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## **Structural transformation and inclusive growth in Ghana**

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**Abstract:** This study examines the structural transformation–inclusive growth nexus for Ghana. The data cover the post-independence period for Ghana and are phased into three periods: the post-independence period to the start of the economic recovery programme (ERP) and structural adjustment programme (SAP) (1957–83), the ERP/SAP period to the start of oil production (1984–2010), and the start of oil production to date (2010–17). The paper finds that structural transformation has been generally weak and also associated with limited inclusive growth. In part, the legacy problem relating to political settlements, and with its roots in the immediate post-independence policies, has been important in shaping these outcomes. The paper concludes by noting that there is potential for the country to move to a path where structural transformation will be more impactful for inclusive growth. However, the risk of adverse political settlements still mitigating this potential impact remains.

**Key words:** Ghana, inclusive growth, structural transformation, industrialization

**JEL classification:** I32, O14, O47

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## 1 Introduction

The desire for structural change in Ghana, which is transformative in nature, dates back to the period shortly after the country gained independence. Unfortunately, and over 60 years after independence, many authors will argue that the pace of structural transformation has been rather slow. There seems to be some renewed hope that the country can get on to a path of higher growth and transformation in a way that is inclusive. Inclusive growth here is used to refer to a situation where economic growth is beneficial to all including the poor. This renewed optimism is based on the fact that, generally, economic growth in Ghana over the last two decades has been good, plus the start of oil production gives hope that the country will have increased resources to support the structural transformation efforts. In line with this, there is renewed debate about whether Africa and, for that matter, Ghana will follow the traditional structural transformation trajectory.

Cooke et al. (2016) note that inequality in Ghana has been increasing since the early 1990s. Therefore, and in reference to the inverted Kuznets U-hypothesis, the finding may suggest that although Ghana's economy has experienced increasing and sustained economic growth over the last few years, the structural transformation of the economy may have been rather weak and characterized by growth that has not been inclusive—and hence the increasing levels of inequality. As a result, new debates around structural transformation in Ghana have emerged.

This study therefore provides an analysis of structural transformation and inclusive growth in Ghana. It does this by interrogating policies and how they have impacted on the process of structural transformation in the past six decades after independence. We chronicle and discuss the evolution of various structural transformation policies that have been implemented and how they have shaped inequality and inclusive growth in Ghana.

## 2 Economic history

As early as the thirteenth century, Ghana which was endowed with gold and oil palm, and situated between the trans-Saharan trade routes and the African coastline, was engaging in long-distance trade. For decades, it served as a market for the trade of both raw materials and output for European traders (La Verle 1994). Shortly after the introduction of cocoa to Ghana from the Americas in 1878, it became the country's major export and, by the 1920s, Ghana was producing more than 50 per cent of the world's cocoa. The Cocoa Marketing Board was then established in 1947 to assist farmers stabilize the production and sale of their crop (Miller et al. 2009). Although modern mining methods had developed prior to the inception of cocoa, the benefits largely accrued to the colonial government and foreigners. In the course of time, and using proceeds from primary exports, the country embarked on various infrastructural projects such as transportation, hydro power, harbours, schools, hospitals, and communication lines (La Verle 1994).

The Ghanaian economy's developmental outlook was thought to be remarkable in the early part of the twentieth century. However, the nearly three decades of economic growth experienced from 1900 to 1925 was followed by two decades (1926–45) of economic stagnation. Although the cocoa boom was timely in terms of rescuing the stagnation that the economy was experiencing at the time, post-independence macroeconomic and political challenges further distorted its developmental prospects (Peprah 2017). During the early 1950s, import restrictions were non-

existent and the Ghanaian currency, which was backed by the pound sterling, was easily convertible. Although the cost of living was generally low, some pressures were experienced in urban areas and, particularly, in the housing sector due to the incipient urbanization (Rimmer 1966).

Between 1900 and 1913, the colony's economic performance increased significantly from an average gross domestic product (GDP) growth rate of less than 1 per cent to that of 4.1 per cent per annum, outperforming the average growth rate of 0.8 per cent experienced by both the West African sub-region and the African continent as a whole. Yet, afterwards, economic performance stalled drastically with very significant declines in economic growth rates, resulting in an average rate of -0.2 per cent over the period 1929-38. From 1870 up to about 1950, Ghana's GDP grew at a mean rate of 1.1 per cent per annum (de la Escosura 2012).

The country's total exports increased in the 1950s, and by 1959 the value of exports had more than doubled from GBP 55 million in 1948 to GBP 112 million. The government and the Cocoa Marketing Board accumulated large surpluses of export revenue, particularly in the early post-war period. However, these reserves were depleted over time through excess import spending in later years. Consequently, until 1959, Ghana's external transactions were balanced and there was no accumulation of deficits (Rimmer 1966). The boost in cocoa production and export augmented national income significantly. By 1957, per capita income had reached GBP 70 and the Ghanaian economy was argued to be among the most advanced in the Sub-Saharan African region (Oteng-Ababio et al. 2016; Pickett and Shaeeldin 1990). The impressive economic progress as well as the social infrastructure was further enhanced to foster industrialization and economic diversification (Pickett and Shaeeldin 1990). Industrialization, prior to 1960, was agriculture-led and value addition through manufacturing was primarily for local consumption.

Paid employment grew alongside industrialization and development. Salaried employment increased from 267,000 to 377,000 between 1956 and 1964 alone. In spite of the 150,000 decline in employment in the private sector, the public sector expanded sufficiently to yield a net increment in employment.

Although many Ghanaian nationals were absorbed into the civil service between 1942 and 1947, the development agenda that was pursued at the time, as well as in the early 1950s, was largely driven by foreigners. The indigenes did not play any significant role in the pursuit of development policies and, as such, upon the attainment of independence, there were significant lapses in the overall management of the economy (Peprah 2017). The first five-year post-independence plan, launched in 1959, involved colossal increases in government expenditure and a substantial reliance on imports. Concurrently, cocoa prices and foreign exchange earnings were dwindling. Ghana began to experience balance-of-payments difficulties and was rapidly running out of foreign reserves. Large budget deficits, therefore, led to the imposition of higher taxes and necessitated the enactment of the Exchange Control Act (Act 71) in 1961 by the government to control foreign exchange (Fosu 2001). In 1960, the government resorted to the issue of treasury bill as a means of raising funds domestically to help finance the ever-rising budget deficits (Rimmer 1966).

Banking in Ghana dates back to 1896 when the Bank of British West Africa, which became Standard Chartered Bank in 1985, opened its first branch in Accra. The success of the bank in the new terrain later attracted other foreign banks to the colony. Owing to a few mergers and takeovers that had taken place in the banking sector prior to 1920, only two banks (Bank of British West Africa and Barclays were operative from 1920 to 1950). The Bank of Ghana was instituted later in

1957 after the attainment of independence to oversee the banking sector and serve as banker to the government. Therefore, it was mandated to issue government financial securities on its behalf (Interias 2015).

### **3 Structural transformation and inclusive growth in 1960–80s**

#### **3.1 Trends in structural transformation: A period of stalled industrialization**

The transformation of Ghana's economy in the immediate post-independence period can be described as short-lived primary industrialization. The economy in the first half of the 1960s was largely characterized by high shares of the agricultural value added and modest gains in shares of the burgeoning manufacturing sector. The manufacturing sector share (as a percentage of GDP), for instance, recorded modest increases from 13.7 per cent in 1960 to about 19 per cent in the mid-1970s—growing at an average rate of 6 per cent per year. It then went into a decline in the 1970s and 1980s (see Figures 5 and 2). The increasing share of the manufacturing sector was due to the industrialization drive of the Kwame Nkrumah-led government, which focused on expanding Ghana's manufacturing base as part of the import substitution industrialization (ISI) policies. The manufacturing sector, however, focused on light manufacturing, producing consumables for the domestic market.

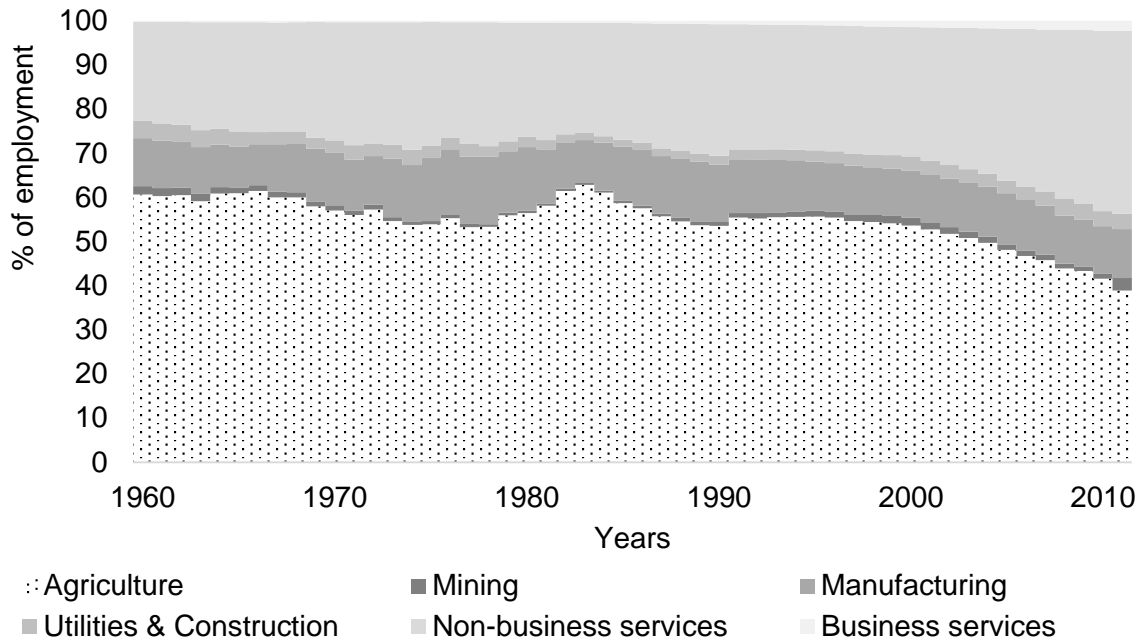
After the early 1960s and up until the mid-1980s, estimates from Timmer et al. (2015) indicate that the economy experienced a stagnation in all major sectors, affecting the overall growth trajectory of the country. The manufacturing sub-sector, which was particularly affected, recorded double-digit negative growth rates in the early 1980s and was the least contributor to economic growth. The unstable and declining growth in the early 1970s and mid-1980s coincided with high instability in Ghana's politics, with four episodes of *coup d'états* in this period (Osei 2001). The period also witnessed high and attendant inflation, largely driven by high levels of budgetary imbalances and central bank financing of budget deficits. It was also characterized by weak institutions and distorted market incentive system due to high controls.

