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Industrial Policy and Its Role in Driving Structural Transformation in Developing Economies

Maulana Usman¹

¹ Universitas Diponegoro, Semarang, Indonesia

Abstract

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This article explores the role of industrial policy in driving structural transformation in developing economies, a topic that has gained renewed attention amid shifting global economic dynamics and development challenges. The main research question asks how industrial policy contributes to economic upgrading and what factors determine its success or failure in different national contexts. Through a systematic literature review, the study synthesizes evidence from peer-reviewed journal articles, institutional reports, and key academic works. The review identifies recurring themes related to institutional capacity, coordination mechanisms, learning processes, and the evolving scope of industrial policy beyond traditional manufacturing. The analysis is organized thematically and draws on both historical and contemporary examples to examine how policy tools interact with broader development strategies. The findings highlight that industrial policy can significantly support structural change when it is context-specific, performance-based, and integrated with complementary investments in infrastructure and skills. This study contributes to ongoing debates by offering a clearer understanding of what makes industrial policy effective in fostering long-term economic transformation in the Global South.

1. Introduction

Structural transformation is widely regarded as a fundamental driver of sustained economic development in low- and middle-income countries. It refers to the process by which economies shift from a dependence on low-productivity sectors typically agriculture and extractive industries towards higher-productivity activities such as manufacturing and modern services. This transformation is not only associated with productivity gains but also with employment generation, export diversification, and technological upgrading. Despite its importance, many developing countries have struggled to achieve meaningful structural transformation. Instead, they face premature deindustrialization, stagnant productivity, and limited integration into higher-value segments of the global economy (Aiginger & Rodrik, 2020).

In this context, the role of industrial policy has regained prominence in both academic and policy circles. Industrial policy, broadly defined, encompasses deliberate government actions aimed at influencing the structure of the economy by supporting selected sectors or activities considered critical for national development. These actions may include subsidies, infrastructure investments, skill development programs, targeted credit, and trade protection. However, modern industrial policy is increasingly understood as more than sector-picking; it involves strategic coordination between public institutions and private actors, capability building, and adaptive policy learning (Aiginger & Rodrik, 2020).

Much of the renewed interest in industrial policy stems from dissatisfaction with the outcomes of market liberalization strategies promoted in previous decades. While liberal reforms contributed to macroeconomic stability, they often failed to catalyze the kind of deep structural change needed for dynamic growth in the Global South. As a result, development scholars have called for a more pragmatic approach one that acknowledges the state's potential role in overcoming market failures, addressing coordination problems, and promoting structural diversification (Rodrik, 2020).

The success of East Asian economies has served as a powerful example of how targeted and well-managed industrial policy can lead to rapid and sustained structural transformation. Recent cross-national panel studies confirm that effective industrial policy frameworks remain relevant when combined with strong institutions and innovation systems even in today's more complex global context (Aigner & Rodrik, 2020; Whitfield et al., 2020).

At the same time, applying industrial policy in today's developing countries comes with distinct challenges. These include limited institutional capacity, risk of rent-seeking, political capture, and the difficulty of designing policies that are both ambitious and realistic. Nevertheless, recent empirical experiences from various countries have been analyzed in the modern literature, offering important lessons on what works, under what conditions, and why (Whitfield et al., 2020; Khan, 2022).

This article aims to contribute to this evolving conversation by conducting a Systematic Literature Review of scholarly works published until 2022. The review seeks to explore how the concept of industrial policy has evolved, the mechanisms

through which industrial policy influences structural transformation, and what institutional or contextual factors shape the effectiveness of such policies. By synthesizing recent theoretical insights and empirical studies, this review provides a clearer understanding of the role of industrial policy in facilitating structural change in developing economies and offers guidance for designing effective policy strategies in contemporary development contexts (Xiao & Watson, 2019).

2. Literature Review

The literature on industrial policy in developing economies has evolved from earlier skepticism to a more nuanced understanding of its role in supporting long-term structural change. Rather than framing state intervention as inherently distortionary, recent studies highlight how targeted government actions can address market and coordination failures, stimulate productivity, and facilitate learning in strategic sectors (Aiginger & Rodrik, 2020; Whitfield et al., 2020).

New structural economics advocates for industrial policy that aligns with a country's current comparative advantages while gradually promoting technological upgrading (Lin & Xu, 2020). This approach offers a pragmatic middle ground between laissez-faire and heavy-handed state planning. Similarly, industrial policy must support long-term capability development and institutional coordination, emphasizing that transformation is a dynamic process rather than a single event (Aiginger & Rodrik, 2020).

Classic lessons from East Asia remain influential. Studies of East Asian industrialization highlight how the state effectively coordinated industrial upgrading

through performance-based incentives and export discipline (Rodrik, 2020). While today's conditions differ, the principle of disciplined coordination remains relevant for developing countries designing modern industrial strategies (Whitfield et al., 2020; Khan, 2022).

Recent empirical work supports the idea that industrial policy can be effective when embedded in capable institutions. Whitfield et al. (2020) demonstrate how Ethiopia's industrial parks and export strategies achieved modest success in selected sectors when supported by focused public-private engagement and learning-oriented policy management (OECD, 2022).

In summary, the literature increasingly views industrial policy not as a static blueprint but as a learning process one that requires strategic coordination, institutional support, and responsiveness to both domestic constraints and global shifts (Aiginger & Rodrik, 2020).

