS countries partner with local governments to share risks and leverage expertise.

For example, Nigeria's Lekki Free Trade Zone (LFTZ), co-developed by the Nigerian government and Chinese investors, operates under a PPP framework. This governance model has allowed the park to benefit from Chinese expertise in infrastructure development while maintaining local ownership and participation in decision-making. The PPP model helps ensure the financial sustainability of industrial parks by attracting public and private capital, making it a popular choice for African governments aiming to scale up industrialization efforts without overburdening state budgets.

# Centralized Government Control

Some African countries have opted for a more centralized governance model, where the government retains significant control over the management and operation of industrial parks. This approach is often favored by countries seeking to regulate economic zones for strategic purposes or to influence their economic trajectory

## directly.

Ethiopia's Eastern Industrial Zone (EIZ), developed with Chinese investment but primarily controlled by the Ethiopian government, is a prime example of centralized governance. The Ethiopian state is leading in park management, regulatory enforcement, and infrastructural development, with foreign investors providing capital and technical expertise. This governance model aligns with the developmental state theory, where the government actively directs industrialization efforts to meet national economic goals.

However, while centralized control can lead to strong state oversight and alignment with national development strategies, it may also result in bureaucratic delays and inefficiencies if government institutions lack capacity or insufficient coordination with private sector actors.

## Market-Driven Approaches

In contrast to centralized or partnership models, market-driven governance models rely on private sector leadership with limited direct government intervention. In this approach, the private sector typically manages industrial parks' development, operation, and governance, with the government providing basic regulatory oversight and incentives for investment.

South Africa's Coega Industrial Development Zone (IDZ) exemplifies this market-driven approach. Private firms lead in managing the zone, supported by a regulatory framework established by the government. This governance model promotes flexibility, market responsiveness, and innovation, as private entities can adjust their strategies in response to global market trends. However, such parks may face challenges related to sustainability if the private sector is overly profit-driven, neglecting long-term infrastructural investments or broader socio-economic development goals.

## 4.2 Impact on Park Success

The choice of governance model has a profound impact on industrial park success. Success can be measured through various indicators, including foreign direct investment (FDI), job creation, sustainability, and economic development. The involvement of BRICS countries has generally enhanced park performance by injecting capital, technical expertise, and new governance strategies.

The governance of industrial parks (IPs) in Africa, shaped significantly by models from BRICS countries, particularly China and other emerging economies, has led to diverse outcomes in investment attraction, job creation, and economic development. Quantitative data reveal the tangible impacts of these governance structures, highlighting both the benefits and challenges of adapting foreign governance models to African contexts.

African industrial parks, especially those co-developed with BRICS countries, have shown measurable improvements in operational efficiency and foreign direct investment (FDI) inflows. For example, Ethiopian industrial parks influenced by China's governance models have recorded significant FDI growth, attracting over 1.2 billion USD in investments and creating approximately 40,000 jobs across zones such as the Eastern Industrial Zone (EIZ) (UNIDO, 2020). Nigeria's Lekki Free Trade Zone (LFTZ), a product of a public-private partnership (PPP) with Chinese entities, has also demonstrated the effectiveness of BRICS-aligned governance, achieving a 15% annual growth in exports and becoming a regional logistics hub (Farole & Akinci, 2011).

However, not all African parks enjoy uniform success, and quantitative data reflect the disparity in outcomes. Parks without robust governance frameworks or foreign involvement report lower FDI rates and often struggle with underutilization and poor infrastructure. For instance, a study across 30 African industrial parks indicated that those influenced by BRICS models had 25% higher FDI rates than locally governed parks (UNIDO, 2020; Oni et al., 2022). This gap underscores the importance of tailored governance approaches that address local institutional capacities while leveraging foreign expertise.

# Investment and Foreign Direct Investment (FDI)

Industrial parks with BRICS involvement, particularly those co-managed under PPP frameworks, have attracted significant FDI. China's participation in industrial park development has been particularly influential, with Chinese firms bringing substantial investment into African economies. Parks such as Ethiopia's Eastern Industrial Zone and Nigeria's Lekki Free Trade Zone have benefited from Chinese investment that has not only financed infrastructure but also facilitated the entry of other foreign investors, creating a ripple effect.

By contrast, industrial parks without BRICS involvement or significant foreign participation often struggle to attract comparable levels of FDI. These parks may rely more heavily on domestic capital, limiting their capacity for rapid expansion or international competitiveness.

# ➢ Sustainability

Governance structures with strong public-private partnerships or centralized government involvement tend to emphasize long-term sustainability. For example, through its centralized control of the Eastern Industrial Zone, Ethiopia's government has ensured that the park aligns with national goals for sustainable development. Chinese investments in renewable energy infrastructure and environmentally friendly industrial practices in the park have also contributed to its long-term sustainability, aligning with Ethiopian development objectives and global sustainability standards.

On the other hand, parks governed by market-driven models, such as Coega in South Africa, may prioritize short-term profitability, sometimes at the expense of long-term sustainability goals. However, market-driven parks can also adopt sustainable practices if strong market incentives or regulatory frameworks promote environmental and social responsibility.

# Economic Development and Job Creation

BRICS-influenced governance models have demonstrated significant success in fostering economic development and job creation in Africa. Industrial parks such as Ethiopia's Eastern Industrial Zone and Nigeria's Lekki Free Trade Zone have catalyzed local economies by creating thousands of jobs, boosting exports, and promoting technology and skills transfer. These parks often benefit from well-established governance structures that streamline regulatory processes, improve infrastructure, and provide investors with incentives such as tax breaks and duty-free imports.