The structure of an economy is also reflected in the employment patterns for the various sectors, as suggested by Aryeetey and Baah-Boateng (2016). Looking at this period, the employment shares of the agricultural sector generally declined from 61 per cent in 1960 to about 58 per cent by the 1980s (see Figure 1). At the same time, the employment shares in the manufacturing sector, although stagnated between 1964 and 1967, continued to rise, averaging a rate of about 2 per cent per year till the end of that decade. The employment shares of the non-business services sub-sector increased from 22 per cent in the early 1960s to 27 per cent by the end of the decade, and remained so till the end of the 1980s. This non-business services sub-sector is characterized by low productivity and low skills, and includes activities such as wholesale and retail activities and repair of motor vehicles. The employment shares of the high-productivity business services sub-sector, on the other hand, remained constant throughout the period at 0.3 per cent annually.

Ghana's export composition during the period remained largely unchanged with the largest component being cocoa. This is indicative of the low levels of manufacturing during this time. Food exports constituted as high as 72 per cent of total exports from the 1960s to the end of the 1970s and declined to about 68 per cent by the end of the 1980s, as seen in Figure 2. The decline in food exports in the early 1980s was due to the extreme droughts and bush fires that were experienced in the country during that period. Also, exports of ores and other metals, although

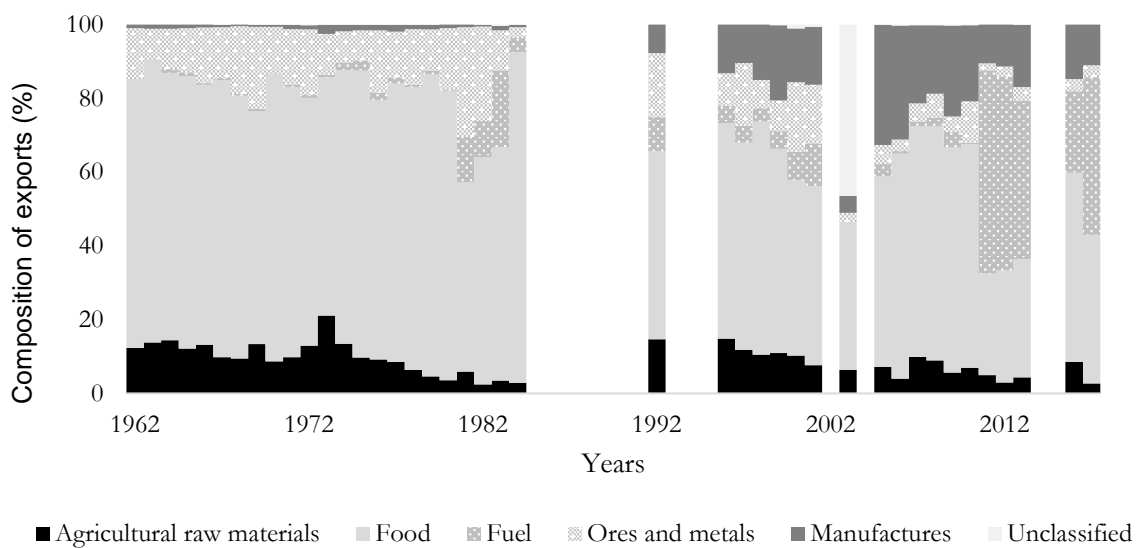
increased throughout the 1960s, declined at the beginning of the 1970s but turned around again in the 1980s. From about the mid-1980s, the country shifted away from implementing the import substitution strategy and adopted a more liberalized trade regime, as recommended under the structural adjustment programme (SAP). This led to increased trade, but with little emphasis on the manufacturing sector. Unsurprisingly, therefore, the manufacturing shares continued to decline and remained insignificant (Figure 2).

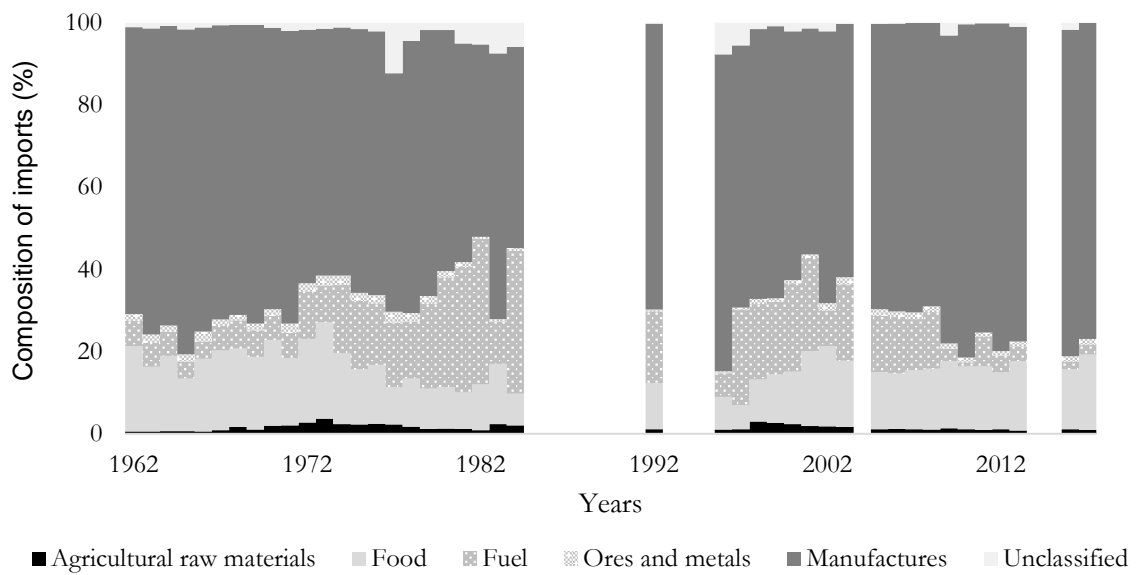
Figure 1: Employment composition, Ghana, 1960–2011



Source: authors' calculations based on GGDC (Groningen Growth and Development Centre) 10-Sector Database Version 2015 (Timmer et al. 2015).

Figure 2: Composition of Ghana's export and imports, 1962–2012

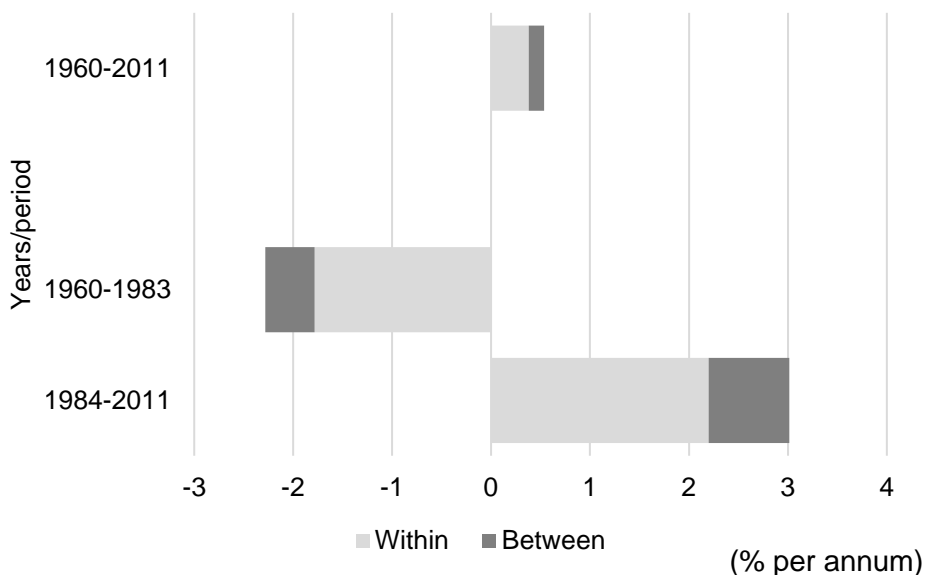




Source: author's calculations based on PovcalNet Version March 2019 World Bank (2019) and UNU-WIDER's World Income Inequality Database (WIID).

From Figures 3 and 4, the labour as well as sectoral productivity ratios tell a compelling story about the growth and the role of the manufacturing sector in the structural transformation outcome for Ghana. Available data indicate that the period between 1960 and 1983 recorded the lowest growth in labour productivity in the history of the country. Productivity growth for both within and between sectors recorded negative growth rates. This trend can be attributed to the political and economic instability that characterized this period (Osei and Jedwab 2016).

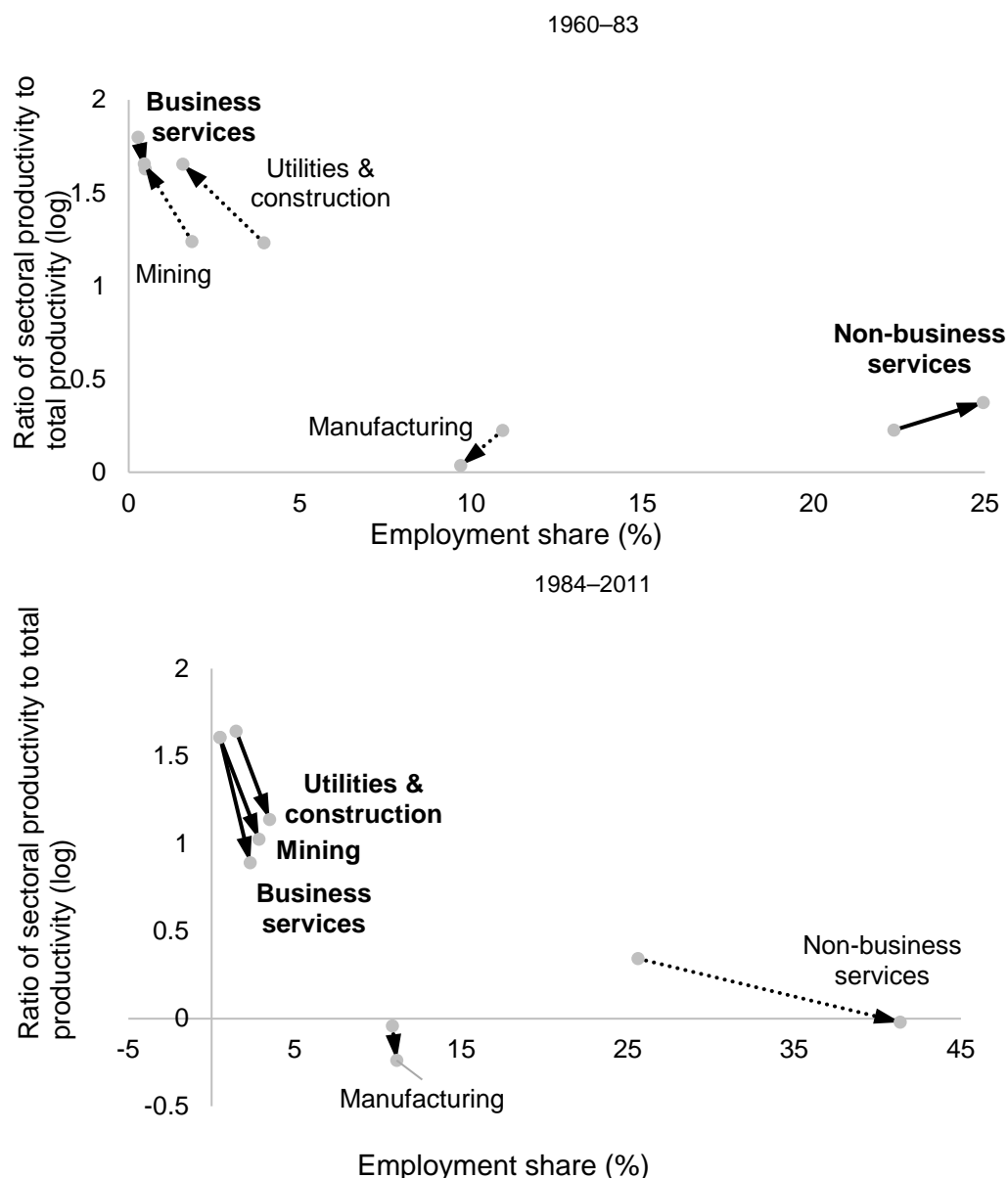
Figure 3: Decomposition of labour productivity growth, Ghana, 1960–2011



Note: Decomposition uses the methodology of McMillan and Rodrik (2011).

Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015).

Figure 4: Changes in labour productivity and employment share, Ghana, 1960–2011



Note: Sectors with higher than economy-wide average labour productivity that experienced an increase in employment share are in bold.

Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015).

Between 1960 and 1983, the high labour productivity sectors included business services, mining, and the utilities and construction sectors. However, these high-productivity sectors accounted for low employment shares. On the other hand, the non-business sector, dominated by informal activities, employed large shares of the labour force but was characterized by low labour productivity. Meanwhile, the declining manufacturing sector during this period also showed low levels of productivity as well as employment shares (see Figure 4). Contrary to the classical structural adjustment trajectory, although the employment shares of the low-productivity agricultural sector declined, there was neither a corresponding increase in employment shares in the manufacturing sector nor an increase in labour productivity. This perhaps was an early



indication of the country's pattern of transformation where the manufacturing sector was to be leapfrogged.

In summary, the nature of Ghana's structural transformation started off with primary industrialization in the early to mid-1960s. Industrialization began to take off then with the manufacturing sub-sector focusing on light manufacturing for the domestic market, as part of the ISI policies that were implemented. However, the industrialization drive stalled from the mid-1960s when the economy began to stagnate amid political and macroeconomic instability. During this period, the various governments focused largely on stabilizing the macroeconomic environment and ensuring sustained growth.

### **3.2 Policies and politics that shaped structural transformation and inclusive growth**

Shortly after independence, the Nkrumah-led administration that took over the reins of governance from colonial rule rigorously pursued an ISI policy. The main aim of the administration's seven-year development plan was to change the structure of the economy through the mechanization of the agricultural sector and rapid industrialization. During this period, the economy witnessed a significant accumulation of physical capital. However, this was not sustained as the economy was characterized by negative growth and rapid increase in inflation rates. According to Frimpong-Ansah (1991), inflation increased from 1 per cent in 1957 to about 23 per cent in 1965. As a result of a worsening macroeconomic environment, the country's balance-of-payment structures and credit ratings deteriorated very sharply, eventually leading to the overthrow of Nkrumah and an end to the socialist's policies on economic and structural transformation.

The two short-lived successive governments after Nkrumah implemented policies that were sharply opposed to the socialist's policies of industrialization pursued before. The ideologies of the National Liberation Council and the Progress Party governments focused more on pro-private capital (Fosu and Aryeetey 2008). Policies during these regimes included disinflationary policies, reduction in domestic public investment, tighter control over import licences, and devaluation of the cedi (Killick 1978). In addition to the currency devaluation, the regimes also pursued policies to liberalize the external sector in order to improve the government's current accounts and reduce budget deficits. Fosu and Aryeetey (2008) note that both total factor productivity and physical capital's contribution to overall growth continued to decline although some positive results with respect to some macroeconomic indicators had been achieved under the new policy direction. The continuous decline in economic growth coupled with increasing fiscal and current account deficits plunged the country into further economic hardship. Unsurprisingly, this was the excuse for the overthrow of the regime in 1972 (Osei 2001).

The decade long decline in Ghana's economic performance from the early 1970s to the early 1980s was characterized by political instability, with the country being governed by five different regimes during this short span (Fosu and Aryeetey 2008). During this period, while these governments pursued different and uncoordinated economic policies, total factor productivity continued to decline. Although dissimilar, Fosu and Aryeetey (2008) argue that the policies pursued in this period focused fundamentally on import substitution, restrictive foreign exchange regime, quantitative restrictions on imports, and price controls. The state had played an important role as a producer in this era. The natural resource sector which was regarded as the backbone of the economy experienced significant declines. The agricultural sector experienced the most decline at this time due to the drought of the early 1980s coupled with en masse migration of the rural population to Nigeria due to the oil boom. The situation was further compounded by the country's

inability to import agricultural inputs to support the sector due to the financial challenges of the time.

The loss of monetary control due to the significant decline in government revenue contributed to increasing inflation, negative interest rates, as well as declining domestic savings and investment. Again, the extreme economic difficulties of the time led to another *coup d'état* in 1981 with the hope of changing the course of the Ghanaian economy. The Provisional National Defence Council (PNDC) regime, as noted by Fosu and Aryeetey (2008), was radical in its policies, similar to socialist Nkrumah's ideology of state control. Initially, policies implemented focused on reducing the role of the private sector while increasing the role of the state in the provision of essential services, with the aim of protecting the poor from both local and foreign capitalists that had dominated the private sector. The economy was characterized by price controls, import duties, and tariffs on selected commodities.

The continued hardship despite the radical interventions by the PNDC government, compelled the government to reconsider its earlier stance on policy prescriptions from international financial institutions. This led to the government under the leadership of J.J. Rawlings to sign up for the economic recovery programme (ERP) in 1983. The medium-term objective of the ERP was to increase the capacity of the economy to adjust to both external and internal shocks and to generate sustainable growth and development (Aryeetey and Harrigan 2000).

After years of its implementation, Ghana's success in implementing the adjustment programmes was hailed by the World Bank (1993) and some researchers (inter alia, see Corbo and Fisher 1995; Osei 2001; Killick 2000). Despite the growth spurts, however, progress was not as strong as expected (Aryeetey and Tarp 2000). Questions began to surface as to why the growth rates were slower than those of economies in East Asia. In line with the tenets of the ERP, the government pursued policies that were largely geared towards macroeconomic stability as well as improvement in the country's balance-of-payment structures. Aryeetey and Tarp (2000) argued that the packages of macroeconomic and institutional policies pursued in Ghana during the implementation of the ERP was not based on a unified framework of economic theory. Ghana pursued two categories of policies, intended, first, to achieve economic stabilization and, second, to restore economic growth through improved efficiency and productive capacities. Policies related to macroeconomic stabilization included a set of fiscal, monetary, as well as trade and payment policies.

In the early years of reform (ERP), specific policies that focused on achieving fiscal balance were implemented. Government expenditure was expected to reduce significantly by restricting increases in wages and salaries, particularly of upper-ranked public officials while increasing government revenue. The adjustment programme of restrictions on public sector employment and expenditure on wages pushed a substantial proportion of the Ghanaian labour force into the informal sector. The goal of expenditure reduction was achieved temporarily when government spending reduced to about 8 per cent of GDP against the projected value of 9.5 per cent of GDP in 1983 (Aryeetey and Tarp 2000).

By 1983, the government had raised tax rates on rental income and on consumables such as beer, cigarettes, and gasoline while new taxes on wealth, including property and non-commercial vehicles, were also introduced. The government also introduced simplified tax schedules that capped the import tariff at a maximum of 30 per cent. This was complemented with a strengthening of the government's tax collection system with the aim of boosting revenue collection. The policies on revenue mobilization yielded positive results and government revenue increased significantly (Aryeetey and Tarp 2000). As a result of the increasing revenue, the

economy was able to improve its fiscal balance, and this reflected in a decline in government domestic borrowing. Although spending and revenue remained stable for some time, the government began to focus on providing and improving incentives for the private sector so as to increase its contribution to growth.

In promoting structural transformation, Rodrik (2013) argues that elements such as respect for property rights, investment in public infrastructure, education and health, and macroeconomic stability may be critical enablers of sustainable growth but may not necessarily manifest in structural transformation. Also, investment in political stability and other macroeconomic fundamentals may create a conducive environment to better deal with market failures required for structural transformation. Studies such as Holden (2012), Kelsall (2011), and Poulton (2014) have shown evidence of structural transformation in relatively closed regimes in Brazil, South Korea, Ethiopia, and Rwanda. Sen's (2015) position seems to support the idea of a conscious policy to change the structure of an economy and contends that structural transformation is more likely when specific industries are favoured and incentivized to operate and when market failures within and across sectors are dealt with.

In the particular case of Ghana, during this period, although investment in public infrastructure provided the required social infrastructure, the level of macroeconomic instability and political instability in particular did not create the required environment for the transformation of the economy. However, studies such as Holden (2012), Kelsall (2011), and Poulton (2014) discount the importance of political and macroeconomic stability in the structural transformation process, citing examples from South Korea, Ethiopia, and Rwanda.

In the absence of data on inclusive growth indicators during this period, Gyimah-Boadi and Jeffries (2000) suggest that growth in the early 1960s to the mid-1960s was not inclusive. They explain that the government's highly ambitious strategy of import substitution had the political advantage and payoffs for the most active political constituency of the Convention People's Party as well as a large number of educated and semi-educated graduates. Unfortunately, the ISI policies were largely dependent on the cocoa sector which was dominated by less-educated or illiterate farmers.

