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# Economic Growth without Structural Transformation: A Review of Industrial Policy in Ghana

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## Abstract

The present review examines Ghana's past experience with industrial policy implementation, and pinpoints the factors that led to their failure to produce the desired outcome, shedding light on the challenges encountered and their implications for future policy endeavors. Furthermore, the review delves into the current model of development and how it has not been successful in promoting economic growth or transforming the structure of the economy. Noteworthy obstacles faced by the country include limited linkage between economic growth and structural and economic transformation. To overcome these obstacles, this review argues for a return to industrial policy implementation in Ghana. The current shifts in the global context, coupled with the enhanced state of fundamental institutions and favorable macroeconomic conditions in Ghana, present an opportune moment for the implementation of industrial policies. By tackling these issues head-on, Ghana can achieve sustainable economic growth and develop a more resilient and diversified economy.

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## 1. Introduction

The role of economic transformation in economic development has received increased attention from scholars in recent years. Recently considerable literature has grown up around the topic. (Worldbank, 2021), (McMillan & Headey, 2014), and (McMillan, Rodrik, et al., 2017), all highlight the importance of economic transformation and the lack of it as the explaining factor behind the weak linkage between economic growth and welfare improvement in many African countries. Economic transformation encompasses a persistent process characterized by the reallocation of labor and other resources from sectors characterized by lower productivity to those exhibiting higher productivity levels, commonly referred to as structural change. Simultaneously, it entails efforts aimed at enhancing productivity growth within sectors, fostering advancements in the economic performance (McMillan & Headey, 2014; Worldbank, 2021).

Structural transformation and structural change are related concepts but have slight differences. Structural transformation

is a process of long-term and systemic changes in an economy's composition and organization that involves a fundamental shift in economic structure towards high-productivity sectors. It includes changes in sectoral composition, technology advancements, employment patterns, and overall improvements in the economy's productive capacity. The role of structural transformation in promoting countries' development has been long observed and is well documented in the works of Timmer & Akkus (2008), Duarte & Restuccia (2010), and (McMillan & Headey, 2014). Whereas structural change focuses specifically on the shifts in the relative importance or composition of different economic sectors. It refers to the changes in the relative size and contribution of various sectors. Structural change can occur within the framework of structural transformation, as it represents a subset of changes that contribute to the broader transformation process (Kanbur, 2017).

There is currently an observable trend of structural change characterized by a shift towards a service-led economy, bypassing the traditional manufacturing sector. This phenomenon has been widely documented across developing nations. Likewise, in Ghana, this pattern of structural change is clearly following this pattern. The deviation from the conventional industrialization path is known as "structural change without industrialization," which indicates premature deindustrialization (Rodrik, 2013). The negative consequences of premature deindustrialization include a lack of employment opportunity, reduced productivity in alternative sectors such as agriculture or services, and overreliance on these sectors which is less capable of generating high-paying jobs. There is a growing body of literature that prescribe the adoption of industrial policy in many African countries, as an instrument to bring about structural, and economic transformation (Ayelazuno, 2014).

Industrial development, particularly the growth of manufacturing industries, is widely recognized in the literature as a pivotal factor in structural and economic transformation. Its significance lies in its capacity to generate employment opportunities, foster technological advancements, and stimulate economic growth (McMillan, Rodrik, et al., 2017). The foundation for understanding the role of industries, specifically manufacturing, can be traced back to the work of Nicholas Kaldor and his formulation of Kaldor's three laws<sup>1</sup>. These laws provide a comprehensive framework that elucidates the interplay between industrial development, productivity gains, and overall economic progress (Yülek, 2018). Rodrick (2013) has shown the importance of manufacturing in achieving unconditional labor productivity convergence, across regions and countries, convergence between poorer and richer countries is faster when resources are channeled toward manufacturing sectors (McMillan, Page, et al., 2017).