In contrast, industrial parks without robust governance frameworks may struggle to generate similar economic benefits. Parks that lack effective management, proper regulatory oversight, or sufficient infrastructure tend to underperform in terms of job creation and economic growth. Governance challenges, such as corruption, inefficiency, or lack of coordination between stakeholders, can hinder their success.

# 5. BRICS and Emerging Economies' Contributions to Industrial Park Governance

External actors, particularly emerging economies such as those in the BRICS bloc (Brazil, Russia, India, China, and South Africa), have significantly influenced the governance of industrial parks in Africa. These countries have played various roles in shaping governance structures through direct investment and the provision of development models that African countries have adopted. This chapter explores the contributions of BRICS countries, particularly China, India, and other emerging economies, in influencing African industrial parks' governance and operational success.

# 5.1 China's Role in Industrial Park Governance

China has been the most influential external actor in shaping the governance and development of African industrial parks. Through initiatives like the Belt and Road Initiative (BRI), China has promoted industrialization on the continent by establishing or co-financing numerous industrial parks, often as part of broader infrastructure and economic development agreements.

China's Governance Approach and Institutional Frameworks to industrial park governance in Africa can be characterized by a centralized, state-led model, where governance structures are deeply integrated with Chinese government policies and strategic interests (AEZO, 2022). Industrial parks developed under Chinese investment, such as Ethiopia's Eastern Industrial Zone (EIZ) and the Suez Economic and Trade Cooperation Zone in Egypt, showcase a governance framework that combines Chinese expertise with local government oversight. These parks often follow the Special Economic Zone (SEZ) model used within China, where the state plays an active role in providing regulatory frameworks, facilitating infrastructure development, and encouraging foreign direct investment (FDI) (Br äutigam & Tang, 2014).

China's governance model emphasizes long-term partnerships between the state and private investors. In many cases, Chinese state-owned enterprises (SOEs) and private companies co-manage industrial parks with local African governments, leading to a hybrid governance structure that blends centralized decision-making with local stakeholder engagement. While this model has proven effective in ensuring rapid infrastructure development and the attraction of FDI, critics argue that it can sometimes lead to governance challenges, such as insufficient local capacity-building and a lack of transparency in management (Zeng, 2010).

The Belt and Road Initiative has been instrumental in China's strategy of exporting its industrial park governance model to Africa. The BRI finances infrastructure projects and promotes governance reforms that align with Chinese investment principles. African countries participating in the BRI, such as Kenya, Nigeria, and Zambia, have seen the establishment of industrial parks funded and managed by Chinese firms in cooperation

with local authorities (Lokanathan, 2020; Arezki & Sy, 2016). Governance structures in these parks tend to emphasize efficiency, regulatory clarity, and investment incentives modeled after China's SEZs.

One key aspect of China's governance strategy is its focus on infrastructure-led development. By addressing infrastructural deficits, such as power, transportation, and telecommunications, China helps create a conducive environment for industrial parks to thrive. This strategy aligns with China's developmental state approach, where the state plays a pivotal role in driving economic growth through targeted interventions in strategic sectors.

## 5.2 India's Role in Industrial Park Governance

While a relatively smaller player than China, India has been increasing its presence in Africa's industrialization efforts, focusing on capacity-building, technology transfer, and public-private partnerships (PPP). India's engagement with Africa's industrial parks reflects a more decentralized and collaborative governance approach, often emphasizing local empowerment and institutional development.

India's strategy in African industrial parks focuses heavily on capacity-building and knowledge transfer. Unlike China's more state-centric approach, India's involvement in Africa's industrial parks has largely been through partnerships with local governments and private sector actors. For example, India has been developing industrial parks in Kenya, Ghana, and Mozambique. Indian companies and institutions work closely with local authorities to improve governance capacity and create sustainable management structures (Iqbal, B. A. & Rawat, B., 2013).

India's governance model emphasizes transparency, inclusivity, and the development of local human capital. This reflects India's experience with industrial parks, where PPPs have been a key governance strategy in the information technology and manufacturing sectors. By transferring this model to Africa, India promotes a governance framework that encourages greater local ownership of industrial park operations, with less reliance on centralized state control than China.

While China and India have contributed to Africa's industrial park development, their governance approaches differ significantly. China's state-led, infrastructure-heavy model often contrasts with India's decentralized, partnership-driven strategy. India's focus on PPPs and institutional capacity-building can be seen as a more adaptable model for African countries seeking to strengthen their local governance frameworks. In contrast, China's model may be more suitable for countries looking for rapid, large-scale infrastructure development.

Regarding outcomes, industrial parks influenced by Indian governance models focus on long-term sustainability and local engagement. These parks may experience slower initial growth than those under Chinese governance, but they often benefit from more resilient institutional structures in the long term (Iqbal, B. A., & Rawat, B. 2013).

## 5.3 Contributions From Other BRICS Members

While China and India are the most prominent BRICS actors in Africa's industrial park governance, Brazil, Russia, and South Africa have also played important roles, albeit to a lesser extent.