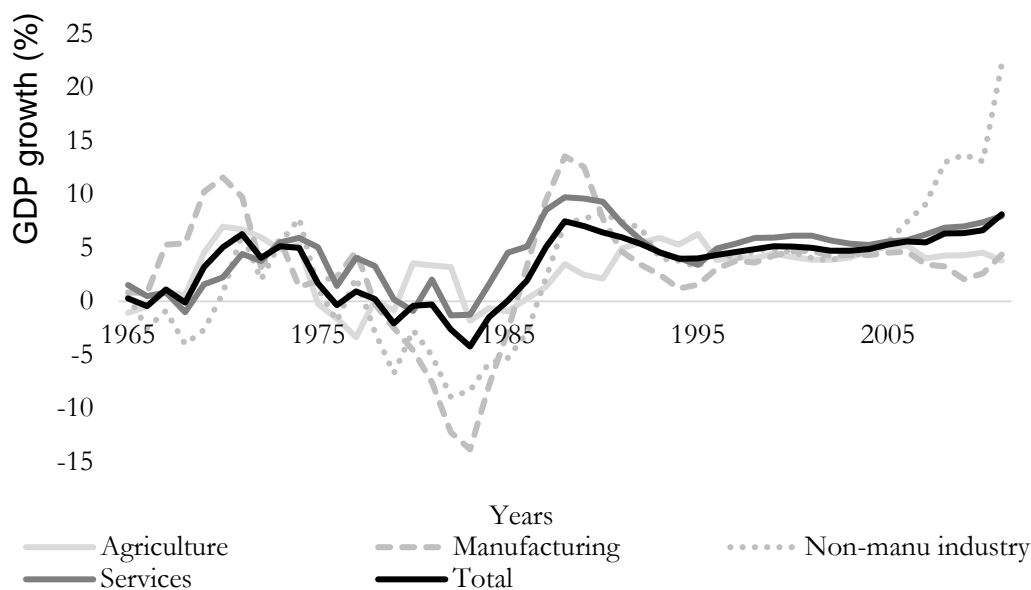
Similarly, under the leadership of Busia whose ideology on liberalization focused on the rural population and particularly on cocoa farmers, it is reported that the levels of investment was biased in favour of the Ashanti and Brong-Ahafo regions which were seen as the main political constituency of the regime (see Gyimah-Boadi and Jeffries 2000; Resnick 2016). Ignatius Acheampong's tenure (1972–78) was also characterized by policies that catered to the needs of the urban population that had been negatively affected by the policies implemented under the previous regime. It is therefore clear that the single most important economic policy during this period was heavily influenced by 'political rationality' (Gyimah-Boadi and Jeffries 2000). It is based on this line of thinking that Frimpong-Ansah (1991) characterized the political elite at the time as 'vampire elements' who had remained even after the overthrow of Nkrumah (see Osei 2001).

## 4 Structural transformation and inclusive growth between 1984 and 2010

### 4.1 Trends in structural transformation: A period of primary industrialization amid a changing policy and political space

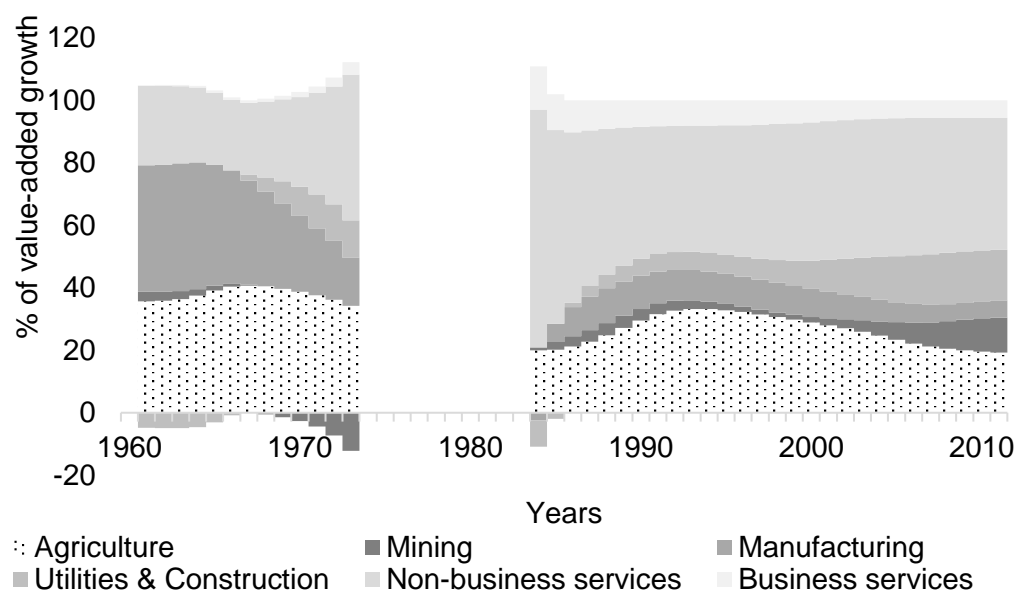
Following the poor economic performance in the 1970s and early 1980s, Ghana adopted the International Monetary Fund (IMF)–World Bank supported the ERP/SAP in 1983. Overall economic growth and that of all economic sectors including manufacturing and other macroeconomic indicators immediately responded positively to the ERP/SAP. Growth, however, became sluggish again by the end of the 1980s, declining continuously until 1995, from where a relatively more stable and sustained growth was observed in all economic sectors (Figure 5). Growth in manufacturing followed a trend similar to overall economic growth and was the most responsive to policy measures, particularly in the early years of the implementation of the ERP/SAP. Between 1989 and 2010, the manufacturing sector’s contribution to overall economic growth declined continuously while that of the utilities and construction sector and, later, mining grew (Figure 6). Thus, manufacturing became a relatively less important sub-sector of industry at the expense of the other sub-sectors and during a period where industry’s contribution to overall economic growth increased. The services sector remained the largest contributor to economic growth throughout this period.

Figure 5: Overall and sectoral GDP growth (five-year moving average)



Source: author's calculations based on WIID (UNU-WIDER).

Figure 6: Growth decomposition of HP-filtered value added by sector, Ghana, 1960–2011



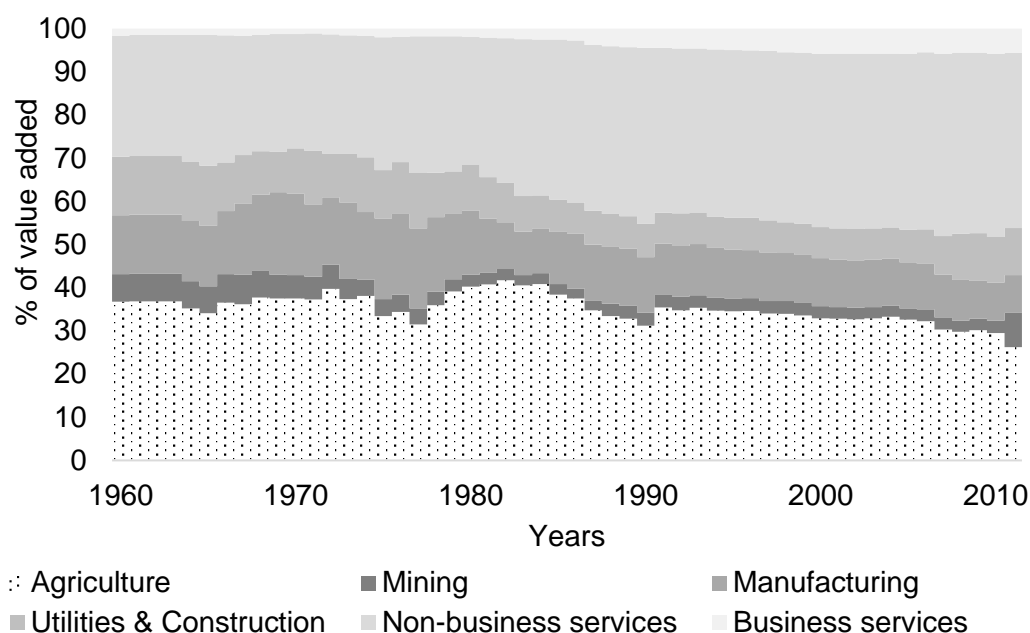
Note: Excludes years that have values of sectoral contribution to value-added growth smaller than -15.0 per cent.

Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015).

Also, following an initial expansion in the second half of the 1980s, the manufacturing sector's share in value added gradually declined from 13.3 per cent in 1989 to 8.8 per cent in 2010 (Figure 7). The services sector's contribution<sup>1</sup> to value added gained 10 percentage points between 1984 and 2010 to hit 48.3 per cent in 2010 while that of the agricultural sector declined continuously from 41 per cent in 1984 to 29.5 per cent in 2010 (Figure 7). The trends in value-added shares across the sectors were also reflected in sectoral employment shares within this period (Figure 1). Overall economic growth in this period was, therefore, largely driven by expansion in the services sector, and to some extent the non-manufacturing sub-sectors of industry, while the manufacturing sub-sector generally remained stymied in the context of a period of sustained and stable overall economic growth. One can assert that the structure of Ghana's economy responded to the ERP/SAP but in a way that rather promoted the services sector and the non-manufacturing sub-sectors of industry while the efficacy of the policies for the manufacturing sector was largely muted.

<sup>1</sup> The services sector's contribution to valued added is made up of business services and non-business services.

Figure 7: Value-added composition, Ghana, 1960–2011



Notes: Business services: financial intermediation, renting, business activities. Non-business services: (a) wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods, hotels and restaurants, (b) transport, storage, communications, (c) public administration, defence, education, health, social work, and (d) other community, social and personal service activities, activities of private households. These notes apply to Figures 1, 4, 6, 7, 12, and 13.

Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015).

A key element of the SAP in Ghana was a shift away from an ISI strategy to an export-led strategy and a more liberalized trade regime. Associated with this policy shift was that Ghana's economy became characterized by high and growing trade deficit and a change in the composition of merchandise exports. The export of manufactures expanded but total merchandise exports continued to be dominated by food and agricultural raw materials, while imports remained dominated by finished manufactures (Figure 2). Indeed, the trade deficits recorded in this period were largely accounted for by unfavourable balance-of-trade in manufactures. We note that the proportion of imports accounted for by manufactures saw increases in this period following a gradual decline that was observed between the 1960s and early 1980s (Figure 2).

In spite of the unfavourable trade performance, growth in aggregate labour productivity between 1984 and 2010 averaged 3 per cent per annum, compared with an abysmal average of negative 2.3 per cent per annum recorded for the period 1960–83 (Figure 3). However, the growth in labour productivity in 1984–2010 was largely driven by within-sector differences in productivity just like that observed for the period 1960–83. This could suggest one of two things. First, it could be the case that differences in labour productivity across the sectors may not have changed significantly between the two periods. Second, inelastic supply of labour could have accounted for the lack of mobility of labour between sectors. As noted earlier, manufacturing sector's share in both value added and employment experienced a gradual decline in the 1984–2010 period. In essence, the stalled industrialization path that began in the later part of the 1960–83 period continued and actually became worse in the 1984–2010 period. Figure 4 provides further evidence on the stalled industrialization that Ghana experienced in this period. The share of manufacturing in total labour productivity continued with its downward trend from the 1960–83 period and went into negatives

by 2011 while other sectors, particularly non-business services sector, experienced a high increase in their shares of total labour productivity.

So why did the rebound in industry and manufacturing after the adoption of ERP/SAP fade so quickly? The ERP/SAP came with the implementation of a number of policy reforms to address macroeconomic imbalances. These included, among others, removal of price and distribution controls, the introduction of a market-based exchange rate regime, trade and financial sector liberalization, privatization of state-owned enterprises, as well as tax reforms, including those related to imports (Ackah et al. 2014). There were also efforts at restructuring the industrial sector by addressing constraints that emerged from the ISI strategy, enhancing capacity utilization and strengthening institutional support to manufacturing firms. These initiatives were to complement the new outward-looking export-led industrialization strategy, which sought to develop an internationally competitive industrial sector. While these policy reforms are credited with the initial rebound in the manufacturing and industrial sector, the same have been blamed for the loss in growth momentum by the late 1980s due to certain constraints that emerged from the ERP/SAP (Ackah et al. 2014). For example, the liberalization of trade exposed protected manufacturing firms to intense competition from imports from relatively more efficient manufacturing industries in countries such as China. At the same time, the financial sector liberalization led to high cost of borrowing as interest rates surged while the local currency began to suffer high levels of depreciation. These new constraints together meant that production cost soared, making local manufacturers economically inefficient.