Rapid industrial development has been the most remarkable in East Asia, positioning the region as a global economic powerhouse (Stiglitz, 1996). The growth experience of East Asia economies has demonstrated the importance and the interlinkage between industrial policy, fast economic growth, structural and economic transformation. Industrial policy plays a vital role in the technology gap reduction relative to the world technological frontier and generating international competitiveness (Cimoli & Porcile, 2013; J. Y. Lin & Monga, 2013). The successful economic performance of East Asian economies has been widely attributed to the effective implementation of industrial policies (Stiglitz, 1996; Akkemik, 2008; Cimoli & Porcile, 2013; J. Lin & Stiglitz, 2013; Yülek, 2018).

In the case of Africa, the push for industrialization started in the 1950s and 1960s, when newly independent countries sought to promote industrial development by implementing

industrial policies. Recognizing industrialization as the primary vector of growth, different industrial promotion policies have been tried (Marti & Ssenkubuge, 2009). Industrial policy has long been a subject of debate and experimentation in Africa, with policymakers and scholars grappling with the challenges of promoting economic development through industrialization. While numerous policies and strategies have been aimed at improving agricultural and industrial sectors, the efficacy of these efforts remains questionable. However, there has been a recent resurgence of interest in industrial policy as an instrument to stimulate economic growth and development in the continent.

When implementing industrial policies, African countries prioritized import substitute industrialization (Marti & Ssenkubuge, 2009; Grabowski, 2015). This policy is believed to have shifted resources out of the sectors where the continent had a comparative advantage (mining, primary sectors) toward sectors where it did not have it (final goods). Tools such as tariffs, quotas, and foreign exchange controls were used to protect domestic industries. State ownership was used to 'guarantee supply chain stability' and resource allocation. Agriculture was neglected due to its low productivity. Tools such as tariffs, quotas, and foreign exchange controls were used to protect domestic industries. State ownership was used to 'guarantee supply chain stability' and resource allocation. The state used its monopsony power to push down agriculture prices, effectively shifting resources out of agriculture -one consequence of this policy of neglecting agriculture can be felt even today; agriculture production didn't keep up with population growth. According to Grabowski, from 1961 until 2009 food production in Africa all but stagnate, however, the protected sectors failed to gain in productivity, and countries facing financial constraints dictate the failure of this strategy. The first industrial policy implementation attempt lasted until the end of the 1970s and the beginning of the 1980s when industry policy fell out of fashion (due to substantial financial strain on countries' public finances) and was replaced by the neoliberal agenda (Ansu et al., 2016; Geiger et al., 2019). This period of neoliberalism materialized in the Washington Consensus policy package, which became the dominant ideology in the world and Africa. This period saw a move (under external advice and conditionality) toward the liberalization of the markets, privatization of State-Owned Enterprises (SOE), macroeconomic stabilization, economic opening, and so on. It was a period of declining GDP per capita and a decline in the industrialization process in Africa (Noman & Stiglitz, 2015; Stiglitz et al., 2013).

Against this background, this study proposes to critically review Ghana's current development model and assess its effectiveness in achieving structural and economic transformation. The study argues for the reintroduction of industrial policy implementation in Ghana as a representative

<sup>1</sup> These laws provide provides the rationale for manufacturing promotion, the first law states that the manufacturing is the engine of growth, the second law

focuses on the role of labor productivity in industrial growth, and finally, the third law addresses the relationship between industrial growth and its positive effect on the growth of the non-manufacturing sector.

case of failed industrialization in Africa, considering the observed weak linkage between economic growth and structural and economic transformation. The research examines Ghana's previous experiences with industrial policy implementation and analyzes the country's current industrial structure and development plan, which includes provisions for the implementation of industrial policy.

The paper begins by providing the theoretical foundations of industrial policy, followed by a historical overview of industrial policy implementation in Ghana. Additionally, as evaluated Ghana's present industrial structure is analyzed, and its alignment with the country's development strategy is evaluated. The ultimate aim is to provide insights into the importance of industrial policy in driving structural and economic transformation in Ghana.

