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From Total Factor Productivity to Structural Change: Interrogating Economic Growth and Structural Transformation from a Developing Country Perspective with Reference to Zambia

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Thesis submitted for the degree of PhD

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Abstract

In this thesis, I question the understanding of structural transformation within mainstream economics, finding that it is too readily restricted to shifts in composition of output and promotion of total factor productivity. While this identifies the kinds of shifts necessary to transform the structure of production, it is not only ahistorical but also inadequately addresses the form of linkages necessary for a broader-based form of industrialisation, whilst leaving out of consideration the crucial agents essential to bring them to bear.

By reference to the Developmental State Paradigm (DSP), the state is seen as a crucial agent for development, capable of successfully guiding and promoting structural transformation through its interventionist policies and interaction with political and economic interests such as private capital and labour. Nevertheless, to be of greater purchase in present discourse, the DSP must move beyond its limited focus and an intellectual framing underpinned by reference to a state-market dichotomy. This requires situating and framing the interactions of socio-political and economic interests through processes of accumulation, with development following from particular forms of growth and development. I make use of the Linkage-Agency approach and notion of a system of accumulation to identify the vital interests embedded in the immediate post-Independence Zambian economy. Through the lens of development planning in the 1960s and 1970s, the constrained if negligible form of structural transformation experienced in the post-Independence Zambian economy is found to be a consequence of the nature of interests and underlying system of accumulation, with continuities and limited shifts as point of departure from the colonial era.

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Abbreviations

ANC	African National Congress (of Northern Rhodesia/Zambia)
BSA	British South Africa Company
DS	Developmental State
DSP	Developmental State Paradigm
FNDP	First National Development Plan
GDP	Gross Domestic Product
GNP	Gross National Product
GRZ	Government of the Republic of Zambia
IMF	International Monetary Fund
INDECO	Industrial Development Corporation
MEC	Minerals-Energy Complex
NDPs	National Development Plans
NICs	Newly Industrialised Countries
POSCO	Pohang Iron and Steel Company, Ltd.
SNDP	Second National Development Plan
TDP	Transitional Development Plan
TFP	Total Factor Productivity

UDI	Unilateral Declaration of Independence
UNECA	United National Economic Commission for Africa
UNIP	United National Independence Party
UP	United Party
UPP	United Progressive Party
UPP	United Progressive Party
WB	World Bank

1 Introduction

1.1 Background of the Study

Inquiry into the fundamental causes of economic growth and requisite conditions to bring about economic prosperity have increasingly occupied an important space in social sciences. It is widely held that addressing these would bring about improvements in living standards and thus enhance overall human welfare. However, installing courses of action to address these goals has not been easy. Researchers have come up with a multiplicity of growth and development strategies usually founded on certain ideological and subjective theoretical notions. Over time, methods and/or tools of analysing growth performance of nations have varied, and the results concerning determinants of growth have been mixed. Further, what role to prescribe to the state in developmental efforts has also been a subject of heated debates.

Interest in growth can be traced back to classical political economists such as Adam Smith and David Ricardo (Fine, 2006; Fine and Jomo, 2006; Helpman, 2004). However, contemporary growth theory established itself around the mid-1950s, drawing upon the earlier Harrod-Domar model (Jones, 2002). The observed divergence in economic growth and living standards between the developed and developing countries in the post-1960s also worked to reinforce further developments and refinements of growth theory. Indeed, the large differences in income per capita across the world begged an explanation.¹ Such has been the motivation for inquiry. In the 1960s and 1970s, growth theory prospered (Jones, 2002). However, Jones is referring to neoclassical growth theory. As will be argued in the next chapter, it is precisely during this period that neoclassical growth theory came under serious and damaging attacks, not least exposing its weaknesses both theoretically and empirically.

The focus of inquiry into the causes of growth has shifted over the years from one issue to another. Before the early 1900s, natural resource-based growth strategies were advocated (Hirschman, 1958). Subsequently, attention shifted to savings and investment in physical capital as the main drivers of growth à la Harrod-Domar model. However, this view, although widely held until the second part of the 1950s, came

¹ Economists have long used income per capita as a rough measure of people's living standards.

under scrutiny, questioning whether increasing capital alone could bring about sustained long-run growth. It was argued that capital faced diminishing marginal productivity and thus growth in per capita income on the back of capital accumulation was not sustainable. Emphasis turned to technological progress as the prime mover of long-run economic growth à la Solow model. Because technological progress was given, it was contended that unpacking its mystery would solve the problem. To this end, geography, disease burden, human capital, among many other factors, have all been subsequently linked to economic growth. Today, the role of politics and institutions has gained prominence (Barton, 2015; Acemoglu et al., 2005).

Despite the many insights into the fundamental causes of growth, uncertainties about which policies and how to implement them arise – from interventionist, protective states to free-market, liberalised ones. It remains unclear how to pinpoint the fundamental causes of growth and how to bring them about. This evolution in focus and emphasis suggests the complexity of studying the processes of economic growth.

Implementing strategies for growth could pull the majority of people in the developing world out of impoverishment (Rodrik, 2007). A classic comparison in this vein is made between the economies of South-East Asia and sub-Saharan Africa. Empirics reveal great divergence in socio-economic indicators of the two regions. In the 1960s, an average sub-Sahara African individual was richer than an average South-East Asian but, by 2005, these standings were reversed – an average South-East Asian individual was more than twice as rich as an average sub-Sahara African. For 45 years after 1960, sub-Saharan Africa grew slightly above half of South-East Asia's growth. Throughout this period, South-East Asian growth trended upwards, except for the mid- to late-1990s with the Asian crisis, whereas sub-Saharan growth had been sluggish, showing great oscillations reflecting periods of expansion and contraction. For South-East Asia, this growth translated into massive payoffs for the citizenry in terms of improvements in socio-economic indicators. For instance, the incidence of poverty in South-East Asia reduced by around 70 percent whereas it has persisted at unacceptably high levels in sub-Saharan Africa (van Donge et al., 2012).

The past decade has witnessed much more favourable growth records for Africa owing to sustained commodity booms. Growth averaged more than 5 percent between 2002

and 2008 but slumped to 2.2 percent in 2009 due to the global financial crisis (UNECA, 2013). However, Africa's growth immediately rebounded and has averaged in the neighbourhood of 5 percent from 2010 to date. Worryingly, however, has been the recognition that this growth has failed to bear favourable social outcomes, not least its failure to reduce inequality and poverty significantly. Further, that growth has been commodity-driven has signified the continent's susceptibility to the external environment and/or global trends. Between 1970 and 2010, while East Asia's shares in world output and global exports have significantly expanded, Africa's record shows a contraction. This, some observers argue, coupled with Africa's falling share of manufacturing in total output, has signalled (premature) de-industrialisation as characteristic of Africa's structural change (UNECA, 2013).

It may seem straightforward to reason that differing rates and trajectories of growth over several decades between Africa and South-East Asia are largely responsible for these observed differences in growth outcomes but the story behind which poverty-reducing growth-promoting policies/strategies work is far from straightforward. Nonetheless, a comparison of the two regions provides some optimism in terms of lessons to be learnt from the experiences of South-East Asian for sub-Saharan Africa economies. But South-East Asian experience has been variously interpreted and largely misunderstood (Jomo, 1997; Sikorski, 1998). One argument widely held resonates with the World Bank's (in)famous 1993 study entitled *The East Asian Miracle*, that industrial export-led growth was the answer even though acknowledgement was made that policy configuration was varied. This position is in stark contrast with Henley's (2012) view that poverty-reducing growth, at least for some South-East Asian countries, relied heavily on agricultural development, and this came before export-oriented industrialisation. Henley's view is shared by van Donge et al. (2012). The latter add that while interventionist strategies in some East Asian countries in agriculture held the key to success, it is precisely the lack of intervention in African agriculture that is paramount to its dismal overall economic performance. This argument not only suggests a strong agricultural focus for Africa to bring about poverty-reducing growth but also proposes a strong government presence.

The above discussion questions the simplistic assertion that lessons for sub-Saharan Africa can be easily drawn from the South-East Asian experience. What is good for

African economic growth and development based on the South-East Asian experience is far from immediate, and this has been a subject of much debate with no consensus being reached. To re-emphasise, critics of the mainstream argue that failure to interpret this experience correctly has catapulted a series of misplaced policy responses by African governments.

On the one hand, the conflicting views about lessons learnt from the South-East Asian experience for Africa afford an opportunity not only to review carefully the literature on South-East Asia but also to revisit Africa's performance. Because of varied policies from the South-East Asian experience, country-specific analyses are preferred and need to be pursued in detail. This demands that country-focused studies examine in greater detail necessary policy prescriptions not only for growth but also for giving rise to desirable social outcomes.

On the other hand, I proceed under the conviction that post-independence African growth experience has been misunderstood. Consequently, this has weakened the assault on Africa's economic situation even through the wide-ranging interventionist strategies that have been adopted. Despite substantial growth in recent years, the failure to underpin its development by structural transformation more generally, and industrialisation in particular, has left Africa susceptible to the vagaries of primary commodity prices and external conditions. Recently, there has been increased interest in industrialising Africa and locating the state within it. However, because the immediate post-independence development experience has been misunderstood, there has been disdain for the kinds of economic policies practised at the time. Therefore, while the state was ideologically reduced to spectator in the wake of neoliberalism in the 1990s, a failure to broaden the economic base through diversified and integrated production has compelled many observers, analysts, governments and other agencies to rethink the role of the state. The state is being invited as participant. But there are problems. Firstly, eschewing the post-independence statist policies, confounded by neoliberal dogma, the state is being invited to do different things — mainly to create an enabling environment for private business.

The post-independence statist developmental era has relevance today, particularly given that current conventional developmental discourse in Africa begs structural

transformation of African economies by gradually calling for greater state participation, if in piecemeal fashion, to pursue, although ironically incoherently, non-statist policies. Some of the problems with recent discourse can be seen from various Economic Reports on Africa published by the United Nations Economic Commission for Africa (hereafter, ECA). For example, in 2013, the ECA suggested making use of Africa's commodities to promote structural transformation. This entailed mainly value addition to the most dominant primary commodities, especially agro-processing, through forward and backward linkages. For Zambia, the state is, being asked to promote backward linkages in mining. Learning lessons from "import substitution" as a "policy failure after independence", although they worked in East Asia, Africa must thus develop "coherent strategies to address market failures and externalities that constrained investment, growth and economic diversification" (UNECA, 2013: 8). This suggests that the post-independence problems have been properly unearthed and analysed, but as the experiences of Zambia will show, this is not the case.

Industrial policy itself has been constrained by a lack of proper understanding of how it was applied in East Asian countries and, therefore, what lessons Africa can learn to make it work. "And without industrial policies to address policy and market failures (especially of information and coordination)," argues the UNECA (2013: 8; emphasis added), "African countries have been unable, until now, to diversify and parlay recent high growth and increased trade into social and economic development." In this thesis, I trace the intellectual understanding of this line of thought through the prism of the Developmental State Paradigm to demonstrate the flaws in the lessons learnt from erstwhile developmental states and how those false lessons, if by their application in industrial policy, are liable to fail to launch Africa's structural transformation.

Hence, there are lessons for today that can be gleaned from the immediate post-independence statist era, and these are different from what the conventional development discourse in Africa suggests largely because of the predisposition embedded in its analytical approach to fail to come to grips with the dynamics and contradictions of the socio-political and economic dynamics woven in post-independence Africa. This is seen from the methodological and analytical approach of conventional literature that is generally ahistorical and bereft of analytical detail (theoretical and empirical). In light of the successes of statist policies in (South-) East

Asia, it is suggested that revisiting the socio-political and economic dynamics of post-independence Africa is paramount in unravelling the actual underlying factors responsible for the failures of statist policies in post-independence Africa. Therefore, I focus on Zambia's post-Independence economy and ascertain determinants of growth from a non-orthodox perspective as elaborated upon below.

Following decades of economic calamities after Independence in 1964, 1999 marked an important year for Zambia. Since 1999, Zambia's annual real GDP growth rate has averaged over five percent. Such high growth rates have overlapped with expansion of mining production and the unprecedented rise of copper prices as well as the strengthening of China-Zambia economic relations. This makes unique the context through which structural change can be analysed. How the government responds to the opportunities these developments present is worth exploring, and how such developments hinder or foster structural change. Importantly, these record growth rates did not correspond to significant lowering of poverty levels and inequality – in 2010, it was reported that close to two-thirds of the population still lived below the national poverty line, and income was distributed with a Gini coefficient of 43.5 in 2006 (Central Statistical Office, 2012).² It is precisely such developments that make it important to analyse what type of growth is occurring and whether or not it is sustainable, and in what ways and with what results.

In explaining the reasons for Zambia's more recent high growth, much of the literature points to free-market type strategies with government's role reduced to spectator. One explanation for this high growth is shared by many. The consensus in most of the literature on Zambia's growth recovery is that macroeconomic fundamentals (had) have been stable and that structural reforms embarked on a decade earlier had proved fruitful (Bwalya, et al., 2011; Mwanawina and Mulungushi, 2008; World Bank, 2004a, 2004b). Structural reforms such as privatisation of state-owned companies (and parastatals including copper mines) and liberalisation of the economy are usually pinpointed as having had desirable effects on the economy.³ Indeed, this widely-held

² In fact, there is evidence of rising inequality - the Gini coefficient increased from 40.8 in 1996 (Central Statistical Office, 2012).

³ Supporting this view is the argument that "the allocation of resources in today's Asia is much more efficient because of the predominance of market forces. Investment is largely private and not public" (Chen, 1997: 34). Chen derives this recommendation from computation of total factor productivity.

view relies predominantly on the traditional neoclassical conception of growth which points to government intervention as being mainly distortionary, not least breeding corruption in the face of weak governance and institutions. Due to its narrow theoretical focus on technical factors, this perspective generally fails to adequately give a potent voice to the social and political forces affecting performance. Indeed, the emphasis on technical conditions of production is short-sighted and thus limits the scope of investigation.

On the contrary, Weeks et al. (2007) warned against a *laissez-faire* approach towards inclusive and sustained growth for Zambia. They propose strong government presence in economic management to bring about poverty-reducing growth. They note that a “non-interventionist approach to strategy would at best result in growth based on minerals and commercial agriculture. This would leave the economic future of the country hostage to the shocks of mineral and agricultural prices and the uncertainties of the climate. If poverty should be reduced within the time frame of the MDGs, indeed, if poverty should be more than marginally reduced over that time frame, a purposeful, integrated growth strategy is required that fosters an efficient manufacturing sector. Such a growth strategy requires well-designed interventions derivative from clear sectoral priorities. Public investment, with its significant crowding-in and linkage effects is the key instrument in that strategy” (Weeks et al., 2007: 64). By recognising an active role for the state in mapping a growth strategy, this perspective also helps to unify the economic factors with the socio-political forces. This position accurately reflects my endeavour – to draw a growth strategy that brings structural change to bear, although this is taken up later.

My main critical point of departure with non-interventionist strategies draws lessons from the South-East Asian economic recovery. Sufficient evidence exists to show that active state participation in economic management was important in fostering poverty-reducing growth. While external factors were also important in bringing about remarkable growth, how the governments responded to the opportunities was key. Domestic policies had to enshrine a strong government role and this enabled these countries successfully to exploit the opportunities the external environment presented.

This vantage point raises questions about what would characterise/constitute a sustainable growth and development strategy for Zambia. But answers depend on the methods of analysis chosen. Thus, I begin with a critical assessment of growth performance based on the Zambian literature. This does allow certain features of what would be characteristic of sustained growth strategy to be teased out. But these are framed here in a more flexible and wide-ranging approach to structural change – i.e. one drawn out of a “linkage-agency” framework à la Hirschman (1977, 1958). Inquiry into the role of the government/state in effecting structural change is also integral to my analysis. Both the exercise of agency and the forging of linkages within and across sectors has to be supported by effective government intervention, as Zambia’s post-Independence development record shows. To frame the role of the state in growth and development, I consider the developmental state debates as a critical point of departure. Interrogating the literature this way will help to draw out concrete policy problems that have resulted from incorrectly interpreting the developmental record of erstwhile developmental states.

Szostak (2009) has recently warned of the complexity of the growth process and calls for an interdisciplinary approach. This is premised on the failure by conventional neoclassical analyses to capture and frame the fundamental causes of growth. I share the view that the growth process is extremely complex and requires heterodox analyses both to assess performance and launch an assault on the contradictions of growth.

1.2 Objectives and research questions

The main objective of the thesis is to develop a framework to assess structural transformation, locating the role of the state within it. The main research questions which are explored in this thesis are:

- *How is economic growth in Zambia understood?*
- *How has Zambia’s growth performance been assessed? What is the theoretical and empirical content of these exercises?*
- *To what extent does structural transformation relate to Zambia’s growth performance?*

- *What are the debates surrounding the role of the state in development, as framed in the developmental state debates? What is the role of the state in Zambia's post-Independence development record?*
- *How realistic are the currently employed methods of assessing Zambia's growth performance? Do the economic conditions in Zambia allow the application of these methods?*
- *To what extent can the state be located in Zambia's immediate post-Independence development record?*

1.3 Hypothesis

The working hypothesis is that structural transformation needs to be divorced from its neoclassical sense of change in composition of output, and from the idea that it is merely a consequence of growth. Properly understood, it also drives growth; although the two-way relationship between growth and structural transformation is conditioned and underpinned by other factors, not least the role of the state, and its determinants.

1.4 Significance and Rationale of the Study

The choice of Zambia as a case study mainly rests on its chequered post-Independence economic history – episodes of experimenting with nationalisation and import-substitution industrialisation policies followed by implementation of market-oriented policies and export-led growth, with none producing desirable outcomes. But this thesis shines light on the immediate post-Independence period, particularly up to the end of the 1970s. This period is taken as the formative post-Independence period under which much of accumulated capital under post-colonial Zambia had taken place. Subsequent periods were aimed at consolidating and reorganisation rather than diversification and transformation. Hence, it is imperative to examine the context under which capital accumulation took place, including how statist policies were applied to drive growth and development. This is done through the prism of development planning, and how it may have limited structural transformation. Zambia's post-Independence development performance is analysed by examining the detail of the first two national development plans, exploring in what ways they promoted industrial development.

This thesis examines the application of neoclassical growth theories to Zambia and, in doing so, sheds light on an alternative understanding of Zambia's growth process. In highlighting Zambia's economic conditions, the study will show that current methods of evaluating performance provide unreliable results and hence obscure lessons to be drawn for policy purposes. Highly exceptional scholars such as Joan Robinson (1953-4) argued that the neoclassical approach, by concentrating on the technical aspects of production (and subsequently growth), diverts interest away from more meaningful inquiry related to the factors affecting income distribution and, subsequently, growth.

This thesis begins by offering a critique of the traditional approach to growth performance assessment. It is argued that underpinning this line of inquiry are flawed theoretical and empirical foundations. Chief to this study is to demonstrate the problems encountered when the traditional approach is utilised. However, the critique is not entirely a negative exercise. In offering a critical analysis of these methods, I will bring out some essential features of Zambia's economy largely overlooked, or indeed set aside, by the conventional methods of assessment. This will aid in discussing the nature of the Zambian economy that in turn will feed into the understanding and context of development planning.

This thesis claims its place in the wider literature explaining sources of economic growth in developing countries. However, the main contribution of this first part of the thesis is to illustrate that Zambia's reality is incongruent with the conditions required to construct these traditional approaches which serve to explain growth while diminishing, or deploring, the role of the state.

1.5 Structure of the thesis

Broadly, besides this introductory chapter, the thesis is divided into two sections. The first section, formed of two chapters, examines the theoretical debates of growth theory and, the role of the state in development. The second section, excluding the conclusion, is made up of three chapters, which explore the detail of Zambia's post-Independence developmentalism prefaced by a brief overview of the pre-Independence development experience.

Chapter Two introduces the discussion by exploring in what ways Zambia's growth performance has been analysed. This is done to identify the intellectual thrust of leading (orthodox) analyses of Zambia. I then offer a critical assessment of current methods of growth performance assessment which compute Total Factor Productivity (TFP) as an essential ingredient in the growth process. I find that aggregate production functions occupy an important place in (Zambia's) growth performance assessment by making reference to the literature on Zambia. Of course, it should be mentioned here that use of aggregate production functions is a practice that is conventional among neoclassical theorists and applied researchers. I move on by erecting an integral pillar of critical analysis of the neoclassical approach; this is the Cambridge Capital Critique.

The preface to alternative methods of economic performance assessment involves subjecting the assumptions underlying TFP measurements to the realities of the Zambian economy. Hence, I briefly bring out essential features of the Zambian economy; these features, it is argued, cannot be captured by current methods of assessment. In other words, I seek to answer the following question; do the realities of Zambia's economy allow for TFP measurement?

Chapter Two's main task is to show the weaknesses, or invalidity, of current methods of growth performance assessment. It is subsequently stressed that the growth process is multidimensional and, therefore, highly complex. Thus, the neoclassical conception of the workings of the capitalist economy according to the narrowly-conceived production process is incapable of capturing and/or explaining the multidimensionality of the growth process.

In the third Chapter, I explore the debates on the role of the state through the theoretical construct of the Developmental State Paradigm (DSP). By examining selected (South-East) Asian countries through the conceptual understanding of development states, I uncover the process of development more generally, and structural transformation through industrialisation in particular, as an outcome of the interplay of social and economic processes, with the state playing an important role within them. The lesson drawn is that industrial policy should not be narrowly conceived as an economic process aimed at shifting the composition of output. Rather, there are interests in society which act through and without the state to promote their own agenda.

Chapter Four begins the more substantive exercise of empirical evaluation by examining the pre-Independence Zambian state. This is to situate not only the role of the state, but the motivation of intervention, and for whom. It is found that the colonial state pursued development in a very narrow way, by silencing the indigenous population, serving limited socio-political and economic interests. Importantly, wide-ranging and effective interventionist strategies underpinned colonial developmentalism. This suggests that interventionism must be understood as serving a particular configuration of socio-political and economic interests. Also, Chapter Four briefly explores the postcolonial literature on African politics and the state. The postcolonial African state has often been interpreted as an obstacle to development, but a failure to recognise the societal composition of socio-political and economic interests has obfuscated analyses. The state, seen as a leading participant in the socio-political and economic interactions, does allocate resources, but who gets to benefit from this allocation and what it does for development must be seen in light of the nature of the groups competing for resources and other actions through the state.

Chapters Five and Six, through the prism of development planning, explore post-Independence Zambia's system of accumulation as one which strengthened rather than altered the inherited structure of production. While wide-ranging developments were pursued, they remained restricted in scope, because of the way in which resources through development plans were allocated. Fundamentally, this reflected the nature of socio-political and economic interests, which are mentioned although not explored in detail for reasons of space and scope of the thesis. Nevertheless, the thesis does examine the political context under which economic decisions were made and policies applied. In finding that the economic events and decisions responded to the political context, resources were largely placed in the hands of the unproductive groups who had gained political power following Independence.

Development of the manufacturing sector is explored in detail in Chapter Six, to demonstrate the nature of developmentalism, and the nuance that the form of dependence and intervention for industrialisation matters. This is done, in part, to quell studies which see interventionism from a one-dimensional universalistic perspective as an attribute which is bad for growth. In sum, Chapter Five and Six aim to revisit

and reinterpret Zambia's post-Independence development record, with reference to the 1960s and 1970s.

Chapter Seven will wrap up the thesis by using the discussion preceding it to make a case for the importance of the social in the understanding of the growth process. In addition, as the chapters preceding it presume, although with some detail, that socio-political and economic interests underpin development, Chapter Seven suggests that further research would do well to explore in what ways Zambia's post-Independence development record created and entrenched interests. Not only that, this would enable analysis to examine the interactions within and across these interests, and in what ways they promoted or blocked structural transformation, within a given socio-structural context and an international environment.

2 Growth Performance Assessment

2.1 Introduction

This section concerns itself with critically appraising the manner in which growth performance of Zambia's economy has been evaluated. To do this, a critical assessment is made of orthodox growth theory as the main theoretical construct that has characterised assessment of Zambia's growth performance. Thus, this critical analysis is not only important for Zambia's literature but also generally useful in challenging growth performance assessment relying on the neoclassical methods. Resting on the belief that assessment of performance should help us understand the growth process, I seek to determine whether the theoretical and empirical underpinnings of the neoclassical methods are not only generally valid but whether they provide insights on actual growth processes.

As a starting point, I summarise the methodological content of some studies that have utilised the orthodox theoretical construct and their subsequent empirical and policy implications. From this critical appraisal, I argue that evaluation of growth through the neoclassical lens is flawed and does not provide valuable insights into the actual growth process. It distracts from identifying and assessing the drivers of growth by casting a blind eye on the processes of structural change.

This critical appraisal builds its argument around the key pillars mentioned above. However, the ensuing argument draws some fundamental interrelated conclusions from the deficiencies of neoclassical growth theory; that (1) TFP measurement is based on dubious theoretical propositions which renders it an erroneous construct (2) the aggregate production function, essentially an integral instrument for both theoretical and empirical neoclassical propositions in growth theory, is an illegitimate concept (3) the realities of Zambia's economy significantly diverge from the assumptions of the theoretical model of the traditional neoclassical approach; the realities of Zambia's economy do not justify the conditions necessary for the computation of TFP and therefore invalidate the narrow approach of neoclassical growth theory.

From the theoretical point of view, I question the underlying theoretical construct of old growth theory, by recourse to the Cambridge Capital Critique. For to argue that the aggregate production function is illegitimate is to imply that marginal product of aggregate capital and marginal product of aggregate labour are fallacious constructs even within neoclassical reasoning itself.⁴

As previously mentioned and in prospect, I show that the realities of Zambia's economy violate the economic conditions necessary for TFP computations.

2.2 Zambia's growth performance assessment

While the literature across the world utilising old and new growth theory is vast and dense, very few studies have independently sought to explain Zambia's post-Independence growth performance.⁵ However, two studies that serve as representative independent standalone studies are notable (these are Mwanawina and Mulungushi, 2008; World Bank, 2004a, 2004b). These are particularly important for my purposes of offering a critical review specific to both growth theory and its applicability to Zambia. They both attempt theoretically and empirically to offer an explanation for Zambia's growth episodes. By recourse to the realities of Zambia's economy, I argue here that the story of the evolution of the economy matters for it tells us something about the realities to which the theory should respond.

The study by Mwanawina and Mulungushi (2008) was a product of the AERC's Explaining African Growth Performance project which begun in 1998. The main output of this project is a two-volume book entitled 'The Political Economy of Economic Growth in Africa, 1960-2000' by Ndulu et al. (2008a, 2008b). The first volume, in part, takes neoclassical growth theory as its standard analytical approach in explaining sub-Saharan Africa's poor growth account and, subsequently suggesting lessons for policy. While taking a retrospective view by synthesising key poles of the case studies, it provides an overview of the methodological benchmark and analytical approach adopted by the case studies; this is particularly so given in the first chapter

⁴ In a reply to Joan Robinson, Fisher (1971a: 405) argues that "If aggregate capital does not exist, then of course one cannot believe in the marginal productivity of aggregate capital".

⁵ Cross-country studies have included Zambia but have not solely focused on it. See for instance Sachs and Warner (1997); Barro (1991).

by Ndulu and O'Connell (2008). Among others, limited structural transformation is considered to have been a hindrance to growth. This limited structural transformation is typified by pointing at limited contraction of the agricultural share of the labour force and/or a focus on export diversification. For the latter, that primary commodities continue to dominate exports is reasonable evidence to suggest that structural transformation has been constrained. But the narrow approach to performance assessment coupled with the narrow conception of structural change lamentably fails to provide a convincing account of the two-way causal relationship between growth and structural change. Further, interventionist strategies are pinpointed as an 'anti-growth syndrome', consequently advocating market-based policies. State participation is cautioned, side-lined and held up as an object of ridicule. This way, the methods fail to give a sound account of the role of government beyond social service provision.

The second volume is a collection of country case studies of which Mwanawina and Mulungushi (2008) is a component of the volume's accompanying CD-ROM. Methodologically, each country case study is informed by the outline given in the first volume.

This project has been received with mixed feelings. Abrahams (2009: 618) regards this two-volume study as "monumental" and notes that "The ultimate strength of the book, however, lies in the perceived authority of the developmental economist's approach in shaping economic growth policy in a neo-liberal context." In essence, this remark suggests that the findings in the study provide empirical support and credence to the neoliberal policies advocated as recommendations. It goes without saying that the acclaim with which this study has been greeted propagates neoliberal ideological arguments supported by neoclassical theoretical constructs. On the contrary, Van De Walle (2009, 2008) offers a critical book review but importantly notes the study's failure to consider properly the complexity of the growth process and its implication. For instance, the study overlooks the "dynamics of the growth experience" by focusing on "a narrow research approach that consistently favored an aggregate macroeconomic approach" while at the same time casting no light on the role of structural change given the "static analytical framework" (Van De Walle, 2009: 183). In this way, it misses the opportunity to inform and offer a compelling account of Africa's growth record.

In hindsight, these weaknesses are shared and, therefore, largely characteristic of Mwanawina and Mulungushi's (2008) country's case study.

I begin by summarising the analytical framework adopted by Mwanawina and Mulungushi (2008), justified by Ndulu and O'Connell (2008) and claimed to offer empirical support to their arguments. The latter carry out growth accounting exercises on the back of what they call a 'benchmark' Cobb-Douglas aggregate production function of the form:

$$y = Ak^{\alpha}h^{1-\alpha}$$

where y is per capita real GDP, k is per worker capital stock and h is per worker human capital and A is an index of total factor productivity (TFP). From this theoretical construct and the associated results, the authors (i.e. Mwanawina and Mulungushi, 2008) conclude and report that TFP accounted for most of Zambia's economic growth performance since it corresponded significantly with fluctuations in the real GDP per capita. Further, while claiming that the growth accounting approach provided useful insights in explaining Zambia's growth story by examining sources of growth, they note that it treated technology (as measured by the index of TFP) as exogenous and thus it ignored the effect of policy variables on capital accumulation (Mwanawina and Mulungushi, 2008: 278). To capture the effect of policy variables and "to gain further insights into the sources of growth", based on new growth theory, the authors model a regression of the form:

$$g_{it} = \sum_{i=0}^n \alpha_i X_i + \varepsilon_i$$

where g_{it} is growth rate of real GDP per capita, α_i 's are parameters to be estimated, X_i 's are the independent variables (believed to capture the effects of policy variables on the growth rate) and ε_i is the error term. The authors include seventeen explanatory variables and, unsurprisingly, nine of them were significant. Overall, the authors concede that "the regression was not robust owing to high correlation among the set of policy variables ... the regression can be interpreted as indicating the joint contribution of the policy variables while the relative importance of each specific

linkage was somewhat less robust” (Mwanawina and Mulungushi, 2008: 278). Of course, one may claim that the combination of old and new approaches to economic growth as presented in these works, also common in the literature, has been justified based on their supposed correspondence (See for instance Barro, 1999).

In a similar light, the World Bank's (2004: 14) study in its so-called growth analysis for Zambia carried out growth accounting exercises by first assuming that “GDP can be expressed as a function of physical capital and human capital” and given by:

$$Y = AF(K, H)$$

where Y is gross domestic product; A is total factor productivity; K is gross domestic capital stock; H is human-capital-adjusted labour input. Finally, using this framework, it is concluded that changes in output per effective labour were mainly accounted for by TFP. This parallels the previously mentioned study.

A comparison of the methodological content of these two studies reveals a stark similarity, underscoring the implicit traditional assumption that this approach is conventional and, therefore, without fault.

Clearly, underlying these two studies are aggregate production functions as an integral device. From aggregate production functions, practitioners compute a residual they call TFP.

The main message is that TFP is an important factor in explaining Zambia's growth story. Because of this, other studies have used such results as forming the basis for their own inquiry. For instance, without questioning the validity of this methodological approach, Bigsten and Tengstam (2010: 14; emphasis added) ask “What explains the low levels of investment and the poor TFP development?” (the duo based this inquiry on Mwanawina and Mulungushi (2002) which culminated in Mwanawina and Mulungushi (2008). It is important to note that the findings of one study have formed the basis of another; supposedly based on the acceptance that these findings are adequate. As I argue, TFP is a meaningless construct and thus such adjacent courses of inquiry are vacuous.

For both studies, underpinning the growth accounting exercises is the old growth theory, placing a production function at the core of the investigation. However, Mwanawina and Mulungushi's (2008) recourse to regression analysis is rooted in endogenous (or new) growth theory, which too is implicitly underpinned by the notion of the production function, where output is represented as a function of a seemingly endless list of explanatory variables.

In the critical analysis that follows, I want to demonstrate that, though this method of assessment is conventional among neoclassical practitioners, it is questionable on both theoretical and empirical grounds. Thus, I trace the history of the production function and show that while the problems encountered have been recognised by critics, they have been resisted and generally overlooked by practitioners. In a way, this is to show why mainstream economics continues to use these methods despite the huge history of accumulated problems. This helps to understand why practitioners generally accept such methods.

A critical analysis of the Zambian case study is useful on several accounts. Importantly, it demonstrates that performance assessment is carried out by use of conventional methods as though these are without problems here. However, there is longstanding literature questioning the validity of this sort of analysis. Thus, I rekindle this critical discourse and trace it back to show that these conventional methods are in fact invalid in assessing performance.

2.3 Growth Accounting and Core Propositions of Neoclassical Old Growth Theory

Here, I show the core propositions of growth accounting exercises and, in this way, help to bring to the fore what is in dispute.

Growth accounting exercises find their roots in the work of Solow (1956, 1957) and have since provided the criterion for measuring and/or calculating TFP. Proponents of growth accounting generally contend that economic growth can be decomposed into two parts. On the one hand, growth can be explained by accumulation of the factors of production (labour and capital) while, on the other hand, an index of technical progress (TFP) would then be used to explain growth. Each part, within this framework would

ultimately individually allow its contribution to economic growth performance to be measured. TFP is deemed to measure economic efficiency which is taken as an indicator of trajectories of how well resources are combined to produce output. The selection of an appropriate functional form of the aggregate production function as well as precision in measurement of both output and factors of production are important ingredients in growth accounting cookbooks (Caselli, 2005; Nadiri, 1970; Collins and Bosworth, 1996; Bosworth and Collins, 2003).

A point worth noting at this stage is that TFP indices are derived when either a production function is unambiguously assumed or from the theory of distribution wherein production functions are indirectly assumed (Nadiri, 1970). From this, growth accounting practitioners use either the primal or the dual approach, which are by construction equal. Because the standard primal model of growth accounting is readily derived from a production function, it is usually claimed to be concerned with physical quantities while the dual approach, also known as the price approach, considers changes in prices of factors of production rather than their physical quantities by recourse to the national income accounting identity (Barro, 1999; Hsieh, 1999; Jorgenson and Griliches, 1967). This is misleading because value data is eventually utilised in empirical work. The dual approach is usually applauded when practitioners wish explicitly to avoid making assumptions related to the “underlying technology or market structure” (Hsieh, 2002: 504). These assumptions relate to type and form of the production function as well as the capital-labour ratio. Additional assumptions include profit maximisation, constant returns to scale, full employment and perfectly competitive input and output markets. These assumptions are necessary for neoclassical theory of growth and distribution, for without them, it is impossible to deploy the aggregate production function and its subsequent implications (Nadiri, 1970; Felipe and Fisher, 2003).

These core propositions – one-commodity world, conception of one-way causal relationship between inputs and output, distribution of income being solely determined by technology – were seriously questioned and thus more generally formed the basis of the Cambridge critique. This is the subject of the next section.

2.4 Cambridge Capital Theory Controversies: Yes, they matter!

Important to this critical analysis is the neoclassical one-sector growth model as represented by the studies outlined above. So, output is represented as a function of factors of production – i.e., labour and capital. More worrying, however, is that acceptance that in such a representation, the output good and the capital good are the same, hence the term one-good model. TFP, measuring technical progress, usually also explains the efficiency with which factors are combined to produce output. To reproduce a theory appropriate for growth, capital is viewed as a factor of production whose so-called marginal product measures its contribution to output. In neoclassical theory, in addition to other neoclassical assumptions, marginal product of capital determines the rate of return to capital also called the rate of profit or interest. The Cambridge critique vigorously challenged many neoclassical propositions and showed the inadequacies of the one-sector model in explaining the growth process, not least because of the dubious theoretical constructs on which it is founded. In essence, the critique is a collection of the longstanding literature demonstrating the flaws of neoclassical growth theory as applied by Mwanawina and Mulungushi as well as the World Bank on Zambia's data. It undermines the logic of the theoretical exposition of Zambia's growth story; but doing so also sheds light on what aspects of the growth process are ignored and should, therefore, be considered in building a more coherent framework of performance assessment.

Both studies outlined above have utilised aggregate production functions that treat capital as an input in production. Although the theoretical expression of capital is physical, constant price data is utilised in empirical investigations.

Traditionally, the starting point of any theoretical appraisal of the calculation of TFP, in particular, and neoclassical growth theory, in general, is reference to the Cambridge Capital critique. Sadly, however, as noted by Cohen and Harcourt (2003: 200):

“The Cambridge controversies, if remembered at all, are usually portrayed today as a tempest in a teapot over anomalies involving the measurement of capital in aggregate production function models, having

as little significance for the neoclassical marginal productivity theory of distribution.”

What follows is a brief overview of some relevant aspects of the Cambridge critique. More detailed discussions of the Cambridge critique can be found in the works of, among others, Harcourt (1972, 1976); Fine (1980) and Sen (1974). The main purpose of this presentation is to establish whether or not they were (or are) of little concern.

I restate here that use of aggregate production functions in growth performance reflects acceptance of the marginal theory of growth and distribution. The Cambridge debates showed that this was incorrect. As demonstrated in Fine (1980), the Cambridge critique shows that the marginal productivity theory of distribution is invalidated when an economy is composed of heterogeneous commodities, as reality would have it! I will confine myself to shedding light on this as it has direct association with my purposes – showing the questionable nature of neoclassical growth theory.

The Cambridge debates lasted two decades and were much more than a debate on aggregation of capital. They spanned from aggregation problems in production functions to other controversial issues such as the theory of income distribution and processes of accumulation compared across dynamic and static equilibria (Felipe and Fisher, 2003; Cohen and Harcourt, 2003). In friendlier terms, the debates showed that the neoclassical parables are invalidated when a more than one commodity world is considered.

Identifying and properly explaining the causes of economic growth is the underlying motive of neoclassical growth theory. Underpinning this, however, is the meaning and measurement of the concept of capital and how in turn it relates to the technicalities of the growth process. The contrasting interpretations of this concept and its role in the growth process were pivotal to the Cambridge critique. One side of the debate advanced propositions and justifications for neoclassical marginal productivity theory of value and distribution. At the core of this are technical conditions of production, pivoted on achievability of technical substitution of inputs. Because of the strong weight placed on technical conditions of production, setting aside the social aspects of society embedded in institutions is an unsurprising conduit of this method. The other

side contrasted this view in the spirit of the revival of political economy by arguing that an explanation of the working of a capitalist economy (and therefore the growth process) would require an appreciation of the context of analysis and characterisation of the institutional set up of an economy (Harcourt, 1972, 1976, 1979, 2013).

In retrospect, my interest in the Cambridge critique lies in showing theoretical and empirical flaws associated with the concept of TFP. This is important in demonstrating the emptiness of the claim that Zambia's post-Independence growth was largely explained by TFP fluctuations as claimed by the outlined studies. Recall that TFP measurement presumes acceptance of the neoclassical interpretation and representation of capital. In this schema, capital is merely a factor of production. But its role is largely relegated to a 'factor' in a production function. However, recognition that such a representation is faulty ignited the Cambridge critique with Robinson's (1953-1954) famous inquiry into the measurement of capital. Robinson questioned the concept of the production function and the propositions derived from it. She asked: "of what units is C composed? ... The ambiguity of the conception of a quantity of capital is connected with a profound methodological error, which makes the major part of neo-classical doctrine spurious." (Robinson, 1953-1954: 82, 84). In other words, she asked how capital is to be measured once represented in a production function.⁶ In a production function, quantity of capital is measured by a single number. This view is problematic in itself, not least because of the presence of heterogeneous capital. She was essentially unhappy with the neoclassical conception of the capital that treated it as if it were an argument whose contribution to (aggregate) production could be easily and uniquely measured without violating the neoclassical propositions; indeed, these depend upon a physical notion of capital. Her concern lay in understanding that capital was a heterogeneous entity whose value measure as a factor of production in aggregate production functions raised a number of issues.

Suppose for a moment it is agreed that capital is homogeneous – so that we do away with difficulties imposed by the heterogeneous capital arguments. In this case, we can

⁶ Robinson frequently challenged the conventional neoclassical logic in other works. However, her introductory words in this daring but yet imposing icebreaker are worthy of note: "the production function has been a powerful instrument of miseducation ... and so sloppy habits of thought are handed on from one generation to the next" (Robinson, 1953-54: 81). It is imperative to shed light on these 'sloppy habits of thought'.

investigate whether a technical relationship between homogeneous capital and output would allow derivation of the rate of profit. Even if indeed it is possible to obtain the marginal product of capital in terms of the output good, it is still difficult to establish what units would be used to represent it because the rate of profit, the ratio of the surplus to the advance, is a pure number (Sen, 1974). But proceeding this way exposes one to the relative price problem since the marginal product in terms of the output good would require a rate of profit computed by a ratio of the surplus to the advance. This is the well-known circularity in the so-called capital aggregation problem⁷ (Harcourt, 1972; Sen, 1974; Fine, 1980; Cohen and Harcourt, 2003). It can be recalled that the neoclassical propositions require that the rate of profit is determined by the marginal product of capital. However, the goods that create the capital stock are themselves produced. Therefore, in a capitalist world, a profit is required from advances made on the purchase of these goods. A price should therefore be known *a priori*. It then follows that the one-way causation of marginal product and rate of profit cannot be established. In other words, an independent determination of the value of capital without knowledge of the profit rate is impossible. Moreover, it may be that the value of capital will change following a change in the prices (i.e. the rate of profits and wages) as opposed to changes in quantities alone (Sen, 1974; Fine, 1980). Put differently, the same physical capital would correspond to a different value if the rate of profit changed. Thus, assuming a homogeneous capital good does not avoid the circularity problem.

Following Joan Robinson's remarks pinpointing difficulties of the neoclassical approach outlined above, a number of authors stepped forward to provide a string of intellectual justifications which arguably did nothing more than solidify the counter-

⁷ It is important to clarify what is meant by the problem of aggregation as this departs from the conventional understanding of it. Here, as made clear in Fine (1980: 98-99), "To some extent, the problem of aggregating capital is a misnomer ... the problem is to aggregate capital in such a way that the propositions of neo-classical theory remain valid – that a production function can be formed from which marginal products yield distribution." Of course, several ways of aggregating capital are possible, such as aggregation of money values, but the problem here transcends that. So, what the capital aggregation problem implies is quite different from merely adding up diverse capital goods because this problem would still hold even if capital is assumed to be homogeneous given a different output good. It is a question of being able to obtain a rate of profit solely from the technological relationship (represented by a production function), and doing so in such a way that capital indexing poses no problems. The Cambridge critique shows that proceeding this way is illogical. Thus it holds that viewing the Cambridge critique as merely a problem of aggregating capital – conventionally – shows a lack of understanding of the deep issues raised by the critique.

arguments, not least raising additional questions. For instance, Champernowne (1953-1954) rose to the occasion as regards the measurement of capital, suggesting a chain index measure of capital in production functions so that appropriate neoclassical results are obtained – i.e. equality of the rate of profit and the marginal product of capital, for instance. But this result depends not only on the revaluation of capital, oftentimes at odds with the market value (Sen, 1974), it also requires knowledge of either the wage rate or profit rate (Harcourt, 1972). This points to the inescapable impracticality of the postulate relating to obtaining the rate of profit from the so-called marginal product of capital since measuring capital, not least because using the chain index implicitly alerts one to see that capital measurement is contingent on prices and distribution. Nevertheless, the significance of this lies in arguing that the chain index fails to rescue the flaws of this aspect of neoclassical theory. Moreover, it is also important in documenting some of the challenges raised by antagonists and defences advanced by protagonists since the dawn of the debates.

An ingenious approach to remove the relative price problem developed by Solow (1957) was, in addition to assuming homogeneous capital goods, postulating that the economy was composed of one good so that the capital good and the consumer good are the same. Even though this eliminated the relative price problem, it did not insulate the neoclassical approach from further, perhaps more devastating criticisms.

Because the world is made up of heterogeneous capital goods, the propositions of the one-good world in terms of distribution are problematical. So, the capital indexing, or capital valuation, imposes inescapable problems to the neoclassical theory due to what are known as Wicksell effects, following Wicksell (1911). In simple terms, Wicksell effects are associated with changes in the value of the capital stock when interest rates change. Two types of Wicksell effects are usually distinguished, namely; price Wicksell effects and real Wicksell effects (Harcourt, 1972; Cohen and Harcourt, 2003). Price Wicksell effects stem from revaluating the capital stock based on changing prices, i.e. as wages and rate of interest (profit) change given a particular technique. Real Wicksell effects emanate from changes in the quantity of capital i.e. real or physical capital stock such that as the technique changes, wages and the rate of interest also change.

The problems Wicksell effects imposed on the neoclassical paradigm are commonly known as double (or re-) switching and capital-reversing (or reverse capital-deepening) (Cohen and Harcourt, 2003). The discussion that follows sheds light on each of these concepts and how they proved devastating to the neoclassical paradigm. But first, going back to the earlier argument relating to a series of defences developed by neoclassical followers, I bring neoclassical propositions regarded as parables, made famous by Samuelson (1962). He argues that “the "Surrogate Production Function," can provide some rationalization for the validity of the simple J. B. Clark parables which pretend there is a single thing called " capital " that can be put into a single production function and along with labor will produce total output (of a homogeneous good or of some desired market-basket of goods)” (Samuelson, 1962: 194). From this, three crucial parables are drawn. First is marginal productivity of capital, deriving from the technical conditions of production, determine rate of profit (rate of interest). Second is an inverse relationship between the rate of interest and the capital-output ratio income, including diminishing marginal productivity so that a higher quantity of capital is associated marginal product of capital (hence the rate of profit). This parable follows from the notion of scarcity in that a lower rate of profit is associated with a higher capital-labour ratio (Lavoie, 1999). Third, income distribution between wage-earners (labourers) and capitalists is determined by technology and factor endowments, i.e. knowledge of which techniques are in use in addition to knowledge of the set of all available techniques.⁸

Ideally, a production function representation is a physical relationship of output and inputs. This physical relationship forms the basis of characterisation of these parables. However, the physical relationship presumption breaks down when inputs (particularly capital) are heterogeneous because of the need for capital aggregation and, therefore, capital valuation. It is from this sort of procession that Wicksell effects present devastating problems for the neoclassical paradigm via reswitching and capital-reversing.

⁸ Moss (1980: 65) remarks that “The marginalist dictum that the price of capital is determined by its marginal product is a special case of the more general statement that the rate of profit is determined by the value of capital employed in given technical conditions of productions.”

The phenomenon of reswitching relates to the assertion that out of all available production techniques, a given technique may be most profitable at more than one rate of interest, despite other techniques being more profitable at rates of interest in between. Because of this, a one-to-one association between a given method of production and the rate of profit can no longer be established. Thus, in the presence of diverse goods, a lower value is placed on the same physical quantities of capital even though the rate of interest is higher (Fine, 2003).

Reverse capital-deepening on the other hand points to a positive relationship between the capital-labour ratio and the rate of interest. Price Wicksell effects suggest that when prices change, so does the same physical capital stock (Robinson, 1955). In this case, given a technique of production, it is then possible for a positive relationship between the rate of profit and the value of capital per worker to exist (Lazzarini, 2011; Lavoie, 2000). This phenomenon also raises problems for the neoclassical theory of growth and distribution that relies on the parables that no longer hold.

So, discussions pertaining to policy prescriptions advocating capital-intensity, as far as the Cambridge critique is concerned, should be divorced from marginal productivity theory. To stretch this point further, certain interpretation such as propositions that labour abundant economies should use less capital-intensive techniques should be interpreted with care. This proposal may not necessarily derive from marginal productivity theory. As (Sen, 1974: 333) clarifies: “when one recommends choosing less capital-intensive techniques in a surplus-labour economy, one is usually making a statement about investment and not about the existing capital stock ... it is not a question of treating capital as one factor of production but of economizing on the use of the class of non-labour means of production vis-a-vis the use of labour, which is relatively abundant.”

The problems of reswitching have been recognised by many but received with mixed feeling. Samuelson’s famous concession is worth quoting here: “The phenomenon of switching back at a very low interest rate to a set of techniques that had seemed viable only at a very high interest rate involves more than esoteric technicalities. It shows that the simple tale told by Jevons, Bohm-Bawerk, Wicksell, and other neoclassical writers — alleging that, as the interest rate falls in consequence of abstention from present

consumption in favor of future, technology must become in some sense more "roundabout," more "mechanized," and "more productive" — cannot be universally valid" (Samuelson, 1966: 568). Other researchers cast aside the implications of reswitching and claim that it is unimportant in empirical work (see for instance Stiglitz, 1974). Nonetheless, to argue that reswitching is empirically irrelevant is a proscription in itself in that it can be shown that the flaws associated with empirical estimations hold even in the absence of reswitching (Fine, 1980). In fact, a change that affects the price of capital is necessarily recorded as a change in technology even when real capital remains unchanged, with or without reswitching. For instance, due to the one-commodity representation of an economy, an increase in price of capital goods is necessarily captured as an increase in quantity of capital. This interpretation of a false increase in capital while output remained the same would appear (erroneously) to reflect negative technical progress (Fine, 2003). Thus, treating an economy as being represented in a one-commodity sense conflates price and quantity changes, the former subsequently interpreted as real changes.

So far, I have been concerned with arguing that the neoclassical paradigm does not hold. Further, it has been revealed that the proposition of the marginal productivity theory of distribution fails to represent a world in which there exists a spectrum of commodities. An additional point worth noting here is that incorporating the results of the neoclassical marginal productivity theory into a growth theory begs an additional explanation for how relative factor endowments are themselves arrived at. Savings behaviour of individuals are incorporated into the technicalities of the model itself pivoted on the crucial assumption of a classless equal savings share for the entire population. However, when savings of the entire population depend on distribution of income between labourers and capitalists, the assumption of an equal savings share disintegrates thus affecting the results of the neoclassical model.

In revitalising political economy from classical contributors, the rate of profit for instance becomes the result of the accumulation process following the deduction that "the potential rate of profits on capital arises from differing power and social relationships in production, and the realization of profits is brought about by effective demand associated with saving and spending behaviors of the different classes and the "animal spirits" of capitalists" (Cohen and Harcourt, 2003: 208). It is this accumulation

process that drives growth. Indeed, post-Keynesians suggest that the adjustment of savings to investment rests on changes in the distribution of wages and profits against the fundamental principle that ‘animal spirits’ of investors determine the rate of growth (Kurz and Salvadori, 2003). Conversely, however, the neoclassical theory of growth has sought to argue that, with full employment of resources,⁹ there exists a steady state rate of growth that is uniquely determined and to which, over time, an economy will move (Harris, 1975, 1973).

Today, analysts seem to be completely oblivious of the Cambridge critique and continue to apply models that violate (economic) logic, at least that is what the debate was all about in simple terms. Perhaps their implications are not fully understood or whether the debate itself is relevant in the first place.

Viewing capital goods as being themselves produced exposes the weakness of the neoclassical conception of technical progress. The neoclassical schema of technical progress derives from the presumption that capital is a factor of production, in which case its contribution to output is viewed as a one-directional stream – i.e. from factors of production (including capital) towards output. But because capital goods are themselves produced, the neoclassical treatise is unable to capture “the feed-back effects of technical progress from one activity to another.” (Harcourt, 1972: 86). This point is especially made clearer when the Solow model is taken as true, following Solow (1957). Here, a constant savings proportion may be assumed so that technical progress reflects shifts in the production function and capital deepening represents movement along the production function. Viewed within this framework, technical progress would imply not only a higher capital-labour ratio but also higher savings. From this schema it is hard to know whether a higher capital-labour ratio is a result of technical betterment or capital deepening. It is correct, however, to suggest that the higher capital-labour ratio is attained only because the economy can save more, but this has, in turn, been made possible due to technical advance. Harcourt (1972) argues that Solow’s view is insufficient in giving a true account of cause and effect. For instance, it partially disregards the effect of technical progress on capital in terms of making capital more efficient. Indeed, Solow’s model would assign the rise in the

⁹ Full employment, in the neoclassical conception, is guaranteed in part through the principle of factor substitution.

capital-labour ratio to a rise in savings only whereas the movement along the production function before technical progress would be indicative of capital deepening, with the residual being assigned to technical progress. Thus, the Solow model ignores the bi-directional relationship that would result as technical progress brings about an improvement in capital use – i.e. makes capital more efficient.

2.5 Realities of the Zambian economy

Theory should respond to realities, i.e. actual economic experiences. This way, it can be used to understand what is going on. Thus, to help explain Zambia's growth process, the theory used should not be incongruent with Zambia's actual economic experience. While making assumptions may be argued to be important in order to simplify exposition, it should not be done at the expense of providing insights into actual economic experiences. I subject the assumptions necessary for TFP measurement to the realities of Zambia's economy. Doing so serves two important purposes; firstly, it questions whether Zambia's economic conditions allow for TFP measurement; and, secondly, perhaps more rewarding but related to the first, it presents key features of Zambia's economy. These features will provide the foundation for characterising a structural change framework for Zambia. I argue here that relying on the neoclassical paradigm to explain growth not only fails to do so but also obscures the actual economic experiences that the theory should untangle.

Few studies have assessed theoretical requirements for TFP against actual economic conditions, but two are notable (Fine, 1992; Sato, 2005). Fine (1992) offers a critical appraisal of the neoclassical paradigm utilised by Jones (1983) to compute and explain South Africa's coal industry productivity. Importantly, Fine questions whether the industry's economic conditions allow for TFP measurement, and by showing that they do not, he argues that he reveals some major features of the industry from which he draws conclusions poles apart from those of Jones'. Sato (2005) follows Fine's (1992) example by critically assessing Truett and Truett's (1997) study utilising the neoclassical technical apparatus embedded in the so-called duality of a cost function. From this cost function, the latter obtain narrow technical aspects of production including input cross price elasticities. Sato disputes this approach and examines its realism when weighed against actual industry conditions. In showing that assumptions

necessary for calculating TFP growth are at variance with the South Korean steel industry, Sato argues that he sheds light on some important patterns and characteristics of the industry, which he posits offer a different interpretation of economic performance than that advanced by Truett and Truett. In recognising the flaws of the methods selected to assess Zambia's economic performance, this section of the critical analysis adopts Fine's and Sato's approach and thus draws its own conclusions from Zambia's realities.

In order to examine whether the economic conditions in Zambia permit TFP measurement, a few concessions need to be made. The neoclassical paradigm adopted in the studies summarised above is based on a number of simplifying assumptions including: Zambia is a one-good economy; perfect competition prevails in the output and input markets; full employment of resources. For my purposes, I provisionally accept them so as to investigate whether they are in agreement with the economic conditions prevailing in Zambia. This is important because it would be impossible to measure TFP without these assumptions.

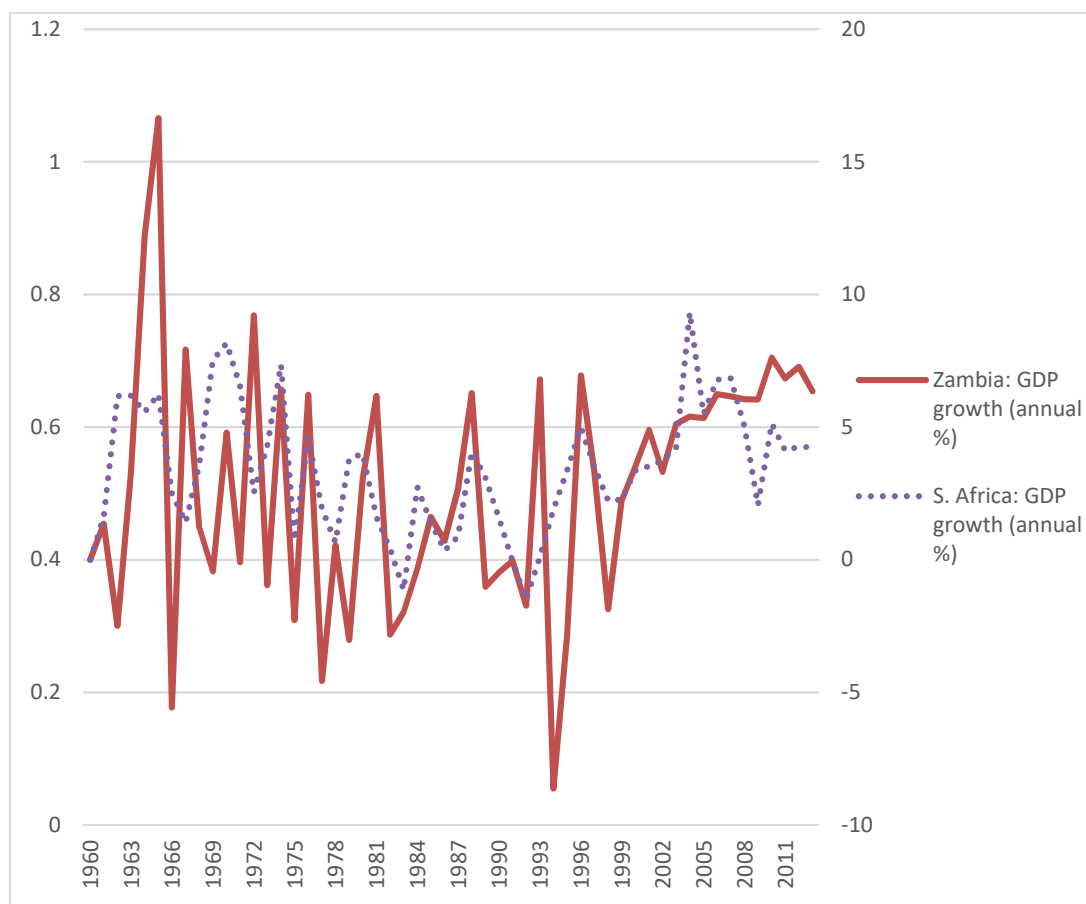
2.5.1 On Zambia's performance and TFP Trends

At Independence in 1964, Zambia was a thriving nation based on developing country standards. Evidently, from Figure 2.1 below, Zambia's overall GDP growth post-Independence has been far from satisfactory, particularly between early 1970s to late 1990s, even when compared to developing sub-Saharan Africa. This unsatisfactory economic performance has been a subject of numerous policy debates. Key to these debates has been the consensus that a mixture of both external and internal factors was responsible for this undesirable performance. External factors such as falling copper prices, oil price shocks of the mid-1970s, droughts, global recessions have all been offered to explain this dismal economic performance (Carmody, 2009; Mwanawina and Mulungushi, 2008, 2002, World Bank, 2004a, 2004b). Further, government's decision to pursue interventionist policies prior to 1991 was scorned in that it was not only unsuccessful in insulating the economy from external factors but it also failed to provide a sustainable economic roadmap.¹⁰

¹⁰ See Appendix A for an overview of policy regimes.