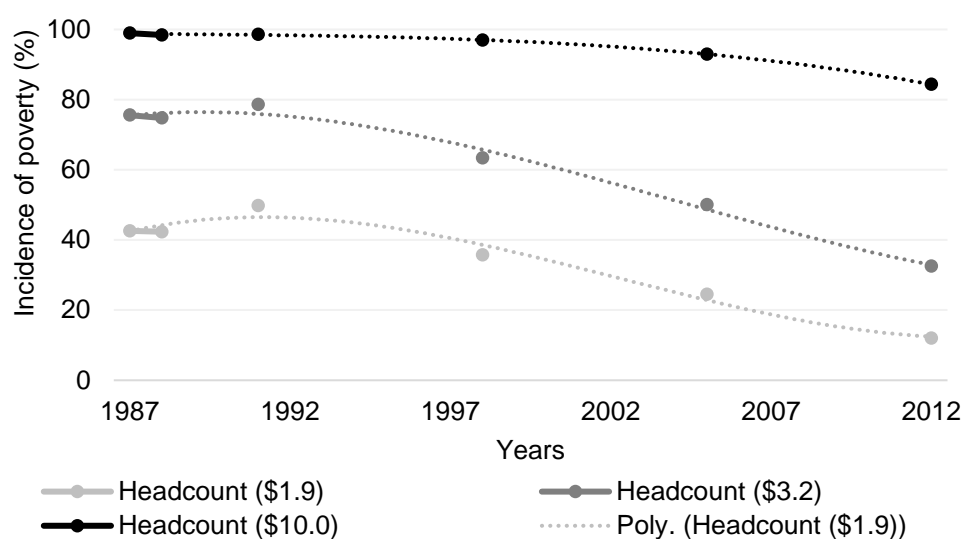
In the mid-1990s, and with Ghana having transitioned from nearly two decades of political instability and military rule to democratic governance and constitutional rule, institutional support for Ghana's manufacturing and industrial sector became deepened. This was to ameliorate the impact of the constraints that emerged from the implementation of the ERP/SAP, with a focus on assisting distressed but viable enterprises (Ackah et al. 2014). The interventions included the trade and investment programme, tariff policy reforms, the establishment of the Business Assistance Fund and of the Private Enterprises and Export Development policy, and the Investment Policy Fund for the development of small- and medium-scale enterprises to provide the needed funds to boost industrial production. There was the promulgation of a new investment code (Ghana Investment Promotion Centre Act of 1994) and the establishment of the Ghana Investment Centre. These interventions were associated with a partial revival of the growth momentum of manufacturing that was achieved during the hay days of the ERP/SAP. However, the growth in manufacturing for most of the years between 1995 and 2010 was below those of the other sectors (Figure 5).

The early 2000s, which saw political power change hands for the first time since the return to constitutional rule, came with a slight redirection of Ghana's industrialization strategy with emphasis on private sector-led industrial production through the application of science and technology. This was part of a series of broad development programmes—The Ghana Poverty Reduction Strategy (GPRS I) and Growth and Poverty Reduction Strategy (GPRS II)—supported by the World Bank and IMF and implemented during the noughties with the aim to achieve high growth, accelerate poverty reduction, and enhance social protection.

## 4.2 Trends in inclusive growth, policy, and political environment

In the 1980s and 1990s when the SAP was in vogue, it was generally believed that if one could endure the short-run social cost then the long-run benefits would be enormous (Sowa 2002). Hence, there was no explicit policy emphasis on inclusive growth until the late 1990s when the calls from some non-governmental organizations and the United Nations, to put a human face on the adjustment measures, were heeded to. These calls culminated in the worldwide adoption of the Millennium Development Goals (MDGs) in the early 2000s (Sowa 2002). By then, it was obvious that the adjustment programmes and policies had had a negative effect on welfare, with pervasive levels of poverty. In Ghana, this instigated the government to introduce the Programme of Actions to Mitigate the Social Cost of Adjustment in 1987. Figure 8 shows that the incidence of poverty in Ghana, based on the USD 3.2 poverty line, was 75.6 per cent in 1987 and had increased to 78.6 per cent in 1991.

Figure 8: Poverty rates, Ghana, 1987–2012



Source: authors' illustration based on PovcalNet Version March 2019 (World Bank 2019).

The promulgation of the MDGs came with the adoption of GPRS I and GPRS II which emphasized growth but more crucially policies and programmes, aimed at achieving significant levels of poverty reduction. This move was again backed by the IMF by replacing its Enhanced Structural Adjustment Facility with the Poverty Reduction and Growth Facility. GPRS I provided direct support for human development with special programmes for the vulnerable and excluded in society as well as the active involvement of the private sector as the main engine of growth. By 2005, the incidence of poverty, based on USD 3.2 poverty line, had reduced to 50.1 per cent (Figure 8). GPRS II, therefore, was implemented between 2006 and 2009 to consolidate and enhance the progress made under GPRS I by placing more emphasis on accelerated economic growth, sustained poverty reduction, and the attainment of middle-income country status. There was also heavy emphasis on the real economy to increase productivity in the agricultural sector and industry under GPRS II.

Quite remarkable was the heavy donor support that Ghana received during the implementation of GPRS I and GPRS II. The government benefited from a wide range of financial assistance, including funds from the Heavily Indebted Poor Countries Initiative, Multilateral Debt Relief

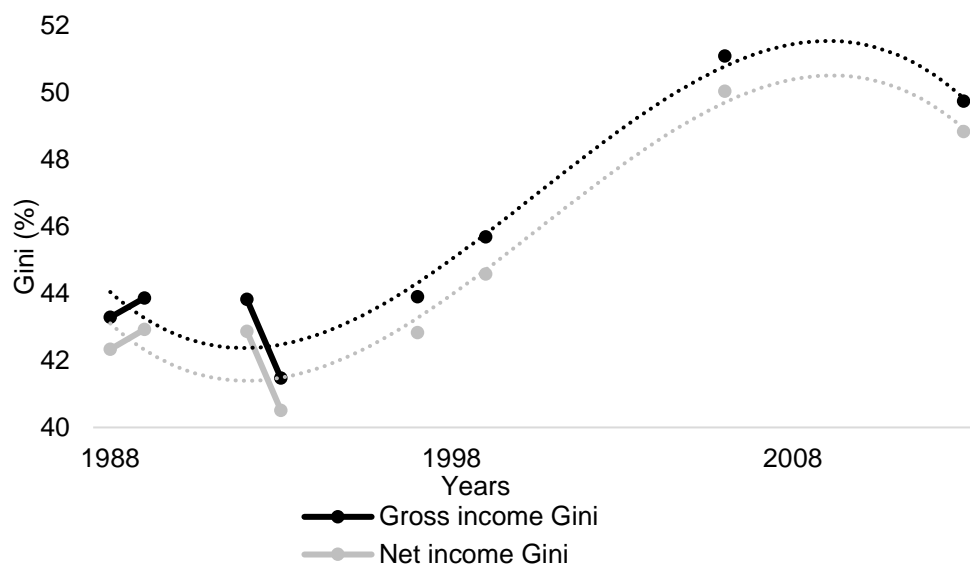


Initiative, Multi-Donor Budget Support, as well as the United States Millennium Challenge Corporation support (UNDP 2015). Commitment to the MDGs translated into increased expenditure on the education and health sectors and other social protection policies/programmes, such as the elimination of school fees at the primary level, capitation grant, national health insurance scheme, and the Livelihood Empowerment Against Poverty (LEAP) programme (a cash grant programme).

By and large, the above efforts at ensuring inclusive growth yielded some results. Trends in poverty rates in Ghana from the early 1990s to 2000s generally matched the sustained high economic growth achieved in this period. Figure 8 shows a drastic reduction in poverty rates between 1991 and 2012: Using the headcount ratio with USD 3.2 poverty line, we note that the incidence of poverty fell from 78.6 per cent in 1991 to 32.5 per cent in 2012. However, it appears that non-poor households benefited more from the sustained high growth compared with poor households. An analysis from various waves of the Ghana Living Standards Survey (GLSS) between 1991 and 2005 shows that households in the upper deciles experienced higher growth in consumption expenditure than households in the lower deciles (GSS 2007).

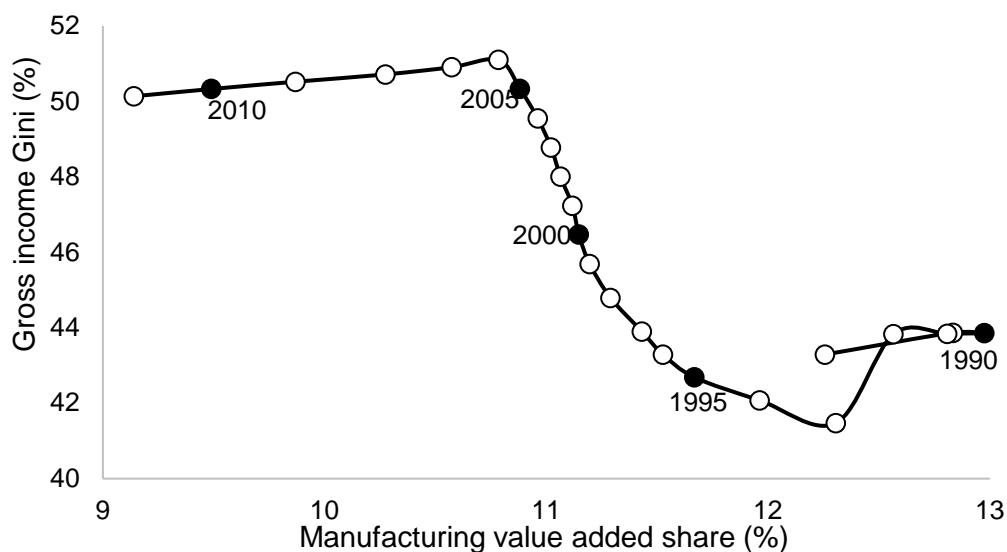
Interestingly, the last two to three decades witnessed an increase in economic inequality, as measured by the Gini coefficient, particularly during the 1990s and 2000s (Figure 9). An important factor that can be cited for this trend is the nature of structural change and its associated trends and patterns of employment growth that Ghana witnessed in this period. Osei and Jedwab (2016) argue that structural change in Ghana had been characterized by a decline in the agricultural sector's share in employment but the released labour ended up in relatively low productivity and informal sectors. Hence, although structural change has contributed to productivity growth in Ghana, the impact has been largely muted. Manufacturing's share in value added has been on a downward trend, as mentioned earlier, but associated with this has been an increase in income inequality between 1990 and 2010 (Figure 10). We also observe a similar negative relationship between manufacturing's share in employment and gross income inequality (Figure 11). In contrast, both value-added shares and employment shares for non-business services sector were positively associated with gross income inequality in the 1990s and 2000s (Figures 12 and 13). It, thus, appears that the decline of manufacturing and the expansion in non-business services drove up inequality. Generally, however, the non-business services sector, which consisted of relatively low productivity and informal activities, has contributed to the lack of a 'strong transformative' structural change in Ghana (Osei and Jedwab 2016).