Brazil's engagement with Africa's industrialization has been centered on promoting agricultural and agro-processing industrial parks. Brazil's governance model emphasizes technology transfer and institutional cooperation, particularly in agricultural innovation. Brazilian companies have established industrial parks in countries like Mozambique and Angola, where the governance framework focuses on improving local agricultural productivity and processing capacity (Farole & Moberg, 2017). Brazil's governance model promotes inclusive development, strongly emphasizing stakeholder engagement and environmental sustainability.

Russia's contributions to industrial park governance in Africa are relatively limited but have increased recently. Russia's involvement primarily focuses on strategic sectors such as energy, mining, and defense-related industries. Industrial parks developed with Russian involvement, such as those in Egypt and Algeria, tend to follow a state-driven governance model, like China's, but with a stronger emphasis on strategic control over key sectors (Farole & Moberg, 2017, Zhao, H., & Guo, S. 2017).

As the pioneer African member of BRICS, South Africa's role in industrial park governance has been unique. South Africa develops its industrial parks and acts as a model for other African countries. South Africa's governance structures emphasize strong public-private partnerships and institutional collaboration, often involving local governments, national authorities, and international investors (World Bank, 2017; Madanhire et al., 2018). South Africa has also worked on intra-African collaborations, providing expertise and resources to neighboring countries to help develop their industrial parks, focusing on regional integration and shared governance models.

## 5.4 Role of Other Emerging Economies

In addition to the BRICS nations, several non-BRICS emerging economies like Turkey and South Korea have contributed to Africa's industrial park development, providing alternative governance models that African countries can adopt.

Turkey has become an increasingly important player in Africa's industrialization efforts, particularly in North and East Africa. Turkish companies have invested in industrial parks in countries like Ethiopia, Sudan, and Tunisia, often focusing on textiles, manufacturing, and construction sectors. Turkey's governance model emphasizes private sector leadership, with industrial parks primarily managed by Turkish firms in partnership with local governments. This approach promotes efficiency and market-driven governance, focusing on job creation and export-led growth (UNIDO, 2019).

South Korea has also significantly contributed to Africa's industrial park development through capacity-building initiatives and technology transfer. Its governance model is similar to India's emphasis on public-private partnerships and local empowerment. South Korean industrial parks in Africa focus on electronics, automotive manufacturing, and information technology sectors, with governance structures designed to promote innovation and high-value production (Farole & Moberg, 2017).

In summary, the contributions of BRICS and other emerging economies to Africa's industrial park governance are diverse and multifaceted. China's state-led, infrastructure-heavy model has had the most visible impact, mainly through initiatives like the Belt and Road Initiative. Conversely, India offers a more decentralized, partnership-driven approach emphasizing capacity-building and local empowerment. Brazil, Russia, and South Africa have also made important contributions, particularly in specific sectors such as agriculture and energy (AEZO, 2022). Meanwhile, non-BRICS emerging economies like Turkey and South Korea provide alternative governance models emphasizing private sector leadership and technological innovation.

These emerging economies offer valuable lessons for African policymakers and industrial park managers, who must navigate complex governance challenges to ensure their industrial parks' long-term success and sustainability.

## 5.5 Case Studies of BRICS-Affiliated Industrial Parks

Africa's evolving industrial park (IP) and special economic zone (SEZ) landscape signals a commitment to economic diversification and global trade integration. Eleven countries are leading this development, each employing distinct governance structures that range from centralized state control to public-private partnerships. The involvement of BRICS (Brazil, Russia, India, China, and South Africa) has been pivotal, contributing to financing, technology transfer, and skill development. Countries like Ethiopia and Rwanda have adopted centralized models that align with national development objectives. At the same time, nations such as South Africa and Morocco have implemented hybrid systems combining government oversight with private management. This collaborative approach has enhanced foreign direct investment (FDI), job creation, and export capacity, shaping the operational success of industrial parks across the continent.

Ethiopia's industrial parks, numbering around 20, are central to its economic development strategy, focusing on sectors like textiles, Agro-processing, and manufacturing, attracting over 50,000 jobs and a 15% annual growth in FDI (UNIDO, 2019; 2020). Governed under a centralized model, Ethiopia's government directly oversees infrastructure provision, regulatory frameworks, and park management to align with national goals. BRICS involvement, particularly from China under the Belt and Road Initiative (BRI), has catalyzed Ethiopia's industrialization by channeling over \$2 billion into infrastructure and logistics for industrial parks (Brautigam & Tang, 2014; Zeng, 2016). Chinese firms actively participate in operational management and workforce training within Ethiopian parks, enhancing Ethiopia's export competitiveness and cementing its role as a regional manufacturing hub (Oqubay, 2015). Similarly, Rwanda has taken a centralized governance approach with 5-10 SEZs, like the Kigali Special Economic Zone, focusing on light manufacturing, green industries, and technology. With \$500 million in FDI and about 50,000 jobs attributed to BRICS partnerships, China and India have significantly influenced Rwanda's industrial parks, with China investing in infrastructure and India supporting workforce development in technology and innovation sectors (Lokanathan, 2020; Zeng, 2016).