The studies outlined above were an attempt to investigate and explain this economic performance. Both studies were in agreement in suggesting that TFP largely accounted for GDP growth. This is of interest because this points to a theoretical approach to performance assessment. I, therefore, begin by examining the explanations offered for TFP trends in these two studies.

Figure 2-1 Growth in GDP - Zambia and sub-Sahara Africa



Source: World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/africa-development-indicators>)

Overall, TFP trends were unsatisfactory, swinging between positive and negative from one year to the other, but giving an overall negative average for the entire four decades. For this, interventionist economic strategies prior to the structural adjustment programmes are claimed to have negatively affected performance by distorting economic activity. Additionally, lack of foresight and perverse development planning and implementation during the period of the so-called stabilisation policies is suggested to have hampered growth. However, for the period post 2000, the World

Bank study records a positive TFP and a positive real GDP growth to which it points to ripening of economic fruits on the back of liberalisation and privatisation policies embarked on a decade earlier (Mwanawina and Mulungushi, 2008, 2002, World Bank, 2004a, 2004b).

The foregoing explanation for TFP trends is problematic in itself. By measuring TFP, analysts are implicitly accepting the underlying assumption of a freely functioning (*laissez-faire*) economy. This is what Sato (2005: 639) refers to as “analytical confusion” in the sense that, in explaining TFP outcomes, analysts are (unknowingly) acknowledging absence of one of its core assumptions. This example, and many more as I argue, casts doubt on the very notion of TFP, whose explanation violates its fundamental requirements and thus offers no coherent explanatory content over and above the more serious theoretical issues in its conceptualisation, deriving from the Cambridge critique already discussed.

Disastrously, though not surprisingly, the computation of TFP is weighed against different policy regimes (especially in the World Bank study). From here, it is overall concluded that state intervention led to poor economic management while market-friendly policies reproduced a good growth record (also mirrored by an upward trend in TFP) albeit with a lagged effect. Such has been justification for World Bank-IMF-type policy advice. Recovery of the mining sector, argued to have been made possible by liberalisation and privatisation policies, provided the vehicle for economic recovery. Because market-based policies coincided with somewhat impressive GDP growth, both for four fifths of the decade after Independence and the period post-2000, this is taken as evidence of a correct policy approach; hence argued to lend credence to private sector-led growth.

However, such claims are based on conjecture rather than evidence. Going by the East-Asian miracle, it would be a mistake to suggest universal correctness of market-based policies. The disagreement of Zambia’s economic conditions, some of which have been offered to explain TFP trends, and the underlying assumption of a freely functioning economy casts doubt on TFP and thus begs a relook at what was going on. In fact, critics have argued that the liberalisation and privatisation policies propagated by the IMF and World Bank were not only deindustrialising but also robbed the

Zambian state of an opportunity to reformulate structural change efforts to reorient the economy towards a sustainable poverty-reducing growth trajectory (Muuka, 1997; Carmody, 2009). Critics have in addition accused such market-based policies for having adversely affected the labour market, subsequently leading to flexibilisation/informalisation of labour.

To foster economic growth, market-based policies essentially put the private sector at the helm of economic activity. From this postulate, another important assumption is that the Zambian economy is perfectly competitive. This raises additional problems. For instance, absence of perfect competition implies that TFP would in fact be measuring changes in the degree of non-competitiveness in given markets as opposed to contribution to output. Further, in the presence of unemployment and/or underemployment, TFP would also track variations in the degree of capacity utilisation (Fine, 1992). Zambia's mining and agricultural sectors experienced long periods of under-capacity utilisation due to poor foreign exchange positions. Rampant unemployment was (is) the norm in the Zambian economy; it has persisted and continues to afflict the economy (to be taken up later).

2.5.2 Competition and measurement of output

It is explicitly (though erroneously) assumed in the World Bank (2004b: 14) study that GDP can be expressed as a production function. Supporting this claim, it is further argued that "the observed value of GDP is the interplay of demand and supply in the product and factor markets, a comprehensive analysis of constant-price GDP growth must examine its components on both the production and the consumption sides of social accounts." In this way, the growth process is reduced to technicalities characterised by the mapping relationship between inputs and outputs. Output is thus represented by (constant-price) GDP.

I note also that in practice, GDP, despite its known weaknesses in being unable to provide critical information on economic performance and living standards, is traditionally taken to represent the output of an economy. By this token, when subjected to the theoretical construct of marginal productivity theory, it is as though GDP represents a single output of an economy. In this vein, I proceed to examine the

legitimacy of this claim against the composition and structure of Zambia's GDP post-Independence.

To qualify the Zambian economy as a one-good economy, by marginal productivity theory, constituent elements of GDP should themselves not only be represented by production functions but they should also be easily aggregated, within and across sectors. Before proceeding further on this point, I begin by noting that Zambia's economy is characterised by many sectors and diverse economic activities. In other words, GDP measures the market value sum across sectors (See Appendix B below for a snapshot of structure of Zambia's economy; GDP by type of economic activity).

It is evident from this categorisation of GDP by sector that the presumption of a single good for the entire economy is seriously in jeopardy. It would take more than a 'willing suspension of disbelief' to contend that GDP is a homogeneous good. The breakdown of GDP by economic activity explicitly shows the heterogeneous nature of the goods and services that make it up. However, to compute GDP, it has been necessary to obtain value aggregates. The aggregate GDP figure combines a spectrum of physical commodities and/or intangible services. While many studies adopting the neoclassical approach have utilised aggregate production functions in their course of inquiry, there has been no convincing justification for their use.

Fisher (1969) demonstrated long ago that the conditions necessary to obtain aggregate production functions are so stringent that it is impossible to find an economy that satisfies them. As it has been strongly argued, aggregate production functions do not exist. However, for purposes of further investigation, if analysts assume they do exist, as evidenced by their use, then it is only natural to test the conditions necessary for aggregation. Theoretically, such aggregation requires not only that production functions between and across sectors are the same but also the condition that they are linearly homogeneous so that constant returns to scale hold. Violation of such aggregation conditions would undermine the purported technical relationship between inputs and outputs, so that this relationship would in turn be determined by how output is distributed across sectors (Sato, 2005), thus requiring additional explanation for the determinants of distribution beyond technicalities of the neoclassical paradigm. A consideration of class interests for instance can be advanced as a factor influencing

distribution, not least the role of the state in transforming the outcome. It is hard to imagine that every sector in Zambia's economy embodies the same technology; how can capital-intensive copper mining be aggregated with labour-intensive agricultural production, so that neoclassical propositions hold? The structure and composition of GDP shows that several sectors and, therefore, several producers exist. In demonstrating GDP constituent elements by sector, it is thus shown that producer specialisation and variability in scope and scale of technical conditions of production is part and parcel of the diversity of the economy. The validity of the assumption of a single output whose production depends on technical relations between itself and its inputs is thus questionable. It suffices to make our point by taking a particular sector, say the mining sector as a general example and copper mining in particular. The categorisation of type of copper mine as open-pit or underground uncovers diversity of technique of copper production. Further, copper production has undergone a series of changes in methods of extraction and refining for both old and new copper ore deposits and as ownership has changed hands. It is thus problematic to assume that copper producers have identical production technologies (identical production functions) and have been in equilibrium throughout the four decades post-Independence. Indeed, the narrow focus on TFP would fail to pick up these intricacies.

As has been repeatedly emphasised, in order to calculate the contribution of factors to output, further crucial assumptions are necessary to derive TFP calculations. To allow contributions of factor inputs to be measured by their factor shares, it is customary to assume that the economy's technology exhibits constant returns to scale and that the economy is perfectly competitive. Otherwise, TFP will not necessarily compute contribution to output.

Furthermore, in measuring TFP, absence of constant returns to scale is highly problematic as it renders pointless the presumption that factor shares measure the contribution of factor inputs (Fine, 1992). Let us return to the mining sector to underscore an important point here. There is sufficient evidence to suggest alternating periods of diseconomies and economies of scale in copper mining. Spells of buoyant copper prices coincided with high copper production, with the converse holding generally true (between 1964 and early 1970s; also post-2000), although this is mixed up with capacity utilisation as opposed to scale economies and raises issues over

whether the two are separable from one another except in theory. But this also underscores issues of demand that are largely ignored by the neoclassical approach. Nziramasanga and Obidegwu (1981) note that the period post-Independence but prior to 1970 witnessed improved labour productivity. However, under-investment in the copper mining sector coupled with external factors such as low copper prices and oil shocks put pressure on the fiscal obligations of the government, which combined in a complex way and manifested in low copper production and low capacity utilisation. Again, I argue that TFP focuses on supply-side factors and thus ignores the effect of demand and other external factors on growth.

Negi (2010) suggests that some mining companies may have enjoyed substantial economies of scale against the backdrop of higher copper prices post-2000. For large mines at least, such scale economies have been suggested as being instrumental in insulating them from external shocks associated with the global financial crisis. Further, to claim that the copper subsector has been characterised by perfect competition is farfetched. Huge investments, economies of scale and concentration of small-to-medium firms, mainly operating as subsidiaries of international companies and a few large firms, show that the scale of operation and size of firms is varied (World Bank, 2011). In excess of fifty percent of Zambia's copper is produced by two large companies. This diversity in terms of size of firms and huge investments required to open a copper mine are characteristic of conditions that diverge significantly from TFP requirements.

Following the sale of state-owned copper companies, initial activities associated with revamping the sector involved resuming production in existing mines through additional investments (recapitalization) and, as surface level copper diminished, digging deeper was required (World Bank, 2011). Additionally, further prospecting has recently taken the form of opening new mines altogether as copper ore deposits are discovered in new places and areas of Zambia. Because the economy is regarded as a one-commodity economy, TFP measurement (erroneously) conflates such variations in production with other factors prevailing in the economy, including distribution and demand conditions.

Again, additional problems persist even if we remain in the one-good world. Because output and inputs, capital in particular, are measured using constant price data, choice of an appropriate price deflator is an important undertaking for the analyst, but the problems we encounter take us back to what we assumed away. Although it is customary to use the GDP deflator for the entire economy, it is a bit more complicated to choose an appropriate price deflator for different capital goods across the many sectors characteristic of Zambia's economy. Again, even doing so would require that markets be perfectly competitive. Absence of perfect competition would point to varying degree of influence of market participants – producers and consumers – and TFP would in fact be tracking this rather than technological advancement (Fine, 1992).

2.5.3 The Zambian Labour Market

The structure of Zambia's labour market questions the plausibility of the assumptions necessary for TFP measurement. For the wage rate to reflect the unit contribution of labour, it is required that the labour market is perfectly competitive. In the TFP world, labour is generally simply aggregated to form a single factor regardless of type, even though attempts can be made to compute effective labour as a distinguishing factor or some other form of human capital augmentation. More conceptual confusion is evident from the studies outlined above. For instance, Mwanawina and Mulungushi (2008: 299), in their opening discussion of the labour market, remark that "The labour market was uncompetitive and dualistic in nature". These authors adopt a method that treats the labour market as a competitive entity but violate this assumption to explain what is taking place in the labour market. By taking into account the dynamics of the labour market, I reveal more about its functioning and role in the national economy than simply presuming it belongs to the TFP world.

At the time of Independence, Zambia's labour market was characterised by inequality of opportunity mainly on racial grounds which derived from colonial policies. For instance, black Africans were not allowed to work in certain white-collar jobs, and had limited access to education, thus biasing labour supply. At Independence, there was no university in Zambia; only 76 Africans held university degrees, all bestowed on them from outside the country, while a meagre 961 held secondary school certificates (Turok, 1989: 37). This low investment in manpower has been dubbed as one of the

greatest development challenges inherited by the indigenous Zambian government and proved particularly problematic in the first few years after Independence (Whitworth, 2015; Martin, 1972; Elliott, 1971).

In addition to educational inequalities, wage differentials too were widespread. Katona (1982: 7) reports that a day before Independence the subsistence population accounted for around 86 percent of the labour force. The average annual income for white settlers was more than ten times that of the African wage earners. The subsistence population performed the worst in terms of earnings even when compared with wage-earning Africans: on average, the subsistence population received less than one-seventh of the income of African wage earners.

When the new African government took charge soon after Independence, one of the main thrusts of its political and economic policies was to bring about an improvement in the standard of living of Africans through employment creation and diminution of income inequalities between Africans and Europeans, and urban and rural settlers. Foreign workers, also known as expatriates, were being displaced, and some opted to withdraw from the labour market against the pressure from the new government structures. Africans took over Europeans' farms as some white settlers left the country. However, due to a chronically limited pool of skilled African workers, it soon became clear to the ruling government that an attempt to retain a certain modicum of skills would require some form of 'outsourcing' which was mainly achieved by hiring expatriates. These expatriates were generally generously paid, reflecting an incentive scheme that kept wages above the going market rate. Thus persisted the lack of competitiveness in the labour market that had previously stood on racial grounds. Despite the government's move towards a more cohesive equal wage policy, inequalities persisted. For instance, by 1968, expatriate employees, mainly Europeans, earned around six times more than African wage earners. This opened up scope for government to push towards ensuring that wage differentials continued to diminish. It is also reported that average wages rose by 147 percent between 1963 and 1968 and, by 1970, the total number of employees increased by nearly one quarter (Katona, 1982). In the face of increasing overall average wage earnings, a reduction in wage differentials required that increases for Africans were relatively larger than those of non-Africans. In the event, Martin (1972: 231) reports that between 1964 and 1968,

the overall wage bill increased by at least 20 percent per year, comprising an annual average increase of 30 percent for Africans and only 9 percent for non-Africans. The increase in nearly half of the wage bill for the first half of the period was mainly attributed to rising employment levels; but 85 percent of the increase for the latter half of the period represented larger wages for those already in employment. The government, through the parastatals and public service, was the biggest employer of formal employment (see Table 2-1 Employees by Industry, December 1980).

Table 2-1 Employees by Industry, December 1980

Industry	Private Sector	Public Sector	Parastatals
Agriculture, forestry and fisheries	10,340	11,210	11,080
Mining and Quarrying	300	-	62,770
Manufacturing	25,720	710	21,330
Electricity and Water	-	2,980	5,030
Construction	17,860	25,890	-
Distribution, Hotels and Restaurants	16,010	2,140	13,200
Transport and Communications	2,530	1000	20410
Finance, Insurance and Real Estate Business	12,240	97,050	10150
Community, Social and Personal Services	8,830	300	220
ALL INDUSTRIES	93,830	141280	144,190

Source: Turok (1989: 82)

A new government, following democratic elections, came to power in 1991. With it, came reforms that would aim at, among other things, downscaling government administration and economic participation through privatisation of state-owned companies. By 1992, 15000 government employees were laid off. However, public

outcry and general discontent, apparently premised on huge social costs and government's failure to pay off retrenched workers timely, saw the government suspend retrenchments.

Following the sale of major parastatals including mining companies, the Zambia labour market experienced dramatic shifts in employment patterns and distribution and by 2008, informal employment had grown substantially (see Table 2-2 Employment by sector and by type of employer, 2008).

Table 2-2 Employment by sector and by type of employer, 2008

By Sector			
	Formal	Informal	Total
Agriculture	84921	3727001	3811922
Mining and Quarrying	15641	80098	95739
Manufacturing	38757	129603	168360
Electricity, Gas and Water	2119	12152	14271
Construction	5166	81800	86966
Wholesale and Retail Trade	133643	327815	461458
Hotels and Restaurants	11591	33006	44597
Transport and Storage	48056	49996	98052
Finance and Insurance	20975	35669	56644
Community, Social and Personal	161307	222445	383752
Total	522176	4699585	5221761
By type of employer			
	Formal	Informal	Total
Central Government	209546	0	209546
Local Government	26891	0	26891
Parastatal	40000	0	40000
Private	225012	659213	884225
NGO/Church	13485	17479	30964
International Organization	4675	2059	6734
Household	0	3969991	3969991
Others	2566	50842	53408

Source: (Shah, 2012; Central Statistical Office, 2011)

The majority of Zambians are employed in the informal sectors, over 90 percent. The effects of privatisation and liberalisation are thought to have contributed to the changing structure of the labour market now mainly characterised by growing informal

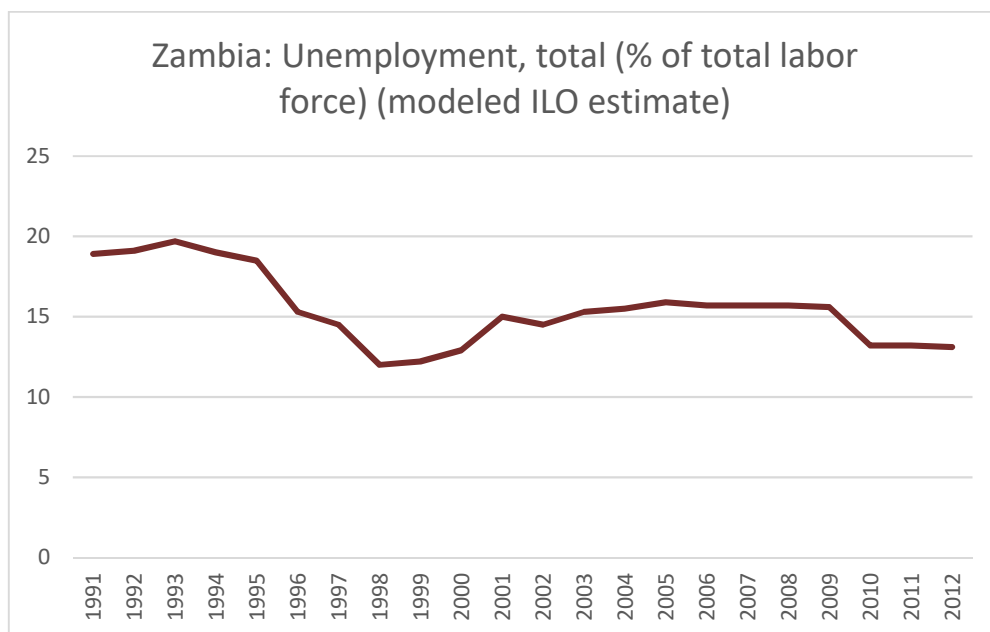
sectors (Gadzala, 2010; Weeks et al., 2007). The informal sectors are largely notorious for sidestepping employment regulations; workers for instance are ill-treated and paid poorly (Fashoyin, 2008).

In terms of formal employment, the public sector continues to be an important employer. In 2010, it recorded close to half of formal wage employment but absorbed, on average, more trained workers as measured by education level of at least post-secondary school level than the private sector. The World Bank (2013: 17) reports that “The public sector, particularly the quasi-government sector, also appears to be paying higher wages than the private sector for similar education, location, gender, and experience.” Such factors have a bearing on our analysis in at least showing that the realities on the ground have nothing to do with marginal productivity theory of distribution – that is, to assume that workers are paid by their marginal products. Such wage structures have a lot to do with shifting patterns and structures of the economy.

Recruitment processes particularly in the public sector have frequently been reported to be unprofessional. Several accounts of non-competitive hiring practices, for instance, have been recorded (Fashoyin, 2008; Nielsen and Westergård-Nielsen, 2001). Therefore, to proceed as if labour operates in a competitive market is questionable even on simple grounds of hiring mechanisms and practices.

Against this backdrop, it is ill-conceived to argue that the labour market in Zambia has experienced continuous equilibrium. Wage structures and labour market policies have undergone tremendous shifts, and adjustments and fragmentation of the labour market festered against the backdrop of expanding informal sectors. There has been some significant improvement in reducing unemployment since the 1991 (see Figure below) but this must be interpreted with caution. For instance, a significantly large proportion of newly created jobs have not been absorbed by high growth sectors.

Figure 2-2 Zambia: Unemployment, 1991-2012



Source: World Development Indicators.

The record of changes in the employment and wage structures across sectors and employers are associated with changing structural characteristics of the economy. The point, however, is that the changing/shifting patterns and/or structure of wages reflects social (and economic) relations and thus could not have been purely free-market determined to equate labour's marginal productivity with the real wage for the entire post-Independence period. In addition, features such as chronic unemployment show how wildly divergent the reality is from the conditions of full employment of resources necessary to justify measures of TFP.

2.5.4 Conclusions on the realities of the Zambian economy

Once subjected to the realities of the Zambian economy, the assumptions behind TFP computations are shown not to hold, thus questioning the application of TFP to explain Zambia's growth record. Indeed, TFP measurement appears to be an exercise in futility as it has failed to provide any convincing explanation of Zambia's economic performance, not least because it is premised on a flawed theoretical foundation. The use of a production function to measure TFP as a residual does nothing more than track the deviations from the assumptions. In other words, TFP is tracking shift in productivity as a consequence of the residual left over from measuring the

contributions of inputs and weighting them by their factor shares. So, what this residual is actually measuring is all deviations from the assumptions which are necessary for that tracking to take place, i.e. changes in unemployment, changes in rewards to factors of production, changes in degree of competition and so on. This raises serious questions about the legitimacy of the method given that in general any economy deviates substantially from these assumptions and this has been shown to be the case for the Zambian economy.

The lessons to be drawn for further analysis are straightforward; examining performance against the back of a changing economic structure requires a more wide-ranging approach. Equally important, however, is that the relevance of the analysis of the realities of the Zambian economy brings to light the significance of consideration of other factors that may affect growth, such as a careful assessment of the role of the state.

3 From the Developmental State Paradigm (DSP) to Linkage-Agency: Lessons for and from Zambia

The role of the state in development has a long controversial history (Fine, 2006: 101). More recently, especially with respect to the so-called high-performing Asian economies (HPAEs),¹¹ a debate emerged which, despite evidence to the contrary, has seen developing countries learn (flawed) lessons and adopt policies that diminish the role of the state in development. For sub-Saharan Africa, two parallel sets of literature, although occasionally cross-referencing each other, have broadly led to this position: first, the poor performance of post-Independence late 1960s to early 1990s state-led development, leading to the so-called lost-decade throughout the 1980s symbolic of stagnant economic growth and even reversal in some cases (Easterly, 2001; Singer, 1989) have served to see state-interventionism within the context of Africa as inimical to growth and development;¹² second, propagated and promulgated by juggernaut institutions like the World Bank, and neoclassical economists more generally, there has been dismissal of evidence which proved an extensive and a considerable role of the state in shaping East Asian developmentalism, instead sticking to and promoting a free-market narrative (World Bank, 1993; Jomo, 1997; Krugman, 1994; Amsden, 1994).

In opposing the free-market narrative, especially one furnished and reinforced by the Washington Consensus, extensive case studies were carried out to provide an alternative account of East Asian developmentalism leading to classical contributions such as Alice Amsden's *Asia's Next Giant* on South Korea (Amsden, 1989), Robert Wade's *Governing the Market* on Taiwan (Wade, 1990a) and Ha-Joon Chang's *Political Economy of Industrial Policy* (Chang, 1994). Yet one of the earliest classical contributions by Chalmers Johnson on MITI and the Japanese Miracle (Johnson, 1982) was driven by an aspiration "to call attention to the differences, not the similarities, between the capitalist economies of the United States and Britain, on the one hand,

¹¹ HPAEs include "Japan; the "Four Tigers" – Hong Kong, the Republic of Korea, Singapore, and Taiwan, China; and the three newly industrializing economies (NIEs) of South-east Asia, Indonesia, Malaysia, and Thailand." (World Bank, 1993: 1)

¹² See World Bank (1981) popularly known as Berg Report on the negative depiction of state interventionism; and, Sender and Smith (1985) for a critical examination of both the Berg Report and its critics.

and Japan and its emulators elsewhere in East Asia, on the other”, which were already showing by the early 1980s (Johnson, 1999: 32). The point of this alternative literature was to highlight that free-market developmentalism largely diverged from the actual experiences of East Asia, not least demonstrating the crucial role the state played to condition development in these countries.

By the mid-1990s, the developmental state literature was welcomed on account of its intellectual gains in demonstrating the Washington Consensus’ flawed explanation of the socio-political and economic content of East Asian economies. However, at the height of the Asian crisis around 1997/1998, the relevance of the developmental state model for developing countries elsewhere and for the East Asian countries themselves was already being questioned, and this inquiry especially driven by the changing global context which witnessed the spread of neoliberalism. However, this was to show that the developmental state literature itself required introspection and reflection, and a deeper explanation and, if required, extension, in order to remain relevant. After being ridiculed as lacking analytical rigour and content following the 1990s Asian crisis, the development state literature re-emerged with renewed energy to explain this crisis and ways out of it by deference to, and calling for, greater state intervention in a neoliberal era. This has meant that ingredients of the intellectual recipe of the developmental state literature have had to be reconfigured although maintaining the flavour of the centrality of the state, to whatever degree and with whatever content, in development.

Ironically, while the DSP was gaining further ground in the early 1990s, neoliberalism in practice was also gaining momentum. It is interesting indeed to observe that the rise of an alternative thread of scholarship did not deter the neoliberal project, if anything it strengthened its resolve as demonstrated by the role the International Financial Institutions (IFIs) played in facilitating the demolition of statism. Developing countries generally, and particularly in sub-Saharan Africa, dismantled public enterprises, as a result of being ‘forced’ to in order to underpin their economies by private capital. They (developing countries) liberalised their foreign exchange markets, opened up their economies to foreign competition, including putting in place other neoliberal policies that essentially reduced the state to spectator. However, after over 25 years of neoliberal policies from the early 1990s in sub-Saharan Africa, the world is a changed

place, inequality has especially been notorious, and finance dominates, while development as envisaged has not been forthcoming. Instead, the tide of scholarship has shifted to one that is calling for a greater role of the state in the economy, but as discussed in Chapter 1, this shift in thought has been half-hearted; it has required the state to do what cannot be substantiated historically, especially within the context of East Asian development.

In this chapter, I revisit the role of the state within the context of the so-called Developmental State Paradigm (DSP) in order to reflect on the literature opposing free-market developmentalism, but also, in the spirit of the central theme of this thesis, to examine what factors were responsible for (developmental) structural change, including what lessons can be learnt for Zambia's economic historiography, particularly the post-Independence state-led development era. Chapter 4 (and going forward) will revisit Zambia's post-Independence statist epoch to establish what factors were central to the performance of the economy, quite apart from what has been depicted in the literature. Informed by the DSP, the aim is to establish what can be learnt for Zambia's post-Independence state-led policies, not least also an exercise in an attempt to uncover why statist policies might have worked for erstwhile East Asian economies.

I start by giving a brief overview of the remarkable economic performance of selected East Asian countries, particularly between the 1960s to the early 1990s. I then explore the dominant narratives explaining this economic performance, with occasional reference to the developmental literature. Following this, I launch a discussion of the DSP, examining its overarching themes, its strengths and weaknesses. The DSP is discussed in terms of its dual trajectory corresponding to its two schools of thought, the political on the one hand, and the economic on the other hand. Deliberation on the DSP also opens up space to reflect on some of the experiences of the selected East Asian countries, by way of example to foreground what can be learned.

After pointing out the relevance of the DSP in development as a way to establish what went wrong during Africa's post-independence statist era, I launch an alternative analytical framework, the Linkage-Agency approach, this transition in methodological and analytical approach being "informed by the idea that economic development" is

“dependent upon the interaction between linkages and agencies” (Fine and Rustomjee, 1996: 23). In a fundamental way, this transition in analytical terrain is an exercise not only simply meant to reveal the weaknesses of the DSP but also an approach to strengthen and extend its scope and relevance. Indeed, if the DSP is to have any usefulness, it must be flexible in its application, which means framing and extending its analytical scope is crucial.

3.1 Overview of economic performance of East Asia: selected indicators

The purpose of this subsection is simply to spotlight the remarkable growth of (selected) East Asian countries as opposed to giving a detailed account of the nature of their growth.¹³ Hence, when discussions about East Asian economic performance is developed in later parts of this chapter, this subsection will serve as a crude reminder or reference point for how remarkable that performance was.

¹³ For detailed accounts of economic performance of selected East Asian countries, see Wade (1990: 34-51) and World Bank (1993)

Table 3-1 GDP per capita (constant 2010 US\$)

Country Name	1961	1969	1970	1979	1980	1989	1990	1995
Zambia	1,483	1,561	1,583	1,290	1,284	1,079	1,045	906
Sub-Saharan Africa	1,074	1,247	1,335	1,448	1,464	1,254	1,249	1,129
South Asia	318	367	380	390	405	532	549	630
Singapore	3,545	5,803	6,507	12,251	13,309	20,953	22,178	29,008
Korea, Rep.	980	1,686	1,815	3,823	3,700	7,785	8,465	12,055
Japan	9,396	18,837	18,435	24,986	25,489	36,028	37,906	40,369
East Asia & Pacific	1,347	2,210	2,200	2,869	2,929	4,027	4,186	4,814
*(excluding high income)								

Source: World Development Indicators, online

Crudely, the extraordinary performance of East Asian countries can be gleaned from Table 3-1 GDP per capita (constant 2010 US\$). Take Zambia and South Korea (Korea, rep.) for example. By 1961, Zambia, then Northern Rhodesia, had a (constant) GDP per capita 51 percent higher than South Korea. By the end of the 1960s, South Korea had surpassed Zambia. In terms of this measure, South Korea, compared to Zambia, was already three times higher by the end of the 1970s, over seven times larger by the end of the 1980s and, more than 13 times bigger by 1995. South Korea itself between 1961 and 1995, a period of 35 years (i.e. within a generation), experienced annual average real GDP per capita growth rates of about seven percent, such that the 1995 GDP per capita was over twelve times its 1961 value. During the same period, the Zambian economy remained virtually stagnant.

Along with the remarkable growth in per capita incomes, HPAEs experienced large dividends in human welfare, with life expectancy rising from 56 years in 1960 to 71 years in 1990 (World Bank, 1993: 4). Additionally, and in general, HPAEs experienced egalitarian growth, while they transformed their industrial capacities/structures. In other words, their remarkable economic performance was underpinned by industrialisation which permitted a fairly reasonable sharing of wealth. For South Korea and Taiwan, for example, they are thought to have “achieved in fifteen years, what took Japan twenty-five years and Great Britain over fifty years” (Wade, 1990b: 42). By the 1980s, South Korea and Taiwan were both regarded as being well on their way to becoming high-wage, high-technology economies, which, with the benefit of hindsight, they had achieved.

Meanwhile, the growth in GDP per capita in South Asia and Sub-Saharan Africa, as entire regional blocs, remained disappointing throughout this period. In fact, average income per capita in sub-Saharan Africa declined by 1995 from its peak in the 1970s. For Zambia, the story is even more disappointing: from its zenith, by the early 1970s, Zambia’s average incomes declined by over 40 percent by 1995.

The debates that emerged to explain East Asian successful economic performance were underpinned by a paradox: that is, why other regions, especially sub-Saharan Africa, seemingly implementing similar (statist) policies experienced stagnation, while East Asia experienced unprecedented economic success. This is partly

addressed in the next subsection, although the discussion is limited to explaining the performance of East Asian economies, roughly during this period.

3.2 Some controversies in the explanation of East Asian development

In this subsection, I examine more closely the (emerging) themes (and occasionally, the analytical scholarship) of the debates on East Asian development, not least locating the role of the state within it. Following the remarkable performance of East Asian economies, and, correspondingly, around the same time, the dismal performance of state-led developmentalism in other developing countries, mainstream (or, more or less equivalently, neoclassical) economics was in limbo. Consequently, it sought to reconcile how it could be that statist policies were exceptionally successful in East Asia yet disastrous elsewhere. By retreat to its technical analytical architecture, mainstream economics found itself performing intellectual acrobatics to evade, or, more appropriately, skirt around, the notion that state interventionism was a requisite character in East Asian developmentalism (Fine, 2013, 2006). Two central if broad themes underpinned its scholarship on East Asian economic development: to deny the broad and specific role of the state, and to make a case for an open economy.¹⁴

First, in preserving its intellectual integrity, it could not afford to dismiss or contradict its ideological bias against statism. Thus, it explained away state intervention as central to East Asian development in a manner that resurrected the notion of free-market developmentalism, even if relegating the latter to an intellectual coma.

Second, it unpacked the nature of East Asian development as one that was underpinned by free-trade export-oriented strategies, industrialisation through market-enhancing interventions as opposed to selective industrial policy. Cunningly, the consequence was not so much to deny state intervention within the context of East

¹⁴ For a more detailed account of neoclassical explanations of East Asian development more generally, and Taiwan in particular, see Wade (1990: 52-72) who, in twenty pages, ranges over a number of themes spanning: free trade regime for exports; competitive (free) labour market; high interest rates; conservative government budgeting; stable real effective exchange rate; high savings; well-trained labour supply; competitive industrial structure; stable government. Another major neoclassical theme was the nature of state participation through public enterprise as a strategy inherently pernicious to the economy. In short, Taiwan's, and indeed more or less equivalently, South Korea's or Japan's, economic successes were deemed to have been due to free market factors and not government/state intervention.

Asian development but to diminish its nature as market-preserving or market-conforming as opposed to one inimical to growth and development supposedly evidenced by other developing countries experimenting with statist policies. Proceeding this way enabled mainstream economics more generally to package East Asian development experiences as special cases with limited lessons for developing countries in other parts of the world.

The opposing response to this view of East Asian development witnessed the rise and coming to prominence of the DSP as alternative intellectual explanation of East Asian development. The DSP, as it has been shown in section 3.3, roughly emerged as two arms of the same broad body of literature: on the one hand, it examined the nature of politics of East Asian development, situating the state within it; and, on the other hand, it supplied an explanation underpinned by economic policy. The evidence of the DSP was so significant and overwhelming that powerful promoters of neoliberal policies (underpinned by neoclassical economics more broadly) such as the World Bank thought it was necessary to respond. The DSP has already been discussed, but the response to it will be discussed in a little more detail below, although some of this has already been raised in demonstrating the shifting content of the DSP.

Around the mid-1970s, South Korea and Taiwan were already being presented and analysed as open economies, archetypical of free-trade regimes. For example, Fei and Ranis (1975: 56) argued that Taiwan and Korea grew their economies and reduced unemployment on the basis of policy changes effected in both countries by 1963 which enabled them to:

“[dismantle] ... the various existing direct control measures, on trade, interest rate and foreign exchange rates, thereby [creating] a more market oriented economy most conducive to access ... large numbers of domestic entrepreneurs [were] seeking efficient utilization of the economy's relatively abundant resources via embodiment in labour-intensive industrial exports.”

The same line of intellectual thought, or, more precisely, ideology, carried on in the early 1980s when, for instance, Balassa (1982: 346, 348), suggested that Taiwan had

moved from an inward-looking economy to an outward one through liberal economic policies implemented between 1958 and 1961 which put in place measures to devalue and unify the overvalued exchange rate, while reducing restrictions on regulations governing investment and imports, in addition to emphasis on exports as opposed to import controls. These measures, as Balassa argues were essential for Taiwan's remarkable performance during the 1960s and 1970s. At this point, mainstream economics literature drew an opposition between inward- and outward-oriented strategies, claiming to spotlight the superiority of the latter. In other words, import-substitution and export-oriented strategies were mutually exclusive. This served to repudiate the role of the state other than in promoting openness.

By the second-half of the 1980s, virtually the same content of mainstream intellectual economics scholarship on East Asian development dominated. Another prolific neoclassical promoter, Bhagwati (1987: 286), explains the poor performance of the Indian economy as a function of extensive regulation "with detailed controls over what entrepreneurs can do." The importance of recalling this piece of work here is to show how Bhagwati attempted to contrast the interventionist nature of the Indian state and that of South Korea. Overall, he imposes a neoclassical archetypical framework that skirts around productivity-capacity-enhancing state intervention by labelling the Indian state as proscriptive as opposed to the prescriptive South Korean state. It worth spending a bit more time addressing Bhagwati's typologies, not least to demonstrate how eloquence in analysis does not amount to substance and enlightenment, and can be misleading.

Bhagwati (1987: 286) proposes the idea that "a prescriptive government may prescribe as badly as a proscriptive government proscribes, each leading to a suboptimal outcome if you believe that such interventions tend to subtract from efficiency. But a proscriptive government will tend to stifle initiatives, whereas a prescriptive government will tend to leave open areas (outside of the prescriptions [sic]) where initiatives can be still exercised. Thus, even though each government might distort allocation of existing resources equally, the proscriptive government will tend to stifle technical change and entrepreneurial activity and hence hurt growth." First, Bhagwati fails to demonstrate why within a socio-political and economic context one state

should be regarded as prescriptive and another proscriptive. In other words, he fails to draw a distinction, especially in practice, between the two categories.

Second, with limited resources at the disposal of both the state and private enterprise, Chang (1994: 107-108) has argued convincingly that a prescriptive state, can in fact suffocate innovation and imagination while the opposite may be true for a so-labelled proscriptive state. A prescriptive state which requires private firms to do many things leaves them with fewer resources to execute their ideas, while a proscriptive state which requires private firms to do few things, leaves them with more resources to exploit their ideas. This is all to enter a theoretical world. However, Chang also demonstrates from the South Korean experience that the state was stifling in several ways: “The Korean prescription for private firms to invest in heavy and chemical industries in the 1970s was proscription against investing in less risky and often more profitable (partly due to higher protection) consumer-goods industries” (Chang, 1994: 107-108). A case in point is the shipbuilding industry which resulted from president Park Chung Hee’s directive without the consent of the Hyundai group. Further accounts of the Korean state’s proscriptive tendencies are exemplified by the state’s power to approve most business activities, to exert influence on interest rates and exchange rates up to a certain considerable degree. The Korean state was also known to temper with market organisation, restricting entry or reorganising industries by promoting mergers and market-sharing options if it was convinced that too much (unhealthy) competition existed. These reflections not only cast doubt on Bhagwati’s typology, but they also demonstrate how actual experiences can diverge from some preconceived notions of how economies work.

The neoclassical explanations remained virtually unshaken throughout the 1980s despite the growing evidence which sharply contrasted their views. For example, Balassa (1988), reporting lessons from the East Asian experience for developing countries elsewhere, offers a number of broad-brushing factors as critical to the admirable developmentalism of the former, these underpinned by a drive towards, and emphasis on, exports. By supposedly diminishing so-called bureaucratic controls and state regulation, the state and its actors are seen to feed into an overall incentive system tailored to systemic promotion of exports. To this end, policy interventions are seen to have been limited, particularly with respect to both the labour and capital markets,

while encouraging considerable private sector participation. Hence, “[t]he neutrality and stability of the incentive system, together with limited government intervention, well-functioning labor and capital markets, and reliance on private capital, thus appear to have been the main ingredients of successful economic performance in East Asia” (Balassa, 1988: 288).

Yet by the second half of the 1980s, sufficient evidence existed which cast doubt on the neoclassical representation of East Asian development, although not to the tune of comprehensive classical DSP contributions, especially within the economic school of the DSP. For instance, Luedde-Neurath (1988, 1986) questioned neoclassical analysis on the basis of its propensity to exaggerate the extent and depth of liberal economic reforms, taking South Korea as a case study. Luedde-Neurath showed convincingly that, despite a turn towards liberal reforms, tariffs were still reasonably high, quantitative restrictions remained considerable, government supported credit to import-substituting industries and industries purchasing from the local market, which essentially served as restrictions on imports, and foreign exchange rationing remained pervasive.

It was, however, the World Bank’s report entitled the East Asian Miracle, published in 1993, which raised the height of the controversy, not least given its influence on development policy in practice. For the World Bank, producing the Report was important because it partially “[reflected] recent attention by the academic and development policy communities to the relationship between public policies ... and rapid growth” (World Bank, 1993: 1-2). Yet, to summarise, the World Bank’s Report essentially served to reject state-led development as the cornerstone of East Asian developmentalism.

The basic premise of the report was that “[i]n large measure the HPAEs [High Performing Asian Economies] achieved high growth by getting the basics right. Private domestic investment and rapidly growing human capital were principal engines for growth” (World Bank, 1993: 5). When unpacked, never mind the theoretical controversies on their conception of human capital, the “basics” are a set of target variables that typically underpin “sound development policy” promoted by free-market scholarship. Among the most important, there is “macroeconomic

management” aimed at keeping inflation low, promoting stable and competitive exchange rates, while spending on social services such as education and general infrastructure.

Although begrudgingly acknowledging the central role of the state in promoting development through intervention, doubt is cast on establishing intervention as a causal factor for growth: “But it is very difficult to establish statistical links between growth and a specific intervention and even more difficult to establish causality ... [o]ther economies attempted similar interventions without success”, yet, ultimately, intervention is subordinated to macroeconomic stability (World Bank, 1993: 6-7).¹⁵ The World Bank skirts around the evidence of the centrality of interventionism by pointing to failed projects in other developing countries, hence pointing to other factors such as macroeconomic stability as being more important for growth and development.

Broadly, a number of conclusions follow from the World Bank’s Report which seek to downplay, or, more appropriately, discourage, the centrality of state interventionism in industrial development in particular and economic development more generally. But more devastating, given its role in development policy in practice particularly in developing countries, is to sustain the idea that the actual experience of East Asia provides little or no substance upon which other developing countries can seek to emulate.¹⁶ Underpinning its entire study are three broad conclusions: “that the promotion of specific industries generally did not work and therefore holds little promise for other developing countries. Directed credit has worked in certain situations but carries high risk. The export-push strategy has been by far the most successful ... and holds the promise for other developing economies” (World Bank, 1993: 354).

¹⁵ In conceding to the notion of state interventionism, the World Bank report notes that “in one form or another, the government intervened – systematically and through multiple channels – to foster development, and in some cases the development of specific industries”, and some of the examples of the different forms policy intervention took were “targeting and subsidizing credit to selected industries, keeping deposit rates low ... protecting domestic import substitutes, subsidizing declining industries” and so forth in line with selective industry support such that “[s]ome industries were promoted, while others were not” (World Bank, 1993: 5-6).

¹⁶ Here, experience means what the state actually did as opposed to the interpretation of what it did.

On trade policy, the export-oriented strategy within the Report is arrived at on the basis of gaining competitiveness via global integration rather than insulation, replacing import-substitution with export-promotion. By allowing reductions in import controls and tariffs, it is argued that international competition forced the East Asian economies to bring their prices in line with world prices, such that “domestic prices for traded goods in the HPAEs [were] more closely aligned with international prices than in many other developing economies” (World Bank, 1993: 260). Below, it is shown that this conclusion is simply not true.

State intervention is thus one that was market-confirming, to the extent that it sought to repair or assist dysfunctional markets. Thus, according to the Report, the state intervened only because markets were not working properly (Fine, 2013: 7). State intervention did work in the manner it did because the conditions of East Asia which permitted it were unique, and, consequently, applying their experiences elsewhere could not be of any use.

It will be of benefit to spend some time discussing in brief detail some of the scholarship that emerged in response and opposition to the World Bank’s East Asian Miracle Report as this serves to underscore the shifting content of the DSP and rhythm of the debate on East Asian development in particular and state-led development specifically, yet never fully coming to grips with the social while sustaining the state-market dichotomy, as will be elaborated below in section 3.3. Amongst the most notable critics of the World Bank’s Report it is unsurprising that some were the classical contributors to the developmental state literature. Amsden (1994: 626), a classical contributor of the economic school of the DSP literature, was strongly critical of the World Bank’s Report: while wondering why the East Asian experiences were not being tried out in developing countries elsewhere, she suggested that, “[t]he greatest disappointment of the report’s market fundamentalism is a failure to study seriously how elements of the East Asian model can be adapted to suit conditions in other countries.” She bemoaned the World Bank’s use of ideology to explain experiences, rather than use the latter to inform and, if necessary, redefine ideology.

Wade (1994) launches his rebuttal by mainly addressing the issue of selective industrial policies, exposing the flaws of the evidence (and associated arguments) that

underpinned the World Bank's Report. For example, its use of unweighted data and unjustified comparison of different time frames to make a case for sterility of (selective) industrial policy is not based on actual East Asian experiences but a flawed method which grouped different countries irrespective of their size, polity and policy in practice. The underlying presumption of the World Report, which it sets out to prove regardless of evidence and argument, was that per capita incomes would have risen even without selective industrial policy, yet the pace and extent of East Asian growth is unprecedented. However, there is no evidence to presuppose that selective growth of industry (pattern of industrialisation) would have resulted from free market policies, especially at the rate it did for the East Asian countries.

The idea that East Asia's relative prices were aligned to world prices is problematic because there is no evidence to support it; that relative prices diverged from international prices is precisely what the economic school of the DSP demonstrated. Wade (1990: xix), in a 2003 reprint of the paperback version of his classical work, *Governing the Market*, adds an introduction wherein he argues that "the [World Bank] report contains evidence – that is not put to use – that the relative prices in Japan, South Korea, and Taiwan deviated more from international prices than those notorious interventionists like India, Pakistan, Brazil, Mexico, and Venezuela in the period 1976-85."

In short, the case for market-conforming intervention was based on the World Bank's neoliberal ideology which it fervently defended and promoted, especially from the 1980s. The DSP simply serves to quell dissent against the underlying logic of free-marketism as the basis for developmentalism, particularly for developing countries whose economies are reflected in backward technology. In contrast, free-market ideology cannot be the basis upon which foreign technology can be borrowed and nurtured, the state would have to intervene in decisive ways as the East Asian experiences demonstrate.

3.3 Opposition to Neoclassical explanations, and the emergence of the Developmental State Paradigm

The rise of the scholarship generally making a case for state-led development emerged as a reaction to the neoclassical accounts of East Asian development. It sought to demonstrate that existing scholarship on the region departed from its actual experiences, and, hence, mischaracterised the nature of development. The extent to which the economies of East Asia had been shaped by state intervention had not been comprehensively and extensively documented and analysed, and, thus, underappreciated, or misunderstood, at least in the empirical sense brought to light by the developmental state literature.

Ben Fine has carried out extensive work over more than two decades on the developmental state literature which not only led him to coin the term Developmental State Paradigm (DSP) but also to distinguish two schools of thought – the political and economic schools – within it (Fine, 2013, 2006; Fine and Stoneman, 1996; Fine and Rustomjee, 1996). Placing the literature explaining the experiences of the so-called East Asian developmental states within the context of a paradigm has a dual purpose with respect to this thesis: first, it seeks to demonstrate the distinctive content and patterns of association of the scholarship that has emerged over the years to support or promote the notion of developmental state interventionism. Second, it maps out the rhythm and trajectory of change of scholarship, which underscores its limits as an analytical tool, revealing its weaknesses as the scholarship through which developing countries can learn lessons.

While the political school has aimed to establish the political dynamics and conditions crucial for success without due regard to, or, more precisely, adequate treatment of, the exact configuration of economic policies, the economic school has instead examined what kinds of economic policies underpinned successful performance with limited reference to the general socio-political conditions necessary to permit execution of these policies. A discussion of these schools of thought is the purpose of this subsection, although some reflection of the actual experiences of some East Asian countries will occasionally inform the discussion mainly by way of example.

3.3.1 Reflections of, and experiences within, the political school

As the name suggests, this school of thought is centred around the configuration of politics and how this permitted erstwhile East Asian developmental states to undertake their developmental tasks. Hence, the idea is to determine the nature of the political landscape and, its dynamics and capacity to use the institutions of the state to deliver development. Accordingly, examining the (historical and existing) conditions around, and within, the state that enabled it to perform its developmental functions is critical (Kohli, 1999). However, how scholarly contributions in the political school define the developmental state speaks of how the state's role in development (or structural change) is understood and, not least, limited. For example, writing in honour of, and referencing, White (1988), Robinson (2003: 26) elevates the idea of development as a political project delivered through institutions designed for this particular (developmental) purpose: "Gordon cultivated the concept of the developmental state in his analysis of the successful East Asian 'tiger' economies, arguing that the deliberate construction of a set of institutions geared towards a clear vision of development under the guidance of a motivated political leadership was key to their success."

Conveniently, the political school understands a developmental state *ex post* because the basis upon which it is defined – the capacity of the state to "promote and sustain development" – can only be known after the state has discharged its duties. For Japan, Johnson (1982: 199) observes this *ex post* attribute of developmental states by mentioning that "[t]his high growth system was one of the most rational and productive industrial policies ever devised by any government, but its essential rationality was not perceived until after it had already started producing results unprecedented for Japan or any other industrialized economy." In fact, the political perceives "economic development" to be "the combination of steady high rates of growth and structural change in the productive system" yet "not a goal but a means" through which a developmental state is legitimated (Castells, 1992: 56-57). Two lessons result from examining how the political school understands the developmental state: first, the nature of the state has a bearing on economic development, although, second, by implication, economic development defines the developmental state. But, as Fine (2006: 103) observes, such a conception "borders on the tautological."

Johnson (1982) is the foundational if leading piece of scholarship within the political school of the DSP. The lynchpin of his work was an emphasis on the (indispensable) role of the state through the bureaucratic structures and actors of the Japanese Ministry of International Trade and Industry (MITI) in guiding high-speed growth and structural change. He observes that the elements that constituted successful industrial development, and structural change more generally, were only realised through extensive discussions within the structures of the so-called industrial-policy bureaucracy of MITI. This is to place the state at the centre of designing industrial policy, but also to express how policy itself was institutionalised within state structures, providing the basis upon which it proffered and continued. Overall, however, the core of his study was to examine the intricate details of the way in which MITI functioned which inevitably leads to an investigation of the bureaucracy and its key personalities. For example, he identifies “Sahashi Shigeru as the one who “institutionalized “administrative guidance ... as MITI’s main means of implementing industrial policy” and hence “the best-known ... of MITI’s vice-ministers” whose “policies laid the groundwork for the extremely rapid industrial growth of the late 1960’s” (Johnson, 1982: 243). Ultimately, it was the continuity of bureaucrats in key decision-making positions from the start of industrial policy proper in the late 1920s through the 1930s Great Depression and well into the 1960s plus their intimate connection to their jobs, and even maintaining a close relationship to the bureaucracy upon retirement through their business interests, that Johnson traced as the central features promoting functional private-public relations.

Japanese industrial policy is well rooted in synergies between private businesses and the state bureaucracy. Through mixed formal gatherings of private sector representatives and public officials, the latter part of the 1920s saw a focused approach to industrial policy and development. During these meetings, features of the Japanese economy that held it back were identified, and solutions were debated. Beyond the 1950s, such forums birthed the Industrial Structure Council, a platform that allowed the private sector to air their views to MITI. In its infancy, the Council was the formal vehicle through which the business community could influence policy in its favour, with notable achievements ranging from the strengthening of planning by assembling industrial data to requisition and endorsement of sizeable loans. During the inter-war period and beyond the second-world war, Japanese industrial policy experienced

extensive, although gradual, experimentation and innovation, but it was the deflation of the late 1940s and the response to it that witnessed the emergence of MITI which then served to take industrial policy to new heights. Hence, the state in industrial policy is then seen in terms of a system of its institutions (and associated personnel, particularly the “economic general staff”), and through them, the capacity to bring industrial development to bear mediated by a mix of interventionist and protectionist policies such as provision of discriminatory financing, management of foreign exchange and purchase of foreign technology, including provision of tax incentives to lower costs and import tariffs to insulate local industries from being contested by foreign products.¹⁷ These policies, executed through the staff situated in state institutions, were designed to promote industrial development but in practice they enabled the state to select and nourish certain strategic industries while ensuring and facilitating their access to (local and foreign) markets. The point of this is to situate the state through its specific institutions, associated personnel and particular policies at the centre of industrial development.

One of the most excellent recollections of the multiple essential roles the state played in promoting industrial development, as Johnson (1982: 236) remembers, involved the wide-ranging roles of the Japanese state through the agency of MITI. MITI was involved in a number of distinct, although interrelated, ways: first, to design a plan documenting the need for the industry and what is expected of it; second, financing options were set in motion by approving funding through the Japan Development Bank and then setting aside the required foreign exchange; third, control of technology importation was administered by means of import licenses; fourth, preferential treatment in form of a mixture of tax concessions and other state-provided resources such as land provision; and, fifth, to ensure industrial growth, competition was highly regulated and investment coordination of companies within the industry was also a

¹⁷ In demonstrating the state’s role in providing finance through coordinated mechanisms of institutions, Johnson (1982: 209-210) notes that “between 1949 and 1953 ... the most important for industrial policy was the Japan Development Bank ... within a year of its creation the JDB became one of MITI’s most important instruments of industrial policy” providing funds for selected industries like steel and coal, and ensuring control and coordination when “MITI also placed of its important retired “seniors” on the JDB’s board.” From 1953 onwards, the Fiscal Investment and Loan Plan of the Ministry of Finance gave more credit “and became the single most important financial instrument for Japan’s economic development”, although MITI through its Industrial Capital Section remained a key player and beneficiary.

requirement, both delivered through MITI's administrative guidance structures and provisions. This recollection underscores the scale of state involvement. The state decided that the industry needed to emerge and be developed, and then put in place measures – policy and resources – to ensure that this aspiration was realised.

Thus, by the end of 1959 when the first liberalisation was implemented, sufficient capacity had been gained. But because liberalisation itself was to disturb the status quo, it was subjected to a series of high-level debates within MITI which eventually led to “MITI's invention of the concept of “industrial structure” and the creation of the Industrial Structure Investigation Council” aimed at identifying and promoting competitive capacity of industries (Johnson, 1982: 253). Throughout the different phases of Japanese industrial development from the interwar to the post-war period, institutionalisation and promotion of industrial capacity through the state is the key to understanding Japanese developmentalism more broadly. Although at the heart of this system, Johnson gives the impression that a committed cadre of experienced and skilled bureaucrats existed who had engineered and sustained their own existence/livelihoods by attachment to the success of industrial development.

Following the liberalisation policies that effectively limited MITI's industrial policy tools, new innovations to sustain competitiveness while promoting industrial development were required. How the Japanese responded to the liberalisation wave of the early 1960s serves to reinforce the central role of the state in ensuring and encouraging industrial development. Johnson tracks this response and its innovativeness through personalities and state structures. For example, MITI's vice-minister, Sahashi, handpicked Morozumi in August 1961 (based on the latter's extensive foreign experience) to run the Enterprise Bureau of MITI and manage highly skilled personnel within it who already had extensive experience within the bureaucracy and industry for purposes of designing a strategy to respond to liberalisation (Johnson, 1982: 257). Their combined work produced the Special Measures Law which outlined well-rounded details aimed at promoting competitive industrial development. In practice, recommendations were made to identify and strengthen capacity of designated industries aiding their competitive ability, but this required the rules to be of sufficient detail explaining the necessity of compliance of

managers in earmarked industries while ensuring that the state structures provided finance and tax incentives.

When liberalisation was already underway and when the 1965 recession peaked, the role of the state in industrial development remained unshaken. MITI responded to the recession by establishing and institutionalising mechanisms both to coordinate and promote investment. MITI set up cooperative discussion groups (eventually replaced by the Industrial Structure Council) in various industries ranging from petrochemicals, synthetic textiles to paper pulp. On these discussion platforms, issues of concern were generally focused on which industries, what type of plant within them and with what technology would they have to be financed and promoted. This demonstrates the depth and breadth of state involvement in decisions pertaining to industrial policy: determining and/or influencing how much would be produced, how should they produce, and who should produce, and then instituting measures to protect them (that is, by setting up barriers to entry) while eliminating the credit constraint through provision of investment funds were all functions that were well integrated in the structures of the state.

There are virtually innumerable lessons to be learnt from Johnson's seminal work, but what is critical in discussing key personalities, Johnson aims to show these individuals' scale and scope of experience, and influence within the bureaucracy and industry. Importantly, in seeing these critical personnel as members of the bureaucracy committed to delivering a (developmental) service, Johnson is forced to make a grand claim of the alleged "inseparability of bureaucratic interests and substantive issues of policy when the state dominates administration of the economy" (Johnson, 1982: 243) yet he occasioned his analysis with instances of lobbying and corruption, including informal contacts between the state and powerful private sector interests.¹⁸ This

¹⁸ For example, Johnson (1982: 68-70) notes "incidents of seeming wholesale payoffs by the government to business interests with preferential access or advance knowledge" which "[s]ome writers have called "institutionalized corruption"" plus the system of "reemployment of retired government bureaucrats on the boards of industries currently designated as economically strategic also created many opportunities for hand-in-glove relationships," but eventually disqualifies labelling them as corruption: "it is, rather, an adaptation by private business to a particular governmental environment" because "[p]referential access to the government for strategic industries is not an unintended consequence of the developmental state; it is in fact the objective of the developmental state." Despite Johnson's claim, it is difficult to see such interactions as resulting from planned rather than sporadic interrelationships.

reveals the tension inherent within DSP conceptualisation of what accounts for a developmental state, but as will be discussed below, the solution has been to seek, and define or refine through, further clarification.

Following Johnson's work, the political school has proceeded with further case studies and, inevitably, in the spirit of the original/classical contributions, an extension in the scope of factors responsible for identifying a state as developmental. In practice, this has required the literature to address conceptual contradictions and difficulties. For example, in the wake of democratisation of politics more generally within the erstwhile developmental states and Africa post-1990, questions regarding what form a developmental state would take emerged, and, to remain relevant, the political school has faced up to this challenge by imagining a democratic developmental state (Routley, 2014, 2012; White, 1998; Randall, 2007; Edigheji, 2010; Sandbrook, 2005).