## 2. Industrial policy: Theoretical underpinning

The industrial policy encompasses a set of governmental measures and interventions aimed at fostering and accelerating economic development, particularly in the context of promoting industrialization. This term is often associated with the Japanese government's strategic initiatives and policies implemented to facilitate and expedite the process of economic growth and industrial advancement (Akkemik, 2008). Industrial policies are designed to affect resource allocation, complement market failure, and income distribution. It targets selected industries based on their potential for technological upgrade, productivity growth, and high-income elasticity (Itoh et al., 1991). In a recent study, (J. Y. Lin & Monga, 2013) makes a case for comparative advantage as the guideline for sectorial targeting. This definition of industrial policy stresses the “vertical” (picking the winner) approach to industrial policy. A “horizontal” (level playfield) approach also focuses on improving the general macroeconomic and social environment. The industrial policy usually targets manufacturing promotion, as manufacturing more easily checks the boxes of desirable characteristics (technological potential, high-income elasticity, productivity growth) for sectorial promotion. However, if we take a broader view of industrial policy, Rodrik (2004), defines it as any policy designed to affect the structure of an economy; it can be the service sector, for instance. Market failure (information asymmetry, issues of investment coordination, information asymmetry) is among the most compelling arguments favoring government intervention.

The widespread presence of market failures in developing countries presents a compelling argument for the implementation of industrial policies. The historical achievements of economies in East Asia (e.g. Korea, Taiwan) provide empirical evidence that supports the proactive adoption of such policies (Akkemik, 2008; Wade, 2010; Chang & Andreoni, 2020). Nevertheless, doubts persist regarding the feasibility of effectively implementing industrial policies. These concerns arise from the experiences of various

economies, particularly in Latin America and Africa, where the outcomes of industrial policy implementation have failed to replicate the successes witnessed in East Asia. Such instances have engendered skepticism regarding the effectiveness and applicability of industrial policies, particularly within the Sub-Saharan Africa (SSA) region. It was argued that implementing the industrial policy requires certain “first-rate institutions” and a cadre of bureaucrats which is supposedly challenging to be found in these countries (Chang & Andreoni, 2020; J. Y. Lin & Monga, 2013). In the context of Sub-Saharan Africa (SSA), detractors of industrial policy implementation have highlighted the presence of weak institutional frameworks, politically challenging environments, significant natural resource endowments (which are believed to discourage the pursuit of industrial policy), geographical factors, and other pertinent considerations (Chang, 2013). However, as the author argues, these same types of arguments were used in the past to argue against industrial policies in East Asia. Hence, these are not credible arguments against the industrial policy in SSA. However, it's important to keep in mind the external factor that eventually will limit industrial policy options for Ghana, these include, limited resources, dependence on donor support, and international institutions that will certainly constrain policy options available.

Following a period of waning popularity, industrial policy has regained prominence as a result of several influential factors, including the ascendance of China, the global financial crisis of 2008, and the imperative to address climate change. These developments have rekindled interest in government intervention, particularly in the form of industrial policies, and have renewed discussions regarding their applicability and significance (Chang, 2013; Cherif & Hasanov, 2019; Akkemik & Yülek, 2020). The shifting paradigm within the international sphere, combined with the relatively enhanced state of basic institutions and macroeconomic conditions in Sub-Saharan Africa (SSA), creates a conducive environment for a renewed attempt at implementing industrial policies in the region (Chang, 2013). Given the inadequacies observed in the realms of economic growth and transformation in Ghana, there has been a growing demand for the reintroduction of industrial policy as a means to rectify these deficiencies (Chang, 2013). For instance, Ayelazuno (2014) argues that the failure of Ghana to diversify its economy into industrialization (i.e., manufacturing) explains the paradox of growth without structural transformation. Allocative inefficiency has been identified as a significant factor contributing to the absence of structural transformation in Ghana, particularly in the realms of transportation and the mitigation of transaction costs. Additionally, issues such as risk aversion and information asymmetry have been recognized as potential further hindrances factors (McMillan & Headey, 2014). Conversely, the concept of industrial policy as aforementioned has long been associated with the imperative of facilitating efficient

resource allocation and rectifying market failures (Akkemik, 2008; Itoh et al., 1991; Stiglitz, 1996). Henceforth, it is recommended that the implementation of industrial policy be considered as a means to efficiently facilitate both structural and economic transformation.