South Africa, an active BRICS member, has around 10-15 SEZs, such as Coega and Dube Trade Port, oriented towards high-value industries like automotive, renewable energy, and logistics. South Africa employs a market-driven model, where private firms manage operations with government-provided regulatory frameworks, though public-private partnerships are also common. China and India have heavily invested in South African SEZs, contributing over \$4 billion in FDI and supporting approximately 120,000 jobs. China's investments

mainly support automotive and renewable energy initiatives, while India focuses on skills development, enhancing South Africa's manufacturing and technological capacity (Farole & Akinci, 2011; UNIDO, 2019). Morocco's 15 SEZs, including Tanger Med Zones and Casablanca Free Zone, similarly leverage a hybrid governance model, where private sector-led operations coexist with government-enforced regulatory oversight. This model attracts investments and facilitates the development of Morocco's automotive, aerospace, and textile sectors. Tanger Med, Morocco's largest SEZ, has attracted over \$9 billion in investments and employs over 90,000 people, generating 20% of the country's exports (UNIDO, 2020). China's BRICS-based investments have strengthened Tanger Med's infrastructure and logistics, making it a strategic gateway for BRICS nations accessing European markets. South Africa also expresses interest in Morocco's renewable energy sector (Farole & Akinci, 2011).

Egypt and Nigeria employ hybrid governance models that blend centralized government control with partnerships in managing their industrial parks. Egypt's 15-20 SEZs, including the Suez Canal Economic Zone (SCZone) and East Port Said SEZ, are critical to the nation's logistics and manufacturing sectors. The SCZone has attracted \$30 billion in foreign investments, creating around 200,000 jobs due to its strategic positioning and infrastructure upgrades from China and Russia (UNCTAD, 2021). As part of the BRI, China has been instrumental in developing SEZs. At the same time, Russia has collaborated with Egypt to establish a Russian industrial zone to promote manufacturing and technology, furthering Egypt's economic diversification (Br äutigam & Tang, 2014). Public-private partnerships have been essential in Nigeria, with over 40 SEZs, such as the Lekki Free Trade Zone (LFTZ) and Calabar Free Trade Zone. The LFTZ alone has led to a 20% annual export increase, heavily influenced by Chinese investment. China's \$1 billion investment in the LFTZ infrastructure and operations has significantly enhanced Nigeria's logistics and manufacturing capacity, positioning it as a regional industrial hub (Farole & Moberg, 2017; Zhao & Guo, 2017).

Through public-private partnerships and technology transfer initiatives, Kenya and Ghana's SEZs also exhibit strong ties with BRICS nations, particularly China and India. With 8-10 SEZs like Athi River EPZ and Tatu City, Kenya has attracted over \$1 billion in FDI, focusing on manufacturing, agro-processing, and logistics. India's involvement in the Athi River EPZ has supported technological capacity-building, while China's BRI investments in infrastructure have improved connectivity and logistics (Arezki & Sy, 2016; Iqbal & Rawat, 2013). Ghana's 5-8 SEZs, including Tema Free Zones Enclave, are essential to agro-processing, logistics, and light manufacturing. China's investments in infrastructure and India's technology transfer have contributed to Tema's \$500 million annual export output, bolstering Ghana's industrial capacity and economic diversification (UNIDO, 2020; World Bank, 2017).

Tanzania and Zambia have adopted centralized governance models to ensure alignment with national priorities in their industrial park operations, with substantial support from BRICS. Tanzania's SEZs, such as the Benjamin William Mkapa SEZ and Bagamoyo SEZ, focus on agriculture, manufacturing, and energy. China's BRI investment in Bagamoyo SEZ supports port and infrastructure development, positioning Tanzania as a competitive regional trade hub and attracting around \$1 billion in FDI (Akas, 2022; Farole & Moberg, 2017). In Zambia, the 4-6 SEZs, including Lusaka South MFEZ and Chambishi MFEZ, specialize in mining, manufacturing, and agro-processing, bringing in over \$700 million in annual FDI. China's investments in the Chambishi MFEZ, particularly in mining and manufacturing operations, have led to job creation and industrial diversification, strengthening Zambia's industrial base (Transparency International, 2020; Bräutigam & Tang, 2014).

Angola's 3-5 SEZs, such as the Luanda-Bengo SEZ, operate under a public-private partnership model where BRICS members China and Brazil are instrumental in supporting logistics, manufacturing, and agro-processing. China has focused on logistics infrastructure, while Brazil has contributed to agro-industrial development, bringing in around \$400 million in FDI. These contributions have helped diversify Angola's economy from its traditional reliance on oil, promoting sustainable growth in manufacturing and agriculture (Farole & Akinci, 2011).

The success of industrial parks in Africa is closely tied to their governance models (AEZO, 2022). Parks with BRICS involvement have generally benefited from public-private partnerships or centralized governance frameworks, which ensure efficient management, attract investment, and promote sustainability. The influence of BRICS nations, particularly China, India, Russia, and Brazil, on Africa's industrial park landscape is substantial, driving infrastructure and technological advancements. Targeted investments and strategic partnerships have bolstered industrial capacity, regional trade, and job creation. For example, Ethiopia and Rwanda's centrally managed parks benefit from China's Belt and Road Initiative, while hybrid models in Egypt and Nigeria leverage both Chinese and Russian contributions. This collaboration effectively addresses immediate industrial needs and

aligns with long-term goals for economic stability. Industrial parks such as Ethiopia's Eastern Industrial Zone and Nigeria's Lekki Free Trade Zone exemplify how governance structures shaped by BRICS nations can lead to successful outcomes.

In contrast, parks lacking strong governance frameworks or foreign involvement often struggle to attract investment and generate long-term economic benefits. As African countries continue to develop industrial parks, the lessons learned from BRICS-affiliated initiatives provide valuable insights for policymakers and investors aiming to enhance the governance and success of industrial zones across the continent. As Africa modernizes its industrial sectors, ongoing BRICS support will remain crucial for fostering inclusive growth and regional integration, positioning African nations competitively in the global market.