Given that classical East Asian developmental states were effectively authoritarian, although in varying degrees, the advent of democratisation (and neoliberalism more generally), especially in Africa, has promoted pluralistic politics, and created political conditions very different from those which placed the political and economic authority of the state at the centre of society and the economy more broadly (Randall, 2007: 634). However, the political school has stayed afloat and met this challenge by integrating analytically, though uncomfortably if incoherently, the theoretical benefits of democracy into the notion of a developmental state. For Randall (2007: 649), the task should involve determining "what ... political parties can or could contribute to a developmental state project." Despite arguments against democracy given its tendency to promote short-termism and myopic politics (Routley, 2012), its benefits must be excavated given that it has more or less come to stay, and these should be applied to, and reconfigure, the conception of a developmental state. Hence, political parties within the context of developmental states should promote vision-building by fostering bureaucratic autonomy as well as state legitimacy.

This then brings the issue of how autonomy is conceived within the DSP. Because the state has been conceptualised as a disciplinarian driven by vision to execute developmental functions, then it must necessarily insulate itself from capture from vested interests which have the potential to undermine the its developmental role.

Evans (1995: 12) has a lot to say about the nature of autonomy as experienced in the DSP: he suggests that “[on]ly when embeddedness and autonomy are joined together can a state be developmental.” This is obviously a somewhat confusing idealisation, a proposal that the state can be autonomous from society and yet embedded within it. Nevertheless, the notion of ‘embedded autonomy’ is qualified on the basis that the state can only be effective in delivering development if it is interwoven within and across different groups of society, profiting from this interaction and involvement to the extent that they enhance the developmental functions of the state and, consequently, deliver development.

Embedded autonomy is unpacked and set in motion by suggesting that successful state involvement in industrial transformation should be guided by, and discharged through, institutional structures. Yet again, involvement as an analytical concept must be closely examined and this forces Evans (1995: 13) to transition from “how much” to “what kind” of involvement is required; however, this transition in focus is problematic because “what kind” is at the very least defined in terms of “how much”. An explanation of how Evans develops his notion of involvement will help demonstrate this contradiction. Involvement is distinguished by four categories: a custodian role is the case when a state is one which acts as regulator; a demiurge role is when the state assumes the functions of a producer through mainly state-owned enterprises; a midwife role is when the state performs functions, such as erection of tariffs, provision of subsidies, institution of import restrictions, and so on, aimed at stimulating productive activity through the private sector as opposed to creation of public enterprises; a husbandry role arises when the state strengthens and nurtures existing private enterprises. Thus, “[t]aken together, these four roles provide a framework for labeling the involvement of particular states in particular sectors. They are not mutually exclusive” (Evans, 1995: 81). It is easy to now see that the categories of state involvement are defined by how much the state intervenes. Some of the weaknesses of this approach to explaining state-society relations are explored in more detail below, but it is worth mentioning here that the state is conceived in terms of its capacity to suppress or promote the interests of capital.

Further limitations of Evans’ conception of embedded autonomy (and the subsequent categorisation of state involvement) in explaining how the state performs

developmental functions are aptly demonstrated within his own work, particularly with reference to Zambia. First, in explaining Zambia's dismal economic performance during the state-led era, he concludes, like many other scholars as will be shown below, that "the role of demiurge brought disaster" (Evans, 1995: 1985). This is to suggest that because the Zambian state lacked capacity to manage the copper industry, it should not have been involved to the extent that it was. Second, that Western copper production expanded by about four percent per year between 1974 and 1978 despite the global recession while Zambia's copper production declined by up to eight percent during this period is taken as evidence of incongruence of the demiurge role within capacity-lacking Zambia. This position on Zambia's economic performance is contested in later chapters (chapters 4, 5 and 6) which will demonstrate that the narrow view of state-society relations cannot capture the broader institutional dynamics and unique geopolitical circumstances Zambia faced. However, it is worth noting that Evans' schema runs into further difficulties when, ironically, he charges that South Korea's POSCO "demonstrates that the demiurge strategy can be a powerful instrument for industrial transformation" (Evans, 1995: 87). As will be discussed in more detail below, POSCO, the symbol of South Korea's early industrialisation, was started when there was absence of state capacity and itself played a considerable role in creating it. This observation begs a different analytical lens to view these issues as opposed to one that confines state-society relations to be explained in terms of the nature of the autonomy of the state.

Further extensions of the analytical landscape of the DSP have involved deeper reflection on the nature of bureaucratic involvement, even outside of industry. Francks (1998) addresses the question of state intervention in Japan by analysing the role of the state in agricultural development. Through the Food Control System, "the same 'bureaucratic developmental state' which conditioned industrial development was able to design, manage and supervise agricultural policies" (Francks, 1998: 2). The underlying logic of state interventions in Francks' research was to demonstrate in what ways the state got involved in agriculture which she shows in terms of administrative guidance to set and supervise output targets, as well as provision of subsidies to farmers. In short, agricultural development can be explained by bureaucratic intervention and regulation.

Chibber (1999) adds to the developmental state literature by questioning the source of the power of the state in guiding East Asian developmentalism. For South Korea, he proposes the notion of an accumulation model that was state-dependent for coordination across individual fractions of capital and protection of domestic production from hostile foreign competition, this being the legitimating factor of the disciplinarian role of the state. However, Chibber places the power of the state in the hands of the political and bureaucratic leadership, while the success of this power in stimulating industrial development is to be found in high-calibre bureaucrats who were capable of designing and reshaping mechanisms within the state's institutions for the benefit of industry. In other words, what matters for the developmental state is not only quality of institutions but also the quality of personnel within them. In fact, it is the skilfulness and commitment of the personnel that renders state institutions strong and effective.

The importance of the quality of institutions and its personnel in the conceptualisation of the developmental state is demonstrated in Johnson's classical work which discussed extensively the meritocratic nature of the Japanese bureaucracy in MITI. This line of thought has also been reflected in Chan et al. (1998) which includes further qualities for the bureaucracy and the state in terms of cohesion and coordination of the bureaucracy, underpinned by social networks of diverse characters and an oxymoronically autonomous state which maintains its ties and contacts with society. The state must however be strong in designing, adapting and executing efficacious policies.

Another way the political school explains bureaucratic excellence and its commitment to a national development agenda in East Asian developmental states is to locate the state as a hub for proliferation and establishment of values and ideas, including convergence of interests, through its institutional structures at the national and community levels (Marsh, 1999). Views and actions of different agents, and especially those acting on behalf of the state, are to be broadly cultivated and harvested within state institutions, and these will in turn influence the nature of the political system. Hence, planting developmental seeds and cultivating them in accordance with collective values and interests of state institutions is anticipated to harvest developmental outcomes. This shifts responsibility to state institutions as channels

through which developmental values are both cultivated and shared. In a similar light, at least in terms of situating the state as the driver of a national economic agenda, Grabowski (2000: 269) proposes that a developmental state should erect and assemble a national identity, but underpins his proposition by the assumption that “[a] developmental state is autonomous and pursues the national economic interest.” Woo-Cumings (1999) also pointed to unification of fragmented interests into nationalism as a rallying cry within the context of East Asian developmental states.

Pempel (1999: 146-147) casts light on the international political dimension as necessary to understand the broader conditions and influences under which developmental states operate; hence, he criticises the developmental state literature for its focus on domestic political and bureaucratic processes: “When developmental states examine hurdles that state bureaucrats must clear in carrying out their agendas, they mainly focus on domestic problems such as business organization; allocation of scarce capital, energy resources, and technology; infrastructure development; tax credits; budgetary incentives; mass education; labor regulations; foreign direct investment; and the like. Far less attention is given to the strategic goals of competing powers and superpowers; regional power balances; cross-national rules and regulations and relations governing trade, investment, energy, and investment ... actions of multinational corporations ... foreign aid; and so forth.” In short, developmental states must be situated not only by domestic socio-political processes but by how the external influences are mediated through internal dynamics.

Within the political school more generally, the role of the state is seen in its institutions and structures, managed by a meritocratic bureaucracy having power over, as opposed to being influenced in a dysfunctional way by, society (private capital, labour, and other interest groups). In sum, in its entirety, the literature in the political school “focuses on the politics of economic policy with, paradoxically, little or no interest in economics as such” (Fine, 2006: 104).

3.3.2 Reflections of, and experiences within, economic school

Quite apart from the political school as a strand of the developmental state literature, the economic school of thought within the DSP has been largely preoccupied with

providing evidence of the nature of economic policy defining actions of the state without necessarily examining the socio-political conditions under which such policy was applied. Of concern to the economic school is simply to demonstrate that certain kinds of economic policy are necessary to promote growth and development, but this leaves unattended the exact configuration of politics that would permit these policies to be endorsed. By notion of economic policies is captured both industrial and trade policies. These policies are discussed in more detail below.

The seminal works of Amsden (1989) and Wade (1990) are typically the launchpads from which studies in the economic school have developed further. Thus, for my purposes of establishing the workings of this school, it is imperative to engage these studies in sufficient detail.

Borrowed technology as opposed to invention was the basis upon which so-called late-industrialisers transformed their economies and raised living standards of their people (Amsden, 1989). From this perspective, industrialisation then becomes a matter of acquisition and utilisation of tangible and intangible (foreign) technology. Industrial (and trade) policy then targets how to procure/obtain foreign technology to be sold at domestic and foreign markets (Deraniyagala, 2006; Chang, 2003; Wade, 2003). The latter market to a larger degree than the former necessitates competitiveness, and so, from the context of late-industrialisers, industrialisation is essentially acquisition and utilisation of existing (foreign) technology for purposes of “catching up” seen “as a process of learning how to compete” (Amsden, 1989: 3). From this vantage point, Amsden’s seminal work can be regarded as a detailed account of the precise mechanisms by which late industrialisers, particularly South Korea, gained competitiveness, and in the process transformed their productive structures. But for this thesis, it would be useful to keep this conceptualisation in mind in order to serve the greater purpose of understanding the failure to industrialise sufficiently for the case of Zambia as partly an outcome of failing to come to grips with industrialisation as a process served through learning rather than mere installation (and, to some extent, management) of plant and equipment.

Amsden (1989) therefore sees learning as a process facilitated and promoted by extensive yet selective state intervention in order to ‘get relative prices wrong’ as

opposed to 'getting prices right', the latter advanced by, and seen through the lens of, neoclassical economics. Complementing the state, and in large measure facilitated by it, the emergence of large diversified business groups commonly known as the chaebols as the hubs of technology utilisation is seen as a necessary condition, at least within the context of South Korea, to gaining a competitive advantage through economies of scale and scope for instance. Operating these hubs of technology utilisation are highly skilled managers and their inexpensive, well-trained and educated workers who put in place effective and efficient shop floor control systems in order to make the most use of borrowed technology.

The role of the state is seen in how it enabled foreign technology to be acquired and utilised, while promoting competitiveness of domestic productive agents. Because learners are required to compete internationally, breaking through to world markets forces them to supply products that are cheaper and/or of superior quality. The basis upon which products are kept cheaper and/or of advanced standard is seen through an amalgamation of wage policy aimed at keeping wage costs as low as possible, government backing and preferential treatment in form of government instruments like subsidies, tax concessions etc. Accordingly, analysis shifts to what role of, and the interrelationships between, the state and other productive agents such as private enterprises including, if rarely, labour.

The vision of the developmental state is seen through the ideology of its leaders, and for South Korea between 1961 and 1979 when Park Chung Hee exercised control over industrial development, his views were critical. He could be regarded as nationalistic in a sense because he believed indigenisation of technology was a necessary condition, although he placed the actualisation of industrial development in the hands of large fractions of domestic capital to be guided by the state. Generally following this line of thought, the state is seen as a disciplinarian, punishing non-performing firms and putting in place mechanisms to repress labour revolt and what could be seen as unnecessary wage hikes. Hence, the coming to prominence of large diversified corporations is seen as a deliberate consequence of the state's disciplinarian role whereby size, scale and range of productive activity embodied in any one such corporation is directly correlated with the state's disciplining mechanisms. For example, a well-performing firm, say in export markets or new industrial territories,

would receive rewards in form of licences, subsidies and other forms of government support to expand their production, but, for the case of diversified corporations, additional licences and other forms of support would be awarded in other highly profitable ventures.

The classical case study of successful industrialising within the context of South Korea is the Pohang Iron and Steel Company, Ltd., referred to as POSCO. The importance of discussing POSCO is to demonstrate the process of learning as an act of industrialisation, locating the role of the state, labour and enterprises within it. Against advice of the World Bank in 1960s on the basis of poor initial conditions, POSCO was initiated as a government project and funded wholly by the government in 1968, although it only rolled out production half a decade later.¹⁹ By the mid-1980s, POSCO was already one of the most productive steel producers in the world. It is safe to say that without the state, POSCO would never have been born. In fact, the successful case of POSCO as a public enterprise has been used to dismiss universalistic arguments against state-owned enterprises as a model for accumulation. But POSCO's case is much more than that, it contests notions of comparative advantage based upon factor endowments as the premise for entering a market as producer. Not only that, it also demonstrates that direction of capital accumulation resulted from planned guidance rather than so-called market forces.

Because steel-making is a capital-intensive operation whose basis for competition depends upon productivity as opposed to low-cost labour, POSCO was forced to devise mechanisms to enhance profitability and productivity. First, POSCO kept its costs low from the beginning by relatively inexpensive construction costs at \$400 per ton representing about half the costs of the United States or about 67 percent of those of Japan. Government subsidisation is seen to have helped to keep construction costs low while propping up POSCO profits in subsequent years. Second, by means of government support in various areas such as finance and infrastructure, the South Korean government made low-cost, long-term credit available, facilitated and

¹⁹ The initial conditions as prospects for POSCO were startlingly against it. South Korea did not have capital and steel-making skills at the time, had a small domestic market while the closest market, Japan, was a highly efficient world-leading steel producer and, the most important raw material, iron ore, had to be sourced further afield in foreign markets, yet the state injected its largest investment even by late-1980s of \$3.6 billion (Amsden, 1989: 291-292).

expedited importation of equipment, including keeping costs for government services such as railway rates and electricity charges exceptionally low, ranging from 20-50 percent of the normal rate.

What is especially interesting for POSCO, and certainly provides lessons for Zambia as shown below, is that POSCO started off initially “almost entirely on a turnkey basis” (Amsden, 1989: 302). The initiating facilities of POSCO were administered and managed by foreign firms: Broken Hills Proprietary Corporation of Australia and the Japan Group handled specialised engineering works and reports. Hence, it is especially important to ascertain the mechanisms put in place for technology transfer and cutting off dependence on foreign expertise. South Korea spent huge sums of money to train engineers and other professionals abroad. Interestingly, some of the training was done ahead of production, such as the case for steel-making well before POSCO even initiated production. When these trained professionals returned, they worked virtually abreast of foreign experts. But training was not restricted to overseas places, a great deal of it was continuously administered at POSCO’s plants.

Lall (1992, 2003) has argued that the extent that industrialisation profits from positive spill-overs and externalities is less determined by stochastic emergence of industries than by creating or identifying strategic sectors for promotion that have the highest potential to spread such benefits. His contribution is also aimed at showing that technology transfer is not as easy as the DSP seems to suggest – that is, simply by learning. There are a number of additional factors that determine not just the pace and scale of technology acquisition, but also whether socio-political conditions would permit such acquisition of technology in the first place. While, on the one hand, technology acquisition can be seen as the means through which capabilities are developed, on the other hand, it can also be acknowledged that the pace and scale of technology acquisition is very much likely to increase as capabilities are enhanced. That is, a virtuous circle phenomenon arises. But, Lall (1992: 180-181) suggests, “that the development of capabilities is the outcome of a complex interaction of” state intervention “with human resources, technological effort and institutional factors ... It is the interplay of all these factors in particular country settings that determines at the firm level how well producers learn the skills and master the information needed to cope with industrial technologies and, at the national level, how well countries

employ their factor endowments, raise those endowments over time, and grow dynamically in the context of rapidly changing technologies.” In short, learning is as much a technical problem as it is a social one.

This is to suggest that merely recognising that industrial development should be furnished by technology transfer does not mean it can be adopted naturally. Rather, conditions that allow technological transfer to be actualised cannot simply be explained by a pure economic analysis (Fine, 2006: 105); the recognition of the existence of social interrelationships inter- and intra-groups in an economy thus brings to light the equally important dynamics of socio-political conditions that have a powerful effect on whether, and how, technology can be absorbed. Neglecting the social dimension can be misleading in the design of industrial policy, not least perpetuating conditions that preclude spreading productive capacity. Ranis (2003: 34) underscores the tendency of the economic school to disregard, or, more appropriately, pay little attention to, the social interrelationships (and their consequences) that may exist between private capital and representatives of the state when the state positions itself to promote and favour certain fragments of capital over others as in the case of encouraging requirements for domestic content: “scant attention” has been paid “to the potential abuse of market power bestowed on industrialists by friendly government officials who do the selecting and share the rents.” Ranis’ observation is of significance to the case of Zambia as will be seen later in Chapter 5, 6 and 7, in that these social relations, within the context of a restricted accumulation system, can act as a powerful hindrance to structural transformation. However, he highlights this point to promote the notion of non-selective industrial policy in order to prevent potential abuse, but this goes against that grain of the actual pattern and nature of industrialisation that East Asian countries experienced. As is argued throughout this chapter, selective targeting and discriminatory policies do partly explain and underpin East Asian industrialisation.

Another way in which the economic school of the DSP has countered conventional knowledge regarding government expenditure which seems to favour austerity, especially in recent times in both developed and developing countries, is to demonstrate how the government undertook debt financing, even in the face of global recession. During the mid-1970s oil crisis, keeping industrial development going

ensured that “[t]he government borrowed its way out of balance-of-payments difficulties and sustained fast growth. Aggressive borrowing coupled with bailouts of financially troubled firms created a supportive environment for big business” (Amsden, 1989: 93, emphasis in the original). Such measures on public finance were crucial to sustain economic activity, without which both public and private businesses would have suffered.

Similar to Amsden who views the South Korean state as disciplinarian, Chang's (1994: 123) analysis of South Korea's industrialisation is premised on a “strong state, able to discipline firms whenever necessary.” This is to explain why the South Korean state was capable of playing a central role through state interventions of varied forms as devices to order the affairs of development. In this work, Chang endeavoured to develop the theoretical and empirical nuances of South Korea's developmentalism. On the latter, drawing on ‘a new institutionalist theory of state intervention’, he proposes that government failure, seen as resulting from information asymmetry and rent-seeking as plagues upon (or inherent within) the state, may in fact be reduced, if not eliminated, by transformation of the organisational structure of institutions of the state, choosing an appropriate instrument for intervention and enforcing changes in the regulations of political competition. From this foundation, Chang's subsequent work has attempted to demonstrate (theoretically and, complemented by evidence from empirical experiences) that a case can be made for state intervention which often results in more desirable outcomes compared to free market options. Complementing private enterprise, the South Korean state intervened in decisive ways, even direct participation especially in sectors where the private sector was reluctant to invest.

It was Wade (1990) who developed the notion of governing the market, symbolic of the crucial role the Taiwanese state played to influence, in large and extensive measure, the market as opposed to necessarily putting in place strong controls. For Taiwan, Wade demonstrates not just state intervention in terms of the different interventionist policy devices such as targeted finance/credit, insulation from foreign competition and so forth, but he also explores the way in which the state participated in the economy through public enterprises: “the state led rather than simply followed the market” and “[i]n many sectors public enterprises [had] been the chosen instrument for a big push” (Wade, 1990a: 110). In sectors like textiles and plastics

where the Taiwanese state did not participate directly through public enterprises, the behaviour of private capital was modified in compelling ways by the state's tools including but not limited to import controls and tariffs, entry restrictions, investment incentives as well as administrative guidance. A mixture of price instruments like tariffs and, administrative interventions like import controls and entry restrictions including administrative guidance, were indispensable in Taiwanese industrialisation, and not least the devices at the disposal of the state to condition in a decisive manner the depth, breadth and direction of capital accumulation. Although public enterprises dominated the economy throughout the 1950s, by 1963 only 45 percent of industrial production resulted from public enterprise activity. Through state machination, public enterprises had initiated some of the projects and were the first to take risks in some new sectors which the private sector eventually came to dominate.

Taiwan's export promotion strategies were already in place by the early 1950s, and in 1952 exporters of (twenty) selected products were allowed to keep some of their foreign exchange earnings, although this particular strategy was eventually replaced by a series of other policies which ranged from subsidies in form of cash payments made to exporters, through granting import permits for well performing exporters, to reduction of import duty on exporters' inputs.

The Taiwanese government also ensured that it had control of what kind of technology to import, through direct means until the end of the 1970s when it installed conditions that "imports of equipment for new plant receive prior approval", and then afterwards through indirect means such as fiscal incentives to firms who imported certain kinds of technology (Wade, 1990a: 133). But state intervention on acquisition of technology for industrial development did not end on deciding what kinds of technology to import, the government also put in place mechanisms to institutionalise the transfer of technology. Among the most notable is the Industrial Technology Research Institute established in 1973 which, fifteen years later, had 4,500 staff spread across six divisions – electronics, machinery, chemical engineering, energy and mining, industrial materials and standards and measurements. Another noteworthy feat in this light was the Hsinchu Science-based Industry Park formulated in 1969 but only commissioned eleven years later; this Park augmented efforts to reduce reliance upon foreign technology. Overseas and local educational scholarships were also supported

by the government. Various other interventions were put in place by the state such as technology-upgrading schemes supported by government funds and other incentives.

While the cases of South Korea and Japan demonstrate the importance and centrality of finance in industrial policy, especially through state-controlled financial intermediaries/banks awarding discriminatory financing to selected projects in order to promote capital accumulation in strategic activities, the case of Taiwan did not seem to provide ample evidence to justify this device as indispensable to its industrial development strategy (Wade, 1990a: 165). Chowdhury and Islam (1993: 141) as well as Wade (1988: 133) recognised a state-dominated credit-based system as prevalent in Taiwan wherein the government owned virtually all financial intermediaries. Wade sees this character of the financial system as important during Taiwan's rapid industrialisation because it enabled large investments to be channelled to specific sectors, something which would have been difficult to accomplish if capital expansion had depended on firms' profitability or, indeed, to be decided by free markets.

The role of finance as a tool for the state to foster industrial development can also be seen in how the Taiwanese state responded to the second oil shock of 1978/1979.²⁰ The Taiwanese state, committed to preferential investment financing in strategic sectors and, especially to promote industrial diversification away from energy-intensive industries, set up the Strategic Industry Fund in 1982 (Wade, 1990b). Financial resources from this fund aimed to promote purchase of locally-produced equipment, or purchase of equipment from international sources for utilisation in strategic industries. Special cases were to be examined by the planning agency before approval would be granted. There is an important lesson to be learnt here in anticipation of the nature of the Zambian state's response to this same oil crisis. An external shock presented the state in Taiwan with new challenges, yet through innovation and commitment to industrialisation, the response served to both broaden and strengthen existing energies dedicated to industrial development.

²⁰ "Oil prices began to rise rapidly in mid-1979, more than doubling between April 1979 and April 1980" Laurel Graefe, Oil Shock of 1978–79, Available at https://www.federalreservehistory.org/essays/oil_shock_of_1978_79?view=print

In demonstrating how the state can confront market failures, taking the East Asian 1997/1998 financial crisis as critical point of departure, Chang (2000: 778) underscores the importance, yet misunderstood role and nature, of industrial policy: “contrary to the widespread assumption, state guarantee through industrial policy need not be bad. There are all kinds of “market failures” that justify socialization of risk through industrial policy ... complementarity between investments across industries ... externalities present in research and development (R&D) ... Once again, the point is not that such socialization of risk does not generate any moral hazard, but that the benefits that it brings about (e.g. higher productivity, better-coordinated investments, prevention of the “wastes” from duplicative investments) can more than offset the costs from the moral hazard that it may generate.” In short, this is to resurrect the role of the state more generally, and industrial policy specifically, even in the presence of crisis. In other words, industrial policy can be reconfigured to confront or respond to influences of different forms, but doing so to enhance productivity and gain economies of scale, crucial for successful developmentalism.

To summarise, the economic school underpinned its economic analysis by demonstrating how the state’s interventions with respect to resource allocation, trade, finance and credit, capital accumulation, direct state participation through public enterprises, exchange rate regimes and so forth, all worked together through the state to forge a developmental model that promoted rapid industrialisation and development. Put differently, the unprecedented rapid development and industrialisation experienced by East Asian countries could hardly have resulted from a free market system. The economic school has responded to different dynamics, both domestic and international, including the interactions of these, in a manner that has shifted, or, more appropriately, broadened its domain to cover market imperfections of various sorts, and locating the state in how these have been confronted.

3.4 The Verdict, Towards an alternative: The Linkage-Agency Approach

While the neoliberal project, spearheaded by powerful institutions like the IMF and World Bank, has exerted great energies to undermine the role of the state more generally, and the DSP specifically, virtually ignoring it in within the development discourse (Fine, 2013: 1), honest analyses of the actual experiences will have more to

say than any concept or ideology. Indeed, it is undeniable, even within the terrain of neoliberal scholarship that state interventionism was almost synonymous with success within the context of East Asian developmentalism. By deference to state intervention within the context of market-conformance more broadly, or, particularly, correction of imperfections in the market, the neoliberal project has attempted to undermine the DSP. However, the DSP, as an analytical tool, points to treasure troves, or Sutton's law²¹ within the context of developmentalism, 'because that is where the money is', the state is required to promote development more generally as opposed to blocking it. The DSP does more than just point to where the treasure is, it also seeks to demonstrate how to excavate it. However, the DSP itself, given its shifting content has shown both within itself and from polemical critics that it is indeed imperfect. Its omissions are its weaknesses, and these are elaborated upon within this subsection and will constitute the basis upon which the DSP can be recast into an alternative approach – the linkage-agency framework.

Whereas it is acceptable to conceive of late-comer industrial development as a process of learning from 'borrowed' technology, it must be understood as it has been previously argued that acquisition and application of technology is dependent upon the broader socio-political and economic dynamics of a country. Technological change – as the basis upon which capital accumulation and economic change take place, for instance – is largely associated with social change since nature of technology (labour- or capital-intensive), its application and location are underpinned by social relations. Seen this way, it is immediately clear that introducing (new) technology, including deciding on its physical location, cannot be understood through a pure economic feasibility analysis alone; rather the decision to install (new) technology is a matter of politics (Leys, 1984; Kiely, 1998: 4). That is, the impact of technology acquisition can both change the nature of politics and the underlying social relations.

²¹ Sutton's law is attributed to William Sutton, a bank robber, who, when caught was asked why he robbed banks, and his reply was, "Because that's where the money is!" In the field of medicine, Sutton's law is used to focus resources or energy on the most obvious diagnosis, avoiding waste of resources in the process (Altman, 1970). Perhaps economics would do well to implement Sutton's law, and save scarce resources by experimenting with the obvious!

While statist literature had gained prominence by the mid-1990s, having also responded in decisive ways to the World Bank's East Asian Miracle Report, two events are worth mentioning that sought to bury it. First is the East Asian financial crisis in the second half of the 1990s, and the second is the shift in mainstream economics' intellectual scholarship which provided the post-Washington Consensus with ample ammunition to capture the central theme of statist.

On the one hand, an inquiry was channelled to answer questions within the developmental state literature as to why states that had been successful in promoting rapid growth over a period of over a quarter century could have been ill-equipped to anticipate, let alone, shield, themselves against the crisis. This called for an introspection on the nature of the state with the bias on politics. Nevertheless, the overarching theme was to see the developmental state as a temporal feature of developmentalism, restricted up to only the phase of late-comer industrialisation – that is, the point at which developing countries catch up with developed countries marks the expiration of the developmental state. For example, Moon (1999: 220) perceived the developmental state as an interim system, and in fact anachronistic in “the age of globalization and liberalization”, thus, as opposed to the developmental state and its “institutional inertia” the “[a]bility to deprogram state intervention [would] determine the future of the East Asian economy.” As development comes with more dynamic institutional change, with pockets of powerful economic interests, the developmental state is called to act in a different way. For instance, democratic change is asked of developmental states. Hence, development both digs the grave and buries its instrument – the development state.

On the other hand, the economic school of the DSP responded to the East Asian crisis by referencing it as a structural break, marking the critical point of departure, and consequences, of neoliberalism in general, liberalised finance and mainstream macroeconomic policy in particular. In other words, it is not so much the fault of the DSP that the crisis should have taken place, but that the developmental states have been stripped of their power and influence over the broader economy, and especially finance. Wade (1998) explains the East Asian financial crisis as the amalgamation and outcome of the real economy speculations and under-regulated national and international financial markets, which should be confronted by reinstallation of capital

controls and establishment of a regional financial stability fund. However, the strategy to reintroduce capital controls for example ignores the powerful economic interests that benefited from prevailing neoliberal arrangements.

A parallel to these views of the developmental state, and marking the occasion of shifting scholarship in mainstream economics, the emergence of the post-Washington Consensus as an internal check within the mainstream intellectual scholarship, was devastating to the developmental state literature. Launched and promoted by Joseph Stiglitz, the post-Washington consensus was a critical review of its ancestor, the Washington consensus (Stiglitz, 2005, 1998). The post-Washington consensus allows for state intervention within the context of market imperfections, the latter being understood in terms of informational imperfections and asymmetries. By permitting intervention in the context of market imperfections, the post-Washington consensus has the potential to swallow up the DSP.²²

But a general outlook of weaknesses within the DSP itself and those imposed on it by broader considerations have been often cited as a way to seek out its relevance. Although understandably as a feature that resulted from the DSP's opposition to the Washington Consensus, the DSP's account of East Asian developmental success is premised on a (false) dichotomy between state and market. Evans (1995) for example recognises the existence of classes or (powerful) social groups but qualifies the (solicitous) state as one concerned about the overall welfare of the nation, requiring it to be autonomous from, yet embedded within, society. But autonomous from which interests? When certain fractions of capital were promoted at the expense of others, would this not represent or reflect conflict and/or its resolution rather than autonomy?

States can be thought of as organised structures that mediate, guide and oversee pure social relations and those that result from capital accumulation. Yet these structures are themselves malleable, reflecting the way in which different interest groups influence them. While for Rueschemeyer and Evans (1985: 47), the state is "an arena

²² The essence of this discussion here is to highlight that the post-Washington consensus has managed to recall state intervention except in a restricted and piecemeal fashion within the context of market imperfections as opposed to extensive state intervention supported by the DSP. For a detailed critical analysis of the new development economics in general, and of the post-Washington consensus in particular, see Fine et al. (2013), Fine (2013, 2006) and Fine and Jomo (2006)

of social conflict ... [va]rious groups, both dominant and subordinate, will try to use the state as a means of realizing their particular interests”; Fine (2006: 114) similarly, more or less, sees “both market and state” as “the consequences of or form taken by underlying economic and political relations and interests.”²³

The interrelations of different social and economic groups (or, simply, relations and representation of class interests) foster capital accumulation in decisive and systemic ways. What obtains as composition of national output by sector, pattern and nature of investment, technology and so forth at the aggregate level is nothing less than an outcome (or reflection) of these political and economic relations. This is not to say that external influences do not impact upon the configuration and relations of socioeconomic groups, rather, such external forces will be mediated through this system, reinforcing or redefining it. Accordingly, any one system of accumulation is underpinned by the unique configuration of socio-political and economic interests prevailing and evolving, which requires to be understood within its context and history. Fine (2006: 115), for example, correctly argues that South Korea’s system of accumulation was largely underpinned by the promotion of the interests of the chaebols. From this vantage, it can be further argued that development policy in general, and industrial policy in particular, seen as policies mounted to encourage diversification and capital-deepening, for instance, were essentially designed to serve the interests of the chaebols.

Chiang (2016) observes the coming to prominence of the chaebols as a result of long-term government support which erected entry barriers in selected manufacturing industries to influence competition, while providing (state-supported) generous funding to particular firms. Park Chung Hee’s administration of the 1960s to 1970s is taken to have grounded a system of accumulation aimed at expanding chaebols both vertically and horizontally, including diversifying into other sectors. Following the global financial crisis of 2008/2009, South Korea’s system of accumulation witnessed a concentration of wealth in the hands of the chaebols, such that by 2015, the top five

²³ Skocpol (1985: 4) points to emerging scholarship which, arguing in the same line of thought, sees the government “primarily as an arena within which economic interest groups or normative social movements contended or allied with one another to shape the making of public policy decisions. Those decisions [are] understood to be allocations of benefits among demanding groups.”

chaebols produced 58 percent of South Korea's GDP, rising from 37 percent in 2008 and 45 percent in 2009 (Chiang, 2016).

In fact, the post-Asian-crisis Korean system of accumulation is regarded to reflect three sets of forces: “a conventional IMF agenda, a US trade and investment opening agenda, as well as a Korean-imposed institutional reform agenda” (Mathews, 1998: 747). Consequently, the ensuing policy initiatives and their impact, even in the narrow sense of domestic output and social relations, are a reflection of these agendas. With the rise and spread of neoliberalism, chaebols have responded by seeking alternative finance especially from external sources (foreign borrowing) while exerting pressure to remove regulations and restrictions. But these measures have served to polarise wealth, with 90 percent of the top 30 conglomerates' net profits accounted for by only four large multinationals by 2012 – Samsung, Hyundai, SK Group and LG – representing more than a two-thirds increase between 2009 and 2012 (Chiang, 2016: i).

For this thesis, the importance of seeing South Korea's pattern of accumulation is to demonstrate that the DSP can be complemented and, neoliberal analysis can be opposed by, an alternative framework of analysis. This thesis develops such a framework within the context of Zambia. I will argue that a system of accumulation underpinned by the copper industry was established within the post-Independence state-led development era which included a dynamic of socio-political and economic interests. It is this system of accumulation as such (as opposed to statist policies as the received wisdom suggests) that served to block developmental structural change more generally, and industrialisation in particular.

3.4.1 The Alternative: The Linkage-Agency Approach

Fundamental features of a developmental state within the context of the DSP have been gleaned, which have essentially pointed to the role of the state in aiding economic progress through interventionism of sorts as opposed to spectator or creator of an enabling environment of private capital accumulation in the neoliberal sense. Evans (1995: 6) points to the “transformative role” of the state since “[e]liciting entrepreneurship and facilitating the creation of new productive capacities require a

more complicated involvement [of the state] in the affairs of the citizenry than simply eliciting loyalty and enforcing good behaviour.” In other words, the existing developmental model underpinned by neoliberalism within the context of developing countries that sees the state as simply promoting good conditions for private capital cannot be the basis upon which meaningful developmental structural change can be expected to emerge.

But, for purposes of learning practical lessons for developing countries such as Zambia and launching an alternative analytical framework, addressing the weaknesses (and/or omissions) of the DSP as an analytical tool helps to frame (developmental) structural change as a matter of understanding the nature of both linkages and interrelationships of agencies that forge these linkages. Structural change is not just about identifying what kinds of linkages would profit a nation’s development, but also about (availability of, or creation of, capacity of) agents responsible for bringing the linkages to bear, framed within wider societal and international forces (potentially) impacting upon growth and development.

Fine and Rustomjee (1996) brought together the Linkage-Agency approach to understand the political economy of South African industrialisation. They argued that while linkages have been readily identified, less clear has been the analysis of how agencies functioned, because, in fact, there is a tendency to “[reduce] the agency to [the] linkage itself” without explaining why agencies are able to perform their designated functions, whether by their own design/will or force (Fine and Rustomjee, 1996: 38-39).

Ashman et al. (2010: 31; 2013) understand the dynamic of the South African economy by recourse to the Minerals-Energy Complex (MEC), this drawing upon the Linkage-Agency approach à la Fine and Rustomjee (1996) which “identifies economic and political interests and how they gave rise to a system of accumulation through both the state and the market.” This thesis draws insights on how the Linkage-Agency approach as a method of analysis was applied to the South African economy. Hence, for the Zambian economy, an attempt is made to identify the underlying socio-political and economic interests that have underpinned Zambia’s developmentalism (and a lack of structural change), with an initial focus on the first fifteen years of post-

Independence as the defining period, and later years as attempts to rehabilitate or change course. Examining the political context which governed decision making does highlight the role of agents within the state and party structures, in alliance with other groups across society such as labour within the civil service and parastatals, and capital in the private sector, in influencing the direction of accumulation. In noting that resource distribution in terms of expenditure allocation as well as economic policy changes responded to political expediency, it is seen that the nature of politics cannot be divorced from distribution and utilisation of resources (and other policies and outcomes).

By reference to the nature of relations of agencies and how this brings linkages to bear, “[i]ndustrialization [must be] best considered as a social process”, such that “the very process of industrialization ... is ultimately socially determined” (Kiely, 1998: 17), not in the narrow sense of its impact on social change, but that it is itself a reflection of social relations. Thus, in examining the nature of Zambia’s post-Independence industrialisation experience, locating the role of state through agencies such as the INDECO, analysis requires attention to the agents who managed the process of industrialisation and how these interacted with the political leadership.

3.5 Conclusion

In this chapter, I have highlighted the remarkable performance of East Asian developmental states. I have also covered some controversies in explanations of their performance. On the one hand, it is found that the dominant narrative has been the free market narrative, despite, on the other hand, the alternative narrative supported by ample empirical evidence.

I then discussed the developmental states literature within the context of a paradigm from two schools of thought as dual explanatory trajectories, with occasional although limited and cosmetic contact. Both schools of thought have undergone shifting content as focus in response to changing national and global circumstances, and explanations for them. However, I have argued that sufficient scope exists to learn lessons from the DSP for developing countries, and in particular Zambia.

Since White (1998: 4) regarded the one-party era in Zambia as a developmental democracy whose political conditions largely depart from today's democratic conditions, I regard this as an invitation and indeed fertile area to cultivate scholarship which seeks to understand why the epoch of state-led development should have failed to produce results anywhere close to the experiences of East Asia. This is in fact the underlying purpose of this entire thesis – to establish a cogent and coherent argument within the context of Zambia's structural change efforts understood as (interaction of) processes, technical and social, that reconfigure the structure of production. Chapter five, six and seven elaborate on these processes and define them within the context of a system of accumulation.

Structural change understood through the process of industrialisation is thus more than capital accumulation through acquisition of technology, it is essential that appropriate socio-political and economic context is given due regard because the case of East Asian development demonstrates that “[s]ocial and political factors have been crucial in the taking of decisions on whether or not to adopt a particular technology, and the effect of this technology has had different effects on social groups such as classes and genders” (Kiely, 1998: 169). Explaining the failure of structural change of the Zambian economy has been to limit discussion, and focus it on, the dependence of the economy on copper, and to suggest the limited direct productive linkages inherent in enclave-dependent economies (see Young (1973) for example).

In the next chapter, I sketch the industrialisation and developmental efforts of post-Independence Zambia. The aim is to discern the nature of industrial development and industrial policy in particular within the context of a broader development strategy underpinned by a complex dynamic of socio-political and economic interests.

4 The roots of Zambia's post-Independence system of accumulation: a synopsis of the pre-Independence political economy

In this chapter, I proceed on the premise that to understand Zambia's post-Independence development efforts more generally, and industrial development in particular as the driver of structural change, it is important to trace the nature of Zambia's developmentalism before Independence, and especially the development of the mining industry and how it induced non-mining industrial development and broader economic activity. This necessitates a brief overview of the pattern of development during the colonial era as the basis upon which developmental structural change attempts were made by the post-Independence Zambian government. I find that during 'colonial times', the territory that is today known as Zambia was designed as an extractive community as opposed to a white settler community.²⁴ The discovery of rich ore reserves, and boom years during the interwar period, catapulted Zambian copper mining making Zambia a global mining giant. Consequently, the scale and pattern of development was a reflection of the attitudes and commitments of the White administering authorities and the private interests engaged in the limited productive activity. It was the interplay of politics between the foreign capital, the colonial government and the white south that underpinned the direction of accumulation, its pace and scale.

To back my underlying argument, I begin by tracing, though briefly, the nature of polity in pre-Independence Zambia. I then shift emphasis to explore the pre-Independence economy, placing copper development at the centre, both in its contribution to public revenues and its spread effects in inducing economic activity. I find that mining companies' interests were best served by the colonial government's policy that created an environment conducive to mineral exploration and development, which undermined the progress of Africans, including blocking industrial and agricultural development. I highlight the dualism of the Zambian

²⁴ Colonial times is loosely used to refer to the period between 1891 and September 1964. White settlers and Europeans are used loosely in this chapter as synonyms. Northern Rhodesia and Zambia are used interchangeably throughout this chapter, and so too are Zimbabwe and Southern Rhodesia.

economy as a result of the attitudes of the colonial government, which, on the main, were conducive for copper mining development. I shift my focus to industrial development throughout the three governance epochs of pre-Independence Zambia. I find that industrial development progress restricted and confined to the copper enclave, this resulting, in part, from the dualistic nature of the economy, as well as the geopolitical and economic position of Zambia in relation to the south. I conclude by reflecting on the main themes resulting from the overview of the economy, and then launch a central argument that failure to industrialise pre-Independence Zambia resulted from socio-political and economic forces that promoted and entrenched interests in mining development, at the expense of industrial and agricultural development.

4.1 The pre-Independence polity in brief

Zambia attained its Independence on 24th October 1964. Before that, and particularly with respect to modern Zambia, it existed as a territory under the rule and administration of three authorities: first, from 1890s to 1924 under the British South Africa Company (BSA); second, under the Colonial Office from 1924 to 1953, and, finally, under the Federation of Rhodesia and Nyasaland from 1953 to 1964.

The BSA engaged in relations with local chiefs, obtained mineral rights over the region and established its headquarters at Mongu in today's Western Province. BSA's principal engagement with this territory was to prospect for minerals in the region. Among its notable achievements was the completion of the railway in 1909 to transport copper from the Katanga region of the Congo. Linking the south and north by railway was an important economic investment. By 1904 the railways south of the Victoria Falls had already been completed. Within six years, extensions of the railways system ensured that Livingstone, a town in Northern Rhodesia, was linked to Elizabethville (now Lubumbashi) in the Congo (Burdette, 1990: 78). By 1910, BSA had achieved a major feat, linking the south and north by railways.

In general, BSA imposed its authority on the local chiefs and, by 1911, the entire region now occupied as Zambia, was ruled as Northern Rhodesia. The number of Europeans occupying this region increased by 142 percent to 3,624 between 1921 and

1911. Regulations by the BSA were already in place which restricted Africans from engaging in free (agricultural produce) trade, while reserving the most arable land for Europeans. Some 36,000 Africans were already forced into wage-labour in the mines by 1921, especially after BSA instituted native taxes to cover some of its overheads and other administrative costs, collecting £6,000 and £72,000 in 1902 and 1914, respectively.

On the whole, the majority of the Europeans lived along the railway line. A third of European males were engaged in agriculture, mainly growing maize for local demand and export to the Congo, and this became the main source of food security early in Zambia's history. At the time, copper mining contributed little to domestic output and exports, amounting to only £7,000 in total exports. Some 133, 58 and 52 Europeans were engaged in copper mining, manufacturing and construction, respectively. Of the 36,000 Africans in wage-employment, a tenth were domestic servants while just under two-fifths were farmworkers. The region was uneconomically sustainable as an administrative and economic outpost for BSA, with the company incurring a deficit of £1.5 million by 1924 (Burdette, 1990; Turok, 1989: 17-18).

BSA, in 1924, maintained in perpetuity mineral rights over the territory while placing Northern Rhodesia under the British government as Protectorate and Crown Colony.²⁵ The Colonial Office thus established a sort of bureaucratic structure with continuities from the BSA system, and by 1926, administering and governing the region proved costly with the Native Tax as the single largest contributor to public revenue. The first Governor of Northern Rhodesia was a national of South Africa who was well acquainted with the system of racially segregated governance. However, numbers of white settlers (see Table 4-1 The Population of Zambia, 1911-1962) compared with the south were low; it was the mass production of copper after 1928 that induced substantial migration of Europeans into the region.²⁶ By 1939, taxes from copper had already substituted the native tax as the largest single contributor of public revenue, and accounted for 70 percent of total government revenue which was

²⁵ But in 1950, BSA "agreed that 20 percent of the royalties might go to the government until 1986, when it would surrender its right. However, the arrangement did not last so long, for in 1964, just before Northern Rhodesia became independent under the name Zambia, the BSA Company relinquished its rights in return for a payment of £4 million" (Pedler, 1975: 102).

²⁶ For instance, 35,000 whites lived in Southern Rhodesia by 1923 (Burdette, 1990: 79).

roughly the same figure the BSA appropriated as custodians of mineral royalties (Turok, 1989).

Table 4-1 The Population of Zambia, 1911-1962

Year	European	Coloured (Mixed race)	Asian	African (estimated)
1911	1,497	-	39	820,000
1921	3,634	145	56	980,000
1931	13,846	425	176	1,330,000
1946	21,907	804	1,117	1,660,000
1951	37,079	1,112	2,524	1,890,000
1956	65,277	1,577	5,450	2,100,000
1959	73,000	10,000		2,280,000
1962	77,000			

Source: Baldwin (1966: 41) and Turok (1989: 20)

By 1931, about 30 percent of the European population lived in the Copperbelt with many of them working in the mines, and the majority of these came from South Africa. In practice, the exploding numbers of white skilled expatriates concentrated and augmented both economic and political power in the hands of the Europeans. Formal consolidation of white supremacy led the 33,000 Europeans in 1948 to begin putting pressure on the Colonial Office to merge the North with the South. In fact, by 1949, Welensky, the then governor of Northern Rhodesia (who later became the second Prime Minister of the Federation of Rhodesia and Nyasaland), had already intimated his repulsion of an African government in Northern Rhodesia. Eventually, the Central African Federation in 1953 was formed, constituted by Southern Rhodesia, Northern Rhodesia and Nyasaland.

The African Welfare Associations with their roots in those founded in 1923 by David Kaunda, the father of Zambia's first President Kenneth Kaunda, unified and morphed into the Northern Rhodesia Congress (NRC) in 1948. The African Welfare Associations were mainly concerned with confronting inhumane discriminatory policies, while insisting on their approach as non-radical, non-antagonistic and therefore subservient to the ruling authorities. The NRC was the confluence of black interests, and indeed, a watershed in black politics. On the side of labour, African labour's consciousness of the state of affairs that subordinated black interests to those of the Europeans caused Africans with the aid of an envoy, a Mr. Comrie, from the British Labour Party to form their union, the Northern Rhodesian Mineworkers Union in 1949. African labour generally kept away from nationalistic movements and national level politics, this being demonstrated by the union's refusal to engage in a Congress-led industrial action in 1953. Turok (1989: 23) argues that the African political leadership failed to subdue the interests of the mineworkers' union under the African political leadership, and efforts by the latter to take over the leadership of the former caused the cleavage between them to grow even further.

Within four years of the formation of the Federation, Africans were increasingly becoming aware of their socioeconomic situation in relation to the minority Europeans, and this led to divisions within the African polity. While Nkumbula's party, the NRC, aligned with the moderate European-dominated Constitution Party, a new party led by Kapwepwe and Kaunda – the Zambian African National Congress (ZANC) – held no such reservations with respect to a neutral stance against European interests. Consequently, some 1,000 NRC supporters defected to ZANC (Turok, 1989). Growing militancy by Africans, in a period of two months in 1959 between February and March, led to some 2000 arrests throughout the Federation, and the prohibition of ZANC. In fact, following NRC's acceptance of the Benson Constitution spelling out the terms for Africans to cooperate with the colonial authorities, ZANC effectively mounted opposition against the NRC. When ZANC was banned in March 1959, with the NRC remained unaffected, Africans grew increasingly suspicious, and doubtful, of the NRC's ability to safeguard their plight (Mulford, 1964: 35).

On the whole, however, before 1961, both the ZANC and the NRC were regional parties, the NRC's support stemming from Southern Province. After 1961, the United

National Independence Party (UNIP), a descendent of the ZANC, increased its organisation on a territory-wide scale, arousing nationalist sentiments along the way and, strongly opposing and calling for the dismantling of the Federation. What started off as a restricted African polity was gaining momentum and beginning to challenge the rule and authority of the Federation.

While African voices were spreading and independence struggles and successes diffusing across the continent, the Federation was drawing its last breaths. By 31 December 1963, the Federation was dissolved formally, with territorial governments appropriating and sharing its assets. Unsurprisingly, Southern Rhodesia appropriated the largest share of the cake, and Northern Rhodesia received negative net transfers.

4.2 Situating the pre-eminence of copper mining in the pre-Independence economy

The purpose of this subsection is to highlight the centrality of copper mining in pre-Independence Zambia (formerly Northern Rhodesia), and the limited growth of the manufacturing sector as an ancillary activity. This is not meant to be a detailed account of pre-Independence (lack of) developmentalism, but rather a very brief exposition of the nature of the Zambian economy that was bequeathed upon the indigenous African government at Independence. From this descriptive overview, the urgency for structural change for the post-Independence Zambian government is immediately apparent, broadly given the inferiority of the development of the manufacturing sector and retarded agricultural development.

Copper production in present day Zambia started commercially in the 1930s, with output growing from one thousand long tons in copper 1926 to 579 thousand long tons in 1960 (Baldwin, 1966: 33). However, under BSA, the extension of the railway from Broken Hill to the border of the Congo in 1909 did not lead to mass production of copper for at least one reason - poor ore grades averaging at most 5 percent copper in the ore. In the Congo, ores with at most 7 percent copper were actually disposed of, being regarded as “too poor to treat” (Baldwin, 1966: 31). Eventually, the only notable copper mine before the 1930s was at Bwana Mkubwa which made consistent losses

after the First World War due to high mining costs and low-grade oxide ores, leading to its closure in 1930.

Broadly, “[b]y 1930 mines were either in production or under development at Bwana Mkubwa, Roan Antelope (now Luanshya) Nkana (Rhokana), Mufulira, Nchanga (Chingola), Chambishi and Kansanshi” (Daniel, 1979: 6). However, by 1931, when the ripples of the Great Depression were being felt in the Copperbelt, the ongoing developments in the mines were halted, with smaller mining companies permanently leaving the market, and two large multinational corporations – Anglo-American Corporation and Roan Selection Trust – staying put for several decades. During the colonial era, the entire copper industry was owned by these two mining giants, and this reflected the colonial administration’s views regarding ownership and development of mineral resources, placing the primary responsibility of mining in the hands of private enterprise.

Nevertheless, despite this tenuous start, technological development led to a floatation process which in turn “made possible and profitable the extraction of copper from the sulphide ores of the Copperbelt” (Burdette, 1990: 80). A reversal in fortunes in favour of copper from around 1933 enabled the two mining companies to open new mines. For example, an electrolyte refinery at Nkana mine was initiated by American-Anglo Corporation in 1933. Four years later, Northern Rhodesia was already the world’s fourth largest producer of copper, churning out annually 210,000 tons of copper by 1937 (Burdette, 1990: 83).

Pedler (1975: 103) observed that “[i]n general ... colonial governments relied on private enterprise for the development of mineral resources”, although “in the last phase of the colonial rule, however, the Colonial Development Corporation, a United Kingdom government agency, supplied finance and management for the development of certain new mines.” Roberts (1982: 353) notes that “[i]n 1943 the British government made a loan of 750,000 pounds to help expand operations at Nchanga, bulk-buying of copper was suspended by Britain from 1944 to 1947.” This is to emphasise that before Independence, the colonial state was involved in guiding and directing mining development but this was tied to accessing external credit, as well as aligning production with demand. However, through its approval of mining projects,

provision of finance and management, the colonial government would influence both the pace and direction of accumulation more generally.

Indeed, even during BSA administration, the broad ideology was that Africa's wealth could only be reasonably appropriated by putting in place mechanisms to inject foreign capital into developmental infrastructural projects like hydro-electricity, as well as central planning systems to administer extraction and governance, in addition to promoting large-scale mechanised economic activities whether in agriculture or elsewhere (Duignan and Gann, 1975: 26). By 1938, development projects would be funded in part by the newly-established National Development Board of Northern Rhodesia. The five-year roads plan that followed has the NDB to thank. Between 1938 and 1953, gross domestic capital formation at current prices as a proportion of GDP ranged between 47.2 percent and 10.7 percent, although it averaged just over 24 percent. Between 1953 and 1961, during the Federation years, gross capital formation averaged just over 31 percent. Accounting for this capital expenditure were infrastructural developments in railways and hydro-electricity as well as ancillary industries like cement manufacturing, financed by a combination of sources from the state and foreign capital.

The dominance of copper mining (and inferiority of the manufacturing sector) in relation to the rest of the economy can be seen by the latter's share in total national output. This is shown in Table 4-2 Sector Contribution to GDP (%) In Zambia, 1954-1961 on sector contribution to GDP. Statistics were based on crude estimates given absence of structures and systems to capture much of the economic activity, but they give an accurate broad account.

Table 4-2 Sector Contribution to GDP (%) In Zambia, 1954-1961

Industry	1954	1955	1956	1957	1958	1959	1960	1961
Agriculture								
Non-African	2.0	1.6	1.8	2.7	2.1	2.4	2.1	2.8
African	11.0	8.8	8.4	10.6	11.2	9.5	9.3	9.8
Mining and quarrying	52.4	56.8	54.0	39.0	32.6	45.4	47.5	44.1
Manufacturing	4.0	3.9	4.4	6.4	7.1	5.6	5.5	5.9
Building and construction	6.1	6.2	6.7	8.6	9.7	5.8	4.5	4.1
Electricity and water	0.4	0.4	1.6	1.9	2.5	2.0	2.3	2.2
Transport and communications	3.4	3.4	3.7	5.2	5.3	5.0	5.1	5.1
Distribution	5.7	5.1	5.1	6.5	6.4	5.2	5.4	5.6
African rural household services	6.6	5.4	4.9	6.4	7.9	7.0	6.2	6.9
All other	8.4	8.4	9.4	12.7	15.2	12.1	12.1	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Baldwin (1966: 35), Table 2-3

Copper contribution to total national output ranged from one-third to over half, averaging around 46.5 percent between 1954 and 1961. Copper exports (figures not shown here) averaged around 86.5 percent of value of all exports. The manufacturing sector as a share of GDP averaged about 5.4 percent, less than half of the entire agricultural average share of 12 percent between 1954 and 1961.

In practice, the centrality of mining to the rest of the economy can be perceived from Pedler's (1975: 103) statement:

“The mines created markets for all kinds of products. The growing urban populations [had] to be fed. Money went into such enterprises as workshops, repair outfits, electric-power plants, cement factories and water works. The Northern Rhodesian mining companies had to build and manage their own townships. They also created medical facilities. Development in turn attracted a multitude of people anxious to supply the growing demand for building materials, fuel, clothing and all manner of personal services.”

Similarly, Katzenellenbogen (1975: 360-361), argued that mining contributed to Africa's economic growth through its multiplier-effect (potential) by inducing a host of economic activities spanning: attracting and hosting technical skills and technology; establishment of social services such as housing, health facilities, water and sanitation and, recreational facilities; and development of a host of ancillary enterprises such as repair shops, facilities for the manufacture of steel and iron, cement production and other services like electricity generation. Further, mine workers were also a source of demand for various other products and services straddling food and clothing, banking services as well as trade stores, services of craftsmen and so forth. Mining also contributed to the public purse through taxation and licence fees, which in turn were used on other economic activities and services of the state.

However, both Pedler's and Katzenellenbogen's accounts say nothing about the underlying processes, institutions and systems including the role, and interrelationships, of agents involved in these developments. Put differently, mineral mining does (potentially) induce economic activity through its wide-ranging spread effects as described, but the nature and form the development of these economic activities take are underpinned by socio-political and economic dynamics, which must be explored within their domestic and international contexts. As will be demonstrated, for instance, the location of housing and social services was as much political as it was economic, and so too were the kinds of manufacturing enterprises which saw the light of day.

In Northern Rhodesia, the expansion of copper production as early as the late-1930s induced the development of additional economic activities, although these remained restricted in scale and scope to serving the economic interests formed around mineral development. By 1943, copper production had escalated to 251,000 long tons; along with this boom in copper mining, supporting industries developed, as exemplified by the construction industry. Copper mining developments and economic activities generally induced by it followed world copper demand; to meet world demand “[m]ore shafts were opened and more refineries and smelters were built; this meant more housing and roads as well. Importantly, manufacturing also grew” (Burdette, 1990: 86).

A look at direct purchases of copper firms from the rest of the economy will help to locate the direct contribution, although the more enduring contribution to the economy lies in the broader spread-effects that come with mining which may not be directly accounted for by material flows across sectors (as opposed to links through expenditures of revenues). However, copper companies, for instance, purchased no less than 14 percent of total manufacturing output in the fiscal year 1956-1957.

Table 4-3 Copper companies' purchases from other sectors, 1956-1957

	Gross output of Northern Rhodesian industries (thousands of £)	Gross output of Northern Rhodesian industries purchased directly by copper companies (thousands of £)	Percent of gross output purchased directly (%)
Industry			
Mining and Quarrying			
Metal mining	136,470		
Stone quarrying	154	32	21
Manufacturing			
Grain mill products, slaughtering, dairy, and other food manufacturing	4,426	528	12
Alcohol, beer, soft drinks, etc.	1,831		-
Manufactures of textiles, wearing apparel, and footwear	317	44	14
Manufactures of wood and cork, except furniture	739	195	26
Valcanizing and chemical products	679	161	24
Bricks and structural clay	411	23	6
Cement and other nonmetal products	1,724	30	2
Ferrous and metal products	2,040	1,146	56
Repair of equipment and motor vehicles	2,639	82	3
Printing and other manufacturing industries	822	6	1
Total manufacturing	15,628	2,171	14
Electricity and water			
Electricity	9,777	6,150	63
Water	337		
Construction			
Payments to contractors	28,247	8,128	29
Railway services	6,553	3,991	61
Government tax revenue	48,500	32,100	66
African wages in monetary sector	26,000	6,300	24
Total European wages and salaries	41,800	15,700	38

Source: Baldwin (1966: 38-39), Table 2-4

Mining also provided substantial resources to government through public revenues such as taxation, licence fees and dividends for itself as shareholder. In the fiscal year 1956-1957, for example, copper mining accounted for about two-thirds of total government tax revenue.