### 3. Industrial policy: Theoretical underpinning

#### 3.1 Economic growth performance

Ghana is at the forefront of economic reform in Sub-Saharan Africa. For instance, after independence, the country implemented an import substitute industrial policy; later on, when the industrial policy was out of favor, the country was at the vanguard of reforms toward the market economy (Kolavalli et al., 2011). However, the results of these reforms have received mixed evaluations. While some scholars credit it for the high economic growth performance attained ever since others argue that the lack of economic transformation and structural change remains the biggest obstacle. Considering the current development level of Ghana and the competitiveness of its industrial base, one can safely argue that there is a need for significant economic transformation and structural changes, which will likely lead the way for further economic and social development. A specific-purpose industrial policy, which aims to nurture specific industries, is arguably a viable way to achieve such a high aim in industrial development. Therefore, before launching industrial policy discussions, it is pertinent to take a brief historical look into industrial policies in Ghana.

**Figure 1.** Per capita GDP growth



Source: Authors' elaboration based on World Development Indicator.

Note: The GDP per capita growth was determined by dividing the total GDP at a constant local currency by the total population.

Ghana's economic history since gaining independence has been marked by notable fluctuations in GDP growth, mainly due to its overreliance on commodity exports (Gocking, 2005). As shown in Figure 1, In the initial decades following independence, the country pursued a State-Led Development approach, which involved Import Substitution Industrialization (ISI). During this period, the government implemented various policy measures such as import tariffs, price controls, import restrictions, foreign exchange rationing,

and import licensing to protect domestic industries (Killick, 2010a). Figure 1 demonstrates that this phase of Ghana's economic history was characterized by significant volatility in GDP growth, with an average growth rate of only 0.46% during the first ten years of independence. This period of economic instability was closely linked to political turmoil and uncertainty. However, due to factors such as high inflation (averaging 40% in the 1970s), fiscal deficits, imbalances in the balance of payments, and depletion of foreign reserves, Ghana sought assistance from the International Monetary Fund (IMF). Consequently, an economic recovery program was implemented, leading to a shift in the economic strategy (Ackah et al., 2016; Gocking, 2005). The new approach embraced a neoliberal agenda, characterized by economic liberalization. This change in strategy yielded positive outcomes, as reflected in the growth of GDP per capita. The long-term growth, represented by the five-year moving average, exhibited an inflection point and turned positive. In the decade prior to the onset of the COVID-19 pandemic, Ghana's economy experienced an average per capita GDP growth rate of 4.5%. This performance positioned Ghana as one of the fastest-growing economies in Sub-Saharan Africa and globally during that period.

Despite this positive result, there is mixed feeling in the academic community regarding evaluating the impact of this liberal agenda in Ghana. Some scholars credit it for its stable and steady economic growth. In contrast, others point to the lack of economic transformation, structural change, and persistence of low productivity, joblessness, and poverty (Aryeetey & Kanbur, 2008). What (Ayelazuno, 2014) characterizes it as the “paradox of growth without development”. As opposed to the first development period, it is argued that Ghana achieved transformation without economic growth.

### 4. Industrial policies in Ghana: A retrospective review

Economic planning in Ghana precedes the country's independence in 1957. In the period leading to the sovereignty, at least three ten-year plan was devised by the then-colonial governorship (Huq & Tribe, 2018). In 1946, the governor of the Golden Coast, as Ghana was denominated then, approved the country's first Ten-Year development plan, which was followed by another plan in 1950, later transformed into a Five-Year plan (Aryeetey & Kanbur, 2017). The plan was intended to promote the development of the industrial development (Aryeetey & Kanbur, 2017). In fact, the first plan that effectively called for the protection of infant industries in Ghana was developed by the celebrated Nobel laureate economist Arthur Lewis. The plan recommended the use of tariffs and quotas to protect domestic industries, increase agriculture productivity, and the expansion of infrastructures (Gocking, 2005; Huq & Tribe, 2018).