## 6. Challenges and Opportunities in Governance

Governance plays a pivotal role in the success or failure of industrial parks. In African industrial parks, governance challenges such as bureaucracy, corruption, institutional capacity limitations, and regulatory barriers often hinder effective operations and development. However, BRICS and other emerging economies have both confronted and adapted to these issues with varying levels of success. This part outlines the key governance challenges faced by industrial parks in Africa, highlighting the lessons that can be learned from BRICS experiences. Furthermore, it explores opportunities for improvement through policy recommendations and governance innovations that could lead to enhanced industrial park success.

## 6.1 Governance Challenges in African Industrial Parks

## Bureaucracy and Administrative Inefficiencies

One of the most pervasive challenges in African industrial parks is excessive bureaucracy. Complicated and inefficient administrative processes delay the approval of permits, hinder investor confidence, and slow down park development (Farole & Akinci, 2011). For instance, in many African countries, registering businesses, acquiring land, or obtaining construction permits can be prolonged due to overlapping regulatory bodies and outdated systems (UNIDO, 2019).

BRICS countries, particularly China, have addressed similar challenges in their development. In China's Special Economic Zones (SEZs), streamlined administrative frameworks were introduced to expedite decision-making and reduce red tape (Brautigam & Tang, 2014). However, the successful replication of such governance practices in Africa remains challenging due to differences in institutional structures and levels of development. While countries like Ethiopia have adopted some of these practices in parks, such as the Eastern Industrial Zone, widespread bureaucratic reform remains necessary to optimize park governance across the continent (Oqubay, 2015).

# > Corruption

Corruption is another significant governance challenge affecting industrial parks in Africa. Corruption increases operational costs, undermines investor trust, and distorts the implementation of policies aimed at fostering industrial development (Transparency International, 2020). The mismanagement of public resources, bribery, and a lack of accountability have contributed to the underperformance of many industrial zones in the region.

BRICS countries have faced their struggles with corruption, but they have implemented various anti-corruption mechanisms to address this issue. For example, South Africa has established anti-corruption agencies, though their effectiveness has varied (Sucker, F. 2019). Similarly, China has enforced strict anti-corruption campaigns, particularly in its SEZs, to create a more transparent environment conducive to investment (Brautigam & Tang, 2014). African nations could benefit from adopting similar measures, enhancing accountability and governance transparency in industrial parks.

## Lack of Institutional Capacity

Many African countries struggle with limited institutional capacity, which hampers the effective governance of industrial parks. Weak public institutions often lack the expertise, resources, and experience needed to manage industrial zones efficiently, resulting in poor service delivery and low investor confidence (Farole & Akinci, 2011). The lack of skilled personnel to manage complex industrial park operations creates a governance gap that inhibits long-term development.

China and other BRICS nations have invested in capacity-building initiatives, mainly through training programs and technical assistance. In Ethiopia's Eastern Industrial Zone, for example, Chinese experts have played a key role in transferring technical and managerial knowledge to local staff, helping to address capacity gaps (Zeng, 2016). Expanding such capacity-building initiatives across other African parks would likely improve governance

and operational efficiency.

Regulatory Barriers

Regulatory barriers in many African countries complicate the operation of industrial parks. Inconsistent regulations, complex tax regimes, and legal uncertainties deter foreign investors from entering or expanding operations in these parks (Farole & Akinci, 2011). These barriers often lead to a high cost of doing business, reducing the competitive edge of African parks compared to their counterparts in BRICS countries.

Brazil and India, as BRICS members, have introduced regulatory reforms that could serve as models for African nations. Brazil, for instance, streamlined its industrial regulations to enhance business operations in its SEZs, while India's recent reforms focused on simplifying tax laws and reducing compliance burdens for investors (UNIDO, 2019). African policymakers could consider similar reforms to create a more business-friendly regulatory environment.

#### 6.2 Opportunities for Improvement

Despite these challenges, there are significant opportunities for improving governance in African industrial parks through collaboration with BRICS nations. The governance experiences of BRICS provide valuable lessons in creating efficient, transparent, and investor-friendly environments for industrial development.

Strengthening Public-Private Partnerships (PPPs)

One of the key opportunities for improving governance is strengthening public-private partnerships (PPPs) in African industrial parks. PPPs can alleviate resource constraints by combining public oversight with private sector expertise and funding (Farole & Moberg, 2017). This governance model has been particularly successful in Nigeria's Lekki Free Trade Zone, where a partnership between the Nigerian government and Chinese investors has increased investment and improved park management (Brautigam & Tang, 2014). Governments can attract more foreign investment and improve operational efficiency by expanding the PPP model across other African parks.

Policy and Regulatory Reforms

Policy and regulatory reforms are essential to creating a more conducive environment for industrial park development. Learning from BRICS countries, African governments can implement targeted reforms to reduce bureaucratic delays, simplify tax structures, and create transparent legal frameworks (Zeng, 2016). By aligning regulatory practices with global standards, African countries can make their industrial parks more attractive to foreign investors, particularly those from BRICS nations.

In addition, African countries could explore adopting investment incentives similar to those offered by China's SEZs, which include tax holidays, reduced tariffs, and streamlined business registration processes (Farole & Akinci, 2011). Such reforms would not only boost investor confidence but also foster competition, leading to higher levels of industrial productivity.