The interests of the mining companies in diversifying their developments outside of copper were varied but often limited. While Anglo-American ventured into secondary industry by promoting and establishing new firms under its subsidiary Rhoanglo, RST restricted its interests to copper mining, save for a co-owned hotel and farm. Rhoanglo set up firms to “manufacture cement and ball bearings” (Burdette, 1990: 86). Hence, whatever developments took place outside of mainstream mining, especially those pursued by the mining companies, they were meant to complement mining or mainly serve the interests of the agents connected with the mines. In fact, it was the initiative of the mining companies themselves to install some ancillary operations and facilities in order to reduce costs that would otherwise have been incurred by imports.

Although the mining sector was an important market for other industries within the country, the mining companies often sourced a large amount of their capital inputs from South Africa and Zimbabwe. Zambia was part of a larger market of the Federation from 1953 to 1963, and also economically integrated into a more advanced southern African region as a whole. Copper production is inherently capital-intensive, utilising large amounts of specially-designed machinery and equipment. Absence of skilled labour in Zambia and a small domestic market for specialised mining equipment made it difficult to source these inputs locally, and, besides, they were already being competitively produced from the South, so there was no incentive for such industries to develop in Zambia (Baldwin, 1966).

The extent of the backwardness of the manufacturing sector in Zambia within the context of other developing countries can be seen from Table 4-4 Population, GDP and Manufacturing output in selected African countries, 1960. From these selected countries, with roughly comparable populations, Zambia had the third highest GDP per capita after Ghana and Zimbabwe, yet, in nominal terms, Zimbabwe’s and Ghana’s manufacturing sectors were each no less than three times the size of Zambia’s manufacturing sector.

Table 4-4 Population, GDP and Manufacturing output in selected African countries, 1960

	Population (million)	GDP (\$ million)	Per capital GDP (\$)	Manufacturing production (\$ million)	Share of Manufacturing in GDP (%)
Nigeria	40	3,500	88	157.5	4.5
Ethiopia	20.7	1,021	49	61.3	6.0
Tanzania*	9.6	671	70	20.1	3.0
Kenya	8.1	641	79	60.9	9.5
Ghana	6.8	1,503	222	94.7	6.3
Uganda	6.7	583	87	37.9	6.5
Angola	4.8	726	151	31.2	4.3
Zimbabwe**	3.6	751	209	120.2	16.0
Zambia***	3.2	511	160	28.1	5.5
Formerly: *Tanganyika **Southern Rhodesia ***Northern Rhodesia ****Gold coast					

Source: Adapted from Kilby (1975: 472), Table 112

It is generally agreed that industrial sector development during colonialism was one that was based largely on economic viability which took into account transportation costs relative to the value of the product, local availability of raw materials and other inputs as well as economies of scale. Accordingly, for Northern Rhodesia, the size of the domestic market in relation to agreements and political and economic interests in the south were of considerable importance (Baldwin, 1966: 182; Kilby, 1975 : 472-

474). However, the colonial government occasionally, through the Colonial Development Corporation, stepped in to provide the funds and other expertise for development projects that would make mineral development more profitable. One such project benefiting from this was the cement industry near Lusaka, which was developed soon after the second World War in order to supply the hydro-electricity project at Kariba. A private firm later purchased the plant. Rising copper production and industrial activity required the expansion of electricity sources leading to the construction of a hydro-electricity dam at Kariba.

Although, the Kariba dam hydro-electric project itself in terms of its location was not without controversy, it was not the first electricity-generating plant installed in Zambia, but it became the most important source of power. A hydro-electric plant on the Mulungushi river was built in 1926, financed by the Rhodesia Broken Hill Development Corporation. Later, another was installed in 1945 on the Lusemfwu River. Industrial expansion in Zimbabwe (then Southern Rhodesia) and expansion of copper mining in Zambia required more electricity to be generated. Although two proposals were submitted for hydro-electricity plants, one at Keshima on the Kafue River (in Zambia) which was preferred by the copper companies and another at Kariba on the Zambezi, the border between Southern Rhodesia (Zimbabwe) and Northern Rhodesia (Zambia), “the decision to proceed with Kariba was taken in 1955” with initial generating equipment located on the southern side (Pedler, 1975: 120; Katzenellenbogen, 1975). The controversy that arose was to view the location of the Kariba dam project as motivated by politics, with Southern Rhodesia choosing to control an important economic resource. Yet, the Kariba location, estimated to have costed between £85.75 million and £114 million, was over £30 million more expensive than the Kafue location.

A technical report by two French consultants favoured the Kariba project on grounds of cheaper current in the long term, and questions about whether Kafue would generate sufficient electricity for the mines and other areas of economic life.²⁷

²⁷ See Katzenellenbogen (1975: 405-406) for more details, but in general, the following financing arrangements were made, and these involved pooling funds from various sources, with the International Bank being the biggest single funder: “the Northern Rhodesia copper companies each loaned the federal government £20 million at 4.5 percent interest. The British South Africa Company provided £4 million, while the Standard Bank of South Africa and Barclays Bank, DCO, put up £2

However, the decision to locate the electricity generating equipment in the south casts doubt on whether the hydro-electricity location in Kariba was purely technically motivated. Adding this consideration to the fact that the Kafue river project was cheaper, closer to the mines, and favoured by the mining companies adds more voice to politics as the main factor in selecting the Kariba location for the hydro-electricity project. In fact, Burdette (1990: 98) suggests that the positioning of the Kariba Hydro-Electric project shines light on political power embodied in Southern Rhodesia: “[t]he Kariba Dam’s main power station was supposed to have been built on the Northern Rhodesian side of the gorge. Instead it was put, at far greater cost, on the south bank, under the control therefore of the settlers in that territory. The political significance of this was hidden until years later when Northern Rhodesia became the independent nation of Zambia under the majority rule after the break-up of the federation.”

The growth of the manufacturing sector also relied on availability of local raw materials. Zambezi Sawmills, one of the oldest firms which started production in 1916, came to life due to presence of local raw materials in the form of teak and other local timbers. Its main products were railway sleepers and other furniture products. It was the BSA’s ambition to link the territories which led to railway installation, and, subsequently, development of such ancillary economic activities. That is, the development of the sawmill was not intended to bring support to industrial development, but mineral exploration and development.

Another significant way the copper industry influenced, or, more appropriately, retarded, the growth of the manufacturing sector was through its European labour force which was “highly paid [and] followed an expenditure pattern similar to that found in rich, developed countries” (Baldwin, 1966: 184). This group (the European labour force) was too small to support local industry, and, therefore, in the absence of local options, resorted to imports. Baldwin also notes that while urban Africans on

million each. The Colonial Development Corporation provided £15 million, the Commonwealth Development Finance Corporation £5 million and the International Bank £28.5 million” with a consortium of Italian firms being awarded major contracts of the first phase while equipment was made in Britain. Work started in 1955 and in January 1960 power started flowing. Although “planners intended to build generators on the north bank of the river”, this decision only came into action in 1971, five years into Zambia’s Independence.

average spent about 60 percent of their incomes on food, drink, and tobacco, Europeans spent only 32 percent of their incomes on these items.

On the whole, manufacturing activities, and, indeed, economic activities in general, were firmly entrenched in the copper mining sector. Baldwin (1966: 40), concerning the state of affairs towards the end of the 1950s, neatly observed that: “[t]here are few domestic manufacturing activities left to be counted, once the local industries from which the copper companies make significant purchases are enumerated.” This suggests that industrial development was restricted in pace, scope and scale by the demands of the copper companies, but also by the scale and profitability of mineral development.

The dualism of the Northern Rhodesian economy was reflected in two further ways: first, the superiority and sophistication of the modern sector versus the backward rural economy and African agriculture sector; second, the racially segregated wage structures and occupational opportunities. Consider Table 4-5 Earnings and employment by sector and race, 1961.

Table 4-5 Earnings and employment by sector and race, 1961

Industry	Africans		Non-Africans		Ratio of non-African to African earnings	Non-African share in employment	Non-African share in total earning
	Number	Average earnings (£)	Number	Average earnings (£)			
Agriculture	40,300	54	670	956	18	2	23
Mining and quarrying	37,800	293	6,840	2,326	8	15	59
Manufacturing	21,600	137	3,430	1,493	11	14	63
Building and construction	30,000	120	2,400	1,434	12	7	49
Electricity and water	2,900	124	510	1,875	15	15	73
Wholesale and retail trade	14,400	124	4,990	976	8	26	73
Finance and Insurance	500	146	1,260	1,056	7	72	95
Transport and communications	10,300	168	2,900	1,349	8	22	69
Government administration	20,600	149	3,040	1,365	9	13	57
Education	9,300	176	1,310	1,121	6	12	47
Health	6,200	122	1,140	1,256	10	16	65
Private domestic services	33,400	81	100	622	8	0	2
Other services	10,800	113	2,270	992	9	17	65
Total	238,100	139	30,860	1,294	9	11	55
Subsistence population	1,692,000	18					

Source: Adapted from Baldwin (1966: 43), Table 2-6

Europeans were three percent of the total population, yet they constituted 11 percent of the entire labour force and accounted for over half of the national wage bill. There are variations by sector, but the earnings differences by race remain similar. In mining, Europeans constituted only 15 percent of the total mining labour force, yet accounted for 59 percent of the mining wage-bill. In manufacturing, the Europeans accounted for over 63 percent of the wage bill despite being only 14 percent of the manufacturing sector labour force.

The wage differences reflected at least two things: the discriminatory employment conditions by race and the differences in skills and education. Africans were mainly working in low-skill positions, while managerial and technical skills jobs were reserved only for Europeans. Colonial government policy in education and employment is largely responsible for a lack of skilled and educated pool of indigenous Africans. In general, the Northern Rhodesian government committed to providing only four years of schooling for Africans. Although some improvements had been made after the Second World War in terms of providing educational facilities for indigenous Africans, it was reported that by 1960 educational facilities and infrastructure could only accommodate 15 percent of school-age children for the first eight years of schooling, and at most only three percent to reach secondary school. This must be contrasted with European children whose schooling between ages seven and fifteen years was compulsory (Baldwin, 1966: 49).

Table 4-6 Enrollment of Africans in Northern Rhodesian schools in selected years

		1937		1944		1960	
Class		Number	Percent	Number	Percent	Number	Percent
Primary							
Substandard	A	15,113	50.92	52,776	51.64	69,234	23.86
	B	6,525	21.99	19,527	19.11	60,001	20.68
Standard	I	3,773	12.71	13,527	13.24	53,115	18.31
	II	2,168	7.30	8,099	7.92	51,317	17.69
	III	1,223	4.12	4,342	4.25	19,943	6.87
	IV	611	2.06	2,425	2.37	17,491	6.03
	v	154	0.52	830	0.81	8,679	2.99
	VI	110	0.37	620	0.61	7,756	2.67
Subtotal		29,677	99.99	102,146.00	99.95	287,536.00	99.10
Secondary							
Form	I	nil	nil	30	0.03	1,311	0.45
	II	"	"			747	0.26
	Remove*	"	"	19	0.02	235	0.08
	III	"	"			139	0.05
	IV	"	"			111	0.04
	VI (1st year)	"	"			28	0.01
	VI (2nd year)	"	"			28	0.01
Subtotal		-		49	0	2,599	0.90
Grand total		29,677		102,195		290,135	
<p>*This class [was] in session for 6 months and links the Northern Rhodesia school year ending in June with the "Cambridge" year ending in December</p>							

Source: Baldwin (1966: 50), Table 2-10

Education levels in Northern Rhodesia were among the lowest in any British colony. For example, Ghana had a population of roughly double Northern Rhodesia's by 1960, yet the number of children in secondary school it attained in 1957 was about three times the figure Northern Rhodesia achieved only three years later. For Ghana, Meier (1975: 451) argues that the colonial government was partly responsible for

*“[achieving] good ... educational progress” by instituting measures to ensure that secondary school education kept apace with remarkable growth in elementary school , such that by 1924 “the government founded Achimota College, which for a time provided education from kindergarten to college level, and which later developed into a full-fledged university.”*²⁸

On the one hand, this suggests that the rate of educational progress for Africans had a lot to do with colonialism in general, but on the other hand, it leaves room to perceive that the energy and resources for African educational advancement committed by any territorial colonial government could be explained by the attitudes of the authorities.

Table 4-7 Number of Children in school in Ghana in selected years 1935, 1938, 1955, 1957

Level	1935	1957
	Number	Number
Primary	63,000	456,000
	1938	1955
Secondary	919	7,711

Source: Meier (1975: 451)

Crudely, the uneven distribution of technical and managerial skills by sector can be gleaned from the employment figures of Europeans by sector. Although it is acknowledged that this is a rough approximation, given the different levels of technology (capital-labour-skill ratio) combinations across (and to a lesser extent within) sectors, the relative share of the capital-intensive copper sector should be

²⁸ See footnote 31 which describes the role of the colonial government in general and, Guggisberg, as the Governor of the Gold Coast (Ghana) in particular, in putting in place deliberate measures to mobilise resources to improve the education standards of the Indigenous population.

indicative of its importance. The relative unimportance of agriculture to the colonial government can also be seen by the numbers of Europeans within it.

Table 4-8 Share of Europeans in sectoral employment, 1961

Sector	Percent
Agriculture and forestry	1.6
Mining and quarrying	15.3
Food, drink, and tobacco	11.1
Textiles and clothing	1.8
Wood and furniture	3.5
Construction	6.8
Electricity and water	15.8
Commerce and finance	26.1
Rail transportation	31.3

Source: Baldwin (1966: 77), Table 4-2

The neglect of agriculture is not simply in terms of numbers of Europeans in the sector; resources for agriculture were virtually minimal. Europeans were also favoured in terms of arable agricultural land and access to finance, in addition to their superior technological and agronomical skills. European farmers were exceedingly more productive than African farmers, but few numbers of the former in the sector meant that agricultural output was restricted. By 1964, the 700 European white farmers mainly engaged in cash crops, tilling 180,000 acres of land, contributed £7.7 million to total agricultural output, compared with £3.2 million from Africans on a land area of five million acres (Zambia Office of National Development and Planning, 1966: 2, First National Development Plan, 1966-1970).

In 1944, colonial governments were asked to submit ten-year development plans by Secretary of State Oliver Stanley in order to compute figures and associate them with developmental activities in colonial territories. For Northern Rhodesia, the welfare of Africans was brought to the fore when about 12 percent of the £13 million development plan budget was allocated to African education compared with 2 percent for European education. Roughly, Europeans were about two percent of the total African population in 1947, yet the funds allocated to education for European children was about 16 percent of the African share. Despite this inequality in resource allocation, on the whole, the ten-year development plan recorded more resources

allocated than previous years, and hence suggested a commitment to improving the welfare of Africans.

However, before the 1947 plan could actually be implemented it was replaced by a 1953 version which reduced the relative allocation to African education to only three percent, an amount equivalent to law and order in the now enlarged plan budget of £54 million. Accounting for this change in allocations was the influence of the Legislature which instead proposed and pushed for provisions of three urgent goals: increasing food production, making available more housing and, refurbishment of roads. European as a proportion of the African population stood roughly at about three percent, yet African education received half the budget allocation of European education. Rural development was disappointing in the new plan, being allocated less than two percent of the total plan budget while agriculture only about the same as the allocation for African education (Baldwin, 1966).

Federal development spending after 1954 increasingly relied on loans as a source of development financing. While in 1947 the share of loans in total spending amounted to 31.1 percent, this share increased under the Federal government: loans would account for just over three quarters of the 1957-1961 plan, a figure which was updated two years later to 85 percent. Importantly, however, was the capital expenditure by federal government, which showed that contrary to what was initially planned in 1947 to improve livelihoods of Africans by channelling more developmental funds into rural development and agriculture, resources were increasingly diverted into urban-centred developmental projects. Power and water, and communications, large capital projects situated throughout the entire length of the line of rail, gobbled up 45 percent of total capital expenditure, while an additional 25 percent was urban-biased being appropriated by African and European residential development, and loans for local (urban) authorities. Combined funds spent on rural development and agriculture were no more than those allocated to European housing (Baldwin, 1966: 197-201).

Budgetary allocations to different sectors are underpinned by particular configurations and interactions of socio-political and economic interests. Indeed, it is true that African education and welfare in general were undermined by deliberate colonial government policies. What stands out is that before the start of the Federation, plans

in place to improve education and welfare for Africans were overhauled by the Legislature, replacing them instead with an even larger allocation for European advancement in business and education. This suggests that the 1953 version of the ten-year development plan reflected, in its allocations, the interests of society, with white settler interests promoted at the expense of the Africans.

In sum, the economy of Northern Rhodesia developed alongside mineral development. The colonial government left mineral development, and much of the economic activity formed around it, to the private sector. Indeed, mineral development induced economic activity, which, on the main, relied on its viability and scale of development. There was limited concern for African advancement in education, while rural development and agriculture were also generally neglected. Broadly, the dual economy that underpinned the structure and nature of Northern Rhodesian developmentalism was a function of deliberate colonial policies, which reflected the interests of copper mining companies, and, to a lesser extent, the interests of the white settlers.

4.3 Industrial Development under the BSA and Colonial Office eras, 1891-1953

The manufacturing sector at the end of the BSA rule was virtually insignificant. By 1935, only the Zambezi Sawmills Ltd. was recorded officially in the Blue Book as the only establishment in the manufacturing sector of Northern Rhodesia, although another sawmill was recorded later in the year. It has already been pointed out that the availability of local timber and demand for railway sleepers for Rhodesia Railways and South Africa were effectively the main contributing factors that brought into existence the timber industry, but it also underwent some diversification by producing wooden furniture and parquet. On the whole, the timber industry had a respectable employment record of about 3,795 Africans and 100 Europeans by 1935. However, the figures of the manufacturing sector in official statistics underestimated the scale of manufacturing sector activities because a complex set of industrial processes associated with mining copper are often excluded from this category (Young, 1973).

A number of ancillary industries around copper mining sprung up during the interwar years, and by 1947 when the first Census of Industrial Production was undertaken, 79 establishments were recorded under 'Factory and Workshop Industries', with 6 percent of these located in the mining sector. The timber industry proxied by 'Wood and furniture' continued to play a dominant role in the manufacturing sector in terms of its contribution to net sectoral output and employment, accounting for about 30 percent of total sectoral net output and around 55 percent of the total sectoral employment. 'Food, drink and tobacco' accounted for 19 and 16 percent of total sectoral net output and total sectoral employment, respectively. The textiles and wearing apparel subsector was relatively underdeveloped, amounting to only 23 percent of the 'Metal engineering and repairs'.

Table 4-9 Number of establishments, net output and employment in the manufacturing sector, 1947

Establishments, Net Output and employment in the manufacturing sector, 1947						
Sector	Number of establishments	Net Output (£)	Numbers Employed	Share of subsector or in total sectoral net output (%)	Share of subsector in total sectoral employment (%)	Net output per establishment (£)
Food, drink, and tobacco						
Baking and confectionary	9	69,845	286	9.8	4.5	7,760.56
Grain milling	6	58,079	394	8.2	6.2	9,679.83
Brewing and mineral waters	7	40,913	257	5.8	4.1	5,844.71
Other	4	36,376	389	5.1	6.1	9,094.00
Textiles and wearing apparel	5	19,245	163	2.7	2.6	3,849.00
Metal engineering and repairs	22	82,634	413	11.6	6.5	3,756.09
Wood and furniture	7	210,890	3,473	29.7	54.8	30,127.14
Building materials	6	10,794	440	1.5	6.9	1,799.00
Printing and publishing	4	110,467	178	15.5	2.8	27,616.75
Miscellaneous	4	71,410	341	10.0	5.4	17,852.50
Total	74	710,653	6,334	100	100.0	

Source: adapted from Young (1973: 7), Table 1.2

Although given the difficulty of obtaining statistics, Young (1973) used estimates of the 1947 Census of Industrial Production gross output to proxy sales from local firms compared with f.o.b. rather c.i.f. import figures to demonstrate that domestic manufacturing was insufficient to meet local demand. Admittedly, if taken too strictly, these comparisons are not accurate, but for my purposes, they are indicative in illustrating the inadequacy of local production capacities. Out of a total gross manufacturing output of £1,498,111, exports accounted for £239,444, 85 percent of which came from the ‘Wood and furniture’ subsector alone. Although the ‘wood and furniture’ subsector had net exports amounting to £33,781, fifty-eight percent of its total domestic demand was met by imports. The food, drink and tobacco subsector

had imports worth £1,499,044, while gross output net of exports was only £705,759, implying that about 68 percent of total domestic demand was met by imports. Overall, the manufacturing sector was in a net exports deficit worth £9,688,828, more than six times the value of gross domestic manufacturing output. Based on these crude estimates, it appears substantial scope for domestic industrial development existed through import substitution.

Manufacturing sector development remained limited by 1954, with the sector accounting only for three percent of the 1954 GDP, although this figure can be said to underestimate the scale of manufacturing activities, given that those tied to mining are excluded. Within the food processing sector, a wheat-flour mill started operations in 1950 in Ndola, while a brewery also in Ndola was installed a year later. Geographically, Ndola was right at the heart of copper mines; this is to demonstrate how manufacturing sector growth was increasingly concentrated in urban centres, and especially in the Copperbelt. By 1935, Ndola was being promoted as the industrial capital of the territory. A 1946 report of the Advisory Committee on Industrial Development referenced a “General Notice No. 397 of 1935” as underpinning the agenda of the colonial government to “develop Ndola as the commercial and distributive centre of the Copperbelt and to provide only retail trading facilities elsewhere to the extent required to meet day to day needs of the inhabitants and to secure healthy competition.” (Tembo, 2016: 104-105). The choice of Ndola as the commercial hub invited criticism, not least given its distance to the south, but also to the rest of the African population. But the concentration of white settlers on the Copperbelt, all within reasonable driving distance from Ndola, suggest that their interests were being met by this decision. Observe, however, the reluctant attitude of the colonial government to stimulate economic activity into value adding establishments. Instead, only retail trading activities were being promoted, and these narrow in scale and scope, serving mainly the interests of the white settlers.

The growth of mining-supporting infrastructure led to a construction boom, and, eventually, the coming into existence of a number of economic activities such as the Chilanga Cement plant in 1951 just outside of Lusaka. This particular capital project was largely financed by the Colonial Development Corporation, its initial co-owner

with the government, before selling it to a private investor. Without government involvement, it is difficult to see whether private capital would have taken the risk.

A number of technical (economic) as well as political economy factors, and their interrelationships, are often pointed to as having hampered the growth, and restricted the scope, of manufacturing sector development. These are discussed below. First, among the most obvious were the low levels of education of Africans (see Table 4-6 Enrollment of Africans in Northern Rhodesian schools in selected years) which reinforced existing natural challenges (Young, 1973; Baldwin, 1966; Kilby, 1975). Owing to the extremely poor education record for indigenous people, Africans possessed limited semi-skilled and virtually no technical skills, thereby undermining the productivity of the African labour force. This limited their (Africans) contribution to industrial output in the event that they had a job. Limited resources for African education which eventually restricted their progress can be seen as a result of attitudes and legislation. The negligible education record for Africans can also be seen to have undercut their (Africans's) role as agents for industrialisation not simply in their contribution to existing enterprises, but also eliminating the potential for them to emerge and contribute to new enterprise development (Kilby, 1975). Further, absence of an educated and skilled indigenous labour force meant that "industrialists setting up in Zambia were obliged to pay the very high salaries necessary to attract expatriates to the country, in order to meet their skilled labor requirements" (Young, 1973: 7). A lack of an educated pool of Africans therefore raised the cost of labour by raising the wage rate for skilled and professional labour, but it also reinforced and strengthened the existing wage disparities between Europeans and Africans.

Zambia's geography as a landlocked country is also identified as hindering the growth and scope of the manufacturing sector. Absence of naturally-endowed or cheap local raw materials meant that most inputs of producing enterprises had to be sourced externally. Compounding this problem was a poor communication and transport network domestically and particularly one linking Zambia to the rest of continent, especially those with seaports. In addition, if using the most reliable transport channels, the distance from Lusaka to the nearest seaport, Beira in Mozambique, spanned some 1,249 miles, or to Cape Town covering a distance by rail of about 2,000 miles. During this period, access to a port was through the Benguela Railway to Lobito

Bay in Angola, or through the Rhodesia Railway to Beira or Cape Town. However, extended supply routes in terms of distance alone should not be seen in isolation, because imports too are disadvantaged by this factor, yet they made it to the domestic market at reasonable cost. Other factors (discussed above and below), in addition to this, must be seen as a web of complexities that must be overcome or confronted in order to develop a competitive manufacturing sector.

By the early 1950s, power/electricity sources were limited. The Broken Hill Mine received its electricity from the Mulungushi and Lusemfwu hydro-electricity plants, while the Copperbelt, which lodged most mines, relied on the expensive steam power plants established by the mining companies which fed off coal from Southern Rhodesia's Wankie Colliery (Baldwin, 1966; Young, 1973). Due to insufficiency of electricity facilities, potential industrialists were discouraged from injecting capital into Northern Rhodesia, choosing instead the larger, more developed market in the south.

The restricted scale of the market for manufactured products is also regarded as an important factor contributing to the failure of the manufacturing sector to develop to an acceptable standard. By market is meant not just the population of inhabitants, but their buying power. Judging from the low earnings of Africans and low numbers of high-earning Europeans, the Zambian market could be considered as extremely small in supporting meaningful manufacturing sector development. In fact, the high-earning Europeans residing in Zambia on the most part consumed goods very different from those consumed by the indigenous people (Harvey, 1976; Young, 1973; Baldwin, 1966). Hence, Young (1973: 9) contends that "there were, in fact, two very small markets in the territory rather than one" in part due to "stratification" stemming from "income inequalities."

The pattern of development in Zambia, which centred around copper, restricted the development of the manufacturing sector in considerable ways. For example, copper production ensured that Zambia was neatly economically, politically and geographically linked to the south. Thus, Young (1973: 10) argues that "the underdevelopment of the Zambian manufacturing sector both as regards intermediate and final products has to be considered in relation to the country's geographical

situation at the periphery of southern Africa. Southern Africa was easily the most advanced part of the continent, and the “backwash” effects of industrialization in South Africa and Rhodesia had a detrimental effect on the prospects for manufacturing expansion in Zambia.” Although this is partly true, it must, however, be seen within the context of absence of an integrated industrial policy in Zambia aimed at encouraging and fostering local entrepreneurship. Hence, if one wishes to ascertain why such an industrial policy strategy was absent, then one must look to political economy factors as the root of the problem. A tendency of the mining companies to favour and source their inputs from the south and a lack of commitment by the Zambian colonial government to foster local industry, and the relationship of the two agencies, should be situated at the heart of the problem. As the DSP account in the previous chapter demonstrates, South Korea was successful in the development of a number of industries with some of the most notable being the ‘iron and steel’ and ‘shipbuilding’ industries despite the nearness of similar establishments in more advanced and larger Japanese industry and market.

Nevertheless, the copper mines in colonial Zambia could effectively cheaply import specialised equipment and machinery from South Africa and Southern Rhodesia, both of which already had relatively advanced and integrated industries, including mining. As demonstrated, the post-war expansion had positive effects on copper in terms of its price and production volumes, which translated into increased revenue and imports for Zambia, and considerably less so in stimulating manufacturing sector development. From Table 4-10 Imports (fob) to Zambia by place of Origin, 1945 and 1953, two points are worth observing: the extreme dependence on just three countries and the scale of import growth.

Table 4-10 Imports (fob) to Zambia by place of Origin, 1945 and 1953

	1945		1953	
	Value (£)	%	Value (£)	%
United Kingdom	2,170,243	31.4	18,937,290	36.5
South Africa	1,780,448	25.8	15,063,881	29.1
Southern Rhodesia	1,439,312	20.8	7,682,094	14.8
Other	1,518,681	22.0	10,149,565	19.6
Total*	6,908,684	100	51,832,830	100
*excludes “government stores” in 1945				

Source: Young (1973: 12), Table 1.4

In both 1945 and 1953, the United Kingdom alone accounted for about two-thirds of Zambia's imports while the south (South Africa and Southern Rhodesia) accounted for more than two-fifths of total imports. Between 1945 and 1953, total imports grew by almost eight times, yet these aggregate statistics hide an even more interesting picture of the dependence of Zambia on the south. For example, Zambia generally received most of its processed food from South Africa. In addition, half and three quarters of mining equipment and explosives, respectively, were sourced from South Africa alone.

Colonial Zambian government policy was largely *laissez-faire*, leaving the development of industry to private enterprise under a free market system. However, as the record demonstrates, the invisible hand of the free market stimulated invisible industrial development: that is, industrial development under the free market private-capital-led system was virtually negligible, except in special circumstances. Where tariffs existed, they were meant to supplement the government's fiscal revenue rather than a tool to stimulate domestic industrial development. The *laissez-faire* attitude reinforced the dependence on the south, and by the first half of the 1930s, part of the most economically vibrant parts of Zambia were tied down by a Customs Agreement with South Africa and Southern Rhodesia which generally promoted free trade among them.

While the colonial government occasionally acknowledged the harmful effects of regional free trade by way of exploring options for protective measures, as was proposed in the 1932 inquiry into unemployment which led to the government establishing an Unemployment Committee, the recommendations from these inquiries did not yield any action on the part of the government (Young, 1973: 13). Generally, it appears the government was constrained from contesting free trade, perhaps by its own attitude towards domestic industrial development or by the anti-interventionist ideology of its advisors. For example, the 'Report of the Commission appointed to enquire into the financial and economic position of Northern Rhodesia' (commonly known as the Pim Report of 1938 because of Sir Alan Pim as the Chair of the Inquiry) in 1938 emphasised the spread effects from the customs union with the south and concluded that granting customs autonomy would lead to increased domestic costs rather than industrial development. Pim was convinced that due to poor industrial

development, most African countries, and Northern Rhodesia in particular, would have to import virtually all manufactures from abroad, such that raising protective duties like erecting tariff barriers would cause costs to escalate “rather than diverting trade to alternative sources of supply” (Gardner, 2012: 42). Hence, Pim discounted all infant industry protection arguments:

“It has been suggested that the customs agreements operate to the detriment of the commercial community, in that they make it difficult to develop secondary industries ... It is impossible to see ... how a policy of customs autonomy could lead to any other result but a rise in the cost of living ... Northern Rhodesia is bound to the South by national commercial ties, and a system of free exchange of products, subject to reasonable regulation, must be to the general advantage. The erection of artificial tariff barriers is a policy to be avoided” (Pim and Milligan, 1938: 102, quoted in Gardner (2012: 46) and Young (1973: 14)).

Pim’s recommendations reinforced the colonial government’s existing policy attitudes in practice, but this ran into conflict with Northern Rhodesian settler whites who advocated for some domestic industry development. By 1943, a proposal, although not adopted at this time, to establish the Industrial Development Board in Northern Rhodesia marked a watershed in interventionist arguments which called for coordinated regional industrial planning if Northern Rhodesia was to keep pace with the south. These discussions reveal the narrowness of the conception of industrial policy instruments, both by anti-interventionist and pro-interventionists. Infant industry protection by itself can hardly automatically translate into industrial development. This has been demonstrated by exploring in the previous chapter how the developmental states mounted cohesive strategies and coordinated investments under the tutelage of the state.

Nevertheless, pressure on the colonial government forced it to give an ear to politicians and businessmen who then made proposals on the kinds of industries to underpin industrial development, namely a cement plant, establishment of copper fabrication facilities, installation of agro-produce processing facilities and a development of manufacturing capacities of glass (Bhagavan, 1978; Young, 1973). Consequently, in 1944 the government engaged the consulting services of W. J.

Busschau, a South African economist, whose report – ‘Report on the Development of Secondary Industries in Northern Rhodesia’ – in 1945 dismantled all arguments in favour of protectionist industrial policy. By referencing weak conditions for industrial development such as the size of the domestic market, skills differentials based on dual systems of employment and education and, extended supply lines, Busschau was of the view that the prospects for manufacturing development based on infant industry arguments were misguided, and instead suggested that industrial development should take advantage of existing resources and capacities which in practice meant expanding existing subsectors such as the timber industry and heavy engineering.²⁹

Interestingly, the Busschau Report went to great lengths in discouraging the establishment of a local cement plant, suggesting its non-viability and advising the government to steer clear of it. Nevertheless, the Report also recommended the establishment of an Advisory Committee on Industrial Development (ACID) constituted of 23 members of diversified expertise. ACID was adopted by the end of 1945 but was only made up of six members who produced three reports within two years of its inception. On the whole, ACID functioned on Busschau’s viability criteria for industrial development, but on one occasion when it did not, it recommended the establishment of a cement factory, this decision being rationalised by social gains as opposed to profit maximisation, although with a caveat of ensuring commercial viability. As Young (1973: 17) recalls: “[t]he Committee’s recommendation was accepted by the government, and Zambia’s first enterprise in state capitalism, Chilanga Cement Ltd., was formed in 1949, with a share capital of £1 million, £750,000 being held by the Colonial Development Corporation (Central Africa) Ltd. and the remainder by the government. The factory, which was situated a few miles south of Lusaka, came into operation ... in 1951.” A number of factors are worth re-emphasising. First, the decision to build the cement factory resulted from the initiative of the white settler community to set the state into motion to actively promote industrial development. Second, by establishing the ACID, the state transformed its structures to invite more meaningful dialogue and to catapult itself into active rather than passive engagement. However, ACID itself was short-lived, having claimed to

²⁹ See Young (1973: 15-18) for a summary of the Busschau Report’s recommendation, its critics (the politicians), and a critical appraisal and reflection of the comparative advantage ideology underpinning the report.

have explored all options for industrial development given the existing economic conditions, the members decided to terminate it before 1950.

In anticipation of carving out a system of accumulation for Zambia which is underpinned by restricted and narrow industrial development formed around copper mining developments, ACID's decision to pursue a cement plant was in anticipation of the Kariba hydro-electricity plant; the latter aimed primarily at servicing copper mining development. As Deane (1953: 48) remarked, "[t]he cement factory has been established at Chilanga, which is a few miles from Lusaka and is designed for expansion to serve the Kariba Gorge hydro-electric project, should that materialize." With the benefit of hindsight, the Kariba hydro-electricity plant did materialise and continues to be an invaluable asset for Zambia (and Zimbabwe) even after close to seven decades later. This particular cement plant is also still Zambia's major economic asset almost a quarter century later.

Despite the demise of ACID, and contrary to its despondency, the politicians in the Legislative Council continued to represent the interests of the white settlers which pressed for greater industrial development. Roy Welensky proposed in 1943 the establishment of the Industrial Development Board, but his plea was largely ignored. Later, he was the politician who harshly criticised Busschau's Report, and was at the forefront of pressing for greater industrial development. His influence and mobilisation of support in the white settler community caused the government to concede political pressure as reflected by a proposed motion in 1950 for the government to consider setting up a finance development corporation. The aim of this initiative was to aid and establish industry and business in Northern Rhodesia. Welensky's proposal was accepted and in January 1951, the Northern Rhodesian Industrial Loans Board was born (Young, 1973). An important lesson from this is that pressure on politicians by the white settlers set them in motion to confront a reluctant government, although the options and tools for industrial development eventually shifted, from vigorous initiatives in establishing industries, such as the Chilanga cement project, to simply providing finance. It should also be emphasised that many of such large investments were approved because they claimed to facilitate mineral development, although with potential spread effects to the rest of the economy.

Between its inception in January 1951 and the end of 1953, total funds committed by the Industrial Loans Board had more than doubled to over half a million pounds. Despite this impressive growth, these resources were negligible, equivalent to only one percent of total imports in 1953. Nevertheless, although its scale of activities was small, it pacified the white settler interests and even “generated an expectation of and a demand for continued state intervention” (Bhagavan, 1978: 12).

Reflections of this sort are important for at least four reasons: first, they point to the nature of advice the government received which left industrial development to the invisible hand; second, it highlights the growing awareness and desire by the white settler population to lodge manufacturing capacities domestically; third, they underscore the role of politics in influencing policy trajectory; and fourth, importantly, however, they underscore the role of the state, if willing, in bringing industrial development to bear. As Bhagavan (1978: 11) recalls: “Left to itself, the colonial government showed no interest in pursuing policies that would promote the growth of manufacturing in Northern Rhodesia. It was the strong and constant pressure from the European settlers that forced the government.”

Industrial development by 1953 was extremely disappointing, especially given the scale of copper mining development that had been accomplished. As Deane (1953: 48) correctly observed by 1953, “[m]anufacturing industry in Northern Rhodesia [was] directed towards the local market and [was] on a small scale” while “[a]s a matter of deliberate policy the colony’s factories [were] largely concentrated at Ndola on the edge of the Copperbelt, the chief industrial market. However, there are minor manufacturing concerns at other centres of European population ... including a small cigarette factory at Fort Jameson [now Chipata].”

Not only was manufacturing sector development restricted by following or, more exactly, leaving to the market, but also ratifications of customs agreements which precluded infant industry protection by an already parsimonious colonial government. For example, Tembo (2016: 104) contends that, “the establishment of a cigarette factory in Northern Rhodesia was discouraged because of the existence of agreements with Southern Rhodesia and South Africa, wherein Northern Rhodesian leaf tobacco entered these markets under free quota in exchange for the entry into Northern

Rhodesia at reduced rates of customs duties of tobaccos and cigarettes manufactured in Southern Rhodesia and South Africa.” Hence, Northern Rhodesia’s budding manufacturing concerns were undercut by competition especially from Southern Rhodesia, leading to the demise of a cigarette factory at Choma, with only a smaller plant remaining at Fort Jameson (now Chipata).

By opting out of interventionism, the state withheld the tools for manufacturing sector development, while allowing the market forces to determine both the pace and scale of development within the context of a customs agreement with the south. This option, however, ensured that domestic industrial development progressed in a narrow and restricted way. When some sectors did produce some manufacturing enterprises, this was to serve existing markets rather than to alter the pattern of production. Inward-looking manufacturing development within the context of effective demand limited its own scope for further development. The discontent expressed by the white settler community in terms of lack of industrial development in Northern Rhodesia compelled the colonial government to act. However, because the indigenous African population was on the main excluded, this remained a conversation between the white settlers and the colonial government. Thus, whatever success resulted, it was limited in scope because it was confined by geography, and capacities, and because it was tied to the development of the copper mining industry.

4.4 Industrial Development during the Federation, 1953-1964

Against the will of over six million Africans in central Africa (Hyam, 1987: 172), the Federation of Rhodesia and Nyasaland was born on October 23, 1953.³⁰ It brought together three different economies, one with a relatively advanced industrial structure (Zimbabwe), another with backward industrial development but a modern copper mining industry (Zambia), with the last (Malawi) possessing a backward agricultural sector and neither of the characteristics of the others, yet important as a labour reserve, but especially for South African gold mines.

³⁰ See Hyam (1987) on the origins, and the geopolitical contradictions, of the Federation of Rhodesia and Nyasaland.

Six years from 1954, gross national income of the Federation in real terms rose by 43 percent to £4,44.8 million, before virtually levelling off till the demise of the Federation in 1963. However, much of the growth that had taken place was biased in favour of Southern Rhodesia, with limited improvements in both Northern Rhodesia and Nyasaland.

Consider Table 4-11 Net manufacturing output in Zambia, 1955 and 1963, for an indication of the performance of Northern Rhodesia's manufacturing sector during the Federation.

Table 4-11 Net manufacturing output in Zambia, 1955 and 1963

	1955	1963
Food, beverages, tobacco	1.56	5.13
Textiles, clothing, footwear	0.14	0.43
Wood industries	0.46***	0.85
Paper, printing, publishing	0.36	0.64
Nonmetallic minerals	*	1.58**
Metal industries (except transport equipment)	*	1.83
Transport equipment	1.36	1.43
Other	2.53	0.8
Total	6.40	12.68
*included in 'other'; **Excludes pottery;***excluding furniture		

Source: Young (1973: 20), Table 1.5

Based on reservations of reading too strictly Table 4-11 on manufacturing output in Zambia during the Federation because of statistical errors and omissions (Young, 1973), the data must be taken as indicative of trends. The food, beverages and tobacco subsector dominated manufacturing sector development. Notable projects in this subsector include a sugar factory in Ndola in 1959, and in 1961, the opening of brewery in Kitwe, while later a wheat-flour meal processor was established in Broken Hill (Kabwe). The growth of this subsector reinforced and concentrated the number of establishments in the line of rail areas, and especially in the Copperbelt.

Six years into the Federation, Northern Rhodesian politicians expressed discontent which appears to have simply been a continuation of ongoing misgivings at the uneven development within the Federation, charging that Southern Rhodesia had profited unfairly from the union. A Legislative Council debate approved the establishment of

a Committee for Industrial Development restricted to ministerial level to explore ways to coordinate inter-territorial industrial development while promoting intra-territorial industrial development. The Federation did not effectively prevent South African goods from accessing its market, and for the most part, South African goods received favourable tariff terms that were too low to discourage inhabitants of the Federation from importing. During the Federation, statistics were compiled for the whole region rather than for individual territories, but it was learnt when the federation was dissolved after Zambia published its own statistics that Southern Rhodesia had grown during the Federation years to become Zambia's largest single trading partner in terms of Zambia's imports, accounting for two-fifths of total imports. This must be compared with the figure during the start of the Federation in 1953 when imports from Southern Rhodesia accounted for only 15 percent. What can be deduced from this observation is that Southern Rhodesian interests had penetrated successfully into Zambia during the Federation.

In terms of industrial policy, the Northern Rhodesian Industrial Loans Board which came into operation in 1951 continued its activities for the next nine years, cumulatively giving out loans totalling only about £1 million. Industrialists operating in existing markets such as metal engineering and building supplies were its main clients. Although the Industrial Loans Board was set up to encourage new industry, it had to wait for clients to reach out for help if they could, ironically, show that they were creditworthy. In addition, it was run by personnel who only served part-time. Putting these features together, it appears the Industrial Loans Board limited its own scale and range of activities by its own design.

At a later date in 1960, the Committee for Industrial Development accepted proposals submitted to it in the previous year by the Industrial Loans Board to consider incorporating the Board into a limited liability company. On 28 April 1960, the Board morphed into the Northern Rhodesian Industrial Development Corporation. Among its objectives, the Industrial Development Corporation was tasked with expanding the scale of activities to encourage local industries, including capital provision, and management services as required. Within two years, the Corporation moved from government to private control. By the third year of its operations, the Industrial Development Corporation endorsed only 46 projects worth £658,087 in total. In

addition, some feasibility studies and surveys it undertook before Independence were especially important because these came to life several years into Zambia's Independence.

The Federation had largely been seen as a major drain on Zambia's copper resources. Under the Federation, the Federal and not the territorial government had most control on fiscal matters. Some K194 million (approximately about £200 million) is estimated to have equalled the net transfer of public revenue from Northern Rhodesia to the other two territories (Faber, 1971: 301). The infrastructural developments that did come to fruition during the Federation were often those related to supporting copper mining such as the Kariba hydro-electricity project and, refurbishment and extension of the railways system. Virtually negligible improvements had been made on road transport, with Zambia spending a third on roads of what Zimbabwe had by the end of the Federation.

African advancement in education was limited by policy which promoted unequal progression, with white settlers benefitting the most. During the Federation years, the government maintained under its responsibility the education of white settler children from primary to secondary, while for African children, the territorial governments were chiefly responsible. In 1962, the per capita expenditure up to secondary school for white children was more than eight times what was spent on African children. Whatever educational progress that did place at the tertiary level, it was broadly restricted to only building trades. Although the mining companies sponsored the establishment of the Copperbelt Technical Foundation in 1956, its main goal being mainly to provide some technical training, it mainly benefited white students who had acquired at least a secondary level of education, but after 1958, the de facto racial segregation in admission and employment operated to block any further advancement by aspiring Africans. By 1961, only two Africans had been admitted to the Foundation.

In the twilight years of the Federation, two additional educational facilities are noteworthy: Ndola Technical College which began operation in 1960 and, in 1963, the College for Further Education in Lusaka rolled out its operations. By 1963, only 74 indigenous people were recorded as university graduates. Thus, by Independence,

there was an absence of a pool of Africans to fill any administrative or management jobs including those requiring more than secondary education. On the whole, no radical change took place during the Federation to improve the training needs of Africans, except in restricted cases and professions. The result was that post-Independence Zambia had to depend on expatriates for many of these jobs. Development of productive capacity for industrial development was limited by the federal government's pursuit of discriminatory policies against the Africans.

The federal era (1953-1963) did not bring to life any notable investments, except for the few which were accounted for by the food processing subsector – a wheat-flour mill at Broken Hill (now Kabwe), a sugar refinery in Ndola, and brewery in Kitwe. For Bhagavan (1978: 12), the Industrial Development Corporation “was nothing more than a sop to keep the articulate settlers’ lobby quiet.” Where industrial development did take place, it was confined to serving existing markets, or to strengthen mineral extraction. Based on these considerations, it is unsurprising that at Independence, the indigenous Zambian government inherited an industrial structure and economy that was not underpinned by an integrated productive pattern of production.

4.5 Some reflections and conclusions from Zambia's pre-Independence political economy

This chapter has shown that about seven decades before Zambia's Independence, three eras of governance administered the affairs of the territory occupied by Zambia. As Turok (1989) correctly observes, the pre-Independence history of Zambia under foreign control was one of social reorganising and dislocation, with copper mining hastening and deepening the processes. He notes that:

“[t]he pre-Independence history of Zambia's economy can be divided into three phases: pre-colonial subsistence farming, the period of consolidation of the extraction of labour and the penetration of settler farming, and the establishment of an indigenous copper mining industry. The first phase was marked by stagnation, the second by the steady dislocation of African agriculture and traditional social structures, and

the third by the rapid reorganisation of the whole economy to create one of the most distorted economies in Africa” (Turok, 1989: 25).

Copper mining created aspects of a modern economy biased against both industrial and agricultural developments. The interests of the copper companies, reflected by the colonial government policies restricted African participation in economic activity, providing cheap labour to the mines, hence safeguarding the economic and political interests entrenched through mineral developments.

Under the colonial government, Zambia had a backward industrial structure, even by African standards, and, ironically, one of the most sophisticated mining complexes in the world (Kilby, 1975). It will be shown in subsequent chapters that this divide was the basis upon which post-Independence development policy was formulated, seeking to place industrial development at the centre, as the vehicle for improving living standards of the many Africans subjected to poverty and decades of exclusion from economic activity.

The administrative and economic system under colonial authority not only failed to stimulate industrial development, it also limited the emergence and growth of African entrepreneurship. Africans engaged in retail trading amongst themselves depended upon credit supplied by European firms. On the one hand, Pedler (1975: 123; 111) observed that a “competitive private enterprise had produced a structure of trade that could hardly have been expected to win the approval of African nationalists as the continent moved into the era of independence”, yet, on the other hand, he notes that “[d]evelopment owed a good deal also to the general administrators, no matter whether they worked in some remote out-station or in a gubernatorial office.”³¹ This

³¹ Pedler (1975: 111-112) gives evidence of the role of administration in delivering development by referencing the commitment and zeal of Sir Gordon Guggisberg who served as Governor of Gold Coast from 1919 to 1928. Pedler sees Guggisberg in terms of “administrative ability and managerial skill.” During this period, Guggisberg recorded to have energetically pursued development for the indigenous population. First, his planning skills were regarded as impeccable when upon taking office, he outlined a Ten-year Development Plan which placed education of the indigenous at the centre. During his service, Guggisberg is credited for devising systems to raise revenue from the colony in order to finance education. Such a system involved the expansion of the communication system; more railways and roads were built. This facilitated the movement of labour and goods. Guggisberg also put in place measures to lubricate flow of traded goods which reduced freight rates. Additionally, although a proposal to construct a port began in 1895, it was Guggisberg who set it in motion this proposal when construction of the port at Takorodi begun in 1921 and opened for business in 1928. Nine decades later, this port is still one of the major economic assets for Ghana.

suggests that the nature and pattern of development in colonial economies, and, consequently, what was inherited at independence, is a function of both the nature of the economic system as well as the nature and commitment of the state administrative machinery. Nevertheless, this does not account for the nature of politics involved in administration, nor does it address the context and conditions that underpin successful administrative strategies.

Although Southern Africa did hamper the development of Northern Rhodesian manufacturing through its harmful “backwash” effects, its presence as a large market and technologically-advanced region could have, through “spread” effects, potentially profited and complemented the Northern Rhodesian colonial government’s efforts, if there had been any real ones, to develop domestic industry (Young, 1973: 10-12), but as Hirschman (1958:187-189) reminds us, such spread effects in isolation are not a condition for success, it is how well they are used to reinforce local strategies for industrial development. As demonstrated by the DSP from the previous chapter, this requires decisive and strategic development policy and state intervention, while the Linkage-Agency framework would ask for which agents would position themselves, by inducement from the state or from their own motivation, to exploit such spread effects.

In anticipation of sketching Zambia’s post-Independence system of accumulation, the brief overview of the pre-Independence polity discussed above should be kept in mind, because nationalism and Independence did not automatically lead to, nor imply, alignment with indigenous interests, themselves subject to definition and contestation. In particular, the cleavage between an organised (mineworkers) labour force and the African politicians strengthened during the post-Independence development era, especially the first 27 years of broadly state-led development. The nature of industrial development is the topic of the next chapter. Nor did interventionism in isolation

Guggisberg himself is recorded to have fondly intimated revising the education system in order to educate more indigenous people: “My practical experience... during the last twenty-seven years has convinced me that what individuals have achieved, in spite of ill-selected systems of education, can be achieved by the race generally, provided we alter our educational methods” (Guggisberg and Fraser, 1929). It is the construction of the Achimota school between 1924 and 1927 for which he is probably most fondly remembered, particularly as a contribution to enhancing education services for the indigenous people.

without capacities and appropriate institutions produce an integrated productive structure.

According to Burdette (1990: 75), under the Federation, “[t]he roots for early differentials in industrial development lay in the interplay between the colonial politics of the settlers and the British Colonial Office, the workings of the imperial system and existing material conditions.” Under the Federation of Rhodesia and Nyasaland, three economies – Zambia, Zimbabwe and Malawi – were integrated, with Zimbabwe, receiving (unfair) advantages over the other two. She draws contrasts in these territories under the Federation and argues that much of Southern Rhodesia’s successes in developing a reasonably integrated industrial structure have the state to thank. Importantly, she situates the role of socio-political forces in prodding the Southern Rhodesian state into action, with the state mobilising and providing finance for infrastructural and industrial development, mounting interventionist measures to protect domestic industries, while promoting development of productive capacities by investing in technical skills and education and other mechanisms of learning. By implication, the failures of both Northern Rhodesia and Nyasaland can also be attributed to the state.

The colonial government can be an agent for industrialisation if its machinery is set in motion to mobilise resources and energies towards industrial development. For this to happen, there should be social and economic forces established to influence the trajectory of development policy. Northern Rhodesia’s colonial government essentially silenced the voices of the African population, with no regard for their welfare except to keep them alive as a source of cheap labour in the mines or elsewhere as needed. Effectively, only the white settlers could speak out and ask the state to cultivate the political will to devise and execute an industrial policy strategy; however, “[a] major reason for this lack of political will was that the settlers in Northern Rhodesia were not a bourgeoisie, and the mining companies and imperial powers’ interests were served well with territory continuing as a raw materials supplier only” (Burdette, 1990: 87). In qualifying this argument, Burdette demonstrates how white settlers emerged in Southern Rhodesia, became a local national bourgeoisie, and how they “formed and linked [their] economic interests to control over the state. Prominent Southern Rhodesian industrialists pushed the government to extend infrastructure and

even to establish important intermediate goods industries.” (Burdette, 1990: 91-92). In part, this suggests two things: first, that the interests of the white settlers were not aligned with developing the territory; and second, the white settlers were not an effective group bound by common interests while embodying considerable clout.

I have already demonstrated how white settler interests if aligned with industrial development can nudge the state into action, as exemplified by the coming into existence of the Industrial Development Corporation in Northern Rhodesia, and many of its subsequent projects. On the main, it is difficult to concede that the white settlers, on aggregate, bound their fortunes and interests to the welfare of Northern Rhodesia, except in a few exceptional cases. In spite of the public purse growing during the war years, the colonial government ignored industrial development, nor could “[t]he settlers in Northern Rhodesia ... force their conservative territorial administration to use that capital for state-sponsored industrial integration or for extending commercial farming” (Burdette, 1990: 95). In Northern Rhodesia, the parsimonious colonial state reflected the interests of the mining companies, and, to a lesser extent, the economic interests tied to the fortunes of the copper industry.

In general, the development which took place in pre-Independence Zambia resulted from activities that followed the pattern of copper development rather than coordinated investments to support and promote an integrated productive structure. Nevertheless, the colonial state was an integral agent in this process. The state mobilised resources and created an environment favourable to private capital accumulation. Largely, the investments that underpinned pre-Independence developmentalism were of strategic importance to facilitate cost-effective extraction of copper as was the case for railways and hydro-electricity projects, but also to support the social and economic interests of the mining community, illustrated by development of food processing manufacturing concerns. Accordingly, the nature and pattern of industrial development that did come to life was restricted in scope and scale, and depended upon the technical and managerial services of the white community (settlers and expatriates). In addition, due to economic activities being narrowly-based on copper mining, the latter’s fortunes governed the viability, pace and scope of ancillary developments. Because copper remained virtually profitable right up to Independence, economic activities around it prospered as well. In short,

the lack of meaningful industrialisation – that is, industrial development underpinned by an integrated productive structure – during the reign of colonial governments reflected the interplay of socio-political and economic interests, with the mining companies’ interests being mirrored by the state.

4.6 Preface to Zambia’s post-colonial political contradictions: a synopsis of the African state within the context of political economy of development

4.6.1 Introduction

Lessons learnt from the DSP strongly suggest that the state played a decisive role in (positively) influencing the scale and pace of development in (East/North-East) Asia, yet, on the contrary, the literature on Africa’s post-colonial development suggests that it is precisely the African state, in its various conceptions and manifestations, that has blocked broad-based development. Thus, in this sub-section, as a preface to considering Zambia’s post-colonial developmentalism, I examine critically the existing understanding and conception of the post-colonial African state in order to gain insights into why postcolonial African states struggled or failed (to struggle) to design and implement broad-based development programmes underpinned by structural transformation of the East Asian type.

I begin by exploring the traditional understanding, conception and nuances of the nexus between the African state and African post-colonial developmentalism. I find that while some care has been taken to avoid grouping African countries and making general statements about the way in which the African state is conceived, it is often the case that a failure to view state-society relations as a function of a particular configuration of socio-political and economic interests propagates criminalisation of the African state. Through its political leadership and resultant interactions with society, the African state is seen as an enemy of progress. Firstly, one must accept that the pattern of resource creation and allocation results partly but significantly from the relative political power of groups competing for resources through the state (Khan, 1998).

Secondly, history provides insights into how groups competing for developmental resources and rights through the state have evolved. For Zambia, it is the case that at

the time of Independence, the virtual absence of indigenous capitalists (due to colonial political economy contradictions as argued above) enabled non-productive indigenous classes, generally through narrow party politics and the state architecture, to influence, although in a dysfunctional way, the developmental trajectory. Subsequently, as will be shown in Chapters Five and Six, evolving economic policies similar to the DSP type did not launch structural transformation. Instead, statist/interventionist policies implemented through the state in collaboration with wider society restricted development as developmental resources were channelled to more politically powerful groups. But Zambia's history within the context of colonial policies ensured that such groups did not possess the required skills and competences, and possibly motivations, to deliver development. Hence, that developmental resources were allocated to unproductive classes reflected the nature of the underlying socio-political and economic interests. Chapter 5 picks up this thread for the Zambian post-colonial polity by examining the political context which governed the design and implementation of economic policy.

4.6.2 The African state and development

The post-colonial African state is often conceived as one constructed to counter social, political and economic dislocation inherited from colonial administration. Confounded by colonial politics, the post-colonial African state goes about achieving this goal by seeking legitimacy while exercising power and control. Often, the starting point of most analyses of the post-colonial African state is to track postcolonial development from its colonial roots. The politics of colonial development are seen to have created institutions and fractions of capital in response to colonial interests, but their usefulness for wide-ranging and widespread post-colonial development falls short (Gewald et al., 2008; Herbst, 2000). Firstly, colonial institutions are often accepted to have been narrow in scope and myopic in terms of wide-ranging developmental ideology, responding mainly to interactions of fractions of (foreign) capital and other classes of colonialists. Although this particular insight explicitly speaks of colonial development as a function of (evolving) socio-political and economic interests underpinned by varied concentrations of political power, it is hardly acknowledged as such. Secondly, growing discontent with colonial administration from within African society more generally led to the germination of

African politics which claimed to be able offer a better developmental alternative in representing the interests of the indigenous people. Accordingly, when the independence wave swept across sub-Saharan Africa, it is understandable that broader sub-Saharan African society should have had heightened expectations in terms of their developmental goals being met (Posner, 2005).

Herbst (2000) tracks postcolonial state-building from its colonial roots, especially highlighting the ways in which the political elite through the state crystallized power. He focuses on the postcolonial state which sought to build the state architecture on principles of legitimacy and power, while taking into account the geographical contours and magnitudes of African countries as landscapes upon which political power was to be transmitted. He argues that the failure to develop adequate (in the postcolonial sense) and independent institutions during colonial times reflected the “limited ambitions of many colonial states, and the failure to establish empirical statehood” (Herbst, 2000: 79). Thus, when the postcolonial state embarked on the project of extending the state apparatus, it gave birth to political contradictions which favoured, or, more appropriately, were subsumed by, the interests of the political leadership. However, he pays little attention to how the state apparatus could be used by the political leadership to respond to (differential) distribution of political power enmeshed in African societies. Also, he does not address how societal pressure upon the state – socio-political and economic interaction – was translated into policy in practice.