3. Methods

This study uses a Systematic Literature Review (SLR) approach to explore how industrial policy contributes to structural transformation in developing economies. An SLR was chosen to provide a comprehensive and structured understanding of existing academic publications that directly addressed the relationship between industrial policy and structural transformation. By systematically collecting, evaluating, and synthesizing previous research, the study aims to identify key themes, theoretical contributions, and evidence-based insights that can inform both academic debate and policy design.

The review followed a three-step process: planning, searching, and analysis. In the planning stage, the main research questions were defined, focusing on how industrial policy is conceptualized in the literature, through what mechanisms it influences structural transformation, and what factors shape its effectiveness in different contexts. The inclusion criteria were then established: only peer-reviewed journal articles, working papers from reputable institutions (such as the World Bank, OECD, and UNU-WIDER), and academic books published in English were considered. One key exception was the inclusion of foundational work due to its central role in shaping the industrial policy literature (Aigner & Rodrik, 2020).

The search process was conducted using a narrative and transparent strategy to consolidate fragmented evidence from multiple sources. The search was conducted using academic databases such as Scopus, Web of Science, and Google Scholar. Keywords included combinations of terms such as industrial policy and structural transformation. Boolean operators were used to improve the search accuracy. To ensure relevance, titles and abstracts were screened manually, followed by full-text review of selected articles (Xiao & Watson, 2019).

In the analysis stage, the selected studies were reviewed to extract relevant information regarding their objectives, methodologies, findings, and policy implications. Thematic coding was applied to identify patterns and categorize the literature into conceptual, empirical, and case-based studies. Particular attention was given to how the literature explains the channels through which industrial policy operates and the institutional conditions that support or constrain its success (OECD, 2022).

The final sample included approximately 30 core publications that directly addressed the relationship between industrial policy and structural transformation in developing economies. The findings were then synthesized using an evidence-based narrative framework to identify patterns, contradictions, and gaps in the literature, forming the basis of the discussion and conclusion sections (Whitfield et al., 2020; Khan, 2022).

4. Results and Discussion

The findings from the systematic literature review reveal several important insights into the role of industrial policy in fostering structural transformation in developing economies. One consistent theme across the literature is that the success of industrial policy is highly dependent on the institutional and political context within which it is implemented. Scholars emphasize that policies are more effective when they are rooted in local realities and involve active state–business engagement. This embeddedness allows policymakers to access information from producers, monitor sector performance, and revise interventions over time. In countries like Ethiopia, state involvement in industrial sectors such as textiles has been guided by ongoing interaction between government and industry, allowing for adjustments based on real-time feedback (Whitfield et al., 2020). Such adaptive governance contrasts with older models of top-down planning and instead supports a more experimental and flexible approach to policy-making, often referred to as a process of discovery (Rodrik, 2020).

Another recurring theme is that industrial policy requires mechanisms of coordination, discipline, and learning to avoid inefficiency and capture by vested interests. Modern empirical experiences demonstrate that linking government incentives with measurable performance indicators helps maintain firm competitiveness. Cross-country reviews emphasize that effective industrial ecosystems are achieved when reforms are accompanied by strong public–private coordination and institutional learning mechanisms (Aigner & Rodrik, 2020).

In addition to governance and coordination, the literature also highlights the evolving scope of industrial policy. Contemporary development analyses stress that industrial strategies in post-2018 contexts should integrate sustainability-oriented objectives, technological disruption responses, and inclusive growth mechanisms (OECD, 2022). This broader perspective reflects structural changes in the global economy and recognizes that transformation today may involve a wider range of productive sectors.

The review further finds that industrial policy cannot succeed in isolation from other areas of development policy. Complementary investments in infrastructure, education, skills development, and trade facilitation are essential to realize the full benefits of industrial interventions. Recent syntheses of evidence-based literature underscore that aligning industrial policy with institutional capacity building and human capital development enhances resilience and long-term structural transformation (Whitfield et al., 2020; Khan, 2022).

Altogether, the findings suggest that industrial policy remains a vital tool for structural transformation, but its success depends on a combination of state

capability, institutional learning, coordination mechanisms, and strategic alignment with broader development objectives. Rather than following a one-size-fits-all model, countries must tailor their industrial strategies to their specific development stage, institutional context, and comparative advantage (Aigner & Rodrik, 2020).

5. Conclusion

This study has explored the role of industrial policy in promoting structural transformation in developing economies through a systematic review of recent literature (Xiao & Watson, 2019). The findings suggest that industrial policy, when designed and implemented effectively, remains a powerful tool for guiding economic development and moving countries toward more productive and diversified economic structures. Key to its success is a strong alignment with institutional capacity, adaptive governance, and strategic coordination between government actors and private sector stakeholders (Aigner & Rodrik, 2020; Whitfield et al., 2020). Rather than relying on rigid or outdated models, modern industrial policy should be flexible, learning oriented, and embedded in local realities.

Successful industrial policy also requires clear performance incentives, monitoring mechanisms, and the political will to withdraw support from underperforming sectors. Moreover, it must be supported by complementary investments in infrastructure, skills development, and trade related capabilities. As the global economy evolves, recent structured syntheses emphasize that modern industrial strategies should integrate sustainability-oriented objectives, technological disruption responses, and inclusive growth mechanisms (OECD, 2022). This

approach can help countries respond to current global challenges while pursuing long-term transformation goals.

In conclusion, there is no single blueprint for industrial policy. Each country must develop its own strategy based on its stage of development, institutional conditions, and economic priorities. However, cross-country analyses in the modern industrial policy literature confirm that with coherent vision, strong coordination, and a commitment to learning, industrial policy can facilitate more inclusive and sustainable development paths for the Global South (Aiginger & Rodrik, 2020).

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