From independence, Ghana aimed to develop an independent economy, which implies being independent of



importing consumer goods; hence the country experimented with an industrial policy based on an import substitution strategy. After 1984, Ghana embarked on an open economy under the auspices of the IMF intervention. For the last two decades, the country has been experimenting with a private-led, natural resource processing industrialization strategy (Aryeetey & Kanbur, 2017; Killick, 2010). Ackah et al. (2016) summarize the phases of Ghana's industrialization can be summarized as follows:

- Import-substitute industrialization (ISI): 1965-1983
- Outward-oriented liberalization strategy: 1984-2000
- Private-led natural resource processing-based industrial development: 2000-present

Killick (2010) further categorizes the initial period into two distinct phases: pre- and post-toppling of the Nkrumah government, spanning from 1951 to 1966<sup>2</sup>. Within this framework, the author asserts that this period represents a significant epoch characterized by a heightened pursuit of developmental objectives.

#### *4.1 Import-Substitute Industrialization (ISI): 1965–1983*

During import-substitute industrialization (ISI), Ghana's government adopted a policy of protecting domestic industries from foreign competition. After independence, Ghana was mainly an import-dependent economy based on natural resource extraction (Ackah et al., 2016; Aryeetey & Kanbur, 2008; Gocking, 2005; Killick, 2010b). The industrial policy in this phase aimed to break away from the colonial system of over-reliance on imported goods. Ghana's economic structure heavily relied on imports for the acquisition of capital and consumer goods (Killick, 2010a).

The government invested significantly in large-scale, capital-intensive manufacturing industries where state-owned enterprises (SOEs) dominated (Gocking, 2005). The main targeted sectors were infrastructure investment, production of previously imported consumer goods, processing and export of primary products, and expansion and development of building materials, electronics, and machinery industries. Industrial policy at this stage primarily targeted increasing manufacturing output. About 90 percent of firms operating in the industrial sector (mining, quarrying, manufacturing, energy, and construction) were manufacturing firms. Light industries such as textiles, garments, soap, wooden products, aluminum, and metal were among the high-priority sectors. The textile industry accounted for 27 percent of the total manufacturing output. The aim was to develop sectoral linkages between the existing sectors and future industries to be developed (Ackah et al., 2016).

The aim was to develop sectoral linkages between the existing sectors and future industries to be developed. The ISI strategy gave special preeminence to SOEs to the detriment of private sector development. During this period, the private sector output went into decline. Policy tools such as tariff and non-tariff protection of domestic industries, licensing, price controls, quantitative import restrictions (quotas), and foreign exchange rationing were widely used. However, these did not produce the desired outcome. It resulted in excess capacity and inadequate linkages with other growth-enhancing sectors, the balance of payments problems, inflationary pressure, and currency devaluation (Ackah et al., 2016). Overall, the ISI strategy did not bring about the desired GDP growth. GDP growth remained negative in most years and averaged -1.67% from 1960-1983.

#### *4.2 Outward-oriented liberalization: 1984–2000*

By 1983, Ghana's production capacity and social infrastructure were in decline. The country went under an Economic Recovery Program (ERP) and Structural Adjustment Program (SAP) by the IMF. These programs generally entail economic liberalization, i.e., the dismantling of industrial policy under implementation. Measures in the SAP include liberalization of the exchange rate, removal of price controls, financial sector liberalization, abolition of the import licensing system, privatization, and the rationalization of the import tariff and taxation system (Ackah et al., 2016; Aryeetey & Kanbur, 2008). The ultimate aim was declared as the development of an internationally competitive economy capable of competing in the domestic market with imported goods and enhancing the capacity to export while developing private-sector-led industrialization as opposed to government-led industrialization previously implemented, which can absorb labors released by the privatization of SOE (Ackah et al., 2016). The liberalization era of the 1980s and the 1990s also witnessed the decline of manufacturing's share in GDP. During the heydays of industrial policy, i.e., the 1960s and the first half of the 1970s, this share was more than 10%. It remained between 10%-15% but declined to below 10% during the liberalization era.