One route the political literature on Africa has taken is to understand the African state through the lens of African political development. In its post-independence conception, African politics is traced from its colonial roots and generally argued to have germinated in the first half of the 1940s as a reply to colonial contradictions, building momentum upon widespread nationalistic discourses (Allen, 1995). African politics is thus argued to have drawn support from across different indigenous societal groups. For example, on the one hand, radical politicians, though members of the African elite, sent a strong message of rapid decolonisation and indigenisation through drastic means, including riots, strikes and boycotts, relying for support upon hitherto subordinate groups such as women, trade unionists and labour migrants (Allen, 1995: 303). On the other hand, a conservative stream of African politics, made up mainly of

African elites who represented their own interests, was ready to bargain, or collaborate, with erstwhile colonialists in the process of shifting and indigenising (political) power.

For Allen (1995: 303-305), clientelist politics in Africa can be tracked from the first half of the 1950s when mass nationalism and rise of African politics combined with decolonisation strategies employed by imperial powers (e.g. Britain and France). Although initially devoted to gradual transfer and indigenisation of power, the imperial powers were hastened by strategies of the radicals who turned to all sorts of disruptive mechanisms. Consequently, as rapid decolonisation was placed on the agenda, local politicians were forced, within a short time, to mobilise and galvanise support across their societies. Subsequently, African politics was conceived in a very narrow sense: as establishment of political parties and processes of gaining electoral appeal. This led African politicians to adopt and merge binary strategies: populist-based politics which favoured those people who already had substantial backing, while using clientelism as a strategy to glue the political leadership to their bases of local support. Power differentials translated into material and ideological differences, such that political alignment was now seen as a practical route to escape material disadvantages. In this line of thinking, resource allocation was to be conditioned by clientelistic relations. In the context of Africa, clientelism was argued to have accelerated and given birth to new forms of corruption, so much so that “[f]or those within the clientelist networks, loyalty to the party or its leaders was rewarded by access to valued resources” (Allen, 1995: 304).

Although Allen goes to some length to explain how clientelism, in its colonial roots, undermined creation and establishment of institutions to design and monitor resource allocation, he does not explain why clientelism should necessarily have channelled resources to unproductive groups or individuals. For example, Allen argues that the creation of the one-party state in Zambia after 1970, with centralisation of power in the presidency, was an outcome of the overthrow of the hitherto colonially-imposed political system. The reformed and indigenised political system in Zambia after 1970 meant that clientelism would thrive in an environment where multi-party democratic principles were suppressed. This, however, leaves unexplained why channels of

resource distribution should have blocked broad-based development except to retreat to narrow and homogenised notions of corruption as anti-developmental.

Bayart's (2009) analysis of the state of postcolonial African politics emphasises the role of dependency in conditioning African politics. He builds his argument on the premise that power to control resources is concentrated in the hands of what he calls leading actors in African societies. These individuals wish to wield greater control and autonomy of power but use "strategies of extraversion" to command the allocation, distribution and utilisation of resources obtained from dependence upon an external environment.³² Subsequently, the external environment is seen as a resource which significantly influences internal political processes and capital accumulation. Dependence upon the external environment is understood as reflecting a particular configuration and alliance of interests – between foreign and a fraction of domestic interests. This, however, does not explain why leading actors do not see indigenous capital accumulation as a viable and likely best option for resource extraction if appropriately nurtured. Nevertheless, although Bayart agrees that the world economy, including Africa's place within it, can be understood as a system, structural factors cannot be the only decisive factors influencing national capital accumulation as propagated by Immanuel Wallerstein and Andre Gunder Frank. In addition, Bayart contends that "social relations of production – not to mention the various cultural practices associated with them – are essentially related to local circumstances" (Bayart: xiv).³³ If this insight is to be taken seriously, one must admit therefore that local circumstances influence the form, direction and pace of capital accumulation.

Beginning from a premise of dependency, Bayart explains the behaviour of the state in Africa as a reflection of the strategy of extraversion, whereby the state is involved in "the creation and the capture of rent generated by dependency" (Bayart, 2009: xvii). But labelling capital accumulation as a function of dependency subsumes the various forms of dependency which must be examined closely in order to determine the degree by which accumulation can promote a broad-based and integrated structure of

³² Strategies of extraversion as are seen by Allen as clientelism.

³³ Local circumstances can be read as exact conditions under which socioeconomic interactions took place. For example, and particularly for Zambia, absence of local capacity and skills may have decisively determined what type of capital to procure and how to use it, and in much of a similar way this feature may have imprinted the design and execution of economic policies.

production. Bayart does not address why Africa developed under the model of dependency, nor does he unpack the particular form of dependency which explained Africa's relations with the rest of the world. Bayart's main conclusion is to label African politics as one plagued by politics of the belly whereby individuals gain political mileage via dysfunctional allocation of public resources and rights. He does not, however, explain how and why resource allocation should have followed a pattern which undermined structural transformation. It is precisely the nature of the interactions of the socio-political and economic interests which governed how resources were distributed that needs to be addressed.

Another way in which African state literature has progressed is to examine state failure, particularly as an agent for development (Bates, 2008). State building and indigenisation of power following the breakdown of colonialism in Africa is notoriously understood within the context of sharing the spoils derived from independence. Bates (2008: 37), for example, argues that "independence represented the capture of the state by local political elites who then used power to accumulate wealth." Narrow politics in Africa thus followed a pattern of resource distribution whereby the state architecture was used to attend to immediate benefits of both the politicians and their voters, and because "[t]he ambitions of the elites was equalled by the aspirations of the electorate ... constituents viewed politicians as their agents whose job it was to bring material benefits to the local community – jobs, loans, or cash" (Bates, 2008: 38). To the extent that votes were traded for tangible benefits, this is seen as divorcing African politics from designing and implementing coordinated and broad-based development projects programmes, and policies. Instead, capital accumulation through the state answered to socio-political dynamics underpinned by differential distribution of rights and resources in response to differential distribution of political power.

Bates launches his analysis by pointing out the dilemma faced by political leaderships in countering colonialism: on the one hand, African political leadership gained support by recourse to narrow political discourse which condemned colonialism as the primary cause of underdevelopment and impoverishment of indigenous people. On the other hand, independence itself was not mainly seen as a new beginning towards developmentalism championed by indigenous interests but rather no less than an end

in itself. Independence, it was often thought, would bequeath upon the indigenous people the honeypot from which they were hitherto excluded from partaking.³⁴ How the honeypot would be sustained without the ‘bees’ was left out of the political discourse.

What this political discourse created was a crisis of expectations which placed political power in the hands of the hitherto ‘forgotten’ groups. Those who championed the independence struggles proclaimed a political agenda which saw independence precisely as an end goal, while those who supported this cause did so on the understanding that independence would end their economic miseries. The indigenous political class, once endowed with power to run the affairs of the state, used and distributed public rights and resources to meet these expectations as a way to legitimise their positions in the political arena and wider society. For example, in Cote d’Ivoire, groups from rural areas who had vehemently supported the independence struggle found themselves enjoying the fruits of independence as “[s]ome had been appointed to the boards of state-owned corporations ... [other] received prized plots of land in the low-density townships, where they built homes, and in the high-density areas where they constructed new enterprises” (Bates, 2008: 34-35). This experience is shared in many African states, including Zambia and Nigeria where “independence represented the capture of the state by local political elites who then used power to accumulate wealth” (Bates, 2008: 37). It entrenched a kind of developmental trajectory whereby the state, though at the centre of development, was used both as a resource and the means to enrich those who aligned themselves with the political leadership.

Although Bates’ narrative does highlight the specific ways and strategies the political elite employed through the state to amass wealth, it does not address adequately why

³⁴ Speaking at the Independence for Northern Rhodesia Conference (The Northern Rhodesia Constitutional Conference) held in London on 5 May 1964 which sought to settle the final details of the country’s transition from being the British Colony of Northern Rhodesia to full independence as Zambia, Kenneth Kaunda, Zambia’s first president, remarked as follows:

“When we embarked upon this struggle for independence many years ago ... We realised that the struggle might be long, it might be arduous and would often result in personal inconvenience, but we know so well, Mr Chairman, that anyone who looks for honey in the bush must expect the bee stings. We have been stung in the past, but we feel that the reward of the honey is now ours to share amongst our own people”

Available at: <http://www.itnsource.com/shotlist/ITN/1964/05/05/T05056404/?s=rhodesia>

their activities should have failed to launch structural transformation, particularly of the East Asian type. Part of the reason he fails to provide such insights is because he overstates the degree and scale of influence differential fractions of political support had on the developmental trajectory. For example, he argues that political discourse was a game in which the incumbent and the challenger competed for votes by distributing a fixed stock of capital and rights. On offer to the voters by the politicians, therefore, were existing resources to be distributed in order to secure votes. One of the flaws of these schema is to view material benefits as flowing from a fixed stock of existing concentrations of capital. Thus, it does not address the specific form of, and factors behind, post-independence capital accumulation. Capital accumulation itself results from distribution of rights and resources, but also underpins fractions of interests which then establish and safeguard themselves upon it. Therefore, to argue that rights and resources are distributed from a fixed stock of capital is to narrow the complexity of interaction of interests, not least how those interests emerge and evolve.

As for the example of Zambia, Bates (2008: 41) argued that its then ruling Party, UNIP, heralded a slogan, “it pays to belong to UNIP,” which sent a message that material benefits would flow to those who attached their support to UNIP. Bates’ exposition is plagued with analytical contradiction when he contends that the opposition stronghold was repeatedly visited by the instruments of the ruling Party to supply material benefits. If it were true that “[b]y refurbishing schools, grading roads, and distributing public monies through local development agencies, the government vigorously bid for votes from the heartland of the opposition”, as Bates (2008: 41) claims, then the heartland of the opposition should have received disproportionately higher benefits. Bates runs into further problems when he professes that “a well-surfaced road, a railway, and an oil pipeline through Northern Province to the coast” built by the government resulted from the fact that “politicians from the Northern Province dominated the Central Committee [of UNIP]” (Bates, 2008: 41). Insights from Zambia’s development plans and understanding of Zambia’s geopolitical contradictions as detailed in Chapters Five and Six explain this developmental trajectory as a function of a multiplicity of factors, not least the mediation of external influences through domestic socio-political and economic interests. That is, it is not merely an outcome of political dynamics alone, but a response through the political

process and existing domestic conditions to external pressures of the time and, in particular, the impact of UDI.

When political competition was brought to an end due to what appeared to be the natural outcome of the political dilemma politicians faced, one-party systems were instituted. The political game changed as political leaders, particularly the head of state, became more authoritarian. The arena for political competition shifted, from inter-party contests to intra-party competition. From an economic point of view, resource distribution within a single-party polity meant that incumbents could now distribute resources in a narrow way. The numerical superiority of citizens bore no influence on resource distribution as the centre of political power shifted to a narrow constituency of supporters within the Party, especially those who could reap direct benefits from manning the state architecture.

Spoils politics, patron-client networks and neopatrimonialism are concepts used to explain the characteristic features of Afro-politics. Mkandawire (2015) is critical of the use of neopatrimonialism as a concept to explain the poor performance of African economies. He argues that neopatrimonialism as a universalistic notion is incapable of shedding light on governance in Africa as it is bereft of analytical content and specificity. Although “neopatrimonialism can be used to describe different styles of exercising authority, idiosyncratic mannerisms of certain individual leaders, and social practices within states,” it lacks “predictive value with respect to economic policy and performance” (Mkandawire, 2015: 564). In other words, identifying a system of governance as neopatrimonial does not provide any information or substance on what factors are responsible for explaining a given economic developmental outcome or trajectory. Mkandawire’s (2015: 572-573) critical reflections compel him to examine how what he terms the neopatrimonial school has attempted to offer explanations for causes of economic growth and structural change via the lens of main factors argued to impact upon growth: “fiscal policy, industrial strategies, macroeconomic policies, political stability, savings, and technical progress.”

For governance issues, for example, as the focus is on state-society relations, Mkandawire’s indelible insights reveal that so loose and vacuous is the idea of

neopatrimonialism that its explanatory net covers a state both submerged in society and insulated from it. On the one hand, neopatrimonialism is offered to explain how societal interests can capture the state in a developmentally dysfunctional way, while, on the other hand, the same concept is seen to provide insights into how development is undermined by a state which, delinked from society, squanders limited public funds.

In Africa's structural transformation effort, while it is generally agreed that industrial development is paramount, scepticism about the continent's ability to adopt sound industrial policy rest on its sociocultural and political economy attributes (Mkandawire, 2015: 585). Postcolonial industrial policy focusing on import substitution industrialisation is argued by the public choice school to have failed largely on account of rent seeking. On the contrary, Mkandawire (2015) exposes the weaknesses of this scholarship by, firstly, pointing out that the public choice school fails to show that rent-seeking public officials designed and implemented industrial policy, and, secondly, "[b]eneficiaries of industrialization were not the source of the policies, but the product of the industrialization." If this insight is to be profitable to the central theme of this thesis, it is worth building upon. First, the interests behind the designing of industrial policy do not always and everywhere converge with those benefiting from the resultant accumulation. What is clear, however, is that once a given fraction of capital has emerged, it hosts interests which in turn protect their affairs around it, whether developmentally or not. While it is possible that these interests in collaboration with the interests responsible for designing public policy could have influenced the direction and nature of accumulation, what matters for structural transformation is whether the emerging form of capital accumulation is sufficient to promote an integrated structure and pattern of production.

Callaghy (1984) has argued that political contradictions through the state architecture have influenced how much foreign exchange has been earned and saved, particularly via installation of import controls and foreign exchange licensing, and also how foreign exchange has been distributed amongst competing interests. His conclusion, however, is to show that these policy measures are merely the cogs which enable the neopatrimonial wheel to move. Subsequently, such analysis is meant to suggest that episodes of high commodity prices, which increase foreign exchange earnings, are followed by unproductive allocation of resources via neopatrimonialism to the

detriment of productive investment and output. Mkandawire (2015) dismisses this view on empirical grounds, instead suggesting that commodity price booms in the immediate post-independence epoch in Africa were associated with substantial productive investment, in education and infrastructure for example, and output growth. Ironically, Callaghy's view offers evidence that an effective state is able to influence not just the acquisition of foreign exchange but its allocation as well. This is consistent with the role the state played in the East Asian developmental states. Nevertheless, a more fruitful avenue to explore would be to question the particular configuration and forms of capital accumulation, rather than suggesting that the state's role was dysfunctional because of neopatrimonialism.

deGrassi (2008: 122) warns "that analysts need to avoid a priori assumptions about the existence of neopatrimonialism and hasty invocations of the phenomenon to explain ... development policy outcomes without thorough documentation of the precise forms, characters, origins, transformations, contestations, extent, and other important features of neopatrimonialism." In addition, against the understanding that neopatrimonialism is heterogeneous both in cause and effect, it would be worth exploring how varying historical trajectories impact upon a particular configuration and form of neopatrimonialism. Lacking in empirical rigour, analyses which take neopatrimonialism as given have been accused of often being driven by "strong preconceptions and prejudices about African politics that are unlikely to be dispelled by a more accurate measurement of the phenomenon in question" (Mkandawire, 2015: 601).

As structural transformation in its loose sense can be seen through industrialisation, it is worth highlighting the reading of the literature on why African developmentalism is bereft of sound industrial policy. Chang (2013) notes that central to much of the literature which is pessimistic of Africa's ability to implement sound industrial policy is the notion that pervasively parasitic politics, and associated contradictions, rule out industrialisation through industrial policy. In other words, as the leading view suggests, Africa's political economy is incapable of permitting effective implementation of industrial policy. According to Chang (2013), Africa's political economy contradictions which are perceived to preclude Africa's competence to implement sound industrial policy can be seen from no less than three vantage points:

firstly, at the level of the political leadership; secondly, at the level of the bureaucratic officials manning the state architecture; and, thirdly, at the level of wider society. At the level of the political leadership, it is often argued that leaders' greed causes them to pillage the economy and strip its assets. While this observation may be true of some post-colonial African leaders, the great diversity in both leaderships and personalities suggests that this is often an outlier rather than a rule.

For Chang (2013), a particular vision a leader holds has a decisive bearing on a nation's developmental trajectory, and sometimes, when industrial policy failed, it is because the leader's vision was 'wrong'. Yet, when a leader's vision appears to be the right one, the ideas of those holding office in the state architecture may be different. Accordingly, the collision of visions between the political leadership and policy implementers, in addition to numerous other factors such as administrative difficulties and coordination deficiencies, are seen to impede effective design and application of sound industrial policy. Although a consensus may generally exist between the political leadership and the bureaucratic officials, society more generally has to be brought on board on the developmental and policy path of the nation. Thus, galvanising and patterning interests of society through the state for purposes of development has often been seen as an impossible endeavour in Africa. Drawing on Mkandawire (2012; 2015), Chang (2013) has confronted this notion and argued that it not only lacks adequate empirical support but also has at one time or another pervaded virtually every society in history, including the advanced nations.

Accordingly, it is a matter of exploring evidence rooted in historicity to determine what comes first: good governance before development, or vice versa. Khan (1998: 15) has suggested that during infancy in capitalist development, corruption is widespread mainly because "capitalists enjoy low legitimacy and states face excess demand for the rights and resources they allocate." Nevertheless, based on the experiences of some Asian countries, the consequences of corruption for development have been varied (Khan, 1998a, 1998b, 1996).

Khan (1998) argues that developmental outcomes underpinned by corruption are explained by varying degrees of political power accommodated in groups which compete for resources through the state. Patron-client networks are seen through the

examination of the interaction of the state with competing groups across society. Diversity of the nature of patron-client networks point to variation in the distribution of political power, which in turn influence the outcomes of corrupt transactions. The underlying presumption of Khan's argument is that low growth was a consequence of "wealth [being] transferred [particularly through corruption] to relatively unproductive groups" (Khan, 1998: 16). Carrying this argument further, it seems indisputable that if a society is composed of many unproductive groups relative to productive ones, the likelihood of low growth is higher, especially if plagued by corruption. Taking this insight further, for Zambia, the indigenisation programme adopted by the government, whatever its motivation, allowed the state to channel resources more decisively to indigenous people, but this failed to take into account the configuration and composition of competences and capacities of indigenous interests. In comparison to foreign interests, independence (and subsequent political and economic policies) gave indigenous interests greater political power. Indigenous interests were not at all homogenous, although they generally shared the common feature of being non-capitalist in orientation, especially up to the height of Zambia's post-Independence industrial development in the early 1970s. Resources through the state, whether by means of corruption or otherwise, were largely captured by unproductive groups (incompetent non-capitalist classes).

To conclude, independence across the (African) continent placed political power in the hands of the political leadership, but it also gave voice to the hitherto silenced (indigenous) classes divided by geography, ethnicity and other social complexes. Inheriting the colonial state architecture, the new postcolonial African state sought ways in which to transform the state apparatus to make it useful for wide-ranging development, but this was to be pursued simultaneously with delivery of development to (socially and economically) fragmented interests across the African polity. The urgency of delivering development meant that existing institutions and concentrations of capital were to be relied upon, yet development underpinned by structural transformation begged a radical departure from policy and implementation as hitherto exercised. In giving voice to the hitherto suppressed (indigenous) classes, independence fashioned socio-political and economic interests in such a way that they influenced decisively how resources were to be distributed. In part, this also demonstrates that postcolonial politics was a response to differential power across

classes which reflected a particular configuration of socio-political and economic interests. In fact, seen through the prism of the linkage-agency approach, corruption through patron-client networks, neopatrimonialism, or clientelism, is merely a type of linkage which connects different agents to a particular form of capital accumulation. As a linkage, corruption, though unethical and undesirable, may bring to bear or promote fractions of capital through the agency of interests manning the state architecture and those responsible for capital accumulation. Accordingly, one must investigate the configuration of interests enmeshed in corruption, and how their interactions within existing conditions preclude broad-based development, or not.

Thus, analysis must uncover the vested interests behind the relations of socio-political and economic interests in order to determine how resources were distributed and utilised. This calls for examining the political context under which decisions were made, and which economic policies were chosen, and who stood to benefit from them. If political power favours the productive classes, as Khan argues for the South Korean case, the characteristic features of Afro-politics cannot be argued to undermine development. Indeed, if broad-based development is underpinned by productive classes, building and/or enhancing a nation's productive capacity more widely can increase the likelihood that resources will be placed in the hands of productive groups, irrespective of the character of Afro-politics.

5 The Political Economy of Development Planning and Structural Transformation in the 1960s

5.1 Introduction and background

With Independence, Zambia needed to reconstruct the state and its policies. As Sindab (1984: 96) observed, “[t]o many Zambians, independence meant putting an end to white domination and opening up important positions throughout the society to Zambians, who would take charge and control their own institutions.” Yet, in doing so, development policy in principle and practice, both created and reflected new and old economic, political and ideological interests. These had profound effects on formulation, implementation and impact of policies in ways that varied across time, place and issue. Independence was political but, because Zambia’s economy relied upon foreign capital and labour, development policy was fashioned to promote economic independence. However, economic independence was conditioned by the nature of pre-Independence developmentalism which bound Zambia to the South for its own economic prosperity. Initially, and specifically within the context of geopolitical tensions with the white South, post-Independence developmentalism focused largely on cutting ties with the South. Frustrated by its own lack of technical and professional skills, although possessing adequate financial resources (within a developing country context) from copper mining wealth, Zambia had to rely on external assistance by hiring expatriates to support its own development. This helps to explain why policy documents were designed the way they were, and to what extent they were realised in principle and practice.

Post-colonial African literature captured much thinking regarding the nature of post-Independence developmentalism, frustrated by the colonial hangover (Ghai, 1973). On the one hand, colonialism shaped the kinds of institutions the postcolonial state inherited but also the initial distribution of political power upon which post-independence leaderships championed their struggles for independence. Thus, the political power base upon which the democratically elected leaders drew support combined with, on the other hand, a vacuum of indigenous capitalists, skills and competences. This meant that if resource distribution answered to the pattern and distribution of political power (as Khan (2009, 1998b, 1998a, 1996) argued for South

and East Asia), then there was a higher likelihood that resources would be placed in the hands of unproductive groups. Lacking local capitalists and human resource capacity, Zambia found itself economically dependent “on foreign decision-making, and upon foreign resources,” which, in a fundamental way, “stunted development of indigenous institutions” (van Arkadie, 1973: 88). Also, it meant that the resources upon which indigenous interests would seek to establish themselves were likely inclined, if not doomed, to be unproductive. Examining the political context which framed development planning demonstrates a failure of the state to employ East Asia type industrial policy because the distribution of power favoured a particular set of socio-political and economic interests which were largely unproductive but consumed large portions of investible surplus.

Propped by Zambia’s own understanding of development through import-substitution industrialisation policies within the context of geopolitical tension with the South, this meant erecting local industries and supporting infrastructure to diminish dependence upon the South. Mediated through domestic political processes, this had profound influences upon the direction of accumulation and establishment of (local) socio-political and economic interests which, in practice, diminished the capacity to create an integrated structure of production.

Conceptually, the group of people in charge of post-Independence Zambia’s developmentalism have been variously characterised. For example, Libby (1983) sees this group as the dominant class, while Burdette (1988) regards them as the governing class, with Sindab (1984: 87) viewing them as the quasi-state bureaucracy. Without being bogged down by conceptual debates, I will loosely and interchangeably refer to this group of people as the dominant, governing or ruling class. In practice, this group was not composed of homogenous elements; it had, at the apex, the President, with far-reaching and wide-ranging arbitrary powers, and then, below him, top Party and government officials, managing the affairs of the state architecture, specifically line ministries and parastatals. This group defined the national interest, or, more appropriately, the national interest was defined in terms of the interests of this group of people, and influences upon it. Nevertheless, in practice, this group of people collectively and in alliance with wider societal interests working through them conditioned the direction and pace of accumulation.

Having gained Independence in 1964 on 24 October, President Kaunda, reflecting continuities of the colonial developmental model, envisaged developmentalism led by private sector and foreign investment . The new black African government utilised revenues from buoyant copper prices and subsequent economic growth to distribute resources in a manner that partially reflected discontinuities from the colonial developmental model. That is, the government recognised the duality of the Zambian economy in terms of a small but advanced modern sector contrasted with a large expanse of rural areas far removed from any meaningful development yet accommodating about half the Zambian population. Thus, a substantial portion of public revenue was envisioned to be spent on social services and infrastructural developments on segments of the population and regions of the country that received least attention during the colonial rule. For some commentators, such expenditure patterns reflected the interests of the political leadership who, immediately after Independence, had a weak economic and political base (Sindab, 1984; Szeftel, 1982).

In the beginning, the new black government also imagined that foreign investment and private sector would be the instrument to expand and deepen the pace and direction of development of productive economic activities. Not only was this initially seen as important in crafting a high growth developmental model, but also as a mechanism to enable the government to “broaden the base of [the] economy thus giving more people a chance to participate in it” (Cohn and Port, 1968: 341). In the meantime, the colonial legacy ensured that not only was there absence of an indigenous capitalist class to support post-Independence development, but that, by Independence, there was a chronic deficiency of local/indigenous personnel to staff the state structures. Consequently, the post-Independence state was forced to rely on foreign staff (or, equivalently, expatriates) to assist in value creation. However, this strategy, with additional roots in external scholarship proved to have considerable impact on reinforcing the inherited patterns of accumulation, with far-reaching socio-political and economic consequences. In the end, the development strategy of the state, and agents lodged within it, foreign and indigenous, in alliance with capital, ensured that accumulation remained restricted and narrow, far removed from creating a more integrated and expansive structure of production.

Less than half a decade into Independence, disgruntled by the sheer failure of the private sector to catalyse growth and development, the President announced in April 1968 in the so-called Mulungushi speech a series of economic reforms, passionately remembered as Mulungushi reforms, that private sector, foreign investment led developmentalism had not only failed to produce the redistributive results envisioned under self-rule, but had in fact blocked the economic progress of indigenous Zambians. Consequently, the Mulungushi reforms were seen as the mechanisms not only to broaden the economic base but to indigenise capital and subsequent accumulation. The government was to be the main economic agent for development through its participation in big business, while indigenous Zambians, bound by identification to the country and its progress, would be privileged both in promotion of labour and capital. In addition, expatriation of profits was to be limited in order to ensure that savings would accumulate and propel further development efforts.

The Mulungushi reforms were interpreted by many as a reflection of discontinuities of the colonial developmental model; they marked a phase which leaned Zambia in favour of socialist development policy mainly on grounds of expansion of the state sector through ‘parastatalisation’ of capital, while providing consumption and production subsidies through the redistributive role of the state (Cohn and Port, 1968). However, some authors saw the Zambian economy during the Kaunda era as one led by state capitalism rather than pure socialist development, which also left substantial space for the private sector, hence qualifying as a mixed economy (Turok, 1989, 1979a). Whatever the labelling, the Zambian economy at the announcement and implementation of the Mulungushi reforms did represent a departure from colonial developmentalism, giving the state a broader and more direct role in the economy. It will be shown in Chapter Six that ‘parastatalisation’ of capital did not yield the result of driving structural transformation, in part, because of the accumulation model of takeovers and subsequent expansion and deepening of existing economic strengths. But, in this chapter, I will show that immediate post-Independence developmentalism remained narrow and restricted because it reflected continuity with the strategy to strengthen the copper sector as the core physical capital base of the colonial legacy.

Chapter Four has explored succinctly colonial development policy which promoted the creation and expansion of a copper-complex system of accumulation, underpinned

largely by suppression of indigenous African society in favour of white settler interests and private capital. Specifically, as Rothchild (1984: 153) also observed, “[c]olonial policies also resulted in widened gaps between subregions because of the way they skewed the distribution of public resources and opportunities. By distributing social amenities (health care, education, roads, and so forth) as well as loans, grants, and scholarships unequally between the relatively advantaged and relatively disadvantaged, colonial administrators accentuated the imbalances resulting from the uneven spread of modernity.” In addition, Chapter Four also argued that public administration and subsequent development reflected the interplay of competing interests of capital and segmented and racially-based labour through the state. This socio-economic complex was reflected in the latter part of Chapter Four which discussed, though briefly, the African state in the context of postcolonial political economy. It sought to examine in what ways the postcolonial state has been understood either as an agent for progress or an obstacle to broad-based development. While the developmental states promoted structural transformation, the African state literature has argued that policy failure in Africa resulted from the role of the state in development. However, this is problematic because it fails to consider the distribution of political power across the wider African societies, and why this, rather than the state per se, may have hampered structural transformation. If the state is seen as a reflection of societal interests, then the state through its policies and programmes also reflects the differential distribution of political power of these interests.

In this chapter, I trace post-Independence development policies within the context of development planning, to gain insights on the attitudes concerning development by examining the allocation of public resources and, subsequently, the nature of development resulting from these patterns of expenditure. But, first, I examine briefly the political context under which development planning was exercised. I then move on to explore the kinds of projects and programmes which underpinned capital accumulation in the post-Independence context under the tutelage of the indigenous political leadership. In the next chapter, I will examine in what ways this material base was sustained in the 1970s, also through the lens of development planning. The last chapter (Chapter Seven) wraps up the broader argument around the system of accumulation by pointing out, though briefly and for further inquiry, the institutional context and socio-political interests which became entrenched in the physical

economic base, and how they interacted or acted to protect themselves (and, by implication, a particular configuration of physical capital), subsequently restricting or blocking structural transformation. Overall, this thesis sees the system of accumulation as the creation and sustenance of a restricted economic base (one which precluded structural transformation) by a particular configuration of socio-political and economic interests. Thus, this chapter and the next examine how a given configuration of physical capital came to exist through the lens of development planning, but Chapter Seven will explore how the state's mediation, or, more appropriately, response to, geopolitical and internal contradictions, in alliance with wide-ranging socio-political and economic interests, perpetuated the preclusion of structural transformation. It will be shown in this chapter, and in the subsequent chapters, that the state's response to geopolitical and domestic contradictions drove the Zambian economy into dependence upon a foreign-exchange oriented, and therefore, copper-dependent, system of accumulation, which did create accumulation outside of copper, but kept the structure of production restricted because it remained disturbingly dependent upon the export of copper.

In questioning in what ways post-Independence development policy promoted economic growth underpinned by structural transformation, I note the challenges the post-Independence state had to deal with. Following Groth and Wade (1984) and insights from Chapter Four, I contend that allocation of public resources cannot be separated from the nature of the political system of a given country; thus, public resource allocation and distribution of income must be seen as outcomes of political economy processes rather than the interplay of purely technical and economic factors suggested by the computation of total factor productivity within models which make use of the neoclassical production function to explain the distribution of income and economic growth.

I argue that development planning as the instrument for resource allocation aimed at promoting growth and balanced development failed to achieve the objective of structural transformation partly but crucially because the assumptions upon which it was built served to reinforce the inherited (material) system of accumulation rather than to alter it. Development planning itself is understood, in part, as reflecting and promoting the "value judgements" of the political leadership (Katona, 1982: 12), but

also partly as the mechanism of the state to process the demands made upon it (Rothchild, 1984). Further, I find that although the economic reforms represented a departure in economic management and the role of the state within it, the economic base upon which developmentalism was erected, and which played as an arena for political discourse and conflict, remained restricted and reliant upon foreign expertise and capital in ways which prevented diffusion of spread effects, and germination of radical ideas necessary for structural transformation.

Thus, in this chapter, I give an overview of the pattern of Zambia's post-Independence development, exploring the broad macroeconomic statistical aggregates such as composition of GDP, employment, and trade balance to sketch the structure of the economy. Gleaning from the First National Development Plan (FNDP), it will be shown that resource mobilisation and allocation perpetuated and consolidated an urban-biased system of accumulation which was predisposed to prevent, and preclude, wide-ranging structural transformation. The system of accumulation itself is understood in terms of the processes and institutional mechanisms as an arena for a particular configuration of socio-political and economic interests which led to lopsided developmentalism. This understanding, and the analytical framework of the thesis, has profited from van Arkadie's (1973: 93, own emphasis) instructive conceptual framework which suggests that "[t]he economic pattern of dependence, which survived the demise of the political system of colonialism, must be understood as a system, the various parts of which reinforced each other, the meaning of which was not to be understood by isolating one aspect from the whole." But van Arkadie's conceptual viewpoint leaves to analysts to decide, under unique politico-economic circumstances, which aspects of the system are decisive. For Zambia, I argue that the system is made up of a particular configuration of socio-political and economic interests whose interaction determine the nature, pace and direction of accumulation. It is imperative first to understand the kind of physical capital base underpinning the Zambian economy, and development planning will help to locate the initial post-Independence development impulse and forces behind it.

This section is followed by an examination of the structure of the Zambian economy at Independence, before exploring the political climate which governed development planning in the immediate post-Independence period. The dominance of copper is

immediately apparent, in its contribution to GDP, exports and government revenue. The private sector dominated the Zambian economy and was the largest employer at Independence. I then move on to trace development planning in the post-colonial era. In its infancy, post-colonial development planning was largely informed and influenced by external consultants who, just before Independence, carried out a series of surveys. Proceeding on the presumption that development plans help to discern the attitudes and ideology of the leadership, I find that a strong commitment to even out development and growth occupied the minds of the political leadership, yet, in examining the FNDP in the subsection which follows, I find that sufficient room must be left within the plans for changing circumstances. While the FNDP had anticipated a substantial role for the private sector, the threat upon the Zambian economy from geopolitical tensions diverted attention and resources, substantially altering the course of action taken in implementation. Subsequently, the Zambian state embarked on a national project to delink from the South, by redirecting trade routes and installing local industries to replace imports, largely done to attain self-sufficiency. Far from promoting development through structural transformation, the Zambian government installed piecemeal uncoordinated development projects, with limiting scope for an integrated structure of production. This pattern of development followed from an interplay of a range of factors, among them: a limited and restricted understanding of structural transformation as found in the FNDP; a particular form of dependence upon foreign labour and capital; and institutional weaknesses to oversee development based on structural transformation.

As part of a system, this reflected a particular configuration of socio-political and economic interests. An assessment of the performance of the FNDP is then carried out. Fortuitous circumstances in world copper prices explained much of Zambia's growth and development during the FNDP. I then move on to assess select developments in select economic activities and sectors, ranging over trade, labour and localisation policies, and then mining, manufacturing and, energy and transport. I find that developments remained narrow in scope, partly but crucially following from the given intellectual understanding of development and structural transformation, including, as argued here, from the political context under which development policy was designed and applied. This is to show the specific aspects of capital accumulation that resulted from the interplay of socio-political and economic interests.

In the latter part of Chapter Six, I will give particular attention to the manufacturing sector to detail the nature and form of post-Independence industrialisation. I find that the manufacturing sector developed by following rather than altering the market since much of the industrial development took place in sectors which served the interests of the dominant classes. It reflected the transfer of resources and rights to a particular configuration of socio-political and economic interests. This feature, combined with the existing conditions, in particular the skills and competences of society, served to reproduce a kind of industrial development that was bereft of acquisition of higher level technologies.

Both Martin (1972: 41) and Seidman (1974a, 1974b) were optimistic about Zambia's prospects for development given the enormous wealth concentrated in the copper mining industry bequeathed upon the post-Independence government. For Martin (1972: 41), the centrality of copper to Zambia's developmentalism was seen by the extent to which it generated incomes, foreign exchange and government revenue. Sadly, the "financial shortages (of domestic savings for investment and of foreign currency to pay for the imports needed by investment) which had crippled so many development programmes in newly independent countries or restricted them to modest scope" (Martin, 1972: 41), that had been absent in the Zambian economy immediately after its Independence, became a factor of increasing concern only about a decade after Independence. For Zambia, these shortages in finance for development after the mid-1970s led to an economic crisis which lasted many more decades. I argue that the inability of the Zambian state to use copper resources to bring structural change to bear is precisely because of the failure to escape the colonial inheritance that privileged interests of socioeconomic and political institutions fashioned to concentrate economic activity around the copper industry. The way in which the post-Independence system of accumulation proceeded deepened economic activity and dependence upon copper mining rather than taking a form that would spread economic expansion outside of mining on the basis of an integrated industrial development programme.

5.2 The Situation in the year of Independence, 1964

By Independence, the Zambian economy had a sophisticated mining sector, and a small industrial sector mainly catering to the needs of the mining sector and urban population. The dominance of the mining sector over manufacturing is immediately apparent. Mining accounted for over half of the GDP, while manufacturing only 6 percent. Agriculture, as discussed in Chapter Four, was extremely underdeveloped during colonial rule, accounting for only 4.2 percent of GDP (See Table 5-1 Gross Domestic Product, 1964 (£'m), below).

Table 5-1 Gross Domestic Product, 1964 (£'m)

	1964	% of GDP
(i) INDUSTRIAL ORIGIN:		
(a) Agriculture	9.1	4.2
(b) Mining	118.8	54.4
(c) Manufacturing	13.1	6.0
(d) Construction	10.2	4.7
(e) Commerce	22.5	10.3
(f) Transport	10.3	4.7
(g) Services	34.5	15.8
Total	218.5	100.0

Source: FNDP, Table II, p6

For the manufacturing sector, Food, Beverages and Tobacco combined to account for over half of the sector's Gross Output. This suggests the lopsided development of industrialisation in favour of these subsectors. However, it worth recognising, as Chapter Four hinted, the engineering subsectors of the manufacturing sector were developed to cater to the world-class copper mining sector, which may help explain why metal and machinery accounted for a substantial proportion of about 18 percent and 24 percent of manufacturing gross output and value added, respectively (See Table 5-2 Mining and Industry Gross Output and Value Added (£'m), 1964, below).

Table 5-2 Mining and Industry Gross Output and Value Added (£'m), 1964

	Gross Output (GO)	% of total GO	Value Added (VA)	% of total VA
Mining and quarrying	154.4	100.0	118.8	100
Manufacturing	33.8	100.0	13.1	100.0
Food	11.6	34.3	2.1	16.0
Beverages and Tobacco	6.2	18.3	2.8	21.4
Textiles and Clothing	1.6	4.7	0.6	4.6
Wood and Furniture	2.3	6.8	1.0	7.6
Paper and Printing	1.3	3.8	0.7	5.3
Rubber and Chemicals	1.5	4.4	0.7	5.3
Non-metallic Minerals	3.2	9.5	1.8	13.7
Metal and Machinery	5.9	17.5	3.2	24.4
Other	0.2	0.6	0.2	1.5
Construction	25.6	100.0	10.2	100.0
Electricity and Water	10.6	100.0	3.4	100.0

Source: FNDP, Table IV, p6

Productive imports were biased in favour of investment/capital goods, especially for the mining sector given the nature and form of pre-Independence Zambian development. 'Raw Materials and Semi-finished Products' accounted for almost a quarter of all imports while 'Plant and Machinery, Transport Equipment' appropriated 13.4 percent of total foreign exchange demand (See Table 5-3 Imports and exports, 1964, below). This must be kept in mind as part of the material/economic base of the inherited system of accumulation.

Table 5-3 Imports and exports, 1964

Imports (c.i.f.) (£'m), 1964			Exports (£'m)		
	1964	% of Total		1964	% of Total
Animal, Vegetable Food Products:			I. Animal and Fisheries	0.4	0.2
Unprocessed	1.0	0.7	II. Agricultural Products	3.1	1.8
Processed	4.0	2.9	III. Minerals	162.1	92.2
Energy	4.8	3.5	IV. Others	8.3	4.7
Raw Materials and Semi-finished products	33.3	24.3	V. Tourism	1.9	1.1
Plant and Machinery, Transport Equipment	18.4	13.4	<i>Total Foreign Exchange Supply</i>	175.8	100.0
Textiles and Leather	10.8	7.9			
Other Goods	10.5	7.7			
Services	22.4	16.4			
Transfers Abroad	31.8	23.2			
<i>Total Foreign Exchange Demand</i>	137.0	100.0			

Source: FNDP, extracts from Tables VII and VIII, p7

To afford these imports, copper exports were indispensable, accounting for about 92 percent of total foreign exchange supply. This suggests the dependence of imports (for all sectors) on exports of copper. However, because imports themselves, especially of investment goods, were important to promote and sustain mineral development, it can be argued that copper exports were crucial for the mineral development as well as continued supply of imports. It is thus not difficult to speculate that (profitable) copper mining would be conditional on importation of crucial capital goods for the mining sector. In other words, a virtuous circle of imports-exports was crucial for the sustenance of the existing system of accumulation.

The private sector bias of the Zambian economy in the year of Independence can also be seen in the composition of salaried employment by type of employer and also by source for capital investment. More than 81 percent of salaried employment was accounted for by the private sector, with the remainder taken up by the public sector.

Table 5-4 Salaried Employment ('000), 1964

	Numbers ('000)	% of Total
Salaried Employment		
Public Sector	50	18.6
Private Sector	218.7	81.4
Total	268.7	100

Source: FNDP, Table IX, p7

Whereas during the years of the Federation, the private sector accounted for 57.7 percent of total capital investment, in the year of Independence, that share had risen to 65.6 percent. This evidences the substantial role the private sector played in Zambia's development.

Table 5-5 Total Capital Investment, 1954-1964

	1954-1964		1964	
	£'m	%	£'m	%
Public Sector	180.4	42.3	13.2	34.6
Private sector	245.7	57.7	24.9	65.4
<i>Total</i>	426.1	100.0	38.1	100.0

Source: FNDP, Table II, p12

In fact, institutional weaknesses in the post-Independence era were not merely seen in terms of organisational structure of the state, but also in terms of the colonial legacy which ensured that Zambian skills had by Independence not developed to sufficient scale and magnitude. “[S]igns of overstrain in the administration,” argued Hall (1969: 118-119), were being felt around the time of Independence when “more than half of the colonial civil servants had taken pensions and departed in 1964,” such that, “[o]f 2,500 graduate posts in the civil service at independence only 200 were filled by Africans — many of them non-Zambians; 7,000 jobs calling for school certificate, more than 6,000 were being done by whites.”

To summarise, in general, the inherited structure of production was such that the Zambian economy was dominated by copper mining which also supported employment and development elsewhere. Colonial development also ensured and promoted a crucial role for the private sector which dominated both employment and development through capital investment and associated linkages.

It is worth spending some time to discuss the nature of dependence of Zambia's economy upon the South, and how geopolitical tensions recalibrated Zambia's understanding both of international relations and developmentalism. Before discussing the development plans and developments they brought about, a brief discussion is in order of the implication of Rhodesia's Unilateral Declaration of Independence (UDI) on Zambia's developmentalism.

5.3 The immediate post-Independence political history of Zambia

The underlying theme of this thesis is that structural transformation, or, more broadly, development, is underpinned by a particular configuration of socio-political and economic interests. If successfully pursued, structural transformation is applied through sound economic policy via the agency of competent and skilled interests (productive groups). As this thesis has sought to locate the role of the state in the interplay of these interests, it is imperative then to examine the Zambian state through the polity. In part, this is to explore the political context within which resources were created and distributed, and policies were designed and implemented. Indeed, one cannot separate Zambia's economic from its political history. To understand the politics, one must also understand the economics, and vice-versa. State-society relations in the political and economic spheres must be understood from how the state is itself politically constituted, including its political vision, and finally, how political structures are designed in a way to influence the process (and direction) of accumulation.

Zambia's political history is normally divided into three roughly distinct episodes—The First Republic (1964-1972), The Second Republic (1973-1991), and finally, The Third Republic (1991-present) (Larmer, 2016, 2007). These distinctions are based on the political system in place, defined in terms of multi-party politics or otherwise. For the First Republic, multi-party democracy was at the heart of politics, although dominated by the United National Independence Party (UNIP). The Second Republic ushered in a one-party participatory democracy, with political candidates selected from within UNIP as the only legitimate Party. The Third Republic reflects the re-introduction of multi-party democracy.

Although Zambia is anthropologically reported to have had 73 tribes, on the political front, these tribal divisions were immaterial in numerical terms. Instead, many tribes identified with and aligned themselves with one regional dominant tribe. Thus, “four major languages” became “common languages for different parts of the country: Bemba, Nyanja, Tonga and Lozi” (Roberts, 1976: 241). Political classes were largely divided along the lines of these tribal affiliations, and that is why the rallying-cry “One Zambia One Nation” was used to stitch the nation together, for a common purpose of nationalism and development. The location of the copper mines in the ‘Northern part’ of the country, and through colonial economics, ensured that over half its workers came from the Northern region, predominantly Bemba-speaking. UNIP’s support from the Copperbelt was grounded in Bemba-speaking voters, so that “the economic heart of the country was dominated by Bemba-speakers from the north-east” Roberts (1976: 241). Thus, it emerged that while UNIP was regarded as mainly a ‘Bemba’ party, ANC, with a large following from the south, was chiefly thought of as a ‘Tonga’ party.

On the whole, differential distribution of political power along regional and sectoral divisions defined the contours and influenced the rules of the political game that the Zambian political leadership was forced to play. The party which led Zambia successfully to Independence was UNIP, headed by Kenneth Kaunda, who then became Zambia’s first President. From 1964 to 1972, Zambia’s polity was adorned with multi-party politics, with this period affectionately called Zambia’s First Republic. At the time of Independence, UNIP had substantial support across the country except in two regions – Southern and Western provinces – which served as the opposition’s support centres (Larmer, 2016; Macola, 2010; Bates, 2008). Although the UNIP government took control of Zambia at Independence, it was threatened not just by strong opposition from African National Congress (ANC), but also by its own intra-party divisions which reflected a contest of leadership foresight and ideals within the nationalist camp.

The traditional African literature casts a shadow of doubt on Afro-politics in delivering development, condemning it to nothing more than a mask of patron-client networks. In this framing, the opposition’s agenda was focused only on taking over the state architecture for personal gain through corruption and patronage despite the

political rhetoric of economic progress. Macola (2010: 95), however, suggests that detailed and careful studies, as with his example of Harry Nkumbula's biography, uncover the folly of reducing post-independence Afro-politics to a model of patron-client networks which aims only to define public resource distribution in terms of patronage. Nkumbula's political activities through the agency of the ANC presents the opposition as an ideological alternative to UNIP. While UNIP had fashioned socio-political and economic discourses in terms developmentalism spearheaded by a strong state, the ANC showcased its ideology in terms of liberal principles.

Larmer (2016) shows convincingly the fragile beginnings of UNIP at the time of Independence, divided along regional and ideological lines. Against the inherited structure of production, existing material/economic and social conditions, these divisions conditioned not just the political game, but also the design and implementation of economic policy. On the political front, the nationalist movement during colonial times was not to be understood as a unified force against imperialist authority. Rather, one must account for disparate interests in the nationalist movement just before Zambia's Independence. Macola's (2010) seminal work on Central African nationalism focuses on Zambia's towering political opposition figure, Harry Mwaanga Nkumbula, whose voice had been hitherto undermined by mainstream political histories of Zambia. Nkumbula's biography, as Macola presents, uncovers the fragility of UNIP as well as the regional interests which divorced themselves from UNIP in favour of Nkumbula's party.

Zambia's First Republic sought to galvanise interests through the rallying mantra of 'One Zambia, One Nation'. As such, traditional political analysis holds that the First Republic reflected a period of political unity, with an agenda for economic progress (Turok, 1979). Government development projects and large-scale social service spending are usually taken as evidence of legitimising the state, attending to the expectations of post-Independence wide-ranging interests. Indeed, if this were the case, it becomes difficult to see the actual influences which drastically shifted the political landscape culminating in a one-party state. Larmer (2006; 2007) has been critical of this conventional view, placing the state's failings to meet popular expectations at the centre of the political conflicts and contestations. Despite the expansive development spending undertaken by the government (see Sections 5.7 and

5.8 below), the state fell short of meeting the expectations of various sections of society, resulting in political tensions. One must locate which sections of society were included or excluded from development spending undertaken by the state. During boom years, development spending was mired by sectional and sectoral biases which created political tensions. Gertzel et al. (1984: 7-8), although recognising the tribal conflicts in politics, are sceptical over reducing political tension to 'tribalism'. Rather, they view 'sectionalism' as a more apposite label capable of explaining the uneven development. They argue that the "competition for scarce resources between interests ... reflected the regional or provincial cleavages ... the diversity of interests in Zambia beyond those relating simply to the ethnic group, and especially regionalism" (Gertzel et al., 1984: 7-8).

When it became clear to UNIP that the southern and western regions were firmly in the hands of the opposition ANC, it was incumbent upon UNIP to make fresh attempts to acquire support from these regions. The strategy employed by UNIP was to use existing resources not so much to create wealth but to 'purchase' loyalty. For example, although the Southern Province African Farming Improvement Fund was instituted to improve agricultural production and productivity in the region, it was seen as a mechanism "to buy influence and support through distribution of spoils" (Larmer, 2016: 55). In practice, however, funds for this agricultural programme were pocketed by national and regional political leaders, revealing the flaws in design, motivation and implementation of the programme itself. When it was unearthed that the agricultural programme had failed on account of corruption, there were devastating political consequences for UNIP's sought for unity, which eventually catalysed the formation of the United Progressive Party (UPP), as an offshoot of UNIP, representing a departure of gathering disenchanted interests. In this way, political contradictions did influence the way in which resources would be distributed and utilised, not on the basis of creating and spreading wealth underpinned by structural transformation, but on political expediency.

Divisions within UNIP were reflected in the way in which top political figures behaved within UNIP and, after their departure from the Party, in becoming its strongest critics. Their actions sought to undermine the legitimacy of the incumbent Party mainly by appealing to hitherto 'forgotten' groups and regions. This led the

ruling Party to respond through policing and legislation. By January 1966, a prominent political figure, Nalumino Mundia, who then served as Minister of Labour, was laid off due to revelations that he had involved himself in corrupt practices in the allocation of state loans. Meanwhile, in 1966, the Lozi-speaking politicians represented in parliament formed a party, United Party (UP), in order more meaningfully to represent impoverished Western region, which had particularly come under economic strain following UDI. After his July 1966 dismissal from UNIP membership, Mundia went on to head the UP which had emerged two years earlier being founded by ex-UNIP and ex-ANC members. At first, Mundia, hailing from the western region, attempted to convince people from there that UNIP did not serve their interests. By early 1968, however, Mundia's political activities turned to the Copperbelt, which led to violent clashes across politically-divided groups, forcing President Kaunda to prohibit UP from political activity, while arresting its top leadership including Mundia. Indeed, violent clashes between UP and UNIP in 1968, seen as attempts to counter the superiority of the Bemba in the Copperbelt, led to six homicides and, consequently, UP was outlawed from political participation, eventually forcing its members to align with ANC.

When general elections were held in December 1968, the ANC strategy of assimilating ex-UP members paid high dividends, such that ANC increased twofold its members of parliament. In addition to its southern and central strongholds, its support from the western region skyrocketed. In fact, growing factionalism within UNIP jeopardised the broader unity Kaunda had sought across sections of Zambian society (Macola, 2010; Larmer, 2007; Gertzel et al., 1984; Martin, 1972). Seen through the lenses of unity, legitimation and populism, one can perceive the economic reforms – both April 1968 Mulungushi reforms and August 1969 Matero reforms – as a wave of new energy meant to galvanise interests and legitimise political leadership within the context of a disenchanted population more generally. In short, the reforms took place within the context of political contradictions, suggesting that “short-term political factors must have influenced the decision” (Martin, 1972: 162).

Bringing political unity while aiming to meet expectations of different regional interest groups led President Kaunda to seek a balanced representation in Cabinet of these interests. Thus, in August 1967, the first UNIP central committee elections since

Independence were held, with Kaunda emerging uncontested as Party President, while virtually all lower ranking posts were being contested. Popularity and regional/tribal alliances were the basis upon which delegates were elected. In contesting the position of the Vice-Presidency of the Party, regional alliances defined who would be victorious: Reuben Kamanga, who had been Vice-President of UNIP even before Independence, hailed from the Eastern province, sought to form a pact with all other regions except the Northern region from which Simon Kapwepwe, the contender, originated. However, Kapwepwe made a strategic association with the Southern region and ended up winning the Vice-Presidency of the Party. A similar result is reported in lower ranks, but ultimately, the Northern and Southern tribes won the majority of seats, and went on to be representatives in Cabinet, with Kapwepwe as Vice President responsible for planning and development. The intra-party contestations are important as they reflect the strenuous political climate based on tribal or regional contradictions under which Kaunda operated and sought to legitimise himself.

Political contradictions, based on meeting popular expectations while seeking legitimacy of the Party and the government in the face of party political opposition, translated into interference with the running of the state architecture in ways which hindered efficient delivery of services. This was the case mainly because the primary interests being served, or those absorbing the resources being distributed, lacked the requisite skills and competences. For instance, civil service professionalism was undermined by the expectations resulting from nationalist movements and the practices of the Party and government to attend to these expectations. Employment in the civil service was interpreted as a way to reward supporters of the Independence movement, whether or not they possessed the qualifications, which they did not in most cases. Musakanya, an elite technocrat, “appointed ... in April 1965” as “the first Secretary to the Cabinet and Head of the Civil Service”, bemoaned the state of affairs vis-à-vis political infringement upon what was supposed to be a professional and independent civil service (Larmer, 2010: 34).

Musakanya noted that:

“I was not aware that there were a lot of people both in the Civil Service and outside who had [...] invested in the change and now expected reward in terms of positions outside the Civil Service criteria. They in fact assumed that at the advent of political change—Independence—they were the public interest ... Furthermore since at the time an opposition party ANC existed the professed impartiality of the Civil Service became a sore point to UNIP, who feared that if ANC was not seen by the people as vanquished and had no power to give favours, it could reorganize to give them a serious challenge at the next elections. Regularly I received reports and requests from Ministers that such and such a Civil Servant was ANC and must be dismissed or not promoted. Civil service regulations could not however entertain such requests” (Larmer, 2010: 35-36, quoting Musakanya)

Through such interference, the civil service came to be seen as an instrument of the Party, brought under the control of the Party and serving as a benefit to the Party, and, by implication, an instrument to weaken political opposition. In serving political expediency, the running of the state architecture worked to serve the interests of the political leadership. Thus, the political leadership had now to attend to the needs of civil servants in order to reinforce their own legitimacy. Nevertheless, the Party itself was not a unified force, and, failure of the civil service to reward proportionately the Party's members drew a cleavage between them on ethno-regional lines. For instance:

“the consequent prominence of Bemba speakers in UNIP led them to expect ‘their party to deliver state and parastatal appointments to their leaders and themselves, state resources and economic development to their communities. However, this was perceived by other UNIP leaders, also under pressure to deliver ‘development’ to their areas of origin, as a threat to their political survival. Movements such as ‘Unity in the East’ were the inevitable result” (Larmer, 2016: 89).

This demonstrates that while the political contradictions insulated the opposition from accessing rewards through jobs, those within the ruling Party were themselves not fully attended to given limited resources and jobs. This served to widen the fractures within the ruling Party, and to leave susceptible the state apparatus to patronage and

corruption as mechanisms to further the interests of those charged with the responsibility to design and promote economic policy through the state.

Moreover, regional conflicts within UNIP, particularly between the Northern and Eastern supporters, threatened to tear UNIP apart, with the President responding by concentrating more power within the Party, mainstreaming it into the government, or more appropriately, submitting the state structures to the ruling Party, particularly when “Ministers of State” were appointed “to UNIP’s headquarters in 1969” (Larmer, 2010: 45). Simon Kapwepwe, the Vice President, and also a well-known Bemba-speaking leader, complained bitterly of being relegated to the fringes, announcing in 1969 that he would step down, but only doing so a year later. By 1969, however, Bemba power within UNIP had rapidly diminished, particularly when the President effectively cut back on numbers of Bemba peoples in Cabinet, while increasingly forging stronger bonds with supporters from the East.

Major economic changes during the fledgling years of Zambia’s Independence have been interpreted as functions of political expediency. For example, nationalisation, more generally, in its hurried form and flawed design, has been seen as an outcome of political engineering rather than carefully designed economic policy aimed at restructuring the economy, despite the political rhetoric to this effect. Martin (1972: 160-162) reports that even before the August 1969 Matero reforms, Zambia faced a “real ... political crisis” with Kaunda’s popularity showing signs of waning, especially in the December 1968 general elections, when he lost the Western and Southern regions to Harry Nkumbula of the ANC. The immediate period after the elections saw the government’s stance against opposition take a drastic turn, with increasing use of state machinery to reward UNIP support and to penalise opposition. About two weeks after the 11 August 1969 Matero reforms, Simon Kapwepwe tendered his resignation as Vice President. Following these events, Kaunda seemed more resolute, and proceeded to dissolve the UNIP central committee, the source of many of the intra-party conflicts, on the basis that a new Party constitution was being prepared.

In August 1971, Kapwepwe re-emerged as the leader of the new party, United Progressive Party (UPP), fuelled by support from sections of society that felt left out during the boom years. Coincidentally, and causally, the growth of UPP was premised

on opposition to increasing unemployment, mainly a reflection of reduced investment around 1970, but also the practice of politics that elevated patronage and allegiance within the ruling Party. While such political practices helped crystallise support for the presidency, regions left out grew increasingly disenchanted. In other words, growing opposition reflected embitterment with both the kinds of economics and politics the state had put in place.

Ultimately, the formation of the one-party state is seen as the culmination of political conflict, a response to growing conflict based on lines of political party affiliation, and hence a way to quell dissidence while supposedly forging unity. Reports of repression were rife, with UPP supporters indefinitely detained without trial or proper legal representation; by the first quarter of 1972, Kapwepwe and his supporters were remanded indefinitely. Meanwhile, in February 1972, the one-party state was born, having been approved by Parliamentary legislation. Kapwepwe and some of his supporters were released in the first quarter of 1973, when the political scene had taken on an entirely new shape under a one-party state

Essentially, the First Republic was not furnished by a particularly unified political vision, it was punctuated by opposition and the state's responses to it. The failure to address developmentalism more broadly, and rural development in particular, including practices of incessantly mixing politics and economics, rewarding with economics those in favour of the ruling Party, created an atmosphere for opposition to emerge and thrive. However, in the interest of political survival, although rhetorically justified by an economic vision, restraining dissidence through coercive means became routine, itself exposing the fragility/weaknesses of the state apparatus/institutions and legal framework of governance. When political contradictions were mediated through resource distribution, the interests being served reflected the broader goal of political survival for the political leadership rather than a politically-driven attempt to pursue development underpinned by structural transformation. As will be seen below, this concentrated resources in the existing pillars of the economy concentrated around the copper sector.