Enhancing Institutional Capacity

Capacity-building initiatives present another opportunity for improving governance in African industrial parks. Through collaboration with BRICS countries, African nations can benefit from technical assistance and training programs aimed at improving the skills of park managers and government officials. China's Belt and Road Initiative (BRI) already includes several capacity-building components focusing on knowledge transfer and technical cooperation (Brautigam & Tang, 2014).

By investing in institutional capacity, African countries can strengthen their ability to manage industrial parks effectively. This would lead to better service delivery, improved investor relations, and more sustainable park operations in the long run (Farole & Moberg, 2017).

Fostering Intra-African Collaboration

As a leading African nation, BRICS member South Africa has the potential to spearhead intra-African collaboration in industrial park governance. African countries could collaborate to share best practices, harmonize regulatory frameworks, and create a network of industrial parks that operate under common standards (Sucker, F. 2019). By fostering regional cooperation, African countries could collectively address common governance challenges and improve the competitiveness of their industrial parks.

Overall, African industrial parks' governance challenges, ranging from bureaucracy and corruption to institutional capacity gaps and regulatory barriers, present significant obstacles to their success. However, by learning from BRICS countries' experiences and adopting best practices in public-private partnerships,

regulatory reforms, and capacity-building, African nations have an opportunity to overcome these challenges. Enhanced collaboration with BRICS countries and efforts to foster regional cooperation will be essential in improving the governance of industrial parks and ensuring their contribution to Africa's industrialization and economic development.

## 7. Discussion

This chapter synthesizes the findings from the analysis of BRICS' contribution to industrial park governance in Africa, evaluating how BRICS countries have influenced governance models and the success of these parks. It also examines the theoretical implications of these findings in the context of institutional and developmental state theories. Furthermore, it suggests practical policy recommendations for African policymakers derived from the governance experiences of BRICS countries.

## 7.1 Synthesis of Findings

The analysis of industrial park governance in Africa reveals that BRICS countries, particularly China, have played a critical role in shaping the governance structures of many African industrial parks. These contributions have significantly impacted the success of these parks, particularly in terms of infrastructure development, investment attraction, and operational efficiency.

## A. BRICS' Influence on Governance Models

BRICS countries have introduced governance models that differ from traditional African approaches, most notably emphasizing public-private partnerships (PPPs) and state-led development. China, for example, has implemented a governance model in African industrial parks that mirrors its Special Economic Zones (SEZs). This model is characterized by the strong role of the state in providing infrastructure and creating an investment-friendly environment, combined with incentives for private sector participation (Brautigam & Tang, 2014). The governance structure in parks like Ethiopia's Eastern Industrial Zone reflects this hybrid approach, where the Chinese government and private investors collaborate closely with African governments to ensure park success (Oqubay, 2015).

India's approach, while less centralized than China's, also emphasizes state-led industrialization, though it places greater focus on market-driven solutions and collaboration with local industries. In Mozambique and Kenya, India has contributed to governance reforms that enhance local ownership and community engagement in park management (UNIDO, 2019; Oni, et al., 2022).

# China's State-Led Industrial Park Governance Model

China's approach to industrial park governance, characterized by state-led coordination and a focus on infrastructure, has yielded impressive quantitative results domestically and in its overseas projects. Within China, Special Economic Zones (SEZs) such as Shenzhen have achieved an average GDP growth rate of 15% annually since inception, primarily due to strong state support and favorable regulatory frameworks (Brautigam & Tang, 2014). This model has been replicated in Africa through initiatives like the Belt and Road Initiative (BRI), which finances infrastructure and promotes governance reforms aligned with Chinese investment principles (Arezki, R., & Sy, A. 2016).

In Ethiopia's EIZ, for example, Chinese state-owned enterprises (SOEs) invested over 200 million USD, resulting in a 20% increase in local manufacturing output and the creation of direct employment for over 15,000 Ethiopians (Zeng, 2016). While effective in driving economic growth, China's state-led model also faces criticism for limited local capacity-building and transparency, as only 25% of the management roles in these zones are typically held by locals (UNIDO, 2019; 2020). This data points to a potential area for improvement, where further localization of governance could enhance long-term sustainability.

> India and Brazil's Public-Private Partnership Models

India and Brazil adopt a public-private partnership (PPP) model in IP governance, emphasizing capacity-building and private-sector leadership. In India, the success of PPPs in technology parks, such as the Bengaluru Tech Park, has contributed to a 30% increase in employment within the information technology (IT) sector and positioned India as a global tech hub (Iqbal, B. A., & Rawat, B. 2013). India's PPP-based governance strategy has also been applied in African industrial parks, focusing on developing local institutional capacity and reducing dependence on centralized state control.

In Kenya's Athi River Export Processing Zone, for instance, an Indian-style PPP model was implemented, resulting in a 10% increase in production efficiency over five years and attracting major textile investors (UNIDO, 2020; Oni, et al., 2022). This model highlights the role of private investment in fostering sustainable

growth and mitigating the bureaucratic delays commonly associated with fully state-controlled zones.

Brazil's contribution to African IP governance, especially in agro-industrial parks, emphasizes technological support and sustainable practices. In Mozambique's agro-processing zones, Brazilian-led PPPs have boosted agricultural output by 25% annually while reducing post-harvest losses through technological upgrades (Farole & Moberg, 2017). These data indicate that PPPs can lead to sustainable development outcomes by prioritizing local empowerment and environmental considerations in governance.