Liberalization of the economy emphasized macroeconomic stability through short-run macro policies, and long-run industrial policies were neglected. The macroeconomic results of the liberalization measures, on the other hand, were favorable, as evidenced by the return of positive economic growth. The per capita GDP growth rate improved largely compared to the previous period and averaged 1.96 from 1983-2004 (see Figure 1). The average growth of the industry was an incredible 11.2% during the first five years of the program (Ackah et al., 2016). However, this growth was mainly led by the energy sector (water and electricity), not manufacturing growth. In addition, due to the over-exposition

<sup>2</sup> Ghana achieved independence in 1957, however, by 1951 it had already achieved self-governance (Killick, 2010).

of domestic firms to international competition and high production costs resulting from a weak currency, among others, the growth of the industry was short-lived. Soon afterward, there was a return to the sluggish growth rate. The government implemented measures such as setting up business assistance funds, export subsidies, support for small and medium enterprises, and establishing exporting processing zones. However, the impact of these measures was negligible despite being positive (Ackah et al., 2016). As a result of these measures, the share of manufacturing in total industrial output (mining, manufacturing, energy, and construction combined) decreased. The mining sector, which benefited from economic opening thanks to better legislation brought by FDI and better capital equipment, outperformed the manufacturing sector, which still accounted for a large share of industrial output. However, this share was on a declining trend (Ackah et al., 2016).

#### 4.3 Private-led natural resource processing based industrial development: 2000-present

In the 2000s, Ghana witnessed a shift in its development strategy, with the government focusing on enhancing economic welfare through poverty reduction, job creation, and inclusive economic growth (Ackah et al., 2016). During this period, the government identified several key challenges that hindered the country's development. One of the identified obstacles was the high cost of credit, which impeded access to financing for businesses and individuals. To address this issue, the government implemented policies and initiatives to promote financial inclusion, enhance the banking sector, and facilitate easier access to credit for productive activities. Another significant challenge was the unreliable power supply. Ghana faced frequent power outages, which negatively impacted industrial productivity and economic growth. The government undertook various measures to address this issue, including investment in power generation infrastructure, encouraging private sector participation in the energy sector, and promoting renewable energy sources.

Rising fuel costs also posed a challenge to Ghana's development efforts. Fluctuating global oil prices affected the cost of fuel imports, leading to increased transportation costs and inflationary pressures. The government implemented strategies to mitigate the impact of rising fuel costs, such as promoting domestic oil exploration and production, encouraging energy efficiency measures, and diversifying the energy mix. Furthermore, intense competition with domestically imported goods was identified as a hindrance to Ghana's development. To address this, the government implemented trade policies aimed at protecting domestic industries, promoting local production, and reducing the reliance on imported goods. Overall, during the 2000s, Ghana's development strategy focused on overcoming challenges related to credit availability, power supply, fuel costs, and competition with imported goods. The government aimed to create an enabling environment for sustainable

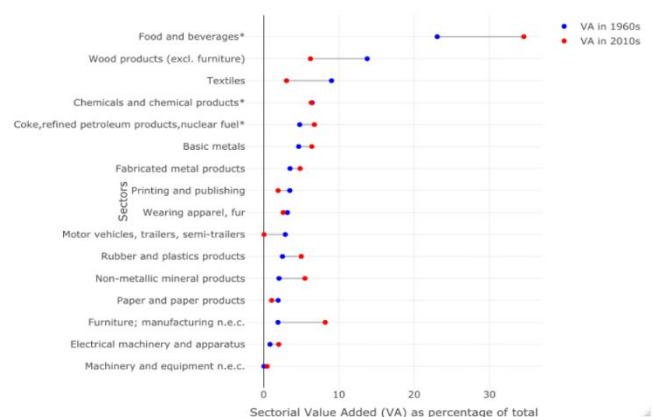
economic growth, poverty reduction, and job creation, fostering inclusive development across various sectors of the economy.