While opposition political parties had been buried via the one-party state, intra-party competition within UNIP was still alive and well. In December 1973, UNIP held its

first elections, re-electing Kaunda as the leader, but not unanimously, given that one-fifth of the total votes were cast against him. But the ruling Party crystallised power even further by embedding within the constitution UNIP's National Executive Committee as governing and overseeing national political development. Effectively, this removed power from ministries and the Cabinet and placed it under Party control.

Larmer (2007) explains that Kaunda's consolidation of power within UNIP, choking off opposition by instituting the one-party state politics, was partly deceitfully rationalised by Zambia's geopolitics. Falsely accusing UPP of "receiving military support from Zambia's enemies", Kaunda outlawed the party (Larmer, 2007: 49). Interpreting the 1973 elections and political practices punctuated by repression towards the end of the 1970s, Gertzel (1984: 91) argues that UNIP had lost the support of mineworkers, its traditional supporters on the Copperbelt, but also lost support of the urban labour class. On the Copperbelt alone, numbers of UNIP members declined drastically, to a point where local UNIP structures remained vacant.

In the interest of what was reported as efforts at unification, former opposition members, particularly UPP which had covert structures still in place, would be persuaded to be mainstreamed into UNIP. Once examined properly, this appeared to have been a strategy by UNIP to extinguish completely, although in a civil manner rather than coercively, all underground flames of opposition. Musonda Chambeshi, a towering UPP supporter and leader, participated and won by-elections held in Roan, a mine residence. However, when he openly criticized the government as having contributed to the deterioration of living standards due to rising costs of living, he was promptly removed from UNIP and parliament on trumped up charges of suspicion to supplant the President.

By 1978, the President, under growing opposition and increasing potential to be unseated, particularly by Kapwepwe, strongly influenced the enshrinement within the Constitution of a prohibition clause which prevented presidential contestations. Following this development, Kaunda was unopposed in the 1978 elections. Yet this did not halt opposition; in fact, it served to make more volatile and less cohesive the glue that sought to bind Zambia's politics together. While most of the 1970s appeared to have established a peaceful political system, it was towards the end of the 1970s

that a sharp rise in opposition within and outside UNIP emerged which, to the surprise of many, culminated in a coup attempt in 1980 (Larmer, 2016). More generally, the heightened opposition in the latter half of the 1970s reflected the broader economic contradictions Zambia faced which witnessed declining profitability of Zambia's economic heart, the mining sector. These economic problems were widespread across many sectors which had developed on the assumption of a thriving copper sector.

The political history of Zambia demonstrates that differential distribution of power reflected regional and ideological divides. The common denominator, however, remained the heightened expectations the independence wave had brought across different societal groups, and the (narrow) manifestos the nationalist leadership promoted. As the latter part of Chapter Four argued, Independence was interpreted almost as an end in itself in that indigenous people pinned their hopes for prosperity upon it. Behind the support which legitimised the political power of the political leadership were expectations from across society. The extent to which these expectations were met within a given time-frame determined the distribution, intensity and scale of support of the political leadership. "The tensions that tore UNIP apart," argues Larmer (2016: 54), "were not simply based on elite competition for state-based spoils; they reflected, at a stage removed, the widespread frustrations amongst Zambians regarding the perceived failure of UNIP to address their poverty and redistribute wealth." Subsequently, institution of the one-party state in 1972 was aimed at silencing opposition which only served to preserve the head of state while intensifying competition at lower levels. The opposition, in aggregate, presented itself as a formidable force and alternative platform upon which these frustrations would be translated into political support, hence threatening the legitimacy of the incumbent political leadership.

Overall, the political context under which economic decisions were designed and applied was largely incongruent with conditions which would have served development based upon structural transformation. While, as will be seen below, the state did possess and apply the interventionist economic policy instruments of the East Asian type, the political context, reflected in a particular of configuration of socio-political and economic interests, demonstrates that the policy landscape was often responsive to political events, undermining the capacity of the state to pursue broad-

based developmental programmes and policies. Industrial and other developmental projects, programmes and policies by type and location answered to political contradictions. The nature of political authority was such that political complexes influenced more generally not just the direction of accumulation but also who would be responsible for it. Thus, given post-Independence expectations, and political expediency based upon political legitimacy and survival, this raises questions over whether it was politically possible for the Zambian state, within the framework of existing conditions, to pursue DSP-type structural change.

The next section shifts focus to understand the geopolitical influences upon Zambia's system of accumulation within the context of UDI. It aims to show how UDI affected the kinds of economic policies Zambia put in place. It must be noted that these decisions were made amidst the political contradictions previously mentioned.

5.4 Rhodesia's Unilateral Declaration of Independence (UDI) and Zambian developmentalism

When Rhodesia declared a UDI on 11 November 1965, Britain responded by mobilising international support to mount sanctions against Rhodesia. However, participating in sanctions against Rhodesia was interpreted by the Zambian leadership as not in the interest of the Zambian economy. Kaunda preferred military action, but Britain was resolved to use the option of political and economic sanctions. The particular form of dependence of the Zambian economy upon Rhodesia sheds light on why the Zambian leadership did not view sanctions as the best strategy to oust the Smith regime.

The Kariba Dam, which had been developed as a strategic resource for Southern Rhodesia during the Federation, was under the firm control of the south. It "supplied virtually all the power for Zambia and had its generators on the south bank" (Hall, 1969: 113). If Rhodesia would have cut off electricity supply to Zambia, virtually all of Zambia's economic activity would have come to a halt. Electricity was needed to ensure mining production remained undisrupted. With only two days of no electricity, the copper mines would have undoubtedly flooded. Such was the importance of electricity to Zambia's economy.

Another feature of Zambia's dependence upon Rhodesia and, hence, an additional variable which supported the Zambian government's lack of support of sanctions, was the trade route through Rhodesia, particularly the railway from the Copperbelt to Livingstone and then through Rhodesia to the port at Beira in Mozambique. In excess of a quarter of all imports, including coal from Wankie colliery in Rhodesia were transported through this route. Virtually all copper exports were transported through this route. Subsequently, the government began to see self-sufficiency as the only viable policy option to redress the dependence upon Rhodesia. Serious local coal developments started at Nkandabwe, although the coal from Wankie was of superior quality. In fact, the government of Zambia was so much in a hurry to self-supply that the coal project at Siankandoba which would have produced coal of superior quality was provisionally abandoned because it would have taken longer to develop. The government and the mining companies went into equal-shares partnership, with mining companies providing technical input. The Siankadoba project was to be developed under exclusive Government ownership, with a French firm contracted to carry out works on the plant. This demonstrates the scale of government involvement in developmentalism, even before the 1968-1969 economic reforms were implemented. For Hall (1969: 113), "[t]he entry into coal-mining was entirely a Zambian initiative." Good or bad, this development was hurried by the geopolitical tensions UDI created, but in practice, coal-mining development only served to strengthen Zambia's dependence upon copper. To the extent that copper remained profitable, so too would coal-mining.

Indeed, Zambia had known that sanctions against Rhodesia were in a way sanctions against itself, since this would inevitably disrupt economic activity. In December 1965, oil to Rhodesia, and implicitly Zambia, was choked off when supplies from Beira were cut off. The Zambian government reacted in two ways; first, oil was airlifted into Zambia at an enormous cost. Second, Zambia had to turn to its northern neighbour—Tanzania—importing oil through Dar-es-Salaam port and then travelling down a gravel road over a distance of over 2400 kilometres. It would take about three years before in 1968 an Italian firm completed the construction of an oil pipeline from Dar-es-Salaam to the Copperbelt.

Importantly for Zambia, the only way to secure the much-needed government revenue was to get the copper out of the country. To do this under the system of sanctions imposed on Rhodesia, copper was allowed to go south to Beira, but the Zambian authorities also preferred to look to other neighbours. Hence, the formula applied by the government was to transport about 50 percent to Beira via Southern Rhodesia, around 25 percent on the Benguela railway via Angola and Congo to Lobito port in Angola, with the rest via road haulage to Dar-es-Salaam port. The government's decision to seek alternative trade routes is rooted in its attempt to minimise its dependence on the South, thereby minimising risk of disruption. This would eventually pay-off when Smith, in 1973, fearing rebel attacks from Zambia, closed off his border to dislocate Zambia's transportation of goods except for copper. By that time, the road north to Dar-es-Salaam had been upgraded into a modern highway, using funds from the international aid community. Consequently, the Zambian government opted for trade routes to Dar-es-Salaam and Lobito. By 1971, imports from southern Rhodesia were only 5 percent (made up of mainly electricity and coke supply charges), falling from 40 percent in 1964 to 20 percent in 1966 (Larmer, 2007; Roberts, 1976; Martin, 1972). Imports from South Africa dropped by half to around 11 percent between 1964 and 1973. Although decisive state policy on trade and industrial development with respect to import-substitution and efforts to secure alternative trade links, these policies were shaped by regional political tensions, especially between Zambia and its southern neighbour, but also by marked influences of the global community.

Zambia was eventually able to supply all its coal needs despite the shutdown of the Nkandabwe operation in 1969. By 1972, a hydro-electric power plant at Kafue was commissioned for operations which a company from Yugoslavia had built. This reduced electricity imports from Rhodesia to only about 33 percent. But by 1976, a further hydro-electric power plant north of Zambezi at Kariba was constructed by an Italian company. Hence, it took Zambia eleven years from UDI to self-supply its power (including electricity) demands.

The alternative railway link from the Copperbelt to Dar-es-Salaam had been met with opposition by the West, but the People's Republic of China, hoping to expand their stake in African trade, expressed real interest when they surveyed the project by 1968,

began works in 1970 at Dar-es-Salaam and completed the works at the Copperbelt in 1975. China was strategic in carrying out this project worth by then about £167 million, whose repayment would be shared equally between Zambia and Tanzania. There is a lesson to learn here, especially in how form of aid itself may have hindered local manufacturing. China had intended to aid its infant industries to access African markets, and because it could not offer cash loans, it set out to provide half of this loan in terms of equipment (rails and railways sleepers etc.) from its own industries, with the remainder comprising mainly of African labour bill and other material for construction from within Africa. Overall, however, both Zambia and Tanzania would pay back the loan over three decades beginning in 1983. China took the sixth position of Zambia's trading partners by 1970. China negotiated with both Zambia and Tanzania to purchase goods from China worth about £56 million in local currency over a seven-year period up to 1977 since the African labour bill and cost of other material for construction needed to be disbursed in local currency. For Zambia, this meant a commitment of about £4 million worth of goods every year between 1970 and 1977 to flood the Zambian market. Whatever the merits of the Chinese-funded projects, the purchase of Chinese goods for a certain period up to a certain amount, as one of the conditions of repayment, guarantees and grants the Chinese goods access to the Zambian market, partly eating into market share of Zambian goods on its own domestic markets.

The tale of Zambia's success in delinking itself from its southern neighbour(s) has profound consequences for understanding the political economy of Zambia's developmentalism. First, although this has been repeatedly pointed out, the infrastructure supporting Zambia's trade pattern and structure were primarily created to propagate a deliberately defined system of accumulation around the copper complex. By confronting the pattern of trade-supporting infrastructure, Zambia was not necessarily speaking to, for purposes of structural transformation, the system of accumulation around the copper complex itself. What the Zambian state did do was to seek alternative trade routes, mainly for the transportation of copper, and partly self-supply inputs to copper (energy etc.) that it previously imported. In doing this, the state perpetuated rather than addressed the underlying system of accumulation that prevented structural change. Of course one might suggest that the same infrastructure (transport, energy etc.) that supported copper production would also have fed into a

diversified production structure, but the extent to which this could possibly be realised depended on the extent and intensity of fiscal linkages, including what was going on with industry. Chang (2003, 2002, 1994) approaches structural change as a product of coordinated efforts and investments across sectors. The extent to which there was minimal coordination across sectors (including particularly with agriculture and industry) could help explain why industrial development and structural change was hindered by the state's response of promoting accumulation that served the interests of the copper complex.

Citing a UN study, Lanning and Mueller (1979: 202-203) contend that the costs of sanctions on Zambia's economy were enormous, with limited compensation: "the cost of sanctions to Zambia from 1965 to 1977 [were] between \$750 and \$800m. To offset this Zambia received aid of only \$100m. in the same period ... despite promises of assistance from Britain."

Nevertheless, UDI cultivated a culture of self-sufficiency, which encouraged the Zambian state through interventionism to erect import-substituting enterprises while restricting imports from Rhodesia. Yet, despite favourable economic circumstances and heightened economic activity, Zambia's inheritance of socio-economic interests ensured that "most of the profits generated by this boom were flowing out of the country, together with large amounts of capital. Most of the companies in Zambia were either subsidiaries or closely linked to Rhodesian and South African companies; and their policy was to remit as much profit and capital as quickly as they could. Estimates show that remittances by non-mining companies increased by 84 per cent in 1966 and a further 15 per cent in 1967" (Lanning and Mueller, 1979: 203).

In the hands and under the control of foreign private interests, capital funds for development benefited foreign private capital. This must be kept in mind when in Chapter Six a discussion on the Mulungushi reforms will be made. Commercial banks tended to favour foreign capital because of its capacity to pay back, and as good lenders, the latter enjoyed large awards of local loans which, however, were largely exported once they were processed into profits. The extent of capture by foreign interests of the banking sector is seen by the scale of commercial bank advances made between 1965 and 1967; "commercial bank advances increased 94 per cent in

December 1965, a further 16 per cent in 1966, and 76 percent in 1967” (Lanning and Mueller, 1979: 203). Not only did these interests limit the scope for structural transformation but they robbed the Zambian economy of investible surplus. Importantly, however, their scope of economic activity remained restricted within the confines of physical accumulation as dictated by the nature and strength of the market. Judging by the state’s response, as will be shown in the Mulungushi economic reforms in Chapter Six, the state confrontation of these contradictions failed to accurately diagnose the underlying developmental problems and, thus, suggested remedies which did not redress and reorient the form of physical accumulation. Instead, the state sought to replace with indigenous interests, local interests which had lodged themselves within a restricted structure of production. The nature of socio-political and economic interests did influence the direction and agenda of public opinion, shifting government policy in non-developmental directions.

5.5 Emergency Development Plan (EDP), Transitional Development Plan (TDP), and external influence, 1964-1966

The post-Independence state created development plans as the blueprint documents to guide national development. However, the history of post-Independence development planning helps to explain why the plans were designed the way they were. The post-Independence development objectives were influenced by external consultants, specifically those commissioned by the United Nations (UN), which had carried out a series of studies to understand the wide-ranging nature of the Zambian economy and to make recommendations for development. Subsequently, post-Independence development planning relied heavily on the development thought of these consultants, and, as I will argue below, this did not address the institutional arrangement for executing broad-based development.

Recall that the ten-year plan for the period 1947 to 1956 (and its revised edition) was the main instrument to guide resource programming under colonial rule. It was argued in Chapter Four how initial allocation for socioeconomic development for the African population in the ten-year plan was overturned by white settler interests. For Chileshe (1986: 59), it “was an uncoordinated affair ... characterized by a strong bias for sector development and in particular, those sectors under European and expatriate control.”

In other words, resource allocation reflected the interests of the white settler community. Thus, in affirming balanced growth and the national interest, it was the task of the post-Independence leadership to reflect in development planning a more rounded reflection of the interests of Zambian society.

Following the breakdown of the Federation of Rhodesia and Nyasaland, development planning for the envisioned independent Zambian state begged assistance from the United Nations and its sister agencies to choreograph a development plan.³⁵ Consequently, the first post-Independence pseudo-development plan was the Emergency Development Plan (EDP) which was seen as a preface to the slightly more detailed Transitional Development Plan (TDP). Both EDP and TDP profited from the reports of the UN agencies, especially the ECA/FAO Report, commonly known as the Seers Report, deriving this name from Professor Dudley Seers as the Report leader. The TDP was envisioned to cover only an eighteen-month period from January 1965 to June 1965.

While the TDP was crucial for formalising and documenting many of the socioeconomic problems the post-Independence Zambian state was to confront, it facilitated continuities of the inherited material system of accumulation and bound the state to it. It did so by amalgamating and incorporating within it colonial public expenditure programmes and also expanding the administrative scope of the newly-independent state. In practice, this meant allocating over 40 percent of the plan resource envelope to projects “being carried over for completion” (Chileshe, 1986: 60; Katona, 1982). Also, substantial resources of the TDP were committed to strengthening the administrative architecture of the state, for example allocating £5.3 million to the Office of the President only while health services and social

³⁵ Chileshe (1986: 59) notes that “[e]ach [UN sister] agency offered help in its field. The United Nations Educational, Scientific and Cultural Organization (UNESCO) stressed aspects of education; the International Bank for Reconstruction and Development (IBRD) placed emphasis on communication infrastructure. The joint team of the United Nations Economic Commission for Africa (ECA) and the Food Agriculture Organization of the United Nations (FAO) covered a much wider field. Its terms of reference included planning for a broad framework for social and economic development and to devising suitable development policies.”

development received a mere £610,000 and £560,000, respectively, a feature which was acknowledged as “a conscious element of the Plan” (Katona, 1982: 13).³⁶

Table 5-6 Transitional Development Plan: crude allocations to sectors and projects

		Amount (£'m)	comment
1.0	From EDP	19.3	42.0% of total TDP
2.0	"A" projects	17.2	Projects to start after completion of financial procedures and agreements
2.1	*Administrative apparatus of government	6.1	35.6% of “A” projects total
2.2	*Education	4.4	25.7% of “A” projects total
2.3	*Transport and communication	3.6	21% of “A” projects total
2.4	*Agriculture	1.9	11.1% of “A” projects total
2.5	*Mines and Industries	0.2	1.2% of “A” projects total
2.6	*All other	0.9	5.5% of “A” projects total
3.0	"B" projects	9.4	Conditionally approved projects, pending availability of local capacity and materials, appropriately trained and qualified human resource
4.0	Total planned TDP expenditure	45.9	approximately equal to K90 million
5.0	Delayed projects	10	

Source: Author's own construction, Table created from Katona (1982: 12-13) and Chileshe (1986: 60)

That mines and industries received only 1.2 percent of the plan allocation reflected government's policy to leave to the private sector capital development of these core sectors. Agriculture's share of public resources also did not increase to a considerable level with Independence. “For how else, could one explain the low priority given to agriculture and the rural sector”, questions Chileshe (1986: 60), “except that revenues from copper continued to comfortably cushion the economy” such that “it is usual to justify such action on the basis of paying more weight on the propulsive force of the mining sector than that of other sectors.”

³⁶ Katona (1982) also records the TDP as mentioning that “for the first phase of the post-independence drive there are some sectors – health is one and housing, for example, another – which have, up to a point, to manage as best as they can ... Their turn, according to Government policy, will come later.”

Further, the TDP promoted uneven line-of-rail biased development, as did previous colonial public expenditure programmes. For example, in social services, out of 5,000 planned urban houses, 2,500 houses went to the Copperbelt and 1,250 houses to Lusaka. Although the TDP allocation to housing was small, it did go a long way in building 3,500 houses annually which, although only half of what was recommended by the Seers Report, did represent commitment by the independent Zambian state to increase provision of social services to the indigenous population, albeit in favour of urban interests.

The TDP did represent a minor departure from colonial public expenditure programmes by allocating some amounts to non-productive sectors, although these were considerably meagre in comparison to what would be required to upscale the standard of living. In considerable measure, however, the expansion of the state architecture by way of allocating to the state more resources for building administrative capacity represented building the post-Independence state upon an inherited and restricted material system of accumulation.

Indeed, much of the thought and scholarship in development planning for Zambia did not originate within the indigenous post-Independence government. This is perhaps understandable given that “at independence ... President Kaunda and his colleagues had been in office for less than two years and had next to no experience of operating a governmental system on a national scale” (Tordoff, 1980b: 7).³⁷ It suggests a lack of capacity within the new Zambian leadership to design home-grown policies for structural transformation based developmentalism. In fact, the recommendations that were taken on board and which consumed substantial public resources were designed to strengthen rather than alter the inherited structure of production. The UN/ECA/FAO report stressed the importance of bridging rural-urban gap, while creating employment to raise living standards (United Nations. Economic

³⁷ During the London talks discussing Rhodesia’s UDI, Hall (1969: 112) reflected on the new Zambian leadership’s reliance upon white advisors and, the former’s failure to discern international relations and government administration: “A clear understanding that Britain would rely entirely on sanctions against Rhodesia had come very slowly to the Cabinet at Lusaka. In June 1965, while in London for the Commonwealth Conference, Kaunda again offered his country as military base — a sign that Zambia did not grasp the realities of British politics. A certain lack of sophistication was understandable, for neither Kaunda nor his colleagues had held government office until 1963; their white advisors tended to be idealistic liberals capable of wishful thinking.”

Commission for Africa and Food and Agriculture Organisation, 1964: 13). These goals were reflected as objectives within the TDP. That these views were captured in government documents is taken as evidence of the attitudes and political objectives of the new leaders (Sindab, 1984; Katona, 1982: 12). To pursue these objectives, the report emphasised that Zambians should take charge of their own institutions and condition their own affairs. Yet, one of the most important observations the report made was the alarming absence of indigenous human resources to staff the state structures: “In no area is Zambia’s heritage of imbalance and contrast so marked as in the field of human development ... It is not too much to say that Zambia in terms of high level manpower is one of the least educated countries in a most under-educated continent” (United Nations. Economic Commission for Africa and Food and Agriculture Organisation, 1964: 91). Consequently, the report endorsed the utilisation of foreign experts to supplement the operations of the state architecture: “The non-Africans in Zambia represent the main source of skilled and educated manpower ... Since the non-African[s] possess much of the skill and education at present lacked by many Africans, they form a very important, though small section of the labor force ... The important economic role of the non-African who has contributed a great deal to the economic development of Zambia in the past, can be expected to continue in the future. Zambia will remain in home of many non-Africans ... [T]heir skills and experience are badly needed” (United Nations. Economic Commission for Africa and Food and Agriculture Organisation, 1964: 93, 98). In order to create a pool of educated Zambians, the report privileged extension of secondary school facilities over technical and vocational skills, but either way, given the dearth of Zambian teachers, this meant importing foreign teachers.

These recommendations were taken on by the new political leadership without any opposition. van Arkadie (1973: 98) notes that advice from the UN commission to Zambia’s post-Independence state “emphasise[d] ...growth and structural change conceived in terms of change in the industrial structure,” yet, “paradox[ically] [and in practice] ... adopting policies aimed to transform the industrial structure through mobilisation of foreign capital, the introduction of modern technology and the hiring of foreign management, [created] a new pattern of dependence.” A lack of opposition by the post-Independence African state to these policies, and a failure to explore alternative thought, is explained by van Arkadie by referring to priority setting and

preoccupation of the post-Independence state: “The initial tasks facing the political leadership revolved around meeting the difficult challenge of taking over and staffing the colonial state. The mechanics of the transfer, plus the need to expand the educational system, were of highest priority” (van Arkadie, 1973: 98). This suggests that the foundation for structural transformation through local capacity was not only weak, but it was something to be learnt and executed over time.

Similarly, Sindab, 1984 (99-100) was critical of UN recommendations and the way in which they were readily adopted without questioning their relevance for the post-Independence socioeconomic conditions; she argued that “no evidence exists that the new rulers explored alternative means of producing an indigenous source of skilled labor by establishing a system which would produce skills in a short period of time and shorten dependency on expatriates”, while insisting that the “social and economic impact[s]” of hiring expatriates “were not discussed at all.” Sindab also suggested that expansion of secondary school facilities would enable the political leadership to reap large political dividends hence it is easy to see why they did not oppose such a policy move. While Sindab is correct in her analysis, she does not establish the inherited institutional mechanism and dynamic as the underlying explanatory factor which muted debate, dialogue and alternative thought. Within the context of the inherited institutional structures and powers, once a decision had been made by the political leadership, specifically, the President, there was no room to entertain alternative thought.

Appendix 5.1 shows actual educational attainment by race and occupation, which demonstrates the scale of influence of, and dependence upon, expatriates even by 1966. In nominal terms, and in total, expatriates only accounted for 12 percent of total employment, but such aggregate statistics hide the variations across sectors, and nature of employment occupied by expatriates. Expatriates were active in top positions in virtually all areas of the economy, especially in profession/technical-intensive occupations. For example, all of the 327 electrical and mechanical engineers were expatriates, while 99.8 percent of the 498 mining technicians were expatriates. Possessing the lowest education, Africans were relegated to low-paying jobs, hence in some way perpetuating race-based wage discrimination. Also, as Sindab (1984: 101) wondered, “[t]here was no justification for maintaining many of the

underqualified settlers in their positions when Africans were being denied opportunities because of their lack of education.” It is worth mentioning, however, that the deployment of the expatriates’ skills was not fashioned to counter the structure of production but rather to maintain and strengthen the existing pillars of the economy. Consequently, the interests of expatriates became firmly bound to a particular physical economic base which supported their livelihoods.

Reflections on statistics illustrating the stock of skills and education prevailing in Zambia during the nascent years post-Independence do not say much about the economy except to highlight the deficiency of skills as experienced by the Zambian economy. What is more important and useful for this thesis is to uncover how this impacted upon national development policy making and implementation.

The UN/ECA/FAO report’s recommendation to make use of expatriates for post-Independence development was based on the assumption that, left to themselves, the Africans did not possess the capacity to manage their own affairs. Consequently, the report fiercely made a case for expatriates: “The economy will need at the very least, the present number of non-Africans until 1970. Unless this number is maintained, growth may fall short of objectives” (United Nations. Economic Commission for Africa and Food and Agriculture Organisation, 1964: 117), without mentioning how they should be used to assist Zambia to attain an integrated structure of production.

The political ramifications of hiring expatriates were immense, but their skills, as suggested by external consultants, were gravely needed, especially to give meaning to Independence, and, hence, rationalise the political power of the new African leaders. Political populism and its contests which arose remained restricted in scope because they served to counter the race-based income gaps, while strategizing on replacing expatriates with Africans without due regard to how such motivations would in reality fail to deal with a lack of structural transformation as the underlying problem for Zambia’s economy.

This discussion on expatriates is important because it serves to support the argument that absence of local skills and therefore dependence upon expatriates right from the beginning kept the production structure narrow, while limiting accompanying political

discourse. The presence of expatriates had far-reaching consequences for the understanding of development and, measure of living standards and progress. Importantly, these contradictions all played out to deflect efforts away from structural transformation, partly by limiting and narrowing accumulation and the political discourse around it.

Shortages of skilled and educated personnel led to competitive behaviour among employers, offering a myriad of incentives to attract and retain workers. But the acute shortages in skills meant that employers did little to influence the growth of labour supply nor to alter the distribution of skills. Whilst competitive practices by employers pushed wages upwards, the government also contributed to this upward wage pressure as an instrument to reward political support.

Although economic growth was reasonably high in the first half-decade post-Independence, Jolly (1971) argues that it should have been higher if there was a higher stock of skills and education. Lack of structural change and distorted growth, although seemingly quantitatively impressive, can also be explained in terms of the dearth of skilled personnel. On the one hand, a deficit in skills can permeate the domains of quality, quantity, and cost of production. Jolly (1971: 46) pointed to “unskilled operation and inadequate maintenance” as limiting the potential output from a capital stock. The rapid depreciation of agricultural vehicles and other equipment are seen to largely be explained by a deficit in maintenance and operational skills. But also, within the mining sector, inappropriate utilisation of machinery and other productive equipment curtailed the machine lifespan by about 60 percent and— “reduced the expected life of some underground machinery from 10 to 4 years” (Jolly, 1971: 47).

On the other hand, shortages of skills impacted upon the structure of the economy and consequently the pattern of growth. By allocating skilled personnel in urban centres, this robbed rural areas of skills necessary to support growth. Hence, geographical regional development disparities were reinforced by the deployment and utilisation of skilled personnel. At the level of programme and project implementation, urban projects, when compared to rural projects, often received more funding and skilled personnel, and were finalised in a shorter space of time. But this is not to say skills

shortages were the main drivers of such regional differences, but rather that they served to reinforce and aggravate an already harrowing situation.

Due to skills deficits, it was necessary to rely upon expatriates, hence by importing skilled and trained personnel as expatriates, Zambians also imported the lifestyles and patterns of living of these people. This importation of skills should also be considered as perpetuation of pre-Independence standards of work and productivity since, in part, after Independence, retaining foreign experts could also be seen as importing their skills. Expatriates were paid handsomely—23 times more than Zambia’s per capita income, and about tenfold more than people of similar skills in advanced nations—and these incomes financed lavish lifestyles. Arguably, the black African dominant class viewed the expatriate class with envy and, consequently, the former formed their own lifestyle expectations from the latter. That is, development (economic progress) in terms of living standards came to be defined by consumption patterns of the white settler and expatriate community. In seeing this as a result of skills shortages, one must reflect on why expatriates needed to be imported in the first place.

However, these contradictions of skills and education on the Zambian economy must not be viewed in isolation. As part of a broader system, they impacted on development policy and, subsequently, the nature of the post-Independence system which created a restricted form of capital accumulation.

5.6 Ideology and developmentalism under the First National Development Plan, 1966-1970

In the introduction of the Zambia’s 1966-1970 First National Development Plan (FNDP),³⁸ President Kaunda commented that it was “tangible proof of my, and my Government’s, intention to provide increased prosperity and higher standards of living for every Zambian citizen no matter whether he lives in an urban or rural area.” Within the FNDP, and reflecting the lopsided urban-biased inherited economy, “greater emphasis [was to be] placed on the rural areas than ever before.” Kaunda’s intentions were clear: even development was of prime importance, but structural transformation

³⁸ Kaunda’s views are captured in the introduction of the FNDP pages v-vi

particularly through industrialisation was the essential mechanism through which broad-based developmentalism would be pursued.

Kaunda recognised Zambia's economic and social structure as one that reflected the nature of colonial administration which restricted social and economic development to only a few privileged white residents much to the detriment of the native population. As Chapter Four touched upon, so low were indigenous education levels that only about 100 black Zambians had attained university education by Independence. For Kaunda, this meant that "only a handful of people had anything like sufficient training to enable them to take their place in the service of the Government." In Chapter Four it was shown that Zambia's transport system and infrastructure were skewed towards the South, and that this was an outcome of the interplay of the state and societal interests. Thus, not only did this reflect dependence upon the South, it also reflected the socio-political and economic interests that underlay the Zambian economy. For example, that "all ... supplies of petrol and oil came ... by the southern route as did the coal for [the] mining industry", meant that there were interests entrenched in businesses and government which were served by this arrangement. Kaunda also recognised that not only was the Zambian economy linked to the South by supplies of inputs to Zambia's productive sectors, but also by provision from the South of even basic manufactured daily-use consumer goods. Historically, as developed in Chapter Four, infrastructural development was skewed to serve the interests of the economic and political base within Zambia but bound to the South.

The trajectory of the post-Independence system of accumulation could already be gleaned from Kaunda's remarks that developmentalism from then would be "a frontal attack on these inherited structures." For example, that it was undesirable to import consumer goods was clear, but for whom was not something that was adequately incorporated into development planning aimed at evening out prosperity. Kaunda himself saw "structural in the transport sector" in a restricted sense, as the rerouting of transport and trade links from the South towards East Africa through development of road and railway infrastructure "linking Zambia and Tanzania." In what ways, and through which institutional mechanisms, this is meant to foster and augment development of a productive and integrated economic structure is unsatisfactorily explored. Simply providing funds for development of a project, as DSP argues, does

not account for success; other equally important mechanisms for utilising economically such funds and erecting with them a competitive and integrated productive structure are fundamental for structural transformation. This involves transformation of the state institutional structures.

Further, the values and interests of the post-Independence political leadership can be extracted from Kaunda's remarks: "A constant preoccupation of my Government is the disparity in the standard of living between the rural masses and the comparatively limited urban and industrial sector." Kaunda was clearly concerned about the economic and social disadvantages of the rural population. Consequently, providing more funds for investment in less privileged areas would be seen as an effort to confront the polarity of developmentalism.

In this thesis, I interpret the post-Independence Zambia's system of accumulation as a restricted response to inherited structures through reorganisation rather than transformation of the institutional structures which would have been required to foster broad-based developmental structural transformation of the economy. As a system of accumulation, developmentalism is seen as the interaction of interests lodged in the state and society, and the material base underpinning this interaction.

5.7 The First National Development Plan, 1966-1970

The FNDP was conceived as a documentation of strategies, "a statement of intention", to confront the contradictions of colonial developmentalism. "A new chapter began to emerge with the preparations for Zambia's First National Development Plan," argues Chileshe (1986: 60), "a definite departure from previous patterns, not so much in terms of mechanisms to be used, but rather in terms of the objectives sought." In Chapter Four, it was shown that prior to Zambia's joining of the Federation of Rhodesia and Nyasaland in 1953, the socio-political and economic interests which underpinned developmentalism ensured that favourable living standards and conditions were developed for the white settlers, with almost complete disregard for Africans. But it was the ten-year membership in the Federation up to 1963 which reinforced and strengthened a system of accumulation that pillaged the Zambian economy of investable surplus. Up to £70 million of revenue and foreign exchange is estimated to

have accrued to Southern Rhodesia from the wealth created within Northern Rhodesia (Zambia Office of National Development and Planning, 1966: 1).

In addition, the limited industrial development which had taken place in Zambia, especially during the Federation, was considerably based upon protection and advancement of economic interests of the South. “Such industries as existed at Independence,” argued the Zambia Office of National Development and Planning (1966: 1) in the FNDP, “were often subsidiaries of Rhodesian firms and while an important market exists for the product of these manufacturing industries, such development as had occurred in Zambia [had] been necessarily ... a by-product to operations whose primary financial and managerial interests [were] in Rhodesia.” Although the FNDP was in many ways a more guided approach to confront the contradictions of the colonial legacy, the South-based economic interests were well entrenched in the Zambian economy by Independence, and, because the preoccupation of the post-Independence leadership was aimed at displacing these economic interests, the response was restricted in scope and imagination. Developmentalism did not see structural transformation in its wider context. Besides, the geopolitical tension with the South placed urgency upon the Zambian leadership to see the South as a hostile economic partner. Hence, in this sense, diverting trade away from the South restricted developmentalism because progress towards structural transformation came to be seen in terms of recalibrating the economy away from the South. An example above has already been given in terms of how Kaunda interpreted structural change of the transport sector as the redirection of transport infrastructure and trade in favour of East Africa.

Acknowledging the difficulty of using the existing industries to order the affairs of development, in the FNDP, the Zambia Office of National Development and Planning (1966: 1) contended that “it is hard to persuade such firms to find new sources of imports and use new trade routes” because they were bound to the South and hence “an extrapolation of the economy of another country.” Consequently, structural transformation came to be envisioned and defined in terms of “utilisation of local materials, the training of local people, and the orientation of industrial production to specifically Zambian needs ... established from scratch.” Industrial production and development was to be restricted to what was required by Zambians, such that despite

acknowledging the rural-urban divide, it was never fully explored which sections of Zambian society would be served by such development, and whether structural transformation would be better served by the kinds of investments to be undertaken as substitutes of capital tied to Rhodesia. Instead, erecting new businesses which would source their inputs (and other imports) from elsewhere other than the South would be an index of economic progress. In fact, it will be shown below that this is precisely how industrial development progressed. In addition, it must be emphasised that viewing developmentalism this way reflected the values and interests of the political leadership but, in practice, progressing this way added to Zambian society a class of socio-political and economic interests which came to depend upon the material base erected out of the values of the governing class.

The inherited economy ensured that too few Zambians were educated or had gained vocational skills limiting the developmental options for the post-Independence leadership. Consequently, it was argued in the FNDP that Zambia would need to bank on the managerial and technical services of expatriates. Nevertheless, the government had hoped that replacing these expatriates with Zambians would establish a local cadre of agents for development. However, expatriates were not only expensive to hire but their salaries and way of life became the standard upon which emerging Zambians viewed their own progress (Sindab, 1984). In other words, Zambians substituting these expatriates became a concentration of interests which accepted a lifestyle at least as good as the expatriates they replaced. Such hiring practices were unsuitable for local conditions because resources meant for development elsewhere were increasingly captured by this concentration of interests.

Further, the FNDP prioritised and rationalised the development of certain projects on the basis of endowment and by labelling them strategic. These included rerouting communication channels for national security and “increased self-sufficiency in certain strategic supplies such as cement, iron and steel, and fertiliser”, as well as “rapid development of independent sources of energy (electricity, coal and oil) and also “greatly diversified sources of supplies of raw material and consumer goods” (Zambia Office of National Development and Planning, 1966: 3). Clearly, the political leadership through the development plans determined the direction of accumulation but less so the specific form this accumulation would take and how this would

recalibrate the economy towards sustained structural change. That accumulation should proceed that way can be interpreted as a political interest given the weak political and economic base of the post-Independence leadership (Sindab, 1984), but it also created and/or extended a material base which acted as site of concentration of other interests. Also, such developments were part of the wider copper-complex because they were pursued on the basis of their importance to the development of the copper industry.

For industrial diversification, the strategy of import-substitution was chosen such that “manufacturing in Zambia those products which are feasible as substitutes for imported products” was the basis upon which industrial development would be pursued. In practice, the FNDP prioritised “firstly ... largescale industries, [such as] nitrogenous fertiliser, and sugar”, and then, “secondly ... a range of consumer goods [previously] imported.” While the ideas of the political leadership may have restricted the direction of accumulation and choice of industrial projects to those that only served their own interests and those of the urban salaried class, the thought behind the choosing of industrial projects was to a large extent influenced by geopolitical tensions with the South within the context of UDI. The declaration of independence unilaterally by Rhodesia from Britain in 1965 threatened Zambia’s own economic development prospects (Burdette, 1988; Chileshe, 1986; Martin, 1972). It is worth mentioning that the response to UDI drew the Zambian economy into a system of accumulation which precluded structural transformation. “The manufacturing sector at the time concentrated on import substitution,” argued Chileshe (1986: 62), “because of the need to cope with the effects of the UDI.” By threatening supplies of food, inputs for industry and other essential imports, UDI forced the Zambian leadership to use import-substitution policy in a restricted manner – replacing with local production goods previously imported, especially those originating from the South.

Fry (1980: 46) argued that UDI enabled the Zambian government to erect barriers to block imports from Rhodesia, a strategy which eventually assisted Zambia to create its own industries: “UDI, by excluding Rhodesian products from the Zambian market, granted infant Zambian industries some protection from their main rivals (this may help to explain why the manufacturing sector performed better than FNDP predicted).” This suggests that the intervention of the state in restricting certain

imports was effective in aiding the creation and expansion of local industries. However, it leaves unexplained what kinds of industries were created, both in terms of technology and type of output. Also it does not address which agents within Zambian industries were responsible for, and benefitted from, accumulation.

Fundamentally, the creation of industries did not follow from a policy which sought coordinated investments to underpin an integrated production structure. As Chileshe (1986: 62) further argued, “[t]he pattern of import substitution or industrialization that emerged in the Zambian context ... due to pressure brought to bear on the economy as a direct consequence of UDI ... failed to provide for maximization of backward and forward linkages in the economy. Production by the respective industries also did not provide for horizontal and vertical integration.” Within the context of absence of local skills, part of the outcome of UDI was a particular form of accumulation which bound the Zambian economy deeper into dependence upon foreign capital and skills (van Arkadie, 1973).

Although this will be discussed in more detail in Chapter Seven, it is worth mentioning here that the interests lodged in the state architecture which formulated and implemented these development plans and projects did disproportionately benefit from these developments relative to the larger disadvantaged population (Bomsel, 1992).

The FNDP’s objective aimed at promoting diversification of the economy was the first of the eight main objectives, but was itself constrained by its own construction. It read as follows:

“To diversify the economy so that the copper industry is not the only main employer in the economy, and so that a greater proportion of domestic demand is satisfied by domestic production from a large industrial base” (Zambia Office of National Development and Planning, 1966: 5).

This objective seems to suggest that diversification was aimed less to promote an integrated structure of production than to provide employment and meet local demand skewed in favour of the urbanised and salaried population. To stretch the argument

further, it can be suggested that the political leadership charged with giving inspiration and direction, and the bureaucratic class responsible for formulating and implementing, development policy, expressed their values and interests in the plan, particularly in terms of the ways in which they understood development. Therefore, progress on diversification came to be seen in terms of growth of value of industrial output and employment figures. As the FNDP noted, “[t]he aim of diversifying the economy ... means rather faster rates of growth for the sectors of the economy other than mining” (Zambia Office of National Development and Planning, 1966: 5). Yet, “for the great majority of African political elite in Zambia ... development meant schools, clinics, shoes for the people, and so forth”, reflecting the themes of the political discourse influenced by the African-European value conflict, “primarily concerning nationalism and development” (Scarritt, 1971: 41). This suggests the pervasive influence of Europeans on the post-Independence political discourse; African political leaders thus were focused more on quenching the conflict which arose when comparisons were made on living standards between whites and blacks. Consequently, development policy was aimed at sustaining the existing physical economic base while making efforts to redistribute national wealth by provision of social services.

In its assessment of the scope for industrial development in Zambia, the FNDP decries developmentalism under the Federation which is seen as having favoured the South at the expense of Zambia: “Under Federation capital-formation generated by income from the proceeds of copper mining in the then Northern Rhodesia was used to assist and encourage the creation of secondary industries in Southern Rhodesia, as a conscious economic policy. The market for these secondary industries depended, and still depends, heavily on Zambia and Malawi” (Zambia Office of National Development and Planning, 1966: 33). Consequently, import-substitution as the policy basis for industrialising Zambia was set in motion mainly to replace South-based imports, without necessarily questioning whether such industries would fit local post-Independence conditions aimed at altering the inherited pattern/structure of production. In addition, although in part understandable due to Zambia’s appalling human resource situation at Independence, little thought went into determining what locally-based institutional mechanisms would ensure that adequate learning of foreign technology took place in Zambia. Instead, the imagination and scope for

industrialisation was restricted by the political leadership's preoccupation to replace goods from the South with locally-produced ones.

The post-Independence Zambian state restricted its role in the economy to one of "provid[ing] encouragement and assistance to the private industrial sector and in certain cases, to undertake direct responsibilities in establishing new industries" (Zambia Office of National Development and Planning, 1966: 33). Consequently, public capital investment was seen as a way to stimulate industrial activity via its upward pressure on incomes, and, subsequently, increased demand for a range of consumer goods including food items. Industrial development was restricted by the imagination of the FNDP in that it was to be used as a vehicle to reduce imports of consumer goods rather than the means to create an integrated structure of production. "Massive capital investments", affirmed the Zambia Office of National Development and Planning (1966: 33) in the FNDP, "[would] generate increased incomes and markets for food supplies and consumer goods. It is here that industrial development will play an important part in preventing a rapid expansion of imports of consumer as opposed to capital goods or raw materials." In other words, industrial development was seen as one which was to be skewed in favour of the existing pattern of demand. Hence, in DSP language, the Zambian state followed the market rather than led it. This must be contrasted with the DSP experiences covered in Chapter Three, and particularly the experience of Taiwan as argued by Wade (1990) in his governing the market schema, wherein the Taiwanese state in several instances is seen to have led rather than followed the market.

The Zambia Office of National Development and Planning (1966: 33) in the FNDP goes further by arguing that making locally consumer goods previously imported from the South was the overarching goal of industrial development: "the aim of the industrial programme to increase progressively output for consumer goods especially those at present imported from Rhodesia and South Africa so as to obtain a substantial degree of self-sufficiency between 1970-1975." Yet, as Chapter Four demonstrated, especially as argued by Baldwin (1966: 184) for the pre-Independence Zambian economy, the imports from the South served a very small section of society composed

mainly of Europeans.³⁹ Baldwin also argued that such expenditure habits were a direct result of the way in which the Zambian economy developed, particularly the copper production-induced income inequality, which concentrated and confined income to a very small section of the population and overall keeping low the ratio of total wages to gross output; this inhibited industrial development by constricting the level of demand. Thus, industrial development which focused on locally producing previously imported goods did not account for whom these goods were imported and whether producing them locally would fit local requirements for structural transformation. Consequently, and as will be developed further below, such industrial development would serve more to strengthen than alter the inherited distorted pattern of production. The main departure from the colonial legacy was simply that previously imported goods were to be produced locally. However, the perpetuation of the inherited system of accumulation is seen in the continued dependence upon copper because of the high import content and absence of export capacity of local production, as well as the kinds of interests served by industrialisation which lodged themselves mainly in the non-productive state administrative architecture. These points are worth mentioning here but they are developed in more detail below.

It was, however, made clear within the FNDP that geopolitical considerations had fundamentally influenced the way in which industrialisation was conceived and pursued. Given the political tension following UDI, which are discussed in detail below, the Zambian state placed self-sufficiency at the centre of industrial development. The kinds of largescale infrastructural projects redirecting Zambia's trade routes particularly following UDI were aimed more at altering the sources of inputs rather than the altering the domestic structure of local production. Local production, interpreted as industrial development, did result from this endeavour but, in practice, it was meant to reinforce the physical economic base upon which the Zambian economy was built. Infrastructural developments to reroute Zambia's trade, for example, led to an expansion in the construction sector which in turn, in the face of geopolitical tensions with the South, caused the government to see "self-sufficiency

³⁹ Baldwin (1966: 184) argued that "[t]he highly paid European sector followed an expenditure pattern similar to that found in rich, developed countries. Yet the local demand by Europeans for many of the items in the budgets was too small to support local industry. The import content of consumption expenditure by Europeans was therefore high. Africans, on the other hand, did not possess the spending power needed to follow the European spending pattern."

in cement” as an urgent matter. Further, “energy requirements”, given rapid post-Independence expansion and mineral development, compelled the state to seek “establishment of a pipeline from the Indian Ocean, also because “[p]olitical considerations alone necessitate[d] means of supply of petroleum products on which Zambia [could] rely in all circumstances” (Zambia Office of National Development and Planning, 1966: 33).

Additionally, the FNDP, reflecting on the impact of geopolitical tension with the South, prioritised certain development projects on the basis of national importance. On careful investigation, it appears these projects were aimed to sustain the existing physical economic base of the system of accumulation. Viewed differently, it can be argued that circumstances such as UDI which threatened the material base of the dominant interests (in this case, those of the political leadership and their advisers) caused them to order development and prioritise projects which conserved the economic base supporting them. This inhibited structural transformation by reinforcing the inherited structure of production while binding the dominant interests to the restricted material/economic base upon which Zambia’s economy was built.

The FNDP succinctly captures the political necessity underpinning the choice of industrial projects:

“The Unilateral Declaration of Independence in Southern Rhodesia clearly indicated Zambia could no longer be dependent upon the supplies of basic industrial materials from sources in Southern Africa. This has elevated the iron and steel, the fertiliser and oil pipeline into matters of national importance. Adequate capital funds have been provided in the public sector for the two projects. The oil pipeline which should be in operation in 1969, will be carried out by private interests at a cost approximately £20 million” (Zambia Office of National Development and Planning, 1966: 35).

The fifteen major industrial projects at the beginning of the FNDP are given in the Table 5-7 Fifteen Major FNDP Industrial Projects, below:

Table 5-7 Fifteen Major FNDP Industrial Projects

	Name of industrial project	Status (and comment) at beginning of FNDP
1	Salt glazed pipes	Already being implemented
2	Brick factory	
3	Sugar industry	
4	Chilanga cement section	
5	Ndola cement	Machinery or plant is about to or already ordered.
6	Textile industry	
7	Bag manufacturing and sacking industry	
8	Oil pipeline	
9	Nitrogenous fertiliser factory	Receiving high priority and to be implemented as soon as possible.
10	Iron and steel project	
11	Explosives project	
12	Pulp and paper industry	To be deferred to 1970 onwards pending expansion in education and literacy, and industrial packaging demand
13	Coal project	deposits of good quality coal discovered.
14-15	Not specified	Pending demand and supply factors for the date of their implementation.

Source: FNDP, p35

Another way in which industrial development was restricted in imagination was the way in which the FNDP emphasised the requirement for local raw materials to feed into new industrial projects. Essentially, this meant that absence of raw materials would deprioritise an industrial project requiring them. For example, the development of the iron and steel industry was in 1966 an optimistic endeavour because of the discovery of good quality coal and research and development dedicated to investigating the state of iron ore deposits. The idea of availability of local raw material defining and influencing the emergence of industrial projects proved crucial for the FNDP. For instance, the salt glazed pipe and brick factory already being implemented at the beginning of the FNDP relied on clay deposits in Kitwe. This marks a crucial departure from the way industrialisation in the DSP was imagined.

For South Korea, absence of local ore and the existence of a highly competitive nearby competitor, Japan, did not prohibit the iron and steel industry from emerging and flourishing. This suggests that industrialisation can be pursued through wide-ranging mixes of strategies and coordinated projects profiting from economies of scope and spread effects (Chang, 1994; Amsden, 1989).

To ensure growth of non-mining sectors, the FNDP aimed at increasing capital investment as a proportion of GDP. During the TDP, in 1965, this share was increased to 20 percent, but was less than the 36 percent peak attained in 1957. However, the FNDP had anticipated a reversal in the relative roles of the private and public sectors in terms of contribution to total investment. Whereas in the Independence year the private sector accounted for 65.6 percent of total investment with the public sector assuming the remainder, the FNDP envisaged an increased role of the government in that 65.7 percent of total capital investment was expected to come from the public sector. Nevertheless, the details of public investment reveal that the expenditure patterns were aimed at building a local economic base which would reinforce and deepen the inherited material base of the system of accumulation. For example, infrastructure and transport were favoured over agriculture and land. Additionally, although the mines received a token amount of about £6m, development of other sectors was fashioned to support mineral development: for instance, owing to the fact that the mines absorbed well over two-thirds of the country's total electricity consumption, electricity development which received an allocation of over £26 million served to support mineral development.

Table 5-8 Public Investment, 1966-1970

	Amount (£'m)	% of sub-total	% of grand total
I. INFRASTRUCTURE AND TRANSPORT			
Housing and Construction	43.158	40.0	15.3
Roads	34.881	32.3	12.4
Railways	9.752	9.0	3.5
Aerodromes	7.549	7.0	2.7
Telecommunications	6.460	6.0	2.3
Meteorology	0.374	0.3	0.1
Supporting Services	5.655	5.2	2.0
Sub-total	107.829	100.0	38.3
II. AGRICULTURE AND LANDS			
Crop and Livestock	34.486	79.3	12.2
Forestry	1.341	3.1	0.5
Game and Fisheries	3.312	7.6	1.2
Research	2.786	6.4	1.0
Other	1.583	3.6	0.6
Sub-total	43.508	100.0	15.4
III. INDUSTRY AND MINES			
Industrial Development	25.029	41.4	8.9
Mines	6.057	10.0	2.1
Tourism	2.731	4.5	1.0
Electricity	26.686	44.1	9.5
Sub-total	60.503	100.0	21.5
IV. SOCIAL INFRASTRUCTURE			
Health	9.226	18.1	3.3
Education	39.767	77.9	14.1
Labour and Social Welfare	2.070	4.1	0.7
Sub-total	51.063	100.0	18.1
V. OTHER			
Office of the President	14.741	77.8	5.2
Secretary to the Cabinet	0.554	2.9	0.2
Office of National Development and Planning	0.605	3.2	0.2
Foreign Affairs	0.310	1.6	0.1
Justice	0.410	2.2	0.1
National Assembly	0.271	1.4	0.1
Home Affairs	1.550	8.2	0.5
Finance	0.507	2.7	0.2
Sub-total	18.948	100.0	6.7
Grand Total	281.851		100.0

Source: FNDP Table III, p12

During the FNDP, rural development, conditional upon absorptive capacity of the rural areas, was to be “achieved principally through activities in the Agricultural and Lands Sector – through raising the productivity of the individual and through the introduction of State-managed enterprises” (Zambia Office of National Development and Planning, 1966: 7). In addition, rural development was envisioned to be supported by a particular form of agriculture-based manufacturing development which, with the benefit of hindsight, did not come to fruition despite rapid industrialisation by the end of the FNDP. To redress the rural-urban imbalance, rural areas were expected to receive total capital investment of £179 million between 1966 and 1970, £76 million larger than the £103 million allocated to urban areas. Because the geographical location of the capital project determined whether it would be regarded as rural or urban, the FNDP recognised the difficulty this imposed in practice. While the Kafue Hydro-Electric Scheme, one of the single largest capital projects, was regarded as rural-based, its benefits were to be captured disproportionately more by urban development. In other words, rural development by resource allocation did not adequately confront the rural-urban disparity both in design and in practice. Additionally, the level of public investment for ‘Agriculture and Lands’ was only 15.4 percent of the total public investment FNDP, a proportion equivalent to ‘Housing and Construction’ urban-biased projects.

To finance economic development during the FNDP, the Zambian government relied on domestic resources, particularly revenue from the copper sector. The composition of recurrent revenue as below substantiates this.

Table 5-9 Total recurrent revenues, 1965-66 and projections for 1966-1970

	1965-66		1966-70	
	£'m	% of Total	£'m	% of Total
Income Tax:				
(a) Copper companies	26.5	24.8	131.4	25.0
(b) Personal and other companies	13.5	12.6	58.8	11.2
Customs and Excise	12.4	11.6	65.9	12.6
Mineral Royalties and Export Taxes	41.2	38.5	193.9	36.9
Other	13.4	12.5	74.8	14.3
Total	107	100.0	524.8	100.0

Source: FNDP Table V, p14

Just at the beginning of the FNDP, copper-based revenue accounted for over 63 percent of total recurrent revenue, a share which the government roughly intended to maintain right up the end of the FNDP. By implication, revenue for the state from non-mining activities was less important not just in its direct contribution to state coffers but that the economic activities on which they were based depended heavily on the profitable operations of the copper sector.

The FNDP did recognise absence of Zambian entrepreneurs, and presence of expatriate-owned and -run business interests. Thus, to create a cadre of indigenous-owned and managed businesses, the Zambian state opted to provide loans through its Loan Capital Programme to local entrepreneurs. This represented a departure from colonial administration, and a decisive effort to confront and alter the colonial legacy. While this move was commendable, little attention was paid to the institutional mechanisms and systems to ensure that once funds were provided to kick-start indigenous-owned and -controlled businesses, default rates were kept to a minimum. Such mechanisms would have ensured that local entrepreneurs were given adequate training in business management skills while creating an environment through state intervention to safeguard and promote the interests of these businesses. However, because the FNDP argued that “[t]raining for industry is more efficiently carried out within the industry itself, and not by external Government-sponsored training institutes” (Zambia Office of National Development and Planning, 1966: 34), it confined such training only to those within the existing businesses. The post-Independence Zambian government opted for a policy to change the attitudes of foreign capitalists aimed at promotion of acquisition of skills by more Zambians in existing businesses while ensuring also that Zambian workers progressed in the ranks and hierarchy of the existing companies. Consequently, the state vowed to assist companies offering training opportunities for Zambians.

1971 stood as the gap between the completion of the FNDP and start of the SNDP. During this year, the government committed capital expenditure amounting to K172.6 million as “consolidation of the gains already achieved by the country” (Ministry of Development Planning and National Guidance, 1971: vii). Therefore, no major development projects to broaden efforts for structural transformation were pursued

during this period; instead public expenditure implied reinforcement of the existing system of accumulation.

5.8 Performance of the economy and selected developments during the FNDP, 1966-1970

Development projects pursued during the fledgling post-Independence years deepened the inherited system of accumulation which depended upon the prosperity of the copper industry. Structural transformation was hindered by the kinds and nature of developmental projects the state pursued. First, these developmental projects strengthened Zambia's inherited system of accumulation, binding it to external events and a fortuitous copper industry, which, in practice, and with the benefit of hindsight, weakened the trajectory of the Zambian economy. The economic growth that did take place reflected the economic boom which enabled the Zambian state to afford a series of developmental projects, but this growth did not imply strengthening of the economy via an integrated structure of production but, rather, it implied localisation of interests which were hitherto imported.

Between 1965-1970, Zambia witnessed substantial economic growth. In real terms, the economy grew by 83 percent during this period, representing an annual rate of growth of over 10 percent. The SNDP acknowledged that "[a]bout half of this growth in real GDP resulted from very favourable terms of trade which the economy enjoyed due to high copper prices" (Ministry of Development Planning and National Guidance, 1971: 1). Such favourable economic circumstances in the copper sector enabled the country to afford wide-ranging economic and social infrastructural development projects and programmes. During the colonial era, particularly the five years just before Independence (1960-1964), annual public expenditure averaged around K92 million, just slightly over one fifth of GDP. Between 1967 and 1968, the pre-Independence amount was dwarfed when 38 percent of GDP amounting to K362 million was spent as public investment. This impressive record appears to lend credence to the post-Independence government's claim of commitment to national development.

Table 5-10 Sources of Government Revenue during FNDP, 1966-1970

	Amount (K' million)	% of total
1. Source of Revenue:		
(a) Income Tax, Mineral Royalties and Copper Export Tax	1136	63.8
(b) Customs and Excise	227	12.7
(c) Other	193	10.8
Sub-total	1556	87.4
2. Capital Resources		
(a) Domestic loans	78	4.4
(b) External Loans and Aid	105	5.9
(c) Others	42	2.4
Sub-total	225	12.6
Grand Total	1781	100.0

Source: FNDP

Government resources during FNDP demonstrate the predominance of copper-based and -induced activities. From the total of K1,556 million of total revenue resources, copper-based and -induced activities in the form of mineral royalties, export tax and income tax, including a portion of customs and excise tax, constituted well above two thirds of total government resources. While the SNDP envisaged diversification in the sources of government revenues, particularly on account of expansion of productive activities which witnessed customs and excise share in total resources rise from 9 percent in 1966 to 16 percent in 1970, the economic activities underpinning this source of revenue remained totally tied to the fortunes of the copper industry.

Substantial progress had been made in education by the end of the FNDP, this marking a critical departure from the situation at Independence. By Independence, only 100 and 1,200 Zambians boasted university degrees and secondary school education, respectively. By 1970, an additional 6,000 Zambians held secondary school certificates, with 1,200 students registered at the University of Zambia. These improvements, though praiseworthy, were far from what was required to effectively indigenise labour. Nevertheless, the growth in secondary education, though a

profitable political move, can be seen to reflect the advice given by UN consultants to the Zambian post-Independence government.