Performance Comparison Across Governance Models

Quantitative data across African parks influenced by China, India, and other emerging economies reveal notable performance differences tied to governance structures. A comparative analysis shows that parks managed through centralized, state-led models report an average 30% higher FDI attraction rate than those governed by PPPs or market-driven models, primarily due to significant infrastructure investments from state partners (UNIDO, 2019). However, parks under PPP models, such as Nigeria's LFTZ and Kenya's Athi River Zone, often exhibit higher levels of operational efficiency, with a 15% reduction in bureaucratic delays and a 20% increase in investor satisfaction rates (Farole & Akinci, 2011).

These differences suggest that while state-led models effectively attract initial investments, PPPs offer flexibility and improved responsiveness to investor needs. Data also indicates market-driven governance models, such as South Africa's Coega Development Zone, yield innovation-friendly environments. However, they may lack the long-term stability seen in more centrally governed parks (Sucker, F. 2019).

## B. Impact on Industrial Park Success

The influence of BRICS governance models has been most visible in the improved performance of industrial parks where these countries are heavily involved. In Ethiopia, for instance, the Eastern Industrial Zone has seen increased foreign direct investment (FDI), job creation, and industrial output, mainly due to the efficient governance framework established with Chinese support (Zeng, 2016). Similarly, Nigeria's Lekki Free Trade Zone, a collaboration between the Nigerian government and Chinese investors, has experienced significant infrastructure development and operational efficiency, positioning it as a key hub for industrial activities in West Africa (Farole & Akinci, 2011).

However, the success of these governance models is not uniform across the continent. In some cases, the influence of BRICS has been less effective due to local political instability, inadequate institutional capacity, or challenges in adapting foreign governance models to the African context (Farole & Moberg, 2017). For example, industrial parks in countries like Tanzania and Zambia have struggled to replicate the success of Ethiopia's zones, highlighting the need for governance models to be tailored to local contexts (Oqubay, 2015).

# 7.2 Theoretical Implications

This study's findings offer valuable insights into the theoretical frameworks that underpin industrial park governance in developing countries. Two key theories, Institutional Theory and Developmental State Theory, provide lenses for interpreting these findings.

The findings of this study align closely with Institutional Theory and Developmental State Theory, both of which provide critical lenses for understanding governance in industrial parks. However, a more profound theoretical analysis would further contextualize these findings within ongoing academic debates on governance effectiveness, adaptability, and sustainability in developing economies.

Institutional Theory posits that formal and informal institutions play a critical role in shaping economic outcomes, with well-defined regulations and norms encouraging investment and operational efficiency (North, 1990). In the context of African industrial parks, BRICS-inspired governance models have introduced new institutional frameworks, such as public-private partnerships (PPPs) and state-led coordination, which aim to reduce transaction costs and enhance investor confidence. The success of Ethiopia's EIZ in attracting over \$1 billion in FDI demonstrates the efficacy of strong institutional arrangements in achieving economic goals. However, challenges such as bureaucratic inefficiencies and inconsistent regulations in other African parks illustrate Institutional Theory's warning that weak or unclear institutions can hinder development. Strengthening local institutional frameworks to support adapted governance models would thus align with this theory's principles, potentially mitigating the governance challenges faced by African industrial parks (Farole & Akinci, 2011).

Developmental State Theory emphasizes the state's role in directing economic growth through strategic planning, investment, and intervention (Evans, 1995). In China's governance model, the state actively supports industrial

zones, provides infrastructure, and shapes regulatory environments conducive to long-term development. Applying this theory to the African context, the study highlights how state-led governance models, such as those in Ethiopia and Nigeria, foster industrialization by integrating state and foreign investor interests. However, the limitations of state-led models in regions with low institutional capacity suggest a need for hybrid governance frameworks that balance state intervention with private sector agility. This aligns with recent critiques of Developmental State Theory, which argue that state intervention must be adaptable and responsive to institutional constraints in diverse socio-political environments (Rodrik, 2004).

Institutional Theory

Institutional Theory suggests that institutions' rules, norms, and organizations are critical in shaping economic outcomes (North, 1990). In the context of African industrial parks, the involvement of BRICS countries has introduced new institutional arrangements that promote efficiency, transparency, and investment attraction. For example, the creation of dedicated industrial park authorities and one-stop service centers, as seen in Ethiopia and Nigeria, aligns with Institutional Theory's emphasis on the role of formal institutions in reducing transaction costs and enhancing economic performance (Farole & Akinci, 2011).

This study's findings suggest that while BRICS countries have successfully transplanted some of their governance institutions to African parks, the sustainability of these institutions depends on their integration into local governance frameworks. The failure of some parks to achieve long-term success despite BRICS involvement points to the need for more profound institutional reform at the national level beyond the boundaries of individual industrial parks (Zeng, 2016).

Developmental State Theory

Developmental State Theory emphasizes the state's role in economic development through strategic planning, investment, and intervention (Evans, 1995). The success of industrial parks in countries like Ethiopia and Nigeria, where BRICS countries have introduced governance models characterized by strong state involvement, supports this theory. In these cases, the state plays an active role in providing infrastructure, setting policy frameworks, and partnering with private investors, mirroring the governance approaches used by China and India in their industrial development (Brautigam & Tang, 2014).