Figure 9: Gross and net income Gini, Ghana, 1988–2013



Source: author's calculations based on WIID (UNU-WIDER).

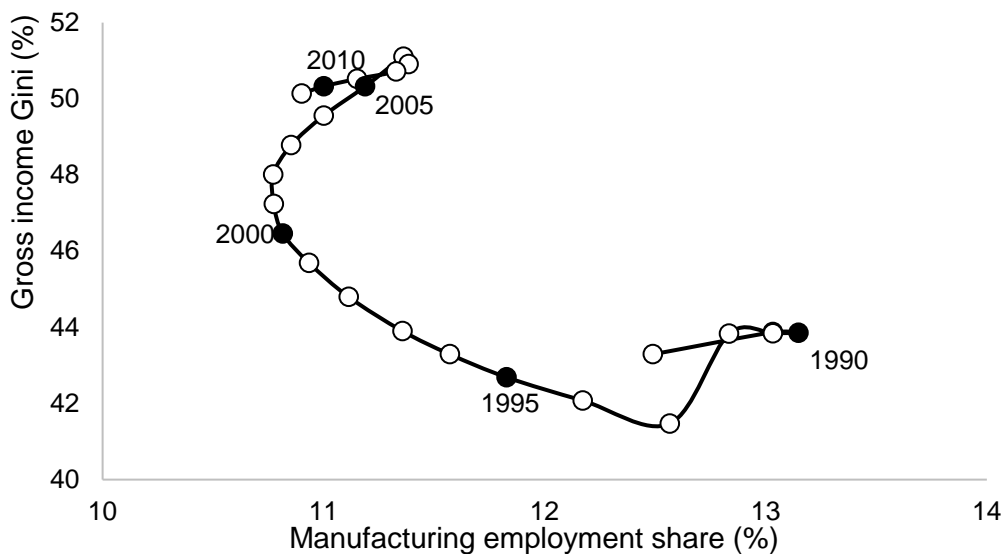
Figure 10: Gross income Gini and manufacturing value-added share, Ghana, 1988–2011



Notes: (i) The missing Gini coefficients were calculated using linear interpolation. See Figure 8 for the original data. (ii) Manufacturing value-added and employment shares are five-year moving averages. For example, the data for 1975 is an average of data for 1971–75. See Figures 5 and 7 for the original data. These notes apply to Figures 1, 4, 10, and 11.

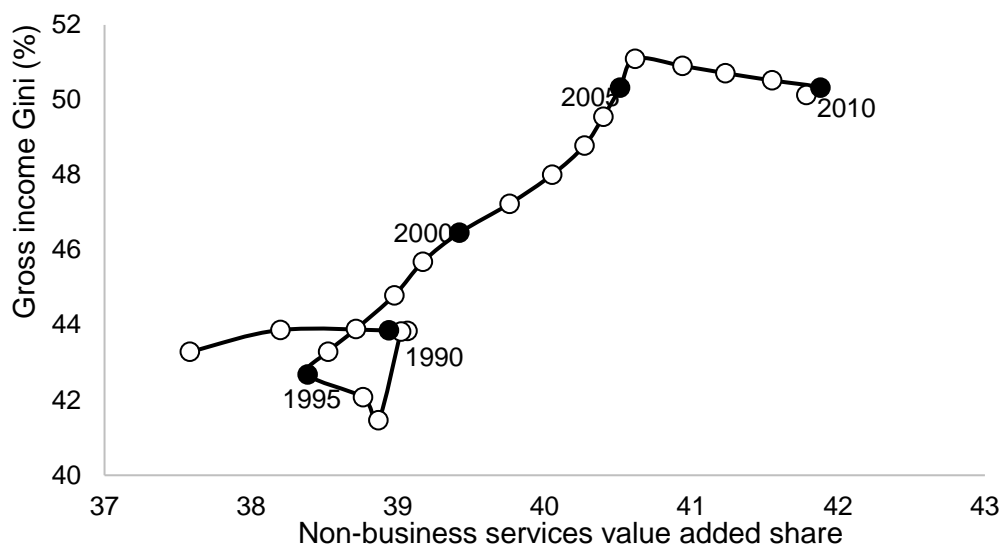
Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015).

Figure 11: Gross income Gini and manufacturing employment share, Ghana, 1988–2011



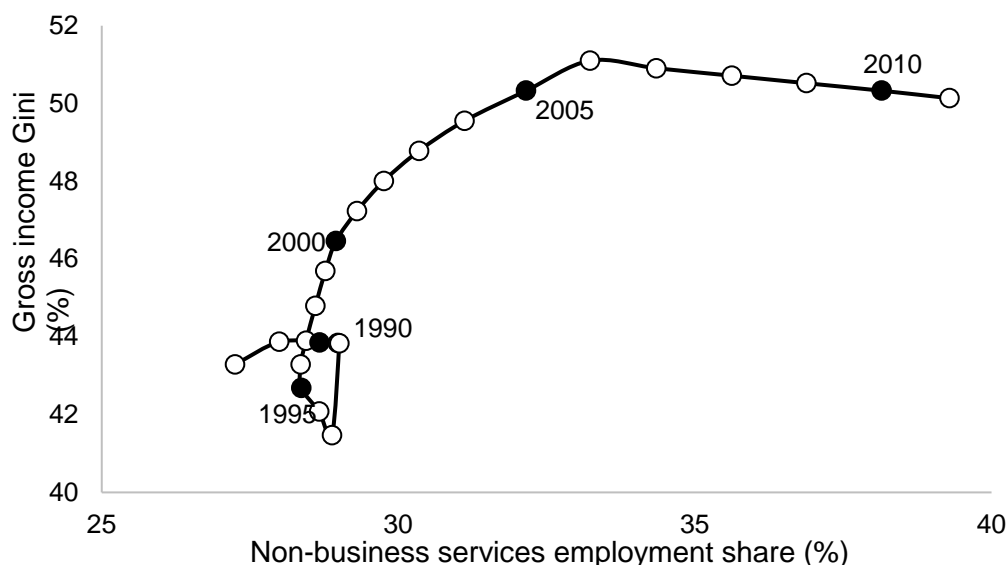
Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015) and WIID (UNU-WIDER).

Figure 12: Gross income Gini and non-business services value-added share, Ghana, 1988–2011



Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015) and WIID (UNU-WIDER).

Figure 13: Gross income Gini and non-business services employment share, Ghana, 1988–2011



Source: authors' calculations based on GGDC 10-Sector Database Version 2015 (Timmer et al. 2015) and WIID (UNU-WIDER).

Linked to the nature of structural change in Ghana is that employment growth has not kept pace with the speed of economic growth. Estimated at 0.47, Ghana's employment–growth elasticity is considered low (Baah-Boateng 2013). Between 1991 and 2013, total employment increased from about 5.77 million to 12.03 million, representing an average annual growth of about 3.4 per cent, compared with an annual real GDP growth of 5.8 per cent (Aryeetey and Baah-Boateng 2016). In addition, the prevalence of vulnerable employment, of which the majority are in the informal sector, was alarming: Of every ten jobs in 2010, seven were estimated to be vulnerable while only one in every five jobs qualified as decent work (Baah-Boateng and Ewusi 2013). The weak response of employment to economic growth has been attributed to issues related to both the supply and demand side of the labour market. The supply-side issues have to do with the nature of education/training which does not equip job seekers with skills that meet the demand of the labour market (Boateng and Ofori-Sarpong 2002; Boateng 2002; Oppong 2013). The demand-side issues borders on the sources and pattern of growth across economic sectors. In particular, it has been argued that much of the growth was driven by low employment-generating sectors (Aryeetey and Baah-Boateng 2016) rather than by a transformative restructuring of the economy (Osei and Jedwab 2016).

Inclusive growth policies and outcomes over this period occurred within a changing political environment, and was particularly important with respect to its conditioning effects on the policies, processes, and outcomes. From the early 1980s to 1992, when the ERP/SAP was implemented, Ghana was under Rawlings' military dictatorship. This political environment allowed Rawlings to stay committed to economic reform, relying on a careful balancing act between technocratic implementation and authoritarian practices (Resnick 2016). This approach, according to Rothchild (1991), Jeffries (1992) and MacLean (2010), crippled the political power of interest groups, hence, they were unable to influence the government's reform agenda. For example, anti-austerity opponents within government were expelled by Rawlings while labour union leaders who led protest about 'unfavourable effects' of the ERP policies were suppressed. It is further argued that

these occurrences sent strong deterrent signals and eventually led to the collapse of lobbying channels of interest groups during Rawlings' military regime (Martin 1993).

The transition to democracy, however, was characterized by a shift in the incentive structure and interest group dynamics (Resnick 2016). With multiparty democracy, the bid to win elections every four years created the avenue for resistance by interest groups and the incentive for politicians to respond (Resnick 2016). For example, the move by the government to introduce a 17 per cent value-added tax in 1995 was opposed by a coalition of interest groups who demonstrated in Accra and Kumasi to register their displeasure, and eventually led to the reversal of the policy (Osei 2000). Similarly, urban interest groups capitalized on the 'political business cycle' to agitate for the reversal of increases in utility prices, as noted by Hutchful (2002). According to Resnick (2016), a large proportion of the gains from the ERP had been eroded by the end of the first decade following the democratic transition.

With the nature of Ghana's political settlement increasingly becoming a competitive clientelist type (Oduro et al. 2014), the two dominant political parties—the National Democratic Congress and the New Patriotic Party, have continued to 'impress' the voting public with policies in the bid to win the next election. The New Patriotic Party government, for instance, reversed some of the ERP policies by increasing the public and civil service wages, as well as subsidies in the energy sector just as the 2008 election drew closer (Gyimah-Boadi 2009; Whitfield 2010). More recently, successive governments have had to continue with and, in some cases, scale up a host of social protection programmes implemented in the 2000s, partly due to the political importance of these programmes and the fears of political backlash and of losing votes in the next elections (Aryeetey, forthcoming). Aryeetey (forthcoming) further argues that the electoral cycle in most democratic countries in Sub-Saharan Africa often dictates the nature of plans and policies as well as their implementation.