Further, the indigenous government's commitment to its people is evidenced by examining employment figures. While salaried employment remained generally unchanged between 1954 and 1964 at about 267,000 workers, by 1970, 390,000 salaried jobs existed, representing 46 percent growth of wage employment.

In 1969, physical national output underperformed but the rise in copper prices in the same year worked as a counterweight. However, in 1970, following two major events (the Mufulira mine disaster and the 1969 deflationary budget), Zambia's economy contracted by about three percent. Overall, the economy of Zambia grew by about 10.6 percent per annum owing to favourable copper prices rather than physical accumulation despite wide-ranging economic and social infrastructural development. This reflected the country's continued dependence upon the copper sector, and in the language in this thesis, reliance upon the inherited system of accumulation. The dependence upon copper is seen also particularly from the assumptions underlying the projections. For instance, the FNDP estimates assumed that copper prices would remain stable throughout the period, averaging around £300, yet so favourable were terms of trade that between mid-1969 and mid-1970s alone, copper prices averaged K1,038 (roughly over £700) per metric ton. This fortuitous condition imposed by external circumstances cushioned the in-country production difficulties faced by Zambia. In 1970, the collapse of a mine at Mufulira, frequently referred to as the Mufulira mine disaster, caused some 89 deaths of mineworkers, but it also reduced copper production for the country by between one sixth and one fifth, since the Mufulira mine made an annual contribution of about 190,000 tonnes (Curry, 1989: 324; Burdette, 1984: 37).

Discounting the impact on the economy from favourable copper prices, the SNDP argued that "rapid increases in manufacturing would have been offset by falls in mining and agriculture", which reduced annual GDP growth and physical output from the actual realised average rate of 10.6 percent to only 6 percent for the 1966 to 1970 period, considerably lower than the 11.7 percent FNDP target (Ministry of Development Planning and National Guidance, 1971: 2). Copper price increases

explained much of Zambia's impressive economic record during the first seven years post-Independence, but the developments which took place outside of copper mining, those which the governing class had hoped would launch the economy into self-sufficiency and underpin subsequent economic development, such as infrastructural and industrial development, tied the Zambian economy tighter to the fortunes of the copper industry and external conditions influencing the demand for copper in particular. This is seen in the kinds of development projects and choice of technology adopted as specific features and forms of development. However, the role of agents in development is seen in who made the decisions regarding project choice, its physical location and what kind of technology to use, and whether these decisions depart from, or are integrated into, the national development agenda. These latter issues are explored in more detail below.

Even if removing the effect of favourable terms of trade, the S NDP regarded Zambia's economic performance under FN DP as satisfactory because whatever developments took place, these must be placed within the broader context of three main challenges: firstly, the disturbingly low levels of education for the indigenous population; secondly, geopolitical contradictions brought in by UDI; and, thirdly, subsequent difficulties in transport during the expansion and redirection of trade routes. Addressing these challenges is seen to have diverted resources away from productive accumulation. Nevertheless, on aggregate, real gross fixed capital formation as a proportion of GDP increased consistently from 16.3 percent in 1964 to a period peak of 27.8 percent achieved in 1970. This is taken, by the S NDP or, more appropriately, the political (and economic) leadership, as "indicative of the fact that the country [was] introducing structural changes in her investment patterns that are essential for promoting sustained social and economic development" (Ministry of Development Planning and National Guidance, 1971: 3). However, this represents a restricted understanding of structural change because insufficient attention had been given to the detail of the developmental projects pursued, including how these fitted into an integrated structure of production. It is not enough to presuppose structural change because the state evidenced its commitment to structural change by doling out public resources, particularly via raising its share of investment in GDP. Making developmental resources available is only one aspect of structural change as

demonstrated by the DSP. It is what is done with these resources to create and promote an integrated structure of production which matters for structural transformation.

During the FNDP period, the 22 percent hike in wages following the Brown Commission in the Mining Industry gave rise to a series of wage increases in other sectors. Consequently, by 1967, the result was that real wages climbed faster than was planned during the formulation of the FNDP. That real private consumption increased by 21 percent between 1966 and 1967 evidences the upward trend in wages. Although this is developed in more detail below, it is worth mentioning that the series of wage increases which resulted from the Brown Commission's recommendations in 1966 were born out of the political interplay of three agents: (mining) labour, the state and private capital (in mining).

Larmer (2007, 2005) sees the sequence of events around the Brown Commission of Inquiry as largely a function of expectations. The pre-colonial government subordinated mining labour to the interests of private mining capital as reflected in state legislation and action against labour movements (Roberts, 1976). From their vantage point, and measured against their expectations, it did not augur well for the African mineworkers that no substantial improvements in their lifestyles and work conditions took place in the first two years after Independence. They had hoped Independence would bring discontinuities to what they perceived as oppression and exploitation during the colonial regime, but their actions post-Independence to secure higher wages only brought them into conflict with both mining capital and the state. Because the state depended heavily upon mines for public revenue, uninterrupted operations of copper mines was in the best interest of the state. The industrial actions of labour threatened the financial position of the state, particularly in the event of a disruption in production. Consequently, before the Brown Commission of Inquiry into the affairs of the mining industry, the state relied on a series of strategies to resist demands of labour, but this only heightened labour's militancy and, according to Larmer (2007, 2005), it was only when the state ran out of non-violent options that the Brown Commission was constituted and its recommendations endorsed.

Although it may seem that the state submitted to the interests of labour, it is more apposite to see this as the governing class safeguarding their own interests in the

existing system of accumulation. Firstly, awarding labour increases was against the developmental recommendations of the Seers Report which argued that only one of two things could the Zambian state afford given the existing resource basket: increases in employment while keeping wages roughly constant, or increases in wages, while keeping employment levels stagnant. Instead, the interplay of the state, capital and labour forced the Zambian state to increase both employment and wages. Secondly, awarding wage increases bound more developmental resources to the existing system of accumulation. In other words, structural transformation was increasingly inhibited by the particular interplay of the state, labour and capital, which concentrated resources in the existing material base, and, in parallel, limited the scope of politics. On the latter, the state-labour conflict created an opportunity for opposition political parties to launch their manifestos which focused on improving the affairs of labour, albeit within the framework of the existing material base.

Nevertheless, by 1968, real private consumption began its downward trend right up to the end of 1969, before rising from 1969 to 1970 by 5.3 percent, although overall leaving the 1970 level 17 percent lower than its planned figure. The declining real private consumption in 1968 and 1969 resulted from a combination of three factors: firstly, wage freezes in 1968 and 1969; secondly, deflationary budget in 1969; and, thirdly, increased personal remittances abroad, rising by more than a factor of two from K11.3 million in 1967 to K26.7 million in 1968, and then doubling again to K54.4 million in 1969. It is worth mentioning that in part this rapid expatriation of funds outside of Zambia resulted from failure of interests of foreign private capital and labour to bind their commitment to the development of the country. Independence brought uncertainty to foreign-owned enterprises, but this disquieting outlook was further shaken by the economic reforms which were interpreted to having brought the state and foreign private capital into opposition. Consequently, foreign private capital (and labour) safeguarded their interests by remitting increasing portions of the surpluses they created in Zambia. Also, after restrictive policies on remittances between Independence and 1968, the series, and specific configuration, of economic reforms between 1968 and 1969 gave substantial leeway for expatriation of funds (Chileshe, 1986).

In real terms, government consumption expenditure grew by 17 percent per year between 1964 and 1968, before plateauing in 1969 and 1970. That the 1969 government expenditure figure was virtually unchanged by 1970, largely reflected the effectiveness of the deflationary budget of 1969.

Table 5-11 Real public and private (excluding subsistence) consumption (K' million), 1964-1970

	1964	1965	1966	1967	1968	1969	1970
Private consumption (1964 prices)	215.0	249.6	276.0	332.6	326.9	318.5	335.5
Government consumption (1964 prices)	59.4	81.6	82.5	105.8	111.1	109.2	109.2

Source: SNDP Tables 3 and 4, p3

To support the government's statement on diversification of the economy, the SNDP noted the establishment of new industries, and the growth of manufacturing, reaching a period peak of 17 percent per year by 1969. The details of these industrial projects, including the specific form of industrial growth, did not inform the SNDP on its statement on structural transformation. As will be seen below, contrary to the SNDP's claim "that the FNDP ... made a good beginning in reducing the dependence of the national economy on copper" (Ministry of Development Planning and National Guidance, 1971: 4), the developments during the FNDP did deepen the economy's dependence upon copper. In part, the restricted understanding of structural transformation, punctuated by geopolitical and internal contradictions, restricted the formulation of wide-ranging policies and creation of broad-based institutional arrangements to underpin resource allocation.

Government expenditure is lauded by the SNDP as having assisted accumulation by creating new or expanding existing assets. Departing from the frugal colonial government, the new government after Independence embarked on a range of developmental projects which were reflected in investment expenditure. In 1965, less

than a year after Independence, the share of central government in gross fixed capital formation was around 19 percent, but during the FNDP period, this share ranged between 26 percent and 30 percent. For the SNDP this evidences the larger role of the state in investment throughout the Zambian economy. Expenditure in gross fixed capital formation increased from K53 million to K 91 million for 1966 and 1970, respectively, giving a period average of about K71 million per annum from a cumulative total of K355 million.

The government also doled out other funds in form of loans amounting to K209 million for the period 1966-1969 to local authorities, state enterprises and local entrepreneurs, which represented an indirect contribution of the state to capital formation in the Zambian economy. From K 26 million for 1965, loans given out by the state increased to an average of K52 per year between 1966 and 1969. However, the performance of these loans demonstrates that giving out money without creating capacity and a framework to monitor, coordinate and promote investment can lead to a deadweight loss (wastage). See the case of the Credit Organisation of Zambia (COZ) below.

The SNDP notes that the implementation of the FNDP called the state into action, to extend its range of administrative structures in order to ensure that targets were pursued with soundness of organisational arrangements. Consequently, this restructuring through expansion and extension of the state administrative structures slowed down the growth of government expenditure on goods and services. Despite the expenditure on goods and services increasing to K120 million in 1970 from K74 million in 1965, the share of this variable in total expenditure dropped to just under 30 percent from 37.6 percent during the FNDP period. Indeed, the immediate post-Independence episode placed urgency on the state to build its administrative capacity, both to deliver and manage development. During this period, inflation eroded money incomes of salaried workers including civil servants. While the Brown Commission had sparked wage increases in the productive sector, it was the Report of the Commission on the Grading, Structure and Salaries (commonly referred to as the Whelan Report) which catalysed a steep rise in the civil service salaries and personal emoluments. Workers of the central government appropriate about K40 million in salaries in 1965, with modest increase of K2 million by 1966. However, the steep

increase to K59 million in 1967 and then K70 million in 1970 reflected partly the expansion of government employment but mainly the increases in the wage bill following the Whelan Report. What these developments in the civil service did was not bind the state functionaries in terms of resources and operations to the existing economic base. This disabled the freeing up resources for, and commitment to, development elsewhere. Thus, the interests of salaried civil service workers were entrenched in the state structures and their subsequent actions, reflected in the recurrent expenditure share of public expenditure, could be interpreted as safeguarding their own interests at the expense of freeing up developmental resources.

5.8.1 Performance of foreign trade

The composition of exports reflects the dependence of the Zambian economy on copper. Throughout the FNDP period, copper supplied over 90 percent of Zambia's annual foreign exchange earnings. Fortuitous terms of trade due to favourable copper prices led to rising export receipts for Zambia, which in turn accounted for the export surplus throughout the FNDP period as shown in the Table 5-12 Exports and Imports: 1966-70 (in K' million current prices), below.

Table 5-12 Exports and Imports: 1966-70 (in K' million current prices)

Year	Exports		Imports		Trade Balance
	Exports	% increase	Imports	% increase	
1966	493.4		246.1		247.3
1967	470.0	-4.7	306.3	24.5	163.7
1968	544.4	15.8	325.2	6.2	219.2
1969	766.5	40.8	311.8	-4.1	454.7
1970	714.8	-6.7	358.5	15.0	356.3

Source: SNDP Table 8, p7

The SNDP notes the steep rise in imports from 1966 to 1967 to the order of almost 25 percent as a result of wage increases following the Brown Commission which instigated wide-scale salary increases. The 1969 contractionary budget implemented via credit restrictions and other regulatory measures targeted at arresting inflation⁴⁰ did allow the trade balance to balloon, hence causing foreign exchange reserves to swell. Nevertheless, reflecting the nature of interests which lodged themselves in the economic base of the copper-complex, specifically foreign capitalists and labour, the age of the FNDP was marked by “substantial increase in the invisible payment obligations abroad which ate into the considerable surpluses on external trade” (Ministry of Development Planning and National Guidance, 1971: 7). The 1969 deflationary budget coincided with soaring copper prices which raised foreign exchange earnings by more than two thirds from the 1968 figure. Until the end of the third quarter of 1970, foreign exchange earnings were expanding, before they dropped again following a decline in world copper prices.

In addition to its own resources for development finance, the Zambian government also made use of external sources of finance throughout the FNDP except for the last year. A total of value of K125 million in foreign loans had been acquired; many of the loans were to be paid back in ten to fifteen years. Loan financing was earmarked for productive development financing, particularly for infrastructural developments such as roads upgrading and expansion, oil pipeline, energy project and establishment of

⁴⁰ On the fiscal side, contraction of government expenditure reduced capital expenditure to K156 million in 1969 from K193 million in 1968. From the monetary side, in alignment with economic reforms, the magnitude and beneficiaries of bank credit were restricted from 1968.

education facilities. Importantly, these developments must be seen as strengthening the inherited system of accumulation by localisation of interests, although with scope for structural change if used properly.

By the end of the FNDP, economic policy change led the government to purchase controlling shares in the copper mines. Although acquiring controlling interests meant that foreign exchange leakages out of Zambia would rise due to settlement obligations on purchased shares, the Zambian government was convinced that acquiring controlling interests in the copper mines would curtail export of foreign exchange earnings which in turn would more than compensate the foreign exchange leakages. In a sense, acquisition of controlling interests in the copper mines was partly aimed at ensuring that foreign exchange earned from copper exports would remain within the country to finance national development. In hindsight, and in principle, this view was based on the assumption that copper mining would remain profitable, and, therefore, a net benefit to shareholders.

5.8.2 Employment, wages and productivity during the FNDP

The expansion of employment experienced during the FNDP which brought total employment to 390,000 by December 1970 from the June 1966 figure of 313,000, represented an increase of about 24 percent, or a fifth less in jobs increase than had been targeted by the FNDP. The public sector accounted for 45.8 percent of the 77,000 jobs growth which took place between 1966 and 1970, while for the same period, the private sector only achieved 15.7 percent. This trend reflects the expansion of the state administrative machinery and state-sponsored infrastructural developments, but also the limited growth in productive output by the private sector. Also, this pattern helps to sustain the argument that the particular form of development experienced during these years reflected localised interests in the state sector and choked the rest of the economy of investible surplus. Martin (1972) was critical of this trend, arguing that despite its advantage of reducing unemployment and fulfilling a social role, it would be difficult to resolve the employment dilemma through expansion of the civil service. Besides, given attractive pay packages and other conditions of work, particularly those reflecting continuities of the colonial legacy which awarded “civil servants with subsidised housing ... [this strategy] greatly increase[d] the burden the civil service

place[d] on the economy” (Martin, 1972: 220). By the end of 1970, the Services and the Construction sectors were the two top largest employers while the electricity and water sectors accounted for the least employment.

Table 5-13 Wage Employment by Industry, December 1970

Industrial Division	Numbers	% of total
Agriculture, Forestry, Fisheries	34,600	8.9
Mining and Quarrying	64,100	16.4
Manufacturing	36,300	9.3
Construction	73,800	18.9
Electricity, Water etc.	3,200	0.8
Commerce	32,500	8.3
Transport and Communications	23,100	5.9
Services (Excluding domestic)	87,200	22.4
Domestic Services	35,000	9.0
All industries	389,800	100.0

Source: SNDP Table 9, p9

Because the fledgling post-Independence years were marked by a substantial presence and use of non-indigenous labour, it is worth viewing the composition of employment on the basis of whether labour was indigenous or not. While total African employment was trending up in both absolute and relative means, non-African employment (mainly white/European) was on a consistent decline as shown in the Table 5-14 Wage employment by African or otherwise, 1960, 1964, 1966 and 1970, below. The share of total non-African employment in total employment declined from about 12 percent in 1960 to only about 7 percent in ten years, with total employment growing in absolute terms by over 38 percent during the same period. Partly explaining this decline was the localisation of labour and employment by deliberate policy, and partly due to the voluntary exodus of non-African (mainly white/European) workers.

Table 5-14 Wage employment by African or otherwise, 1960, 1964, 1966 and 1970

	1960	% of total	1964	% of total	1966	% of total	1970	% of total
African								
Agricultural Employment (Commercial)	37,000	13.4	34,500	12.8	32,100	9.9	34,100	8.9
Non-Agricultural Employment	207,000	74.7	202,500	75.4	264,000	81.2	321,900	83.9
sub-total	244,000	88.1	237,000	88.2	296,100	91.1	356,000	92.8
Non-African								
Agricultural Employment (Commercial)	700	0.3	700	0.3	400	0.1	500	0.1
Non-Agricultural Employment	32,300	11.7	31,000	11.5	28,700	8.8	27,000	7.0
sub-total	33,000	11.9	31,700	11.8	29,100	8.9	27,500	7.2
Total	277,000	100.0	268,700	100.0	325,200	100.0	383,500	100.0

Source: Adapted from SND Table 10, p10

Meanwhile, as wage pressures following labour-capital conflict in the mining sector, mediated by the state, led to rising wages for mainly African mineworkers, this sent a ripple effect throughout the rest of the economy as wages in the non-mining sectors also went up. Again, this must be seen as labour protecting and promoting its own interests with concessions made by the state seen as merely reflecting this. Despite rapid wages in the non-mining sector, by 1970 the mining sector paid the highest average wages, with Agriculture and Domestic Services taking the bottom two places in terms of level of average wages by sector. However, the gains made by labour concentrated power and resources in the existing economic base, and this is seen in

the way the state responded, particularly in terms of resource distribution and, subsequently, economic policy change focused on renovation and consolidation of existing assets. Within four years of Independence, the total wage bill had increased by at least a fifth.

Table 5-15 Annual Kwacha Wages of African Employees by Sectors: 1964, 1966 and 1970

Sector	1964	1966	1970	Percentage increase	
				1966-70	1964-70
Mining and Quarrying	732	934	1,555	66.5	112.4
Transport and Communications	482	688	1,034*	50.3	114.5
Commerce	388	447	795	77.9	104.9
Services (excluding domestic)	392	526	794	51.0	102.6
Construction	286	332	533	60.5	86.4
Manufacturing	406	484	802	65.7	97.5
Electricity and Water	320	573	927	61.8	189.7
Agriculture	176	190	348	83.2	97.7
Domestic Services	196	248	280	12.9	42.9
*For the year 1969					

Source: SNDP Table 11, p11

In addition, it is difficult to interpret progress of salaried workers as reflecting the national interest since higher salaries in the context of post-Independence Zambian society “represents a victory for the fortunate minority Zambians with jobs over the less fortunate” (Martin, 1972: 220). Further, expansion of employment and infrastructural development put pressure on the economy to provide decent housing, but to demonstrate the state’s response to this challenge as a reflection of the interests of the salaried workers mainly resident in the urbanised and more developed areas of the country “[i]t has been estimated ... that something in the tune of K118 million was spent on civil service housing during the First National Development Plan period 1966-1970 – four times as much as the Government allocated to low-cost housing for the rest of the population” (Martin, 1972: 224, footnote 1).

Steep increases in African wages across all sectors represented the narrow notion of development policy and political discourse. Representing the nature of colonial administration, as explored in Chapter Four, white settlers (loosely referred to as expatriates in the post-Independence epoch) appropriated a larger portion of national income, which reflected in the dual wage structure, with African workers receiving substantially lower wages. In part, the dual wage structure during the era of colonial administration reflected superior skills and experience of white settlers, but also the attitudes and legislation of the colonial government. However, with Independence,

African workers expected their working conditions, especially their wages, to improve, while changed political attitudes and administration of the new black leadership, having won support of the African workers, vowed to destroy colour-based discrimination both in wages and employment patterns. The interplay of these expectations, the colonial legacy and political discourse ensured that improvements in working conditions were to be based upon the standard set by white workers (Sindab, 1984). That is, wage structures and lifestyles of expatriate workers became the standard against which improvements for African workers would be measured, with a view to convergence in wages over time by deliberately permitting faster wage increases for African workers.⁴¹ By integrating this view of progress for African workers, development policy departed from what would be suitable for local conditions. Note that the high salaries paid to white workers were not only an incentive for them to see and seek opportunity in Africa, but, in 1963, for example, they “were among the highest in the world” (Martin, 1972: 38). In the year of Independence, the average wage of an African was about a ninth of the average wage paid to the expatriate. By 1970, reflecting that African wages accelerated faster than expatriate wages, on average, an expatriate received only six times more than an African worker. This is certainly proof of progress in ending racially-based wage discrimination, but that expatriates continued to receive substantially more than Africans reflected their superior administrative, management, and professional experience and skills (Sindab, 1984). The average total for all sectors shows that African workers increased their money earnings by a factor greater than two, while expatriate workers by only about 55 percent. Despite rising prices, salaried Zambians may have witnessed a marginal

⁴¹ Generally reflecting on the magnitude of earnings of, and the lifestyle these wages could afford for, white settlers, Martin (1972: 39) reports that in 1963 “a European artisan on the mines earned something like £150 a month in basic pay, together with generous leave entitlements and other benefits. He lived in a subsidised house – comfortable suburban villa with an extensive garden – and he sent his children to an exclusive school with all modern facilities that had been heavily subsidised by the Federal Government. He employed two or three African servants whose wages made only a small hole in his own pay packet. He himself certainly possessed a new car and his wife very probably drove another. His social life revolved around the racially exclusive mine club and the golf club with its beautiful watered course and luxurious clubhouse.” Although aspirations and attitudes towards progress in the post-Independence era were formed around such lifestyles, it must be mentioned that such a lifestyle could certainly hardly be the basis upon which development policy suitable for local conditions would be erected. Progress measured on an emulative basis of such a lifestyle would not only represent misallocation of scarce resources, it would also plant the country deeper into a narrow notion of development and the economic base underpinning it.

improvement in their standard of living on account of the fact that between 1964 and 1970, their real earnings rose annually by around eight percent.

Partly to circumvent the effect on inflation of rising wages, in August 1969, the Government instituted a wage freeze, and then for 1970, wage growth was capped at 5 percent. Revisions on wages, according to the government, would be informed by labour productivity gains and progress in diminishing the rural-urban income gap.

But the gains achieved in wages growth were almost wiped out by the end of the FNDP. For example, the wholesale price index for consumption goods rose by 22.6 percent between 1966 and 1968. These developments must be kept in mind when discussions roll out below on state-labour relations. While salaried workers housed within the existing economic base acted to protect and advance their interests, rising prices kept their wage increases modest enough to ill-afford substantial improvements in lifestyles as they had anticipated which in turn fertilised further state-labour conflict within the context of state-owned enterprises, while also limiting the scope of politics. As will be developed below, particularly when developmental resources became scarce, political discourse focused instead on the agenda of advancing/safeguarding the interests of salaried urbanised workers and business elites (Scott, 1978; Sklar, 1975) framed as consolidation and renovation of the existing economic base rather than structural transformation to broaden the economic base, although with occasional rhetoric on rural development.

5.8.3 Training and, localisation of labour and skills

For technical and vocational jobs, the apprenticeship arrangement was the only systemic technique used at the time of Independence, and this represented an aspect of continuity of the colonial era. The sustainability of this system depended upon a reasonable pool of already appropriately educated and trained personnel to pass on the skills to apprentices. When Zambia's immediate post-Independence years were plagued by mass departure of skilled expatriates, the Zambian Government was compelled to abandon the apprenticeship scheme as the technique for expanding trade and vocational training and skills. Consequently, the Commission for Technical Education and Vocational Training was established in 1968 as the vehicle to develop

and drive local trade and vocational skills. By 1971, several Zambians to the order of 2,911 had been enrolled in technical institutions. See Table 5-16 Annual Kwacha Wages of African Employees by Sectors: 1964, 1966 and 1970, below.

Table 5-16 Annual Kwacha Wages of African Employees by Sectors: 1964, 1966 and 1970

Enrolment in Technical Institutions, 1971	
Category	Enrolments
Technological	473
Trades Training	1,362
Applied Arts and Commerce	842
Technical Teacher Training	60
Nkumbi International College	174
Total	2,911

Source: SNDP Table 13, p13

The exodus of expatriates inhibited in some important ways the germination of manpower with wide-ranging skills to underpin a more integrated structure of production. Firstly, the departure of expatriates placed an urgent need upon the Zambian authorities to seek local skills to fill the vacuum. In doing this, public financial and human resources dedicated to developing local skills to fill the vacancies did not directly confront the existing system of accumulation; instead, these developments served to strengthen it by manning the existing institutions underpinning the Zambian economy. Secondly, such skill-development facilities were developed with the existing economic base in mind, so that graduates of such training would quickly find employment in existing enterprises. This not only served to strengthen the existing system of accumulation but it also reflected the limited and myopic imagination of what kind of development was to be underpinned by structural transformation. Even if structural transformation is seen in its narrow notion of industrial development, skills development and capacity building must have foresight and hence must anticipate an integrated structure of production. Because the process of catching up requires learning foreign technology, such learning should not be restricted by the existing economic base. Indeed, the DSP account evidences this. For example, Amsden (1989: 302) explores the detail of foresight of the South Korean industrial development agenda, particularly in terms of skills development: she notes that “[e]ven before operations had commenced, 597 POSCO personnel had received training on or off the job in Japan and Austria in total of eleven fields, among them iron-making and steel-making. This afforded a tremendous accumulation of experience and know-how and set a precedent for the overseas training that continues

today.” For South Korea, not only did foresight allow wide-ranging skills to develop in order to promote learning of yet to exist foreign technology, it also permitted continuous development of skills and experience over time to support and promote an integrated pattern of production.

Overall, progress for Zambian workers was not only seen in terms of creation of new employment, but also in replacing expatriate workers. In common parlance, this was regarded as *Zambianisation of labour*. To accelerate *Zambianisation of labour* at a national level, the state put three committees in place in 1968: the *Zambianisation Committee for the Mining Industry*; the *Zambianisation Committee for the Private Sector*; and the *Zambianisation Committee for the Civil Service*. By the end of the first quarter of 1971, substantial progress had been made to localise labour. For the central government for example, the share of Zambians in all positions rose to 83.7 percent in March 1971 from 70.8 percent in 1966. However, progress for Zambians in professional level categories of employment in central government remained virtually static and low, in part reflecting the low levels of education. The largest gains for Zambians within the central government categories were seen in the *Administrative and Executive* category.

Table 5-17 Zambianisation in Central Government

Categories of Employment	Percentage of Zambians employed	
	1966	1971 (March)
Professional	17.6	17.7
Administrative and Executive	46.5	87.4
Technical	45.4	67.2
Teachers	82.9	83.7
All Categories	70.8	83.7

Source: SNDP Table 14, p13

While in December 1964 only 704 Zambians held jobs that expatriates could do, that number had increased to 4,661 by the end of 1970. Also, for example, the total number of expatriates in the mines reduced to 3,774 in December 1970 from 7,621 in December 1964 (Ministry of Development Planning and National Guidance, 1971: 13). However, Tordoff (1980: 7) points to administrative and institutional weaknesses

in the immediate post-Independence half-decade, mainly on account of a failure for suitable institutions to emerge following the contradictions of the colonial legacy, but also contends that a lack of adequate education, particularly in the state architecture, hampered the effectiveness of the state: “An unusual feature of the Zambian situation at independence was that those who, through the policy of Zambianisation, were promoted rapidly to senior posts in the civil service, tended on aggregate to be less well educated than political leaders who became Cabinet Ministers.”

These statistics on Zambianising labour add voice to the view that development policy in the immediate post-Independence epoch became constrained by the existing physical/material base. Because there were virtually insignificant African (Zambian) businessmen during the implementation of the FNDP, progress for Zambians as a feature of development was seen largely in terms of progress of labour. Limited actual new employment had been created despite unprecedented increase in public expenditure. Consequently, progress of African labour was partially seen in terms of the rate at which expatriates were substituted by Zambian workers. However, such dynamics took place within the existing system of accumulation, and hence only served to localise interests on virtually the same core material base. That is, Zambian labour made progress within a limited space confined by the existing physical economic base.

5.8.4 Mining developments

Between 1965 and 1970, copper production increased by 1.4 percent to 684.7 metric tonnes. This represented a low output growth of 0.3 percent per year, but coupled with the fact that employment in the copper industry increased by 4.5 percent, it meant a modest decline in the productivity of labour. In fact, the Mufulira mine disaster already discussed did contribute substantially to the drop in copper output when, in its wake, at least a sixth of copper was taken out overnight. However, that employment in the Mining and Quarrying sector increased by a tenth implied that copper-induced non-copper mining industries experienced a larger expansion in employment. Indeed, although such an expansion evidences growth of non-copper mining activities, it was the presence of copper mining that induced and sustained such growth. For example, the establishment of the coal industry accounted for part of this growth in employment

in overall Mining and Quarrying sector, but it was the copper sector within the context of geopolitical contradictions with the South which necessitated such a development. In other words, it did not represent broadly-viewed diversification of economic activities because at the heart of it, such growth could only be sustained to the extent that copper mining remained profitable. In effect, developments outside of copper planted the Zambian economy deeper into its fortunes. Supporting this argument, and demonstrating the pre-eminence of copper to Zambia's immediate post-Independence period, is the characteristic that while by 1965 copper contributed 42 percent to GDP, dropping to 40 percent in 1967, favourable copper prices, which financed non-copper developments elsewhere, ensured that by 1969, copper shares in GDP had risen to 49 percent.

Despite efforts by the government to promote developments in the copper industry through revisions of the tax system and putting in place additional laws to regulate mining operations, no substantial injection of foreign capital into the mines took place. Such features restricted government policy in the copper industry to emphasise maximisation of extraction of surplus for the state in form of mineral royalties and other taxes, without acting as a disincentive for mineral development. As the previous tax system relied on sales of copper without taking into account the costs of production, changes were made in the tax system to ensure that costs including capital costs were first subtracted from profits before the government could claim revenue. These changes, however, did not stimulate substantial mineral development; instead, as will be developed below, the system of accumulation, which led to nationalisation of the copper mines, only deepened development policy into the fortunes of the copper sector. When copper prices declined and costs of production rose, copper production not only became unprofitable but it was also a net drain on the state coffers.

Indeed, it was the fortuitous rise in demand for copper on the world market which kept copper prices high such that a lack of productivity growth in the copper industry was more than offset by the profitability of producing and exporting copper. Despite the SNDP concession that "[i]t is obvious from these figures that the price of copper was as much an important influence as increased development in other sectors of the economy" (Ministry of Development Planning and National Guidance, 1971: 18), it is even more clear that without the lucky break in copper prices, financing

developments in other sectors would have had to depend on external rather than domestic sources. Importantly, however, is to assess to what extent increased developments in other sectors promoted or restricted structural transformation. In part, this is seen in the form of industrial and infrastructural development as the basis for formation of an integrated, yet independent-of-copper, structure of production. Independent-of-copper here is seen in its broader sense, which implies the amalgamation of direct (material flows) and indirect (fiscal linkages, sectoral productive linkages, foreign exchange capacity and allocations etc.) links between copper developments and the rest of the economy. But, as will be shown, the particular configuration of interests lodged in the material base bequeathed upon the Independent Zambian economy by the colonial era functioned in a way which deepened the dependence of the Zambian economy on profitability of copper. In large part, accounting for this particular functioning and configuration of the state was the institutional establishment and expansion of the post-Independence state and its relation to capital within the context of a given stock of existing local skills and human resource capacity. The expansion of the Zambian state was seen as a necessity in order to deliver development, but it did so against a backdrop of chronic shortages of local human resource capacity.

In sum, limited mineral developments took place, while favourable copper prices and non-technical conditions surrounding its extraction and export such as transport costs, did make copper mining a highly lucrative undertaking. This helped the government expand its expenditure capacity and, subsequently, to finance a range of development projects.

5.8.5 Manufacturing sector developments and Zambia's form of industrialisation

The reason behind the promotion of industrial development during the FNDP has already been discussed. In part, the geopolitical contradictions and the nature of interests of the political leadership saw urgency in the development of industries to replace imports, mainly in light industries in the food, beverages and tobacco subsector. In total, the government alone spent about K95 million Kwacha on industrial development projects which must be seen in context if compared to K118

million it spent on housing for civil servants alone during the FNDP. Good or bad, this raises questions over government commitment to industrial development or, more exactly, demonstrates the strength of the interests lodged in the state's civil service. Thus, including their salaries and other benefits, civil servants alone appropriated so large a share of the national pie that it dwarfed the committed resources for industrial development. As will be developed, this pattern of resource allocation reflected the nature of the system of accumulation — the material base underpinning it and the nature of interests which were bound to it.

The FNDP and SNDP mantra of meeting prevailing local demand by local production restricted industrial development to the needs of the salaried workers, whether in the state sector, the Party or private enterprises. Thus, industrial development as experienced in Zambia during the immediate post-Independence era departed from the DSP experience in a fundamental way. As Amsden (1989: 69) argued, the state under Park ensured “increasingly [that] exports [were] compulsory rather than a choice for the private sector”, such that expansion of exports was explained more by “pressure rather than [by] subsidies.” Eventually, for South Korea, it was “[e]xports of labor-intensive manufactures [which] began to eat away ... the cancer of underemployment” (Amsden, 1989: 72).

Both the Zambian and South Korean industries profited from government support, but the motive and specific configuration of such support differed in a fundamental way. For Zambia, administrative and price restrictions on imports and government-sponsored production subsidies were used to promote growth of local-market-oriented industries, while the South Korean government did so to encourage and nurture net exporting businesses. In addition, government support, for the case of South Korea, was conditional on good performance, particularly in meeting strict export targets. Although “[g]ood performance [was] evaluated in terms of production and operations management rather than financial indicators”, the pressure from the state via government bureaucrats on business managers to export aided the development of competitive capacity through innovation of systems and operations (Amsden, 1989: 16). Zambia, on the other hand, lacked competitive capacity and foresight, and instead restricted industrial development to the local market, dominated mainly by urban

salaried elites, with obvious political implications for employment and provision of subsidies for production and consumption.

Wade (1990: 139), in a similar light as Amsden, adds voice to the role of the state in aiding exports through export incentives. For example, by creating export processing zones, the Taiwanese state compelled firms operating within them “to export all of their production in return for enjoying duty- and tax-free imported inputs, good infrastructure facilities, and simplified administrative procedures for trade and remittances” (Wade, 1990b: 139). Overall, to encourage exports even in a considerably protected industrial environment, the Taiwanese state relied on a mix of methods and strategies, among them, the establishment of export processing zones, tariff rebates, nontariff barriers, export tax incentives, export credits, export cartels export quality inspection, export marketing, export awards and foreign exchange allocations and, to some extent, exchange rate management. Hence, it is imprudent to view government intervention itself as inherently bad without assessing its detail and motive, and not least the underlying physical economic base and interests it promotes.

Nevertheless, the Zambian economy did experience substantial aggregate industrial development, exceeding some expectations of the FNDP in certain indicators such as gross output (Fry, 1980).

Table 5-18 Plan Targets and Achievements

Indicators	Plan targets for 1970	Estimated achievements 1969
Gross output (K million)	227.3	235
Value added (K million)	90.5	90
Employment	40,000	36,300*
GDP growth per rate per year	14%	17%
Total wages and salaries (K million)	29.1	39.0
*This figure is for December 1970		

Source: SNDP Table 17, p19

The detail of industrial development during the FNDP can be gleaned from the SNDP which lists twelve large-scale manufacturing projects. These are: The Zambia Clay

Industries, located in Kitwe which started production in 1969, was producing 6,200 tons of salt-glazed clay pipes and 2.7 million bricks per year; Zambia Sugar company which began operations in 1968 annually produced about 45,000 tonnes of raw sugar; INDECO Milling Ltd, established in 1968, producing annually, 40,000 tonnes and 5,000 tonnes of mealie meal and bran, respectively; expansion of the Lusaka Brewery annual capacity in 1968 to 200 million bottles of beer; Truck Assembly plant at Luanshya with an assembly capacity of 20 trucks per month; expansion of Chilanga Cement Ltd. capacity in 1969 to 500,000 tonnes of cement per year; Dunlop Zambia Ltd. which began operations in 1969 in Ndola, had an annual capacity of 100,000 tyres; Kafue Textiles Ltd., established in 1970, providing 1,000 jobs and producing an annual capacity of 12.5 million metres of textile fabrics; Kabwe Industrial Fabrics Ltd., with an annual capacity of 5 million gunny and 1.3 million of hessian cloth was established in 1970; Nitrogen Chemicals Ltd. in Kafue with an annual capacity of 75,000 tonnes of fertilisers and blasting compounds rolled out operations in 1970; in June 1970, Kafironda explosives started operations with an annual capacity of 7,000 explosives; Mwinilunga Fruit Canning Factory, an enterprise of Rucom Industries, started operations in 1970 with an annual capacity of 300 tonnes of pineapples.

Further, the rerouting of trade which led to the establishment of Tazama Oil Pipeline in August 1968 induced “the establishment of Zambia’s first oil refinery, the Indeni Petroleum Refinery in Ndola, with a capacity of 650,000 tonnes of crude oil per annum” (Ministry of Development Planning and National Guidance, 1971: 20). A number of additional industries which emerged during the FNDP were materially directly related to the copper industry, and a case in point was the Metal Fabricators of Zambia at Luanshya, a mining town in the Copperbelt, which had a capacity of 1,500 tonnes of copper wires and cable including some 200 tonnes of aluminium cable. These developments, though laudable, clenched the Zambian economy to the core of accumulation – the copper industry. Importantly, however, listing these developments here helps to identify the specifics and detail of the physical accumulation the post-Independence Zambian economy experienced. Analytically, the kinds of industrial projects which underpinned physical accumulation of capital are seen to be of a narrow base, particularly is measured against the experiences of the Developmental States discussed in Chapter Three.

Industrial development ensured that the total number of establishments rose by about 30 percent to 535 in 1969 from 412 in 1965. The highest concentration of industries by category was observed in the 'Metal-working' subsector, accounting for almost a third of total establishments in 1969, followed by 'Leather and footwear', with 'Tobacco manufacturing', and 'Glass and china' taking the bottom spot.

Table 5-19 Number of Industrial Establishments in Zambia

Category	1965	% of total establishments, 1965	1969	% of total establishments, 1969	percentage change, 1965-1969
Food industries	64	15.5	65	12.1	1.6
Beverages	27	6.6	7	1.3	-74.1
Tobacco manufacturing	2	0.5	1	0.2	-50.0
Textiles	68	16.5	101	18.9	48.5
Leather and footwear	2	0.5	4	0.7	100.0
Timber	40	9.7	43	8.0	7.5
Paper, pulp, cartons	6	1.5	12	2.2	100.0
Printing and publishing	19	4.6	23	4.3	21.1
Chemicals	15	3.6	28	5.2	86.7
Petroleum and coal derivatives	1	0.2	2	0.4	100.0
Rubber products	9	2.2	11	2.1	22.2
Glass and china	1	0.2	1	0.2	0.0
Plastics	2	0.5	13	2.4	550.0
Building materials	51	12.4	36	6.7	-29.4
Non-ferrous metals	2	0.5	3	0.6	50.0
Metal-working	98	23.8	171	32.0	74.5
Others	5	1.2	14	2.6	180.0
Total	412	100.0	535	100.0	29.9

Source: Adapted from SDNP Table 18, p20

Although this is developed in more detail below, it is worth mentioning that direct state participation in production was achieved via two state agencies – INDECO for large-scale and medium enterprises and Rucom for small-scale rural and agro-related industries. It is through these state agencies that a number of industrial units saw the light of day.

Chapter Seven will detail the particular nature of post-Independence industrial development and capital accumulation. It will be shown that relying on foreign capital, management and administration, led to remarkable capital accumulation but its particular configuration drew the Zambian form of industrial development deeper into dependence upon the fortunes of the copper sector. In fact, while political vices such as graft, the spoils-based political system and corruption became increasingly prevalent (Szeftel, 1982, 1980), they did so within a restricted structure of production, consequently limiting the political discourse and remedial measures. If placing this within the entire schema of the thesis which sees developmentalism within the context

of a system of accumulation, such actions can be interpreted as relations of interests and exchange taking place within bounds as permitted by the underlying configuration of physical accumulation.

5.8.6 Developments in the energy and transport sectors

The FNDP regarded self-sufficiency in energy as a matter of urgency. By the end of the FNDP, K75 million was spent as capital expenditure, an amount well over a third above what was planned. A number of small hydro-electric schemes dotted across the country developed during the FNDP which supplied individually between 1.2 MW and 60 MW of energy, although it was the first stage of Kafue Hydro-electric Scheme with installed capacity of 600 MW which gobbled up a large chunk of, and ballooned, the capital expenditure. At the end of the FNDP it was decided that developments at the Kariba North Bank Hydro-electric Scheme would be carried out and be completed by 1974, costing over K53 million.

To demonstrate that developments in the energy sector bound the Zambian economy to the copper sector, the copper mines alone at that time consumed about 80 percent of Zambia's power. During the FNDP, total national consumption of electricity in Zambia grew by 6.2 percent per year to 3,958 kWh in 1970. Threatened by the UDI experience, energy provision was important to the Zambian government because it was the lifeblood of the copper sector, the backbone of the Zambian economy. Thus, this suggests that the direction of developmental resources was tied to capital projects which directly supported the development of the copper sector.

For transport, the system of accumulation under colonial administration, defined generally in terms of the development of copper mines, and Zambia's place within the South, ensured that major trade routes and transport (and other) infrastructure underpinning them were sufficiently developed along a narrow region relative to the large expanse of land of the country. The restricted infrastructural development which came to be known as the line-of-rail region was home to about 95 percent of the urban population and around 25 percent of the total population by 1969. This region represented the economic centre of the country, linked to the rest of the world via roads and railways to major Southern African ports on the Atlantic and Indian Oceans.

The FNDP embarked on upgrading and extension of road networks from 1,322 kilometre of paved roads in 1964 to about 3,000 kilometres in 1971, although these were aimed at improving and enabling trade and commerce of the existing economic base. Importantly, this discussion helps to understand what copper windfalls were spent on in the immediate post-Independence era, and whether and in what ways such expenditure enabled or hampered structural transformation. By the end of 1971, a total of K104 million was spent on upgrading existing roads, as well as on some new dirt roads; this figure was over 9 percent more than spent by government on industrial development. Parallel to development of roads, the total number of registered automobiles rose to 99,609 in 1970 from 65,690 in 1965, and facilitating movement of people, public transportation also ballooned with the number of operators rising by about 250 percent from 222 operators during the same period.

On closer inspection, about 50 percent of the additional road length was accounted for by the Great North Road (822km) to Tanzania towards the port at Dar-es-Salaam, one of the most important facilities induced by rerouting of trade. The geopolitical tension created by UDI did indeed affect the way in which development would be conceived, and the rerouting of trade, and development of infrastructure to facilitate this, were not just a reflection of relations with the South but a glimpse in the thought and understanding of development by the post-Independence leadership. Indeed, the developments in transport which followed UDI, although with rhetoric of self-sufficiency, inflated transport costs denied development elsewhere by appropriating scarce public resources and planted deeper the Zambian economy to the circumstances and conditions of the copper sector. For example, following UDI, K10 million out of the public cake was sliced out by Zambia Railways in establishing a railway workshop at Kabwe which began its operations in 1971. The SNDP recognised the difficulties of building road infrastructure to facilitate trade redirection when in fact existing railway routes to the South would have achieved the same thing except at lower cost and smaller burden on the foreign exchange reserves.

Viewed more broadly, in part, UDI served to conceive development as self-sufficiency, but its understanding was restricted because self-sufficiency meant being able to localise economic interests in Zambia that were hitherto imported from the South. In the transport sector, firstly, this meant finding alternative trade routes, and,

secondly, it meant linking UDI-induced economic activities through new transport facilities to the core economic centre. For example, coal previously imported from the South was to be replaced by local coal, yet developments of local coal preceded transport developments. Hence, public resources needed to be provided not only for development of import-substituting industries but also transport infrastructure to facilitate transiting of these products to the core economic base along the line-of-rail. The SNDP reported that “the construction of a railway line from Choma to Maamba Colliery, which [was] scheduled to be completed in 1972, [would] reduce transport costs considerably for coal, which [was being] being transported by road to Batoka railway station and from there to the main consumer centres in the Copperbelt” (Ministry of Development Planning and National Guidance, 1971: 22). Zambian mines during the colonial era and immediately after Independence before UDI depended on imported coal from (Southern) Rhodesia. When UDI came into effect, coal supplies were cut short and this disrupted production of copper. It is against this background that the urgency of localisation of coal production must be seen. In other words, reliance upon copper placed urgency on creating local capital when geopolitical tensions endangered the smooth operations of copper mining.

5.9 Conclusion

By the early 1970s, Zambia had made significant strides in promoting economic development. Political independence gave the newly independent Zambian leadership the power to use the state apparatus to encourage accumulation, but the colonial legacy, particularly one which ensured that no indigenous economic interests and capacity developed, threw challenges at the state, which not only caused it great difficulty in realising broad-based development, but also supplanted the development of local institutions to promote structural transformation. Using existing capacities, while facing the threat of geopolitical tensions, and profiting from advice of international consultants, the new Zambian government embarked on a number of developmental projects while, at the same time, reorganising and manning the state to meet its developmental aspirations. Within a year of Independence, Zambia’s most important trading partner and neighbour, Rhodesia, declared unilateral independence from Britain, which caused great anger for the international community as to impose sanctions. The Zambian government was forced to accept its participation in

sanctions, and this caused great anguish for the Zambian economy because crucial supplies for Zambian industry, particularly for the copper mines, were disrupted. As a matter of principle, and in the national interest, the Zambian government put in place measures to delink from the South (Chileshe, 1986; Roberts, 1976; Hall, 1969). Consequently, a strategy of self-sufficiency and a programme of infrastructural development to divorce from the South defined development policy more broadly.

Assisted by substantial windfalls from favourable copper prices, the post-Independence government could afford virtually all its development projects. Public expenditure increased substantially, reflecting the commitment of the state to its developmental aspirations. Importantly, in terms of policy, a series of measures, such as erecting trade barriers and provision of credit and finance for local industry, were used by the state effectively to create local physical capital. From this vantage, the Zambian state acted effectively developmentally, but the kinds of economic projects it created remained restricted in scope because they were tied, directly or indirectly, to the continued profitability of the copper mines. Dependence upon foreign skills and capital in the manner as was experienced during the immediate post-Independence period created a physical economic base which robbed the Zambian economy from benefiting from a system of physical accumulation integrated by substantial flows between industries and sectors.

Developmental progress thus was seen in terms of successes achieved in building up local infrastructure to support trade redirection and establishment of local economic interests that were previously imported. In practice, development or installation of local physical capital to replace imports robbed the Zambian economy of investible surplus necessary to create broad-based coordinated and linked investments as would be required for an integrated structure of production. For such local economic interests were organised not in order to spread productive linkages but to attain self-sufficiency in raw materials and inputs (e.g. coal, electricity), workshops (railway repair stores and engineering facilities) and infrastructure (e.g. road, railways) for copper development and supporting industries. Hence, diversification of the structure of production was constrained to the extent that economic interests that were previously imported were now locally established, with little or no regard for whether these promoted or underpinned an integrated structure of production. Considering the scale

and form of development the Zambian economy took, it seems apposite to suggest that the Zambian government failed to deal with the underlying developmental problem — foreign exchange dependence through copper mining. “So as 1969 began, it was apparent that Zambia was balanced on a knife-edge” since, as Hall (1969: 176) argued, “[e]verything depended on copper.”

Primarily, in this chapter, I aimed to show the kind of physical capital (physical economic base) which underpinned Zambia’s post-Independence developmentalism, highlighting some of the major factors and features which directed the Zambian economy. Within the scheme of a system of accumulation, this was to show what kind of economic activity underpinned the socio-political interests. In Chapter Seven, I will argue that as socio-political interests were establishing themselves upon a restricted economic base, they began to act in a manner which protected and perpetuated the restricted configuration of capital. This raises questions for whether their actions should be interpreted as necessarily inimical to development. Thus, analyses which focus purely on the politics of development fail to account for how the political discourse itself remains restricted by the configuration of physical capital. Also, purely economic analyses, which emphasise the technicality of development, fail to capture the integral roles of socio-political interests in shaping the form and nature of physical accumulation itself. The next chapter will continue the assessment of what kind of physical economic base underpinned the Zambian economy during the post-Independence period of interest to this thesis by examining whether during the Second National Development Plan period, 1972-1976, substantial progress had been made to redress the contradictions of the colonial era and the immediate post-colonial developments until the early 1970s.

6 The Political Economy of Development Planning in the 1970s

6.1 Introduction

Thematically, this chapter is, on the one hand, a continuation of the previous chapter. It seeks to understand the kind of configuration of capital in the 1970s, particularly through the lens of the Second National Development Plan (SNDP). Essentially, in this chapter, I will examine the kinds of development projects and programmes which underpinned the Zambian economy, as a reflection of the material base of the system of accumulation. I also investigate how the governing class understood structural transformation more broadly, and industrialisation in particular. On the other hand, I investigate the detail of industrial development, both in terms of policy and its execution in practice.

I begin by examining broad themes within the SNDP, such as resource allocation, as well as performance of the economy. This is to question whether during the SNDP, the Zambian governing class had come to grips with the underlying problem. I find that development planning in the SNDP itself proceeded as did FNDP, but in the absence of copper revenues, industrial development was not only restricted, but undermined by being denied public resources.

6.2 The SNDP and Structural Transformation

Administratively and institutionally, policy formulation of the SNDP boasted local participation and involvement by enabling District Development Committees to suggest local development projects and programmes. These recommendations were reviewed for endorsement at the Provincial level by the Provincial Development Committees before being approved at the National Level by the National Development Planning Committees. The Development Planning Division of the Ministry of Development Planning and National Guidance made the final reviews “in the light of the financial resources available to the Government and a reasonable compromise arrived at in choosing a balanced and integrated programme of economic and social development over the next five years” (Ministry of Development Planning and National Guidance, 1971: vii).

In the foreword of the Second National Plan (SNDP), President Kaunda expressed optimism for the future hinged on “great satisfaction” of the accomplishments of the first seven years post-Independence (Ministry of Development Planning and National Guidance, 1971: iii). For Kaunda, the FNDP was meant to build wide-ranging social and economic infrastructure, this being the foundation for future economic and social development. Thus, Kaunda lauded the FNDP and development policy during that period for establishing wide-ranging development projects. Yet careful investigation reveals that economic and other infrastructural developments during the FNDP, though praiseworthy, did not progress to counter the structure of production by building an integrated pattern of production. Instead, geopolitical considerations, particularly with the South, compelled the Zambian state to place great emphasis above all else on the redirection of trade routes and establishment of local industry to replace goods imported from the South. This project absorbed considerable public resources and led to the development of industry and physical infrastructure in transport and communication, specifically upgrading of the road network, to facilitate carriage of exports and imports.

In addition, another mega-project already underway, and to be completed, during the SNDP, but reflecting the redirection of trade routes resulting from geopolitical contradictions, was the Tanzania-Zambia Railway from Kapiri Mposhi to Dare-es-Salaam. Although this project was conceived to catalyse economic development in Zambia, it was meant to serve the existing economic base, especially the transportation of copper, this being the dominant export commodity. In other words, to the extent that socioeconomic and other infrastructural development progressed to serve existing (socio-political and economic) interests, it reinforced dependence upon, and deepened, the existing system of accumulation.

Both to serve existing economic interests and be the basis upon which to establish new ones, the FNDP was commended for ensuring the expansion of local power and energy sources. Completion of the Kafue Hydro-electric Power Scheme at the beginning of the SNDP was another laudable accomplishment. At the beginning of the SNDP, works on the Kariba North Bank Hydro-electric Power Station were already in operation. These developments in the power and energy sector were pursued in order to make Zambia “completely self-sufficient in the supply of electricity for

both industrial and domestic consumption” (Ministry of Development Planning and National Guidance, 1971: iii).

Expansion of educational facilities, such as building at least one secondary school in each district, as well as critical tertiary learning institutions in urban centres were commendable advances. The establishment of the University of Zambia and some technical colleges were among the proudest achievements. But the SNDP planned to depart from expanding general educational facilities to focus instead on targeted skills in order to enable Zambians to take on skilled and semi-skilled jobs.

Overall, economic development remained biased in favour of the line-of-rail urban centres, a feature which reflected continuities with the colonial legacy. The SNDP was conceived against this background, and its implementation as the basis to counter this uneven development, and rural development was selected as the weapon of choice. The importance of rural areas for Zambia’s economy is best captured by Kaunda’s sentiments which emphasised that “developing the rural areas [was] a matter of life and death, though [he did] not under-estimate the problems involved” (Ministry of Development Planning and National Guidance, 1971: iii). Consequently, as a statement of aspiration, rural-based projects such as rural housing, roads, credit facilities and health services would be prioritised over urban ones, this being the mechanism to address the rural-urban imbalance. The SNDP, rather than transforming the institutional framework of the state, relied instead on the goodwill of the politicians and planners in government to ensure that rural development progressed in the manner aspired.

For agriculture, again, the government emphasised self-sufficiency in food crops, this being pursued through direct production and indirect means such as provision of agricultural services. Promotion of private and State production schemes as the agents of such development was the aim of the SNDP. A number of so-called Intensive Development Zones (IDZs) would be selected and promoted via earmarked public resources. In addition, Village Productivity and Ward Development Committees were legislated by the beginning of the FNDP in order to ensure local participation in development. A review of these institutional reforms is taken up in the next chapter,

but it is worth mentioning that decentralisation of planning was the central aim of these changes in the hope that local economic concentrations would be created.

Departing from the FNDP, the SNDP increased its “share of capital investment outside Government” (Ministry of Development Planning and National Guidance, 1971: iv). Also, the SNDP considered itself a man-centred plan, to bring equality in Zambian society by emphasising rural development.

Since investigating the absence of meaningful structural transformation in the immediate post-Independence state-led Zambian economy is the overarching objective of this thesis, it is worth examining more closely the role the SNDP placed on industrial development in the overall development strategy but also how it had hoped mineral development would support this. Industrial development was to focus on creation of import-substituting industries which would make use of local raw materials, especially those from local agriculture and mining. Hence, industrial development would also be pursued as a mechanism to improve rural agriculture-based livelihoods. In particular, establishment of food processing industries would raise demand for agricultural products but also provide employment.

Meanwhile, the resources to fund industrial development were to be had from the copper mining industry. Indeed, copper mining would continue to play an important role for the Zambian economy as a source of government revenue and foreign exchange. In addition, establishment of copper processing industries was envisaged to aid diversification. However, seen as part of a broader system of accumulation, it is difficult to see such diversification as sufficiently integral to allow for structural transformation.

To fund the SNDP, the government would have required a total of K2,609 million, yet a shortfall of K153 million was expected from what was seen would be realistically raised by Central Government and external loans. The SNDP was envisaged to create 100,000 jobs, a quarter of which would be accounted for by the manufacturing sector, although this relied on an average price of copper of about K740 per metric tonne f.o.b. and a two to three percent increase in import prices per year, while increasing

copper production to about 900,000 metric tonnes from the 1971 output of 645,300 metric tonnes.

Projections of economic growth reflected the place and importance of copper to the Zambian economy. By keeping the copper price at K740 per metric ton and costs of copper production stagnant, total Government revenue from copper was expected to be around K660 million, while the real GDP growth of 34.7 percent between 1971 and 1976 was to be largely accounted for estimates of copper price and costs of copper production. In total, capital expenditure was estimated at K474.3 million of which K193.8 million was earmarked for maintaining production capacity, including replacement, and, for expansion of production capacity, an estimated amount of K203 million. In administrative terms, MINDECO and other mining-related Boards, approved the suggested amounts to be expended on capital. To sustain the importance of mining to Zambia's economy, the SNDP amount allocated as capital expenditure for expanding mineral development was about 46 percent higher than for the FNDP. Such expenditure patterns served to deepen Zambia's inherited system of accumulation, whose prosperity was tied to the fortunes of the copper industry.

The impact on mining employment from the capital expenditure was minimal, expecting only a 3 percent increase in jobs from 64,100 in 1972 to 66,000 in 1976. However, wages and salaries were expected to increase by about 8 percent, mainly on account of encouraging top positions, in the face of declining numbers of non-Zambian workers in mining.

For the manufacturing industry, the following indicators were expected at the end of the SNDP:

Table 6-1 Expected outcomes of selected manufacturing sector indicators by 1976 relative to 1971

	1971 Figure	1976 Figure (expected)	nominal increase	percentage increase
Gross output (K' million)	264	509	245	92.8
Value added (K' million)	100	199	99	99.0
Employment	38,200	62,500	24,300	63.6

Source: SNDP p35

Essentially, value added was anticipated to increase by 100 percent while employment was expected to grow by about 63 percent. However, again, the SNDP was to promote the strategy of import substitution since industries created through this strategy would “receive priority attention” (Ministry of Development Planning and National Guidance, 1971: 35). Industrial development was mainly being promoted to serve the local market, with promotion of export of manufactures as a sideshow. To the extent that promotion of food and other consumer goods received the highest priority, and taking into account the nature of income distribution existing at the time, it appears the nature of the market, biased in favour of a small salaried population, determined the development of the manufacturing sector. The SNDP’s focus on developing consumer-based industries reflected the planners’ views that light and more advanced industries were beyond the scope of Zambia’s existing human resource capacity for some time.