## 5. The current state of industrial policy in Ghana

### 5.1 An outlook of manufacturing industries

Ghana's economic growth has been heavily reliant on commodities exports, particularly oil and gold. Mining, in particular, has played a significant role, contributing to approximately 20% of the country's GDP between 2013 and 2019. However, despite its contribution to GDP, mining is a capital-intensive activity that does not generate substantial employment opportunities. This dependence on commodities exports also exposes Ghana to the risks of price fluctuations, leading to macroeconomic instability (Worldbank, 2021). A relatively small proportion of Ghana's labor force, approximately 15%, is employed in the mining, manufacturing, and energy sectors. Within the manufacturing sector, productivity levels are relatively low, with only a 20% productivity difference compared to agriculture. In contrast, China's manufacturing sector demonstrates a much higher productivity level, with a 500% difference compared to the agriculture (Grabowski, 2015). This disparity indicates a significant productivity gap in Ghana's manufacturing sector. Furthermore, there is a declining trend in productivity as firms employ more workers, suggesting a low absorption capacity in general. This highlights the challenges faced by Ghana in terms of increasing productivity and creating meaningful employment opportunities within the manufacturing sector. These factors collectively underscore the need for Ghana to address its overreliance on commodities exports and enhance productivity within the manufacturing sector. Diversifying the economy, promoting industries with higher value-added activities, and implementing measures to improve productivity are crucial for achieving sustainable economic growth and employment generation in Ghana.

Figure 2. Sectors in Ghana



Source: Authors' elaboration based on United Nations Industrial Development Organization (UNIDO).

Note: The data source is based on Industrial inquiries conducted annually and quarterly, data were converted from ISIC Revision 2 to Revision 3. In the top right corner of the figure, you'll notice "VA" which stands for "value-added." The data displayed represents the average calculated over a 10-year period, spanning from the 1960s and 2010s respectively.

Figure 2.2 depicts the share of different industries in Ghana's total manufacturing value added during the 1960s (blue) and the 2000s (red). Several notable trends can be observed. First, industries such as wearing apparel and fur, food and beverages, and fabricated metal products have experienced a significant increase in their share of total manufacturing value added over time. This suggests that these industries have grown in importance within the manufacturing sector. However, it is important to note that the observed growth in these industries does not necessarily imply substantial technological deepening. Without further evidence, it is challenging to ascertain the extent to which technological advancements have occurred within these sectors. In comparison to East Asian countries like Singapore, where industries with higher value-added and technological content, such as electrical and electronic machines, have increased their share, the Ghanaian manufacturing sector's progress in technological deepening appears constrained (Akkemik, 2008). Moreover, there are industries, such as wood products and motor vehicles, that have experienced a decrease in their share of total manufacturing value added. This decline could be indicative of challenges in these sectors, potentially including limited technological advancements and competitiveness. To better understand the level of technological deepening in Ghana's manufacturing sector, additional research and analysis are required. Detailed assessments of technological capabilities, research and development investments, and the adoption of advanced manufacturing techniques would provide more insights into the country's progress in this regard.

### *5.2 Recent industrialization strategy in Ghana (2018 to present)*

Ghana's industrialization strategy is currently centered around promoting privately-led agro-processing industries as a means to bridge the productivity gap, diversify the economy, and foster private sector-led growth. This strategy encompasses various sectors, including agriculture and agro-processing, manufacturing, tourism, and digital services. The government aims to facilitate the development of these sectors by improving the business environment, enhancing access to finance and technology, and encouraging innovation and entrepreneurship.