However, the study also highlights the limitations of the developmental state model in contexts where the state lacks the institutional capacity or political stability to manage industrial parks effectively. In such cases, a hybrid model that combines state leadership with strong private sector involvement and international partnerships may be more appropriate for achieving sustainable park success in Africa (Farole & Akinci, 2011).

## 7.3 Policy Implications

The findings of this study have important policy implications for African governments seeking to improve the governance of their industrial parks. By learning from the experiences of BRICS countries, African policymakers can adopt strategies that enhance the performance and sustainability of these parks.

Strengthening Public-Private Partnerships

One of the key lessons from BRICS countries is the importance of public-private partnerships (PPPs) in industrial park governance. African governments should prioritize the establishment of PPPs to attract foreign investment and leverage private sector expertise in park management. The successful implementation of PPPs in parks such as Nigeria's Lekki Free Trade Zone demonstrates the potential for this model to improve governance and operational efficiency (Farole & Akinci, 2011). Governments can also introduce legal frameworks that facilitate PPP formation and ensure transparency and accountability in park management.

Enhancing Institutional Capacity

The study also underscores the need for capacity-building initiatives to strengthen the governance of industrial parks in Africa. African governments should invest in training programs for park managers and government officials, focusing on skills such as project management, regulatory compliance, and investor relations. Capacity-building initiatives led by BRICS countries, such as China's technical assistance programs under the Belt and Road Initiative, offer valuable models for how African countries can enhance institutional capacity in park governance (Zeng, 2016).

Regulatory and Policy Reforms

To create an enabling environment for industrial park success, African governments should undertake regulatory and policy reforms that reduce bureaucratic barriers, streamline administrative processes, and enhance legal certainty for investors. BRICS countries, particularly China and India, have introduced regulatory frameworks that incentivize investment and reduce the cost of doing business in industrial parks. By adopting similar reforms, African governments can make their industrial parks more attractive to both domestic and foreign investors (UNIDO, 2019; Oni, et al., 2022).

Intra-African Cooperation

Finally, there is a need for greater intra-African cooperation in the governance of industrial parks. African countries should collaborate to share best practices, harmonize regulatory frameworks, and create regional networks of industrial parks that adhere to common governance standards. South Africa, as a leading member of both the African Union and BRICS, can play a key role in facilitating such cooperation (Sucker, F. 2019). By working together, African nations can address common governance challenges and improve the overall performance of their industrial parks.

## 8. Conclusion

The conclusion synthesizes the study's findings on the governance of industrial parks in Africa, emphasizing the influence of BRICS countries and emerging economies on the success of these initiatives. It highlights the importance of governance in shaping industrial park outcomes and suggests avenues for future research.

This study has demonstrated that governance models influenced by BRICS and other emerging economies play a pivotal role in the success of industrial parks in Africa. Through a comprehensive analysis of governance structures, investment strategies, and operational frameworks, the research revealed several key insights:

*Diverse Governance Models:* BRICS countries, particularly China and India, have introduced governance models emphasizing public-private partnerships (PPPs) and state-led initiatives. These models have significantly impacted on the effectiveness and efficiency of industrial parks, facilitated infrastructure development, and attracted foreign direct investment (FDI) (Brautigam & Tang, 2014).

*Case Study Evidence:* The case studies of Ethiopia's Eastern Industrial Zone and Nigeria's Lekki Free Trade Zone illustrate how governance frameworks inspired by BRICS have led to measurable success in terms of job creation, industrial output, and economic growth (Farole & Akinci, 2011; Zeng, 2016). These examples underscore the potential for tailored governance approaches to enhance park performance.

*Challenges and Opportunities:* While BRICS involvement has contributed positively to many industrial parks, challenges such as bureaucratic inefficiencies, corruption, and the need for greater institutional capacity remain prevalent. Addressing these challenges through collaboration with BRICS nations can present new opportunities for improving governance and ensuring the sustainability of industrial parks (UNIDO, 2020; Oni, et al., 2022).

*Theoretical Contributions:* This study's findings contribute to the existing literature on institutional and developmental state theories by illustrating how BRICS governance models align with and diverge from traditional African governance frameworks. This duality highlights the necessity for local adaptations of foreign governance strategies to ensure successful outcomes (Evans, 1995).

In conclusion, effective governance is crucial in shaping the success of industrial parks in Africa. The involvement of BRICS and other emerging economies has the potential to transform industrial development on the continent by introducing innovative governance models that can stimulate economic growth and foster sustainable industrialization. However, successfully integrating these models into local contexts requires careful consideration of regional challenges, institutional capacities, and governance frameworks.

As African countries continue to pursue industrialization, the potential for BRICS nations to play a transformative role in this process cannot be overstated. By fostering collaborative partnerships, enhancing institutional capacity, and adopting best practices from global experiences, African nations can harness the benefits of governance innovations to ensure the long-term success of their industrial parks, ultimately contributing to broader economic development and poverty alleviation across the continent.

## 9. Recommendations

Policymakers should encourage transparency in governance and regulatory frameworks, promote policies that attract investment and facilitate smooth public-private partnerships, and establish monitoring and evaluation frameworks to continuously assess the performance of industrial parks.

Investors are advised to engage with local communities and stakeholders to understand the socio-economic context and consider long-term sustainability in investment strategies, including environmental and social governance.

Local Governments are also encouraged to enhance capacity-building initiatives to strengthen institutional

governance and management skills and foster collaboration among different levels of government to ensure alignment in policies supporting industrial parks.

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