## **5 Structural transformation and inclusive growth after 2010**

### **5.1 Policies and trends in structural transformation**

The post-2010 period marks a watershed moment in Ghana's industrialization agenda as a result of the discovery and production of oil in commercial quantities in this period. Oil production began in December 2010, and in that year real GDP grew by 7.9 per cent—3 percentage points higher than the growth achieved in the previous year. Overall economic growth hit 14 per cent in 2011 largely due to the oil production which took place all year round that year. However, growth declined continuously after 2011 and reached 3.7 per cent in 2016. Part of the reason for the decline in growth experienced over that period was a massive and sustained power crisis between 2012 and 2016. This affected the economy badly, particularly the manufacturing sector (Abeberese et al. 2017). The onset of oil production and the power crisis together had an effect on the structure of Ghana's industrial sector. The manufacturing sub-sector whose share in industrial output averaged 40.7 per cent between 2006 and 2010 saw its share fall year after year and reached 17.6 per cent by 2017 (ISSER 2018).

There has also been an impact of the oil production on Ghana's export composition. Fuel export, following the start of oil production in 2011, has been significant and constitutes a growing share of exports. With more oil fields being discovered in Ghana, the prospect of an increase in the production and export of fuel is high. This will mostly likely have further consequences on the

structure of Ghana's export and production sectors. Whether the impact will be favourable for the economy as a whole will depend on the breadth and depth of production, consumption, and fiscal linkages that will be forged between the oil sector and the other economic and social sectors.

Between 2010 and 2013, the government pursued the Ghana Shared Growth and Development Agenda (GSGDA I), which coincided with the beginning of oil production in Ghana. In addition to ensuring continued macroeconomic stability and enhancing the competitiveness of the private sector, GSGDA I aimed at changing the structure of the economy to favour the services and industrial sectors. Some of the specific strategies under GSGDA I included the development of infrastructure and the development of salt and petrochemical-based industries to support oil and gas production. GSGDA I was succeeded by GSGDA II in 2014. GSGDA II was to be implemented up to 2017, with the goal of deepening the gains from GSGDA I while addressing challenges such as the limited job creation opportunities that had accompanied the oil-driven expansion in industry during GSGDA I. Of course, GSGDA II was to sustain the shared growth while the economy continued on the path of transformation. The administration that took over in 2017 has been pursuing an ambitious agenda towards agricultural mechanization, productivity enhancement, and industrial transformation. These goals of industrialization have been espoused through flagship policies/programmes such as Planting for Food and Jobs, Rearing for Food and Jobs, the 'One District, One Factory', and 'One Village, One Dam'.

## **5.2 Policies and trends in inclusive growth**

Between 2012/13 and 2016/17, the incidence of poverty in Ghana fell by only 0.8 of a percentage point, of which economic growth effects was 2.2 percentage points, while redistribution effect was -1.4 percentage points (GSS 2018). Thus, the incidence of poverty would have fallen by 2.2 percentage points if the redistribution effect had been zero, suggesting that growing economic inequality in Ghana has negatively affected Ghana's growth-poverty elasticity. Indeed, analysis from the last four waves of the GLSS shows that Ghana's growth-poverty elasticity declined from 0.17 in the 2005/06-2012/13 period to 0.07 in the 2012/13-2016/17 period (GSS 2018). What this means is that the level of poverty reduction associated with a percentage increase in growth has declined, implying that economic growth is becoming less pro-poor, after 2010.

This has happened in spite of deepened concerns at the onset of oil production about the need to ensure an inclusive growth process and mitigate the already growing regional or spatial inequalities in Ghana. To a large extent, these concerns informed the policy direction of GSGDA I and GSGDA II. However, because growth in this period was largely driven by expansion in non-manufacturing industrial activities, particularly oil and mining, it is not surprising that it has been associated with a large reduction in Ghana's growth-poverty elasticity. Also, largely due to the capital-intensive nature of the oil and mining sector, the growth did not translate into increased job creation and decent work for the growing labour force. Instead, labour has moved from rural agriculture mainly into low-productivity areas within the services sector, characterized by wholesale and retail activities. Consequently, the 'structural transformation' in this period appears superficial and non-inclusive (Rodrik 2013; McMillan et al. 2014).

In addition to the ambitious interventions in agriculture and industry by the government since 2017, there has also been expanded access to senior high education in another intervention dubbed the 'Free Senior High School' policy which began in September 2017. Financed mainly by government proceeds from oil production, figures touted by government officials indicate that

enrolment increased by 69 per cent between 2017 and 2019, although there are significant infrastructural (both hard and soft) constraints that remain (*Ghana Business News* 2019).

## **6 The future trajectory of the structural transformation–inequality–inclusive growth nexus**

The future trajectory of the structural transformation–inequality–inclusive growth nexus is one that is difficult to predict with a high degree of accuracy given the importance of the evolving nature of political settlements and its implication for the deals environment. In particular, one notes that a feature of the politics that is becoming increasingly important is that when there is a change in the party in power, some programmes of previous government are discontinued. This means that the trajectory of the structural transformation–inclusive growth nexus is dependent on whether there will be a change in the ruling party. However, one can expect the trajectory, in general terms, to take one of two forms—one associated with the medium term and another with the long term.

In the medium term, one expects the relationship to be inelastic—where some amount of structural transformation will occur but will be associated with limited positive changes to inequality. This assertion is premised on a number of points. First the changing structure of the economy is bound to continue, with growth in the services sector remaining strong and dominant. Second, even though we expect the growth in employment share in services to increase, this is likely to be dominated by the low-productivity sub-sectors such as retail trade. We base this medium-term projection on two complementary factors. As noted in Osei et al. (2018), political patronage remains rife even though political settlements is becoming more competitive in Ghana. This means that the deals space is still dominated by elites so that growth favours sectors that are not too inclusive—particularly the extractive sectors. A second related point is that low-skilled labour from agriculture, who form the majority of the labour force and who can normally move easily to the manufacturing sector, cannot do so to the high-productivity end of the services sector. This is in large part a result of the generally low human capital associated with labour in the agricultural sector. This makes the movement of labour to the higher productivity end of the services sector (associated with higher skill sets) more difficult. It is for this reason that we expect the medium-term elasticity of structural change with respect to inclusive growth to be limited.

In the long term, one expects changes to favour a trajectory where structural transformation impacts more positively on inclusive growth and, as a result, reduces inequality. We base our long-term projection on the following complementary factors. First, the current educational policies of the government have the potential to increase the average human capital of the populace as a whole and also increase the emphasis on technical and vocational skills. This potentially will reduce the rigidities associated with vertical movement along the skill ladder of the labour force. Second, and as argued by Osei et al. (2018), the power of the growing middle class is bound to put increasing pressure on the political elite and force political settlements to become more competitive. This coupled with increasing oil resources will eventually engender investments in sectors that are pro-inclusive growth. For this reason, one expects a more favourable structural transformation–inclusive growth nexus in the long term.

These projections are not without risks, however. A downside risk that may affect this long-term projection could come from the nature of competitive elections in Ghana. Increasingly, this has the potential of compromising political settlements in Ghana in a way that is not conducive to

inclusive growth. Our reasoning is premised on the fact that competitive elections are increasingly demanding more resources for the running of political parties. Additionally, the winner-takes-all politics in Ghana (see Gyampo 2015) means individuals are increasingly investing a lot more in political parties with the objective of gaining better leverage when their party wins elections. Unfortunately, the increasing demand for resources from party financiers is intensifying rent-seeking behaviour. Rents, as we know, are typically highest in the extractive sectors and so there is increasing leverage for policy to favour activities in this sector. This situation has the potential of working against policies that seek to maximize the speed and benefits of structural transformation for inclusive growth.

## 7 Conclusions

This paper has sought to interrogate the nature of the link between structural transformation and inclusive growth in Ghana by discussing the pathways of Ghana's structural transformation and the policies that have shaped it since independence. We have also examined the trends in poverty and inequality over time. In doing this, we have assessed how the nature of structural transformation has shaped shared growth outcomes in Ghana. Our main findings are summarized as follows.

First, Ghana's overall growth has improved markedly since the mid-1980s, in large part driven by more market-friendly policies, with a more stable macroeconomic and political environment. Additionally, and in more recent times, the start of oil production has reinforced this growth of the economy.

Second, the structure of the Ghanaian economy has changed, with services having become the dominant sector. However, we argue that this changed structure has not been of the transformative type. Whereas the changing structure has been associated with changing employment shares from agriculture to the services sector, we note that the productivity differentials between these sub-sectors have not been very large. This finding is consistent with Osei et al. (2018) who argued that labour movement in Ghana over the years has been from low-productivity agriculture to the low-productivity end of the services sector. Indeed, the highest productivity has consistently been in the non-manufacturing industrial sector (extractive sector) and this sector has not attracted significant share of labour. Unsurprisingly, therefore, the link between productivity growth and employment in Ghana is found to be weak.

Third, we find that while the incidence of poverty has declined over the years, inequality has persisted. Part of the challenge, we have argued, has been the fact that employment growth has lagged behind economic growth. This muted employment response to growth is in part due to the nature of structural change that is occurring and in part due to the low skill set of the labour force which makes labour supply inelastic.

We conclude by noting that structural transformation in Ghana can be characterized as having generally oscillated between stalled and primary industrialization. Indeed, associated with this has been an increasing inequality, suggesting adverse Kuznet tension. In spite of this muted structural transformation in Ghana, there is potential for it to be more impactful on inclusive growth, particularly in the long term. However, even this potential transformation in the long run can be compromised by the nature of competitive elections in Ghana.