To achieve these objectives, the Ghanaian government has implemented several policy initiatives. One such initiative is the One District, One Factory (1D1F) program, which aims to establish at least one factory in each district of the country. This program seeks to promote local industrial development and generate employment opportunities. Additionally, the Ghana Automotive Development Policy focuses on promoting

the local production of vehicles and auto parts. The government has also established industrial parks and special economic zones to attract foreign investment and stimulate the growth of key industries. Examples include the Ghana Free Zones Authority, the Western Nzema Industrial Park, and the Appolonia Business Park. These initiatives provide dedicated spaces and infrastructure to support industrial activities and facilitate business operations. Overall, the industrialization strategy in Ghana is geared towards creating a more diversified, competitive, and resilient economy that can generate higher levels of economic growth and employment. By prioritizing agro-processing industries, improving the business environment, and implementing targeted policies and initiatives, the government aims to foster industrial development and enhance productivity and skill levels across various sectors.

Ghana's industrial policy plan, developed by the Ministry of Trade and Industry, outlines a comprehensive framework for transforming the country into an industry-driven economy. The plan reflects extensive consultations with stakeholders and aims to achieve sustainable economic growth, job creation, and equitable income distribution. Manufacturing is identified as the key sector to be promoted, with 21 thematic areas grouped into four main components: production and distribution, technology and innovation, incentives and regulatory regimes, and cross-cutting issues. The plan sets multiple goals, including diversifying the economy and creating jobs through industrialization and manufacturing promotion, fostering the growth of small and medium-sized enterprises (SMEs) and entrepreneurship, driving innovation and technology transfer through research and development, encouraging value addition and local processing of raw materials, developing infrastructure and services that support industrial growth, and attracting private sector investment in industrial development. Furthermore, Ghana's industrial development priorities include expanding productive employment in the manufacturing sector, modernizing the economy by promoting high-value-added sectors, and enhancing industries' technological capacity. Financial deepening, technological promotion, and macro management are also highlighted as important aspects of industrial policy. Ghana's current industrial policy aligns with the concept of strategic industrial policy, as defined by Chang (2020). It emphasizes correcting market failures in a static sense while promoting innovation to enhance productivity. The policy focuses on creating a level playing field rather than adopting the traditional industrial policy approach of picking winners, as observed in East Asia. Overall, Ghana's industrial policy plan demonstrates a comprehensive and strategic approach to industrial development, emphasizing the promotion of manufacturing, innovation, and private-sector investment. By addressing market failures and facilitating technological advancement, the plan seeks to foster sustainable economic growth, job creation, and a diversified industrial base in Ghana.



## 6. Conclusion

In conclusion, this study presents a comprehensive analysis of industrial policy and its historical implementation in Ghana, emphasizing the urgent need for structural and economic transformation. Through an examination of Ghana's current industrial development and the theoretical rationale behind industrial policy, the study underscores the importance of addressing market failures and promoting diversification.

By exploring sector targeting guidelines and the chronological experience of industrial policy implementation in Ghana, the study provides valuable insights into past failures and their implications for future policy endeavors. It highlights the pressing challenges of limited diversification, heavy reliance on commodities, and a weak manufacturing sector, emphasizing the need to move beyond a commodity-dependent model.

The study calls for a renewed emphasis on industrial policy implementation in Ghana, emphasizing the favorable global context, improved institutional capacity, and conducive macroeconomic conditions. The importance of industrial policy in addressing the issue of weak linkage between growth and structural and economic transformation is emphasized, as this is a common challenge faced by many African countries. The Ghanaian experience with industrial policy and its prevailing development model bears significant relevance for other developing nations grappling with the challenge of weak linkages between economic growth and structural and economic transformation. This experience underscores the fundamental significance of government policies in effectively addressing resource allocation issues and mitigating market failures.

In summary, this study contributes to the understanding of Ghana's industrial policy implementation and highlights the significance of achieving structural and economic transformation. By recognizing past failures, understanding current challenges, and advocating for the return to industrial policy, Ghana can pave the way for sustained and inclusive economic growth, ultimately fostering a more balanced and resilient economic landscape.

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