## References

- Abeberese, A., C. Ackah, and P. Asuming (2017). 'How Did the 2012–2015 Power Crisis Affect Small and Medium Manufacturing Firms in Ghana'. IGC Policy Brief 33305. Ghana: International Growth Centre. Available at: <https://www.theigc.org/wp-content/uploads/2017/08/Asuming-et-al-2017-policy-brief.pdf> (accessed March 2020).
- Ackah, C., C. Adjasi, F. Turkson (2014). 'Scoping Study on the Evolution of Industry in Ghana'. *WIDER Working Paper 2014/075*. Helsinki: UNU-WIDER.
- Aryeetey, E. (Forthcoming). 'The Political Economy of Structural Transformation: Has Democracy Failed African Economies?'. Helsinki: UNU-WIDER.
- Aryeetey, E., and W. Baah-Boateng (2016). 'Understanding Ghana's Growth Success Story and Job Creation Challenges'. *WIDER Working Paper 2015/140*. Helsinki: UNU-WIDER.
- Aryeetey, E., and J. Harrigan (2000). 'Macroeconomic and Sectoral Development since 1970'. In E. Aryeetey, J. Harrigan, and M. Nissanke (eds), *Economic Reforms in Ghana: The Miracle and the Mirage* (pp. 5–31). Trenton, NJ: Africa World Press.
- Aryeetey, E., and F. Tarp (2000). 'Structural Adjustment and After: Which Way Forward'. In E. Aryeetey, J. Harrigan, and M. Nissanke (eds), *Economic Reforms in Ghana: The Miracle and Mirage* (pp. 344–65). Trenton, NJ: Africa World Press.
- Baah-Boateng, W. (2013). 'Unemployment in Ghana : A Cross-Sectional Analysis from Demand and Supply Perspectives'. *African Journal of Economic and Management Studies*, 6(4): 402–15.
- Baah-Boateng, W., and K. Ewusi (2013). 'Employment: Policies and Options'. In K. Ewusi (eds), *Policies and Options for Ghana's Economic Development* (3rd edn). Accra: Institute of Statistical Social and Economic Research (ISSER), University of Ghana.
- Boateng, K. (2002). *Higher Education and the Labour Market: A Logical Framework for Policymakers in Africa's Education Sector*. Addis Ababa: Economic Commission for Africa.
- Boateng, K., and E. Ofori-Sarpong (2002). *Analytical Study of the Labour Market for Tertiary Graduates in Ghana*. Accra: World Bank/National Council for Tertiary Education.
- Cooke, E., S. Hague, and A. McKay (2016). *The Ghana Poverty and Inequality Report Using the Sixth Ghana Living Standard Survey*. Accra: UNICEF.
- Corbo, V., and S. Fisher (1995). 'Structural Adjustment: Stabilisation and Policy Reform—Domestic and International Finance'. In J. Behrman and T. Srinivasan (eds), *Handbook of Development Economics* (Vol. 3B). Amsterdam: North Holland.
- de la Escosura, L. (2012). 'Output Per Head in Pre-Independence Africa: Quantitative Conjectures'. *Economic History of Developing Regions*, 27(2): 1–36.
- Fosu, A. (2001). *Emerging Africa: The Case of Ghana*. Nairobi: African Economic Research Consortium.
- Fosu, A., and E. Aryeetey (2008). 'Economic Growth in Ghana, 1960–2000'. In B. Ndulu, S. O'Connell, J. Azam, R. Bates, A. Fosu, J. Gunning, and D. Nijinkeu (eds), *The Political Economy of Economic Growth in Africa, 1960–2000. Volume 2: Country Case Studies*. New York: Cambridge University Press.
- Frimpong-Ansah, J. (1991). *The Vampire State in Africa: the Political Economy of Decline in Ghana*. London: James Currey.

- GGDC (2015). GGDC 10-Sector Database, version 2015. Groningen Growth and Development Centre (GGDC), Groningen University. Available at: <https://www.rug.nl/ggdc/productivity/10-sector/> (accessed March 2020).
- Ghana Business News* (2019). 'Free SHS Has Increased Enrolment by 69%—Bawumia'. Available at: <https://www.ghanabusinessnews.com/2019/12/30/free-shs-has-increased-enrolment-by-69-bawumia/> (accessed 5 February 2020).
- GSS (2007). *Pattern and Trends of Poverty in Ghana, 1991–2006*. Accra: Ghana Statistical Service (GSS).
- GSS (2018). *Ghana Living Standard Survey 7(GLSS7): Poverty Trends in Ghana, 2005–2017*. Accra: Ghana Statistical Service (GSS).
- Gyampo, R.E.V. (2015). 'Winner-Takes-All Politics in Ghana: The Case for Effective Council of State'. *Journal of Politics & Governance*, 4(1): 20–28.
- Gyimah-Boadi, E. (1997). 'The Challenges Ahead'. *Journal of Democracy*, 8(2): 78–91.
- Gyimah-Boadi, E. (2009). 'A "Liberal" Development State in Ghana: An Emerging Paradigm for Democracy and Economic Growth'. Paper presented at the conference 'From Asymmetry to Symmetry? The West, Non-West and the Idea of Development as Conceptual Flow', 13–16 July. Germany: University of Heidelberg.
- Gyimah-Boadi, E., and R. Jeffries (2000). 'The Political Economy of Reform'. In E. Aryeetey, J. Harrigan, and M. Nissanke (eds), *Economic Reforms in Ghana: The Miracle and the Mirage* (pp. 32–50). Trenton, NJ: Africa World Press.
- Gyimah-Boadi, E., and H. Prempeh (2012). 'Oil, Politics, and Ghana's Democracy'. *Journal of Democracy*, 23(3): 94–108.
- Herrendorf, B., R. Rogerson, and A. Valentinyi (2014). 'Growth and Structural Transformation'. *Handbook of Economic Growth*, 2: 855–941.
- Holden, J. (2012). 'Rwanda: Overcoming the Industrial Policy Taboo'. In M. Campioni and P. Noack (eds), *Rwanda Fast Forward* (pp. 126–44). London: Palgrave Macmillan.
- Hutchful, E. (2002). *Ghana's Adjustment Experience: The Paradox of Reform*. Geneva: United Nations Research Institute for Social Development.
- Interias (2015). *The Changing Face of Banking in Ghana and Implications for Ghana's Economy*. Accra: The International Institute of Advanced Study of Cultures.
- ISSER (2018). *The State of the Ghanaian Economy in 2017*. Accra: Institute of Statistical Social and Economic Research (ISSER).
- Jeffries, R. (1992). 'Urban Popular Attitudes Towards the Economic Recovery Programme and the PNDC Government in Ghana'. *African Affairs*, 91(363): 207–26.
- Kelsall, T. (2011). 'Rethinking the Relationship between Neo-patrimonialism and Economic Development in Africa.' *IDS Bulletin*, 42(2): 76–87.
- Killick, T. (1978). *Development Economics in Action: A Study of Economic Policies in Ghana*. London: Heinemann.
- Killick, T. (2000). 'Fragile Still: The Structure of Ghana's Economy 1960–94'. In E. Aryeetey, J. Harrigan, and M. Nissanke (eds), *Economic Reforms in Ghana: The Miracle and the Mirage* (pp. 51–67). Trenton, NJ: Africa World Press.

- La Verle, B. (1994). *Ghana: A Country Study*. Washington: GPO for the Library of Congress.
- Maclean, L. (2010). *Informal Institutions and Citizenship in Rural Africa: Risk and Reciprocity in Ghana and Côte d'Ivoire*. New York: Cambridge University Press.
- Martin, M. (1993). 'Neither Phoenix nor Icarus: Negotiating Economic Reform in Ghana and Zambia, 1983–1992'. In T. Callaghy and J. Ravenhill (eds), *Responses to Africa's Economic Decline*. New York: Columbia University Press.
- McMillan, M., and D. Rodrik (2011). 'Globalisation, Structural Change and Productivity Growth'. In M.B. Jansen (ed.), *Making Globalisation Socially Sustainable* (pp. 49–84). Geneva: International Labour Organisation and World Trade Organisation.
- McMillan, M., D. Rodrik, and I. Verduzco-Gallo (2014). 'Globalization, Structural Change, and Productivity Growth, with an Update on Africa'. *World Development*, 63(1): 11–32.
- Miller, F., A. Vandome, and J. McBrewster (2009). *History of Ghana*. Beau Bassin: VDM Publishing House.
- Oduro, F., M. Awal, and M. Ashon (2014). 'A Dynamic Mapping of the Political Settlement in Ghana'. ESID Working Paper 28. Manchester: Effective States and Inclusive Development Research Centre, University of Manchester.
- Oppong, S. (2013). 'Should Higher Education Institutions Serve National Economic Needs? Why and Why Not?'. *Education Sciences and Psychology*, 25(3): 90–109.
- Osei, P. (2000). 'Political Liberalisation and the Implementation of Value Added Tax in Ghana'. *Journal of Modern African Studies*, 38: 255–78.
- Osei, R. (2001). 'A Growth Collapse with Diffuse Resource: Ghana'. In R. Auty (ed.), *Resource Abundance and Economic Development* (pp. 165–78). Oxford: Oxford University Press.
- Osei, R.D., and R. Jedwab (2016). 'Structural Change in a Poor African Country: New Historical Evidence from Ghana'. In M. McMillan, D. Rodrik, and C. Sepúlveda (eds), *Structural Change, Fundamentals and Growth: A Framework and Case Studies* (pp. 161–96). Washington DC: International Food Policy Research Institute.
- Oteng-Ababio, M., G. Owusu, C. Wrigley-Asante, and A. Owusu (2016). 'Longitudinal Analysis of Trends and Patterns of Crime in Ghana (1980–2010): A New Perspective'. *African Geographical Review*, 35(3): 193–211.
- Peprah, K. (2017). 'Trends in Global Development Paradigms and the Ramifications in Ghana (1950–2015)'. *Ghana Journal of Geography*, 9(2): 40–67.
- Pickett, J., and E. Shaeeldin (1990). *Comparative Advantage in Agriculture in Ghana*. Paris: OECD.
- Poulton, C. (2014). 'Democratisation and the Political Incentives for Agricultural Policy in Africa'. *Development Policy Review*, 32(S2): S101–22.
- Resnick, D. (2016). 'Strong Democracy, Weak State: The Political Economy of Ghana's Stalled Structural Transformation?'. *IFPRI Discussion Paper 01574*. Washington, DC: International Food Policy Research Institute.
- Rimmer, D. (1966). 'The Crisis in the Ghana Economy'. *The Journal of Modern African Studies*, 4: 17–32.
- Rodrik, D. (2013). 'Africa's Structural Transformation Challenge'. *Project Syndicate*, 12 December. Available at: <https://www.project-syndicate.org/commentary/dani-rodrik-shows-why-sub>

saharan-africa-s-impressive-economic-performance-is-not-sustainable?barrier=accesspaylog (accessed June 2019).

- Rothchild, D. (1991). *Ghana: The Political Economy of Recovery*. Boulder, CO: Lynne Rienner.
- Sen, K. (2015). 'The Political Determinants of Economic Growth: An Analytical Review'. In S. Hickey, K. Sen, and B. Bukenya (eds), *The Politics of Inclusive Development: Interrogating the Evidence*. Oxford, UK: Oxford University Press.
- Sowa, N. (2002). 'An Assessment of Poverty Reducing Policies and Programmes in Ghana'. A paper prepared for presentation at a MIMAP Workshop on Assessing Poverty Policies, Raba, Morocco, 25–31 January. Ottawa: IDRC.
- Timmer, M.P., G.J. de Vries, and K. de Vries (2015). 'Patterns of Structural Change in Developing Countries'. In J. Weiss and M. Tribe (eds), *Routledge Handbook of Industry and Development* (pp. 65–83). Abingdon, Oxon: Routledge.
- UNDP (2015). *Ghana Millennium Development Goals*. New York: United Nations Development Programme (UNDP). Available at: <https://www.gh.undp.org/content/ghana/en/home/library/poverty/2015-ghana-millennium-development-goals-report.html> (accessed March 2020).
- UNU-WIDER. 'World Income Inequality Database' (WIID). Helsinki: UNU-WIDER.
- Whitfield, L. (2010). 'The State Elite, PRSPs, and Policy Implementation in Aid-dependent Ghana'. *Third World Quarterly*, 31(5): 721–37.
- World Bank (1993). *Ghana 2000 and Beyond: Setting the Stage for Accelerated Growth and Poverty Reduction*. Washington, DC: World Bank. Africa Regional Office, Western Africa Department.
- World Bank (2019). 'PovcalNet: The On-Line Tool for Poverty Measurement Developed by the Development Research Group of the World Bank'. Washington, DC: World Bank.