The installation and promotion of certain industrial activities and infrastructural facilities before and after the SNDP was clearly based on supporting mining development. For example, the development of the explosives industries, cement production, timber and coal mining were anticipated to grow between 12 percent to 50 percent due to increased demand induced by copper mining development. The political leadership was convinced that localisation of capital of mining inputs would both promote and sustain mineral development. In this sense, industrial development progressed to substitute local industries for imported products, especially for the mining sector.

In addition, specific attention was given to import substitution of food products, other consumer goods and some intermediate and capital goods, although focusing on utilisation and processing of local raw materials sources from agriculture and mining. In this way, industrial development was tied to or, more appropriately, constrained by, local capacity and endowment, including extent of development of both the mining and agriculture sectors. The extent of industrial development achieved by the implementation of the SNDP determined what sort of industries would be promoted. However, the focus on rural development ensured that the SNDP sought “establishment of small-scale industries in rural areas ”(Ministry of Development Planning and National Guidance, 1971: 93), without due regard for whether such

industries would be underpinned by an integrated structure of production. The politics of the rural-urban gap necessitated or called upon physical location of industry in rural areas as an expression of government's commitment to balanced development.

The SNDP went some way in explaining its scope for industrial diversification based on import substitution. Firstly, it understood imports as composed of manufactured products in intermediate goods for mining and construction, and processed food items. Secondly, local establishment of industries to replace such imports were to be justified in part by size of an existing market. Thirdly, industrial development was to be complemented by expansion of hitherto existing industries. Taking note of rapid urbanisation and expected increase in demand for processed food items, the SNDP made it clear that local industries would help reduce food imports: "The substitution of processed food imports is, therefore, one of the major objectives of the manufacturing sector in SNDP" (Ministry of Development Planning and National Guidance, 1971: 93). All in all, industrial development was to be restricted by the existing nature and pattern of domestic demand.

6.2.1 Major selected Industrial projects envisaged during SNDP

Examining the objectives of the SNDP for the manufacturing sector reveals a narrow view of industrial development. First, industrial development was restricted by the pattern of domestic demand, especially with respect to imports. Imports of processed foods were mainly serving the interests of the small salaried population which had the capacity to import based on its earnings. By localising such food processing industries, the interests of this privileged class of the population were disproportionately well served. Of course, such industries would require raw materials, say from agriculture, hence benefiting the rural population, but such intended benefits were minimal when the nature of technology of the industries is taken into account. As will be shown below, the technology of certain industrial projects was capital intensive, diminishing the potential to spread productive linkages. Consequently, industrial development was constrained by the specific form of technology chosen.

In terms of individual projects, there were continuities from the FNDP period since, in the lifetime of the FNDP, some industrial projects started or were planned for

implementation in the later period. A number of projects discussed below were seen by the SNDP as significant to promote diversification and structural transformation. For import substitution of food processing, meat, poultry and dairy processing would be encouraged across various locations of the country, including rural areas in Mongu and Chipata. New developments as well as modernisation and expansion of existing plants would underpin promotion of food processing industries. Again, this reflects the thinking behind capital accumulation.

In addition, import-substitution of consumer goods was mainly aimed at expanding existing capacity. For example, the textiles industry was promised an expansion of capacity at Kafue Textiles from “12 million metres of cotton fabrics to 25 million metres per year of cotton-polyester and rayon fabrics” (Ministry of Development Planning and National Guidance, 1971: 95). Grain bags, hessian cloth production and a knitting plant constituted some notable SNDP projects.

Expansion of existing tannery facilities were all part of the consumer goods development. Saw-mills for making railway sleepers and flooring products, as well as a pulp and paper industry would make use of local timber. For Fincham (1980: 306), “[t]he relative increase in local value-added in the basic consumer industries of food stuffs and clothing reflects the country’s very high rate of urbanisation and consequent expansion in consumer markets since independence.” But that the effective population was a small fraction of the urban population which was the actual market for these goods, supports the view that such growth was aimed at serving the dominant class. Data on Zambia’s industrialisation (see below) under the state’s import-substitution policies show that the rhythm of industrial development was dominated by consumer goods. One must ask whose interests were served by this pattern of industrialisation. Clearly, more affluent sections of the population benefited from the structure of production. In other words, industrial development was demand-determined. The problem with permitting structure of demand to influence the direction of investment is that it disregards the existing levels of technology if they are deficient or absent. Consequently, industry is compelled to apply foreign technology. The car-assembly plant provides an illustration of triumph of a type of demand (interests of the affluent) over broader considerations of what meaningful structural change required. By 1976, Harvey (1976: 147) was right in making the statement that “the pattern of demand

created by the present income distribution continues to influence the way in which production of goods and services develops.”

For intermediate and capital goods, the SNDP made special emphasis on copper-related industries in terms of their direct material contribution to copper development. Capacity for production of sulphuric acid was to be expanded while copper sulphates were to be newly produced to support the refining and leaching of copper. The explosives subsector at Kafironda would be expanded in order to provide the mining sector with all its explosives needs. The Zambia Metal Fabricators (Zamefa) factory at Luanshya to produce copper wires and cables was aimed at increasing existing output from 2,000 tons per year to 6,000.

The Nitrogen Chemicals at Kafue would receive funds for expansion of capacity in order to produce more fertiliser in anticipation of higher demand in agriculture. Another notable INDECO-sponsored project was the glass factory at Kapiri Mposhi to churn out annually 20,000 metric tons of glass containers. In order to promote industrial development, Rucom Holdings, an INDECO subsidiary, was expected to install a number of projects in rural areas, the main ones being four new grain mills as well as extension of those already existing, about three mixing units for stockfeed.

In total, industrial development would profit from investment of fixed capital in the order of K250 million, and an additional K150 million of working capital assumed at 60 percent of fixed capital. Despite large-scale public investment during the SNDP within the context of nationalisation and state-owned enterprises, about 70 percent of capital investment was expected to be provided by private capital. Thus, an Investment Code would be formulated to spell out incentives and guarantees to potential investors, since absence of private capital would cause the SNDP estimates of the manufacturing sector's contribution to output and employment to fall miserably short.

It is clear that the industrial projects proposed, both aimed at expanding existing capacity and creating new products, were determined by the existing production structure (e.g. to provide inputs for the mines) and patterns of demand (e.g. textile plant for cotton-polyester and rayon fabrics for higher earning people as opposed to cheaper cotton-fabrics). In this way, industrial development, although with some

limited diversification, was restricted by the material base and socio-political and economic interests that determined, considerably, which, and how, projects would be approved.

Taking into account the absence of many educated and skilled Zambians to support industrial development through their labour, the SNDP embarked on continuation of the education policy, to increase enrolments at all levels of education. For tertiary education, and specifically, university education, the SNDP allocated K13.8 million, representing only 0.6 percent of total SNDP budgetary resources. From this commitment, gross enrolment was expected to double to 3,012 between 1971 and 1976.

6.3 Performance of the economy and selected developments during the SNDP, 1972-1976

6.3.1 General performance

The performance of the SNDP was properly understood by the time the Third National Development Plan (TNDP) was launched in 1979, three years after the completion of the SNDP. By the launching of the TNDP, the FNDP and SNDP were still conceived as plans “to provide the basic economic and social infrastructure, initiate measures to diversify the agricultural and industrial base of the economy and promote self-reliance and self-sustained growth” (Zambia Office of the President National Commission for Development Planning, 1979: iii).

Mild growth was experienced in the first ten years of Zambia’s Independence; between 1964 and 1970, roughly equivalent to the period during the implementation of the FNDP, the country grew by around 1.5 to 2 percent per annum, while the SNDP period performed slightly better, with the Zambian economy growing about 3.4 percent between 1972 and 1976, although marked by wide fluctuations, ranging from contractions of 0.4 percent to expansions of up to 7.4 percent.

Table 6-2 Real Average GDP Growth

Period	Real Average growth of GDP (using constant 2005 US\$)
1960-1970	3.60%
1964-1970	1.50%
1970-1979	0.80%

Source: UN Data (<http://data.un.org/>); World Development Indicators

Table 6-3 Real annual growth of the Zambian economy, 1965-1976, below is taken from official statistics which the TNDP used to explain performance. Some reasonable growth took place between 1964 and 1975.

Table 6-3 Real annual growth of the Zambian economy, 1965-1976

Year, period	Real annual average growth of GDP (using constant 1965 Kwacha prices)
1965-1970	2.0%
1972-1976	3.4%
1971-1972	7.4%
1972-1973	2.0%
1973-1974	5.6%
1974-1975	-0.4%
1975-1976	2.4%

Source: SNDP Table 1.1, p1

Set against a population growing at about 3.2 percent, for example rising from 4.39 million in 1971 to 5.14 million in 1972, the performance of the Zambian economy was unsatisfactory, with GDP per capita between 1971 and 1976 remaining virtually unchanged.

The TNDP placed considerably more emphasis on external conditions — copper prices; geopolitical contradictions, particularly the Angolan civil war and Rhodesian border closure, leading to interruption of trade routes; and adverse weather conditions impacting on agricultural output — to explain the sluggish performance of the Zambian economy during the SNDP, and the immediate two years afterwards. Indeed, while the TNDP argued that “sluggish growth and foreign exchange difficulties” were “attributable mainly to disruptions caused to the country’s supply routes, oil crisis, world recession and the collapse of copper prices” (Zambia Office of the President

National Commission for Development Planning, 1979: vii), it seems a lack of structural transformation is at the heart of the problem. These challenges only revealed the depth of dependence of Zambia's economy upon a system of accumulation which inhibited structural transformation, and could only be sustained by the fortunes of the copper sector.

In fact, the TNDP acknowledged that “[B]esides exogenous factors, the overall growth of real GDP [during the SNDP] was affected by adversely by the pattern of investment, import of highly-capital intensive technology and certain factors of domestic origin” (Zambia Office of the President National Commission for Development Planning, 1979: 2). The pattern of investment is explained in terms of sectoral allocation of production-oriented and/or consumption-based fixed investment. While the SNDP maintained a relatively large portion of total gross fixed investment in GDP, standing at an annual average of 28 percent, much of this went into maintenance of copper mining and non-directly-productive socioeconomic infrastructure and services. The mining sector alone appropriated about a third of the economy's total investment, while real estate and public administration combined to account for about 17.4 percent of total fixed investment (see Table 6-4 Sectoral Distribution (percentage) of Gross Fixed Capital Formation, 1966-1976, below). Even the 12.7 percent of gross fixed capital formation as share for ‘Transport and communication’ was largely spent on infrastructure aimed at supporting the production of copper. Meanwhile, the manufacturing sector was allocated only a tenth of total fixed investment. Such patterns of investment only serve to underscore and sustain the argument that a system of accumulation inherited from the colonial era persisted in the post-Independence period, but a major shift occurred only in the sense that the kinds of interests which lodged themselves in this system of accumulation, specifically those which bound the state architecture to its underlying economic base, ensured that policies and resultant expenditure patterns sustained this material base rather than alter it as would be required for structural transformation.

Table 6-4 Sectoral Distribution (percentage) of Gross Fixed Capital Formation, 1966-1976

	FNDP, 1966-70	SNDP, 1972-76
<i>I. Directly Productive sectors:</i>		
1. Mining	26.4	29.0
2. Others	24.5	21.4
(i) Agriculture, forestry and fisheries	6.6	5.2
(ii) Manufacturing	10.6	10.8
(iii) Electricity, gas and water	7.3	5.4
<i>II. Construction</i>	6.4	1.7
<i>III. Services and Infrastructure</i>	42.7	47.9
(i) Transport and communication	9.3	12.7
(ii) Wholesale and retail trade	4.3	6.5
(iii) Real estate	6.6	9.5
(iv) Public administration	12.8	7.9
(v) Education	5.7	4.7
(vi) Health	1.5	1.5
(vii) Others	2.5	5.1

Source: TNDP Table 1.2, p2

In addition, productive investment led to accumulation of capital-intensive technology, which not only diminished the potential for direct productive linkages and employment generation, but also robbed the country of foreign exchange. Despite massive absorption of public resources by the state's architecture, the performance of accumulated capital was impaired, according to the TNDP, by "weakness in the plan implementation machinery at both central and provincial levels; absence of properly appraised projects for absorbing capital funds; shortages of skilled manpower and managerial capacity; and policy shortcomings, such as pricing of products unrelated to economic costs" (Zambia Office of the President National Commission for Development Planning, 1979: 3). Nevertheless, these contradictions must be seen in terms of the nature and interaction of socioeconomic and political interests and the form of the economic base underlying them.

Another way to look at the kinds of interests which lodged themselves in a restricted material base dominated by copper is to examine GDP in terms of its categories of expenditure (see Table 6-6 GDP by Kind of Economic Activity at Constant (1965) Prices, 1966-1976, below). Between the FNDP and SNDP periods, government

expenditure doubled while private consumption witnessed a mild contraction. Net exports of goods and services substantially contracted, and when net transfers are taken into account, Zambia shifts to a net borrower from being a net lender. In part, the latter scenario is explained by nationalisation, particularly of copper mines, and subsequent payments for majority shares by the state, and export of rents by minority shareholders in the face of political and economic uncertainty.

Table 6-5 GNP by expenditure (%), 1966-1976

		FNDP, 1966-70	SNDP, 1972-76
1	Government Consumption	11.0	23.0
2	Private final consumption	45.0	43.0
3	Gross fixed investment	25.0	28.0
4	Changes in stocks	2.0	3.0
5	Net exports of goods and services	17.0	3.0
6	GDP at market prices	100.0	100.0

Source: TNDP Table 1.3, p3

The dominance of copper is seen in its share in GDP, and, mainly as a source of revenue and foreign exchange.

Table 6-6 GDP by Kind of Economic Activity at Constant (1965) Prices, 1966-1976

	1965	1972	1971	1976	Annual compound rate of growth	
					1970 over 1965	1976 over 1971
GDP (unadjusted)	711.1	783.1	842.2	995.0	2.0	3.4
I. Mining and quarrying	291.8	221.9	202.7	232.0	4.4	3.8
II. Non-mining sector	419.3	561.2	653.3	776.0	6.0	3.6
1. Agriculture	97.4	106.0	118.2	142.0	1.8	3.6
(a) Commercial	18.3	24.0	35.8	55.0	-	-
(b) Subsistence	79.1	82.0	82.4	87.0	-	-
2. Manufacturing	48.0	81.0	86.0	107.5	4.9	4.5
3. Electricity, gas and water	5.4	16.2	19.8	40.5	32.0	16.0
4. Construction	40.9	34.8	51.1	66.5	-2.8	5.5
5. Trade	80.5	89.7	87.5	104.5	2.2	3.6
6. Hotels and restaurants	4.0	8.1	12.3	13.0	15.0	1.1
7. Transport, communications and storage	32.8	34.6	47.5	41.5	1.3	2.4
8. Financial institutions	10.7	15.9	18.9	17.5	8.3	-1.4
9. Real estate	11.6	33.1	30.0	43.0	32.0	7.5
10. Business services	9.5	12.6	15.1	18.5	5.8	4.1
11. Community, social and economic services	64.0	107.5	137.2	158.0	10.9	2.9
12. Import duties	14.5	21.7	23.0	17.0	-	-
13. Less imputed bank service charges			6.7	6.5	-	-

Source: TNDP Table 1.5, p4

The share of mining in total GDP declined progressively; starting at 41 percent in 1965, dropping to 28.3 percent in 1970, then 24.1 percent in 1971, and finally to 23.3 percent in 1976. Accounting for much of this drop had been some developments outside of mining, but the fluctuations, with average downwards trend in copper prices after 1975, were accounted for mainly by copper. As has been argued, the developments outside the copper sector were indirectly related to the development of copper mining. Meanwhile, the manufacturing sector, based on its share in GDP, performed comparatively well, raising its share from 6.5 percent in 1965, to 10.3 percent in 1970, 10.2 percent in 1971 and 10.8 percent in 1976.

Table 6-7 Government Revenue and Expenditure (current price in K' million), 1966-1976

	1 July 1966- 31st Dec. 1967	1968	1969	1970	1972	1973	1974	1975	1976
<i>I. Recurrent account</i>									
1. Revenues	384.3	292.3	389.5	425.1	288.0	385.0	650.0	448.0	441.0
(a) Mineral	245.8	176.2	235.1	231.1	56.0	108.0	324.0	59.0	12.0
(b) Non-mineral*	138.5	116.1	154.4	194.0	232.0	277.0	326.0	389.0	429.0
2. Expenditure	295.6	225.7	258.0	275.0	363.0	394.0	441.0	606.0	612.0
3. Surplus (+) or deficit (-)	+88.7	+66.6	+131.5	+150.1	-75.0	-9.0	+209.0	-158.0	-171.0
<i>II. Capital account</i>									
1. Receipts	75.8	78.6	63.3	70.6	79.0	102.0	119.0	167.0	143.0
(a) Miscellaneous capital projects	40.4	17.4	23.8	26.8	15.0	12.0	33.0	28.0	32.0
(b) Loans, internal	23.0	14.2	16.0	22.0	15.0	41.0	28.0	38.0	58.0
(c) Loans, external	12.4	47.0	23.5	21.8	49.0	49.0	58.0	101.0	53.0
2. Expenditures	160.4	194.3	156.3	169.2	160.0	153.0	194.0	246.0	162.0
3. Surplus (+) or deficit (-)	-84.6	-115.7	-93.0	-98.6	-81.0	-51.0	-75.0	-79.0	-19.0
III. Overall surplus (+) or deficit (-)	+4.1	-49.1	+38.5	+51.5	-156.0	-60.0	+134.0	-237.0	-190.0
1. Financing by Bank of Zambia	8.0	-11.9	-44.5	-45.7	53.0	31.0	2.0	158.0	60.0
2. Financing through other sources	-12.1	60.0	6.0	-5.7	103.0	29.0	-136	79.0	130.0
Source:									

*examples of these include income tax on non-mining companies, customs, excise, sales tax etc.

Source: TNDP Table 1.6 p5 and Table 1.7 p6

On aggregate, despite actual capital expenditure being larger than planned during the FNDP, financial constraints on overall development planning had not yet featured. For the period 1966-1970, external loans accounted for only 15 percent of the capital account and, while the capital account had been in deficit, the surplus in the recurrent account more than compensated for the shortfall. Thus, an overall surplus in the sum of recurrent and capital accounts was experienced.

Often, a combination of adverse external conditions (episodes of copper price decline; Rhodesian border closure in 1973 which disrupted transit of tradeables) and internal challenges (Mufulira mine disaster in 1970) are identified as having set off the SNDP to a difficult start. In 1971 and 1972, copper prices were generally reflective of a downward trend, with copper per tonne at the LME trading at K765. Fortuitously, average copper prices per tonne at the LME rose again in 1974 to K1,326, which led the balance of payments into a surplus. It is revealing that only six years after Independence, copper prices were so unfavourable to Zambia's economy that foreign exchange difficulties were already featuring. For Turok (1979b), the frailty of the Zambian economy was not seen in a one-dimensional sense in terms of dependence upon copper, but the dependence upon copper is explained as a consequence of development of a system of accumulation which precluded the ability and capacity to forge and implement developmental goals underpinned by structural transformation. Turok (1979b: 71) argued that "even by 1974, before the collapse of copper prices, foreign exchange was becoming a serious constraint on development. The problem lies deep within the system itself and to have its basis in the ambiguities and lack of direction in national development goals and the structural contradictions this has caused ... there is a form of state capitalism in which the interests and policies frequently collide to the detriment of the smooth running of the system."

Turok, however, places much stock on an ideal type state which has developmental aspirations figured out yet frustrated by an interplay of societal interests outside of it. But if the state is seen as a reflection of interests, then developmental projects pursued by the state must also be seen as satisfying/meeting a particular configuration of interests, lodged both in the state architecture and its allies/partners in the private sector.

Examining the development plans reveals a state which has generally crafted and pursued successfully a number of developmental projects. Yet, although important and laudable, given the Independence scenario as initial conditions, these developments were far removed from conceptions of structural transformation spearheaded by industrialisation, as a way seek relief from dependence upon copper, and be the basis of an integrated structure of production. Indeed, the development plans themselves reveal the inadequacy in thought and execution of industrialisation for example, such that, even if followed to the letter, structural transformation would have eluded the Zambian economy. Hence, one must ask whether the development objectives, projects and policies crafted in the first place were in fact suitable given the contradictions in production, distribution and allocation of resources of the post-Independence Zambian economy. Generally following this line of reasoning, and questioning the pattern of post-Independence industrialisation, Ann Seidman (1974a: 608) asked, “should Zambia, at this stage in its development, use scarce government investment funds to produce private cars for the few people with high incomes? Or should it give priority to the production of simple tools and equipment - for example, animal-drawn ploughs, maize-grinding machines, bore-hole drills - to increase rural productivity and levels of living? Or, alternatively, should the Government invest in the more rapid expansion of lorries and buses, to provide cheap transport for low-income rural dwellers and the goods they produce and buy?”

Her queries draw attention to questioning the adequacy of development thought and conception within the development plans themselves, that is, exposing the ineptitude of public policies themselves. Nevertheless, this does not address the underlying reasons as to why a set of development projects and policies must necessarily be pursued. She recognises this weakness in her argument by pointing out that observing absence of an integrated pattern of production in the manufacturing sector could very well “be strengthened by a thorough examination of the evidence concerning the extent to which the emergent class of Zambians — who have since independence assumed control of the civil service and the parastatals — may in fact be pursuing policies ... in its own perceived self-interest” (Seidman, 1974a: 624, footnote 1). Within the context of a system of accumulation, this being the interaction of socio-political and economic interests in a restricted economic base, the dominant role of

state actors is identified and the interaction of these on behalf of the state with private capital.

Bomsel (1992) saw the interests within the state architecture as both inept and acting to preserve the existing material base upon which their interests were well served. He argued that, for Zambia, bad economic policies harmed the agriculture sector, and these policies must be traced from the people situated in the “government ... who have devised and implemented these policies”, hence have acted to sustain the economic base of their interests since, “[a]s the largest employer within the country, the state and its employees constitute the strongest pressure group for maintaining the current unproductive income distribution system. Moreover, few government employees possess the technical and managerial abilities necessary to develop meaningful reforms and to rebuild the economy” (Bomsel, 1992: 78). In addition, by the beginning of the end of the 1970s, over 66,000 people were directly employed in the copper mining subsector, with an additional three million people profiting indirectly from this employment and business interests tied to mineral development. Thus, the perpetuation of a particular configuration of an economic base and interests underlying it can be discerned by looking at how interests get embedded within or, attached to, a particular material base, and how they then act to safeguard their interests and, therefore, the material base. Political rhetoric about employment creation ensured that a set of interests developed and embedded themselves within a restricted material base, one which combined continuities from the colonial era and new developments in the post-Independence era in a manner inimical to structural transformation.

While rising copper prices in 1974 led the balance of payments into surplus, the following year and an extended period afterwards witnessed a long-lasting collapse of real copper prices, this suggesting a combination of external and internal conditions as having a determining influence upon Zambia’s development prospects. Firstly, the sharp decline in copper prices caused financial problems for the government both as the state and as majority shareholder in the copper mining interests. Government mineral revenue declined considerably from K324 million in 1974 to K59 million in 1975, K12 million in 1976 and virtually nothing between 1977 and 1978. Secondly, although it is generally seen that post-1975 decline in copper prices was a unique and

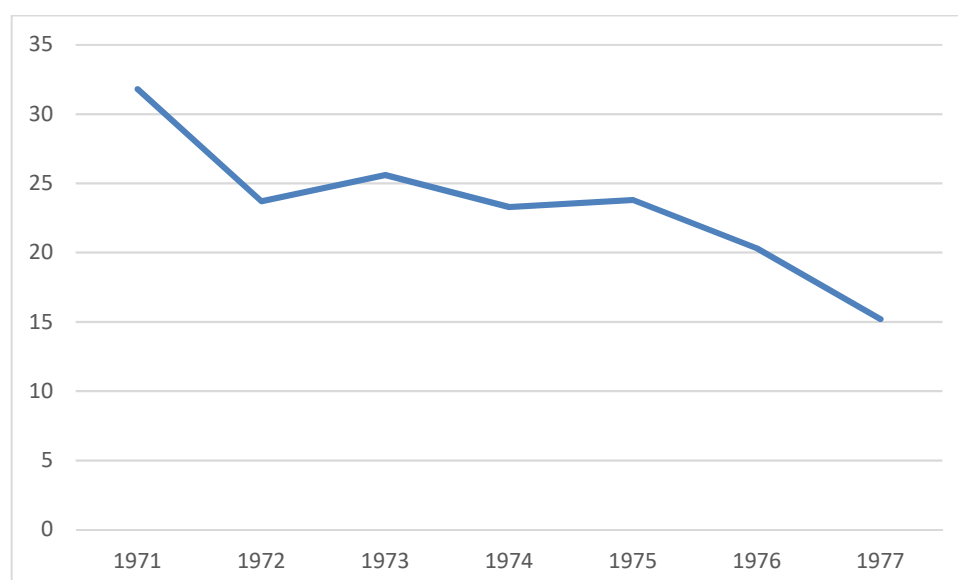
decisive feature of Zambia's developmentalism, when this is seen within the context of long-run trends in copper prices, the post-1975 situation appears to be in line with these (Tilton, 1992). Hence, while acknowledging the impact of external conditions, it is more apposite to examine how internal conditions responded, and how this, in combination with unprofitable copper mining, pushed the country's economy further away from structural transformation. It is then found that the interplay of human resource (technical, managerial, administrative) factors, as well as politico-economic factors adversely impacted upon the profitability of mineral development and the ability of the state to alter the course of development towards structural transformation.

Thus, after 1975, when terms of trade halved following the first oil shock, in addition to transportation difficulties and cost challenges which made copper mining considerably less lucrative, the political system and development policies responded by serving interests entrenched in a restricted economic base. Political and social vices such as corruption and rent seeking which proliferated were not bad for development in and of themselves, but because they took place within a confined structure of production to advance, sustain and encourage interrelationships of interests, they strengthened dependence upon the (distorted) existing economic base. Inefficiency, mismanagement and waste, including political patronage, were not the cause of the economic crisis, although they aggravated it, they were symptoms of deep-seated contradictions of a system of accumulation hostile to structural transformation.

Given that the government sustained its consumption patterns despite declining terms of trade and diminished revenue base in anticipation that the decline in copper receipts would be short-lived (Bomsel, 1992: 69), it can be argued that the state acted to safeguard the existing system of accumulation. The economic crisis, as a symptom of the unprofitability of the copper sector, eliminated the substantial mineral revenue base of the state. For the recurrent segment of the government budget, mineral revenues were as much as 60 percent of the 1966 to 1970 FNDP period, declining to 20 percent of the total recurrent receipts in 1972, and then increasing to 50 percent in 1974, before falling to insignificance. Non-mineral bases of revenue thus became important sources of revenue for the state rising from 23.5 percent of GDP less value added from the mining sector to 27 percent. Sustaining existing interests by way of

maintaining consumption patterns required the government to solicit funds from external sources and, by 1975, external loans featured prominently, making them for the first time larger than mineral revenues. Meanwhile, recurrent expenditure increased more than two-fold between 1970 and 1976, corresponding to an increase in its share in GDP from 21 percent in 1970, to 27 percent in 1972 and a period peak of 34 percent in 1976. Conversely, capital expenditure declined considerably, and fell well below the targets set out at the launch of the SNDP by as much as 70 percent (Zambia Office of the President National Commission for Development Planning, 1979: 7; see Table 1.8).

Figure 6-1 Capital Expenditure as a Percentage of Gross Fixed Capital Formation, 1971-1977



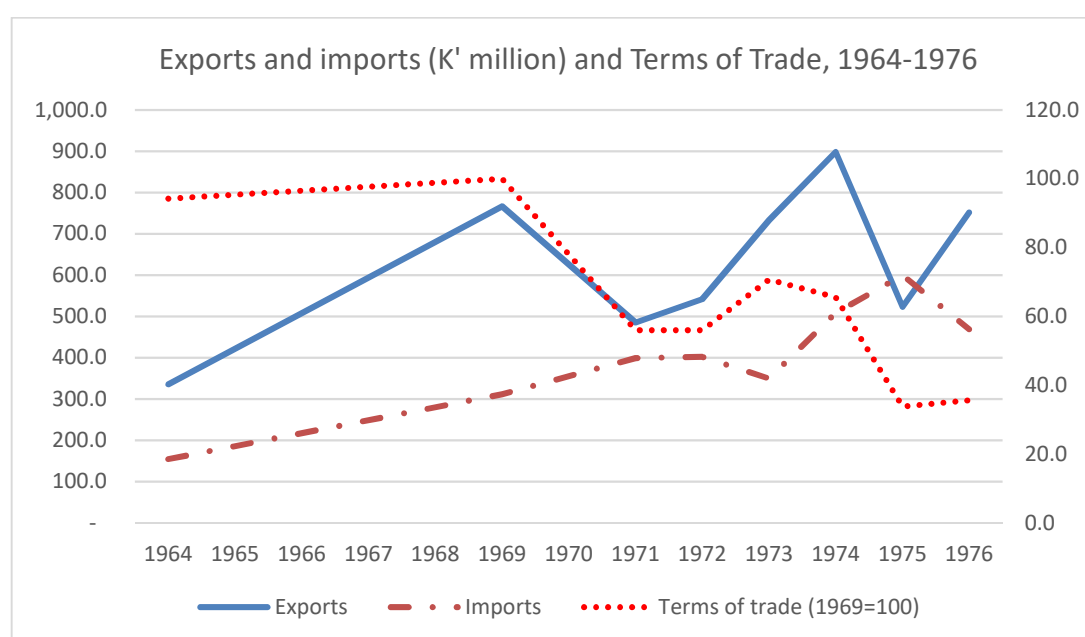
Source: Author's own construction from data in Turok (1989: 135)

The allocation of capital expenditure also showed that efforts to restructure the pattern of production had diminished significantly, while maintaining the existing economic base was of prime importance. For example, only 20 percent of capital expenditure was allocated to directly productive sectors (mining, manufacturing, agriculture, forestry, fisheries, tourism), with 26 percent going to social and community services (housing, community development) and a further 47 percent apportioned for economic infrastructure (power, posts and telecommunications, road, water and air transport,

railways). Turok (1989: 135) has suggested that “[o]ne of the most important indices of real intentions is the scale of government capital investment.” But this leaves unexplained the socio-political and economic structures responsible for a lack of genuine commitment. If public recurrent expenditure serves as an insight into the kinds of activities which demonstrate genuine commitment, then it goes without saying, as Chapter Seven will show, the nature of interests lodged in the state architecture did absorb considerable resources at the expense of productive investment. The increase in recurrent expenditure denied investment in the productive sectors. The TNDP also noted that: “The shortfall in capital investment in the first three years of the SNDP was 25%. The consequent failures eroded government’s revenue potential in an ever increasing downward spiral.” (Zambia Office of the President National Commission for Development Planning, 1979: 18).

In general, an upward trend in both exports and imports was experienced from 1964 to 1976, but 1975 was the first post-Independence year to have experienced a deficit in the trade balance. As copper accounted for at least 90 percent of exports, the fluctuations in exports is explained mainly by fluctuations in exports of copper which in turn is determined considerably by the vicissitudes of the copper sector. From the middle of 1974, copper prices declined and reached K794 per tonne by 1975, from K1,326 in the first half of 1974. Note that in 1972, when an export surplus was recorded, copper prices stood at K764 per tonne, a price lower in nominal terms than the trade balance deficit year of 1975. This suggests that one must look elsewhere to explain not only the deficit in the trade balance, but the crash in the copper sector. One such explanation is offered by transport difficulties Zambia faced, particularly following the crisis of the civil war in Angola. Terms of trade began to decline in 1969, rising briefly in 1974 before a sharp drop thereafter.

Figure 6-2 Exports and imports (K' million) and Terms of Trade, 1964-1976



Source: Adapted from TNDP Table 1.11

Another way to see the nature of Zambia's system of accumulation is to examine the balance of payments, particularly during the immediate post-Independence era. The contraction of the balance of payments deficit between 1972 and 1973 from K108 million to K8 million is mainly explained by an increase in the trade balance surplus by almost three times owing to favourable copper prices. Although the favourable trade balance situation permitted the government to redeem K147 million in ZIMCO bonds, the overall balance of payments in 1973 was still in deficit.

Table 6-8 Balance of payments, 1972-1976

		1972	1973	1974	1975	1976
1	Exports f.o.b.	+543.2	+733.5	+898.2	+523.1	+742.4
	Imports f.o.b.	+405.4	+349.4	+508.4	+599.6	+482.2
	Balance of Trade	+137.8	+384.1	+389.6	-76.5	+260.2
2	Investment income (net)	-51.0	-77.3	-62.2	-45.0	-109.5
3	Non-factor services (net)	-121.1	-132.6	-197.7	-192.0	-166.7
4	Unrequited transfers (net)	-97.0	-80.2	-81.2	-79.0	-86.1
5	Current account balance	-122.3	+93.4	+48.5	-392.5	-102.1
6	Capital account (net including errors and omissions)	+7.3	-101.5	-29.9	+142.0	-34.1
7	SDR allocations	+7.3	-	-	-	-
8	Overall deficit (-) or surplus (+)	-107.7	-8.1	+18.6	-250.0	-136.2

Source: TNDP Table 1.12, p9

In 1975, when substantial gains in foreign exchange earnings were made on account of favourable copper prices, the balance of payments recorded a short-lived surplus, since the remainder of the SNDP went into large deficits. 1975 was a decisive year for Zambia's economy, the balance of payments recorded a substantial deficit in the order of K250 million, in spite of considerable inflow into the capital account. So bad was Zambia's economic situation that in 1975, K136 million was recorded as deferred payment to foreign creditors, with a further K104 million the following year in outstanding payments.

Explaining part of the economic problems, which came into play throughout the latter part of the 1970s, is Zambia's dwindling foreign exchange reserves which had peaked in the early 1970s.

Table 6-9 Foreign Exchange Reserves (K' million), 1970-76

	End 1970	End 1971	End 1976
Gold	4.173	4.541	5.424
SDRs	6.348	13.592	17.661
Reserve position in IMF	13.576	13.581	-
Foreign exchange	360.723	178.340	66.135
Total	384.820	210.054	89.220

Source: TNDP Table 1.13, p10

Gross international reserves were over K384 million by the end of 1970. Foreign exchange reserves halved between end of 1970 and end of 1971, and sliding further by end of 1976 to only around K66 million. By 1976, Zambia's foreign asset position indicated a net liability in the order of K115 million and, meanwhile, growing debt imposed a burden of foreign debt servicing which consumed about a tenth of export earnings.

Drastic decline in terms of trade diverted investible surplus since "changes in terms of trade have an important bearing on total availability of resources for meeting the investment and consumption needs of the economy" (Zambia Office of the President National Commission for Development Planning, 1979: 1). In 1979, Kaunda reported that "[s]ince 1975, Zambia [was] losing, on average, more than K200 million a year to the rest of the world because of deterioration [of its] 'terms of trade'" (Zambia Office of the President National Commission for Development Planning, 1979: iv). These developments were a reflection of the nature of a system of accumulation bereft of an integrated structure of production, relying instead on foreign exchange earnings as its lifeline.

At ministerial level, reflecting the weaknesses of its assumptions, the planning and implementation of state development programmes was usually poorly coordinated across ministries. For instance, by 1972, as reflected in the Second National Development Plan (SNDP), while the Ministry of Finance sought ways to maximise mining tax revenue for the state, the Ministry of Mines, in a bid to encourage mining development and private capital injection, sought to reduce taxes on mines (Seidman, 1974; 1979). These conflicting views are reflected within the same document, the

SNDP, and from them, it was difficult to discern properly the stance of the state with respect to private capital in the mines.

6.3.2 Employment

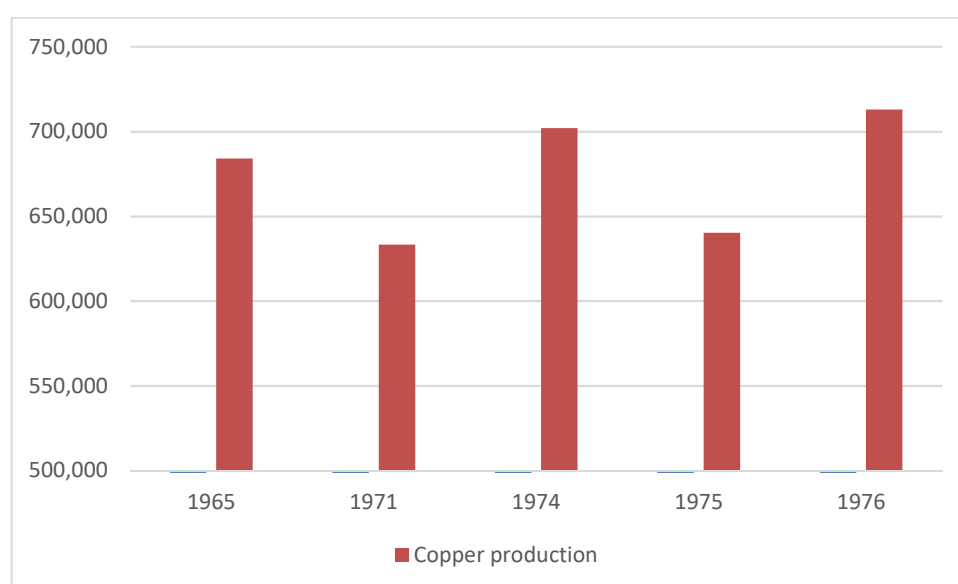
Employment between the launch and completion of the SNDP had remained virtually unchanged. Although between 1971 and 1974 employment had experienced a five percent increase, on aggregate growing to 384,890 workers, the completion of certain infrastructural projects (for example, of the TAZARA Railway which led to most of the project's 13,000 workers becoming unemployed) and closure of businesses (due to, for example, import controls) by the end of the SNDP, no gains in employment were recorded. For the major sectors, moderate gains in employment were experienced in mining, while, construction, commercial agriculture, transport and communications witnessed declines with manufacturing staying put.

On aggregate, the decline in economic activity during the SNDP did not reduce employment figures on account mainly of political expedience. Since the state sector was the largest employer, within the context of economic contraction, maintaining political legitimacy compelled Kaunda and his allies to leave unaltered employment figures. Acknowledging the unemployment problem, the TNDP placed emphasis on stimulating employment maximising economic activity through the rhetoric of rural development programmes and utilisation of labour-intensive technology.

6.3.3 Overview of performance of mining and manufacturing sectors

Between 1971 and 1976, the contribution of mining to GDP remained the same at around 23 percent. Clearly, from its share in GDP of around two-fifths in 1964, one would think some reasonable structural transformation had taken place, but as seen so far, copper continued to dominate the economy both as virtually the only foreign exchange earner and a major source of revenue for the state. Even in episodes where copper mining did not produce revenue for the state, particularly between 1977 and 1978, its continued production, even at a loss, was necessary for the purpose of earning foreign exchange.

Figure 6-3 Copper Product (metric tons), 1965-1976



Source: Author's own construction based on TNDP data

From its 1971 level of output, copper output by 1974 had registered substantial gains, rising to 633,400 metric tons to 702,100 metric tons, before dropping by about 9 percent in 1975 mainly on account of Zambia's obligation to CIPEC to cut back production. By 1976, copper output had increased to 712,900 metric tons, a level which was 26 percent less than envisaged at the launch of the SNDP. In short, in terms of output, the copper mining sector performed well below what the government had hoped.

In 1965, with an output of 684,000 metric tons of copper, Zambia's share in world mine production stood at 12 percent; yet by 1976, when its output had increased to 712,900 metric tons, this share had contracted to 8 percent. This shows that copper output outside Zambia increased faster than in Zambia. Several reasons have been offered to explain this predicament. The government of Zambia through the TNDP argued that many of the problems which debilitated copper mining were outside the control of the state. While new investments had been undertaken, with the opening of new mines, the "the depletion of existing mines" as well as "high rates of turnover among managerial, technical and supervisory staff, and transportation difficulties caused by the border closure in 1973 and the Angolan civil war in 1975" explained the disappointing performance of the Zambian copper mining sector (Zambia Office

of the President National Commission for Development Planning, 1979: 15). Further, a substantial portion of the K500 million capital investment of the SNDP for the mining industry went into rehabilitation rather than expansion of production. All these problems combined to ensure that copper mining operations were executed under conditions of capacity underutilisation. Barton (2016, 2015) examined the performance of the Zambian economy and, specifically, the copper sector; he placed more emphasis on withdrawal of foreign capital due to uncertainty within the context of institutional degradation under one-party authoritarian rule. Rather, the problem was the inability of the Zambian state to promote structural transformation when resources were available in the immediate post-Independence period.

While these views provide some insight into the factors affecting the performance of the Zambian economy more generally and the copper sector in particular, they misrepresent the underlying problem. Both views detail symptoms of underlying processes, and because they fail to account for a lack of structural transformation as the underlying problem, they cannot properly account for the root causes. Institutional degradation within the context of an authoritarian and exclusive one-party state that Barton pins his analysis on cannot fully explain the underperformance of the Zambian economy because it is precisely that states were authoritarian which, as argued in Chapter Four, enabled developmental states to condition and order the affairs of their development more effectively. Indeed, as I show below, one must examine the nature of physical accumulation, and how socio-political and economic interests through the state and between themselves interact to promote a particular configuration of capitalist development. It is that configuration, and interests attached to it, which underpinned the nature and form of Zambia's post-Independence developmentalism.

Response of the state through BOZ to dwindling foreign exchange reserves did not confront or seek to alter the nature of the structure of production, but instead reflected it. Concerned about the level of foreign exchange reserves, BOZ, in 1972, set in motion a series of strategies among them enforcing ceilings on foreign exchange transactions, prohibiting a number of imports and, finally, in May of the same year, suspended all import licences. Consequently, a number of firms had their operations disrupted, while some companies such as “two major clothing factories in Ndola and Kitwe” completely went out of business on account of refusal by the Ministry of Trade

to issue cloth import permits (Barton, 2016: 213, footnote 74). See below also for the overall impact of these policy moves on capacity utilisation and, eventually, a contraction in production. The interventionist policies the state used were flawed in motivation, because they were aimed at protecting the existing spaces of economic strength rather than promoting structural transformation.

6.3.4 Key selected external influences: Rhodesian Border Closure and oil crisis

The Rhodesian border closure of 1973 was another milestone in geopolitical influences on Zambia's economy. Mediated through political expediency, it influenced development policy in practice in Zambia in ways that prevented the economy from ordering its affairs towards structural transformation. Worried about Kaunda's continued backing of so-called guerrilla fighters against Rhodesia, in January 1973 the white Rhodesian state decided to conditionally close its border with Zambia, cutting off all trade save for copper. Meanwhile, Kaunda reacted by starving Rhodesia of Zambia's copper business by opting not to use Rhodesia as a transit route for copper exports, while also putting in place measures to shelve further foreign exchange transactions with both Rhodesia and South Africa. Just before these decisions were implemented, Rhodesia transported around half of Zambia's copper exports, making it a crucial trade route, yet Kaunda did not flinch as he saw this as part of the wider cause and commitment to liberation struggles of southern Africa. Despite facing opposition, since "some Zambians felt this to be at the expense of their own concerns" (Larmer, 2010: 56), Kaunda went on with his decision once again to delink from Rhodesia. The inherited institutional set up which gave Kaunda considerable power ensured that such decisions, though at the expense of the Zambian economy, became a matter of national policy.

Following the Rhodesia border closure, it becomes clear that resource allocation and policy priorities as experienced in Zambia were truly a matter of the nature of politics. Confidential documents stored in the UNIP archive revealed that rising costs as well as restraints on capital investments in copper mining production were anticipated (Barton, 2016: 78). However, set against the crash in copper prices in 1975, it seems the losses in both foreign exchange and impact on mining production following the

Rhodesian border closure were underestimated. Nevertheless, Kaunda revised his stance against trade with South Africa, but not with Rhodesia, and eventually struck a deal to airlift copper to Johannesburg with return flights bringing with them supplies of parts and other inputs such as chemicals for use in existing enterprises, mainly copper mines. Partly to account for Zambia's policy option of avoiding Rhodesian transport routes and partly to cushion the Zambian economy from the early-1970s oil shock, the IMF, World and other bilateral partners featured in Zambia's development policy space as development partners through their provision of finance. Thus, avoiding the Rhodesian trade route was not only extremely onerous upon Zambia's fledgling economy, it also reflected the nature of politics and, subsequently, how this restricted options for structural transformation, instead focusing on investing scarce resource into existing strengths.

By 1979, the government was "paying over K100 million more in ... oil imports as compared to [the] pre-1973 oil bill" (Zambia Office of the President National Commission for Development Planning, 1979: iv). Meanwhile, in parallel to the oil embargo starting around October 1973, commodity prices experienced an initial boost. Copper prices rose rapidly, in excess of 125 percent to US\$ 2,733 between January 1973 to April 1974, leading to a ballooning of government revenue. Confidential government documents revealed that foreign exchange earnings in 1973 were at least as much as US\$980 million based on a copper price of US\$1,100 per tonne for an average production of 54,500 tonnes per month (Barton, 2016: 79). While 1973 should have provided windfall of no less than US\$250 million in foreign exchange revenue, and hence should have offset the rising costs of energy and transport arising from the oil shock, politics played a bigger role in shaping the Zambian economy. The geopolitical contradictions and reactions within the context of the Rhodesian border closure, including redemption of government bonds for management contracts in the copper mines, added decisively to Zambia's development trajectory tied to debt.

6.4 Post-colonial manufacturing sector development: Industrialisation without Learning, 1960s and 1970s

6.4.1 Introduction

This sub-section places a microscope on manufacturing sector developments, especially within ten years of Independence. I detail the nature of industrial development, highlighting the role of the state in capital accumulation, including the specific nature of state-capital relations. As Chapter Five argued, geopolitical contradictions within a year of Independence placed urgency on installing local industries, but a failure of the post-colonial state to develop appropriate structures and institutions, reflecting its own weaknesses, paved way for uncoordinated investments bereft of local learning. Understandably, given the colonial legacy which ensured that virtually no local structures and skills existed at the time of Independence, while the politico-economic project of delinking from the South called for self-sufficiency, industrial development was forced to rely on foreign technology and expertise by establishing industries which did not develop on the basis of an integrated structure of production. This forms part of the broader argument of the thesis that a lack of developmentalism underpinned by structural transformation is precisely why the Zambian economy failed in its crucial formative fledgling post-Independence. That Zambia fell prey to the drawbacks of deteriorating terms of trade, was merely a reflection of an earlier failure when finances were available to support development based on a diversified and integrated structure of production.

The inability of the post-Independence literature to place industrial development in its context, including a failure to adequately capture the role of the state, by instead focusing on the kinds of interventionist policies — such as subsidy provision, import restrictions, credit controls, foreign exchange allocations and so forth — which underpinned and promoted capital accumulation, has provided misleading assessments. Bigsten and Kayizzi-Mugerwa (2005: 320) generally supported neoliberal reform (reliance on market prices and trade liberalisation) and placed blame on Kaunda's interventionist policies for Zambia's economic decline from mid-1970s right up to the end of the Kaunda leadership in 1991: "It was now becoming increasingly clear that UNIP's heterodox policy approach was not working." In addition, they saw import-substitution policies as part of the broader interventionist

policies which did not work for Zambia; they argued that “[t]he import-substitution industry, which had thrived on high tariffs, became a major victim of the decline of the copper sector,” and thus, while “macroeconomic reforms in the 1980s, with support from the World Bank and the IMF” were instituted, “the partiality for government controls persisted. By the mid-1980s there were already a number of reform-minded technocrats in place at the Ministry of Finance and the Bank of Zambia, but they received very limited support from the political leadership ... There was still considerable faith in structuralist ideas and the benefits of pursuing an import-substitution industrialisation (ISI) strategy” (Bigsten and Kayizzi-Mugerwa, 2005: 321). It is clear that Bigsten and Kayizzi-Mugerwa were apprehensive about interventionist policies, but this is partly because they misunderstood both the nature of the policies and their motivation, including the context under which they were applied. In their analysis, no mention is made of the geopolitical contradictions and influence of foreign interests in establishing a particular configuration of capital which was not underpinned by structural transformation. Nevertheless, such analyses and recommendations as “[o]verall, Zambia’s economic development during most of the Kaunda era (1964-1991) was very poor. There is certainly no basis for any yearning for a return to the policies of that era. The policy changes in recent years have not been perfect, but they have at least been in the right direction” (Bigsten and Tengstam, 2010: 5; emphasis added) have been uncritically widely accepted even though they are misleading.

The DSP account has demonstrated that it is insufficient to suggest universally that interventionist policies are necessarily bad in and of themselves. Rather, it is more apposite to interrogate the wider socio-political and economic context as well as the detail of the form of capital accumulation. Zambia’s post-Independence development record shows that interventionist strategies and the big push through the state led to unprecedented rapid industrialisation, with the manufacturing sector as a share of GDP almost doubling in less than a decade of Independence, but absence of a coherent and integrated industrial policy strategy aimed at raising competitive capacity and integrating production diminished the potential for such growth to be self-sustaining. State interventionism in industry through import-substitution and protection of domestic production did decisively encourage growth of the manufacturing sector, although uncoordinated investments including reliance upon foreign expertise and

technology weakened the potential to spread productive linkages and erection of an integrated structure of production. With the benefit of hindsight, “there is wide agreement that trade liberalisation in Zambia had a negative impact on ... manufacturing ... and was anti-poor” (Weeks et al., 2007: 3). The deindustrialisation of Africa more generally following the 1990s neoliberal craze is well known, yet the neoliberal dogma surrounding industrialisation continues to dominate discourse.

By reinterpreting post-Independence industrial development, this subsection aims to highlight the importance of interventionist policies for industrial development, but adds a nuanced analytical dimension which suggests that the motivation and configuration/form of interventionist industrial development strategies matters, which must be designed to stimulate broad-based accumulation, while promoting wide-ranging coherent and integrated developments. Zambia’s immediate post-Independence record shows that uncoordinated industrial projects distorted the pattern of industrial development, yet this must not be seen as the cause of the failure of the industrialisation programme in creating an integrated structure of production, but merely a symptom of the broader structural and institutional weaknesses reflected in the state. One must first address the question of why industrial projects were uncoordinated in the sense that they did not support an integrated structure of production. For Zambia, this resulted from a host of elements, among them, the most enduring, with a lasting imprint on post-colonial development, being the socioeconomic and structural difficulties inherited from the colonial era which guaranteed dependence of the Zambian economy upon external influences. Firstly, as the previous two chapters demonstrated, the Zambian economy depended upon the South (specifically, Rhodesia and, to a lesser but considerable extent, South Africa), in a direct and decisive manner, for technology, expertise and infrastructure. Secondly, inherited capacities in human resources and institutions to deliver broad-based development were virtually absent.

Subsequently, on the occasion of UDI elaborated upon earlier, to sever ties with the South, and relying on foreign advice and expertise, and seeking self-sufficiency in hitherto imported items, Zambia embarked upon a major project to redirect trade routes, mainly to ensure that its chief export commodity, copper, continued to be exported, to earn the government much needed revenue to finance national

development more broadly. However, delinking from the South and seeking self-sufficiency planted deeper the Zambian economy to the inherited pattern of production centred around the fortunes of copper production. To the extent that the developments which followed, though unprecedented for Zambia and therefore praiseworthy, depended on the fortunes of the copper sector, they reflected a particular form of accumulation. One aspect of self-sufficiency which the post-Independence government deemed as crucial was the creation of industries to diversify production and relieve the Zambian economy of dependence upon copper, while also producing products previously imported. Nevertheless, given the absence of local capacities in technology and expertise, industrialisation should have meant acquisition of foreign technology, and creation of structures and institutions to do so.

Dependence upon foreign markets and technology are not uncommon in late industrialising countries, and these should not be interpreted as the underlying developmental problem (Lall and Urata, 2003; Amsden, 1989; van Arkadie, 1973). Here, the experiences of East Asian developmental states are instructive. For Japan, argued Goto and Odagiri (2003: 83), “acquisition of advanced technology from abroad was essential to help build technological capabilities of its own.” Similarly, “[l]acking domestic technological capabilities, Korea, had to depend heavily on foreign technology” (Kim, 2003: 146). Although Taiwan is argued to have relied to a higher degree on foreign direct investment than Japan or South Korea, its industrial development in the earlier phase of rapid industrialisation between 1960 and mid-1970s substantially relied on “technology embodied in imports of new capital ... [with] the process of acquiring and using foreign technology ... facilitated by the availability of an educated labour force as well as the emphasis on the production of goods using relatively simple technologies” (Aw, 2003: 168). Overall, as the DSP suggests, the processes of technology acquisition were facilitated by aggressive wide-ranging support from the state. The ability of a nation to ensure that technology acquisition takes place within the framework of broad-based development depends largely on the development of supporting structures, institutions and effective coordination between them and the investments they promote. In other words, learning new technology on a national scale is not restricted to firm-level capability building, but ability of the state to ensure that supporting structures and institutions are in place, to enhance capacity development hinged on spreading productive linkages.

For Zambia, there was some tendency in the Kaunda era literature to misrepresent or, more appropriately, inadequately investigate, the nature of industrialisation by viewing dependence on foreign technology as the underlying problem. Accordingly, import substitution itself is seen as a problem because it supposedly promotes dependence. For instance, Kaunga (1985: 5) suggested that “[b]y stressing ... import substitution the country had landed in a situation whereby ... external dependence is merely shifted and not eliminated.” Firstly, it not true that import substitution necessarily encourages dependence as the experience from the DSP indicates. This distorts the proper understanding of import substitution. And, secondly, dependence itself is not problematical, and neither is it avoidable, especially in early stages of development. In this connection, for Africa more generally and Zambia in particular, van Arkadie's (1973: 94, emphasis added) insights are revelatory: “Difficulties arising from dependence result not so much from reliance on foreign markets ... Nor is the problem reliance on foreign technology, which is inevitable. Rather it is that access to foreign markets, foreign technology and designs, and managerial talents came in a form in which understanding, access to information and critical decisions were either controlled elsewhere, or whatever local elements existed were drawn from the immigrant community.” Precisely because Zambia’s post-Independence development stimulus was conditioned by a particular kind of dependence, which reflected socioeconomic structural contradictions while facing geopolitical tensions within the context of UDI, the form of industrialisation was far removed from a self-sustaining and cohesive accumulation of physical assets. The absence of a coordinated and cohesive investments which reflected in high capital and import dependent industries was symptomatic of the broader political economy factors and structural contradictions which plagued the Zambian economy immediately after Independence.

Seen through the prism of a system of accumulation, the pattern of industrial development measured by a particular form of accumulation of physical assets was merely a reflection of the nature of socio-political and economic interests entrenched in the state apparatus, private sector and broader Zambian society which interacted to influence decisively resource allocation for industrial development as well the specific configuration of investment technology. This will be shown by first discussing the broader post-Independence industrial policy strategy which underpinned industrialisation, in order to establish the role the post-Independence Government

envisioned for the manufacturing sector in Zambia's overall development strategy. I then sketch the major features of industrial growth and patterns of capital accumulation in industry. In addition, an examination of select industrial projects will be offered, to demonstrate the nature of technologies adopted and the interests behind them.

6.4.2 Post-Independence Industrial Policy, 1964 to early-1970s

Soon after Independence, the new African government quickly came to grips with the urgency of transforming the structure of the economy. But what has evaded the state until today, is how to do it, seeing that this goal is still but a dream. Broadly, development strategy spelled out in the transitional development plan, profiting from the insights of the Seers report (UN/ECA/FAO report), aimed at diversifying production by industrial and agricultural development, while simultaneously enhancing the country's health, educational and infrastructural profile. With the private sector taking the lead, the state was responsible for planning which in practice meant drawing up development targets and supervising their pursuit.

Young (1973: 71) suggests that "[t]he nearest thing to a coherent state of this role [of manufacturing sector in Zambia's economy] was given in a white paper, Outline of the Government's Industrial Policy, which was published in October, 1964 on the eve of Independence and revised and reissued in January 1966; as late as 1969 it was still being quoted in the Ministry of Trade, Industry, and Mines as the official statement of government policy." In brief detail, industrial policy was aimed at supporting selected industries with largest potential to promote diversification. With its focus on meeting existing demand, promoting employment and skills development, industrial policy emphasised supporting labour-intensive consumer goods industries. Demonstrating the flawed nature of promoting consumer goods industries at Independence, it should be noted, as Chapter Three illustrated, that Zambia had by Independence a fairly developed consumer goods industry which, because of its relatively high import-dependence, should not have been promoted on the basis of not being complementary to domestic production to serve final demand. Preferably, as argued by Young (1973: 87), "the problem was to ensure that the economies of scale in basic and intermediate industries would not be ignored as the more obvious but ultimately limited

possibilities for import substitution in the consumer goods industries were exploited.” Put differently, selective industrial promotion should not necessarily have ignored consumer goods industries, but recognition should have been made that maximising spread effects required resources to be channelled elsewhere, especially given that consumer goods industries were already by Independence fairly large and expanding.

A hint on enhancing export capacity of manufacturing sector industries also appeared in the White Paper: “Government will encourage especially those industries which have a potential likely to lead to the establishment of other related industries, and will be prepared to consider special assistance where the product not only will meet requirements of the local market but also provide a surplus for exports at competitive prices” (Ministry of Commerce and Industry, 1966: 1). The White Paper also outlined Government’s commitment to establish industries outside the main economic centres.

By aiming to promote labour-intensive industries, including industries outside the main economic centres, the White Paper was believed to be partly responding to political pressures (Young, 1973). By the time the FNDP was crafted, particularly within the context of UDI, self-sufficiency became so important that it was elevated as a matter of national security. In addition, the reliance upon copper even at Independence was well known, that diversification of production was a matter of urgency.

Gleaning from industrial policy strategies which were believed to have been applied to develop (Southern) Rhodesia’s industries at the expense of Zambia, the post-Independence Zambian Government focused mainly on methods of intervention (Young, 1973; Martin, 1972). In practice, this implied application of a mixture of incentives such as tax holidays, other price mechanisms like tariffs, and administrative means such as import licensing, exchange control permission, preferential treatment in government contracts, administrative support for obtaining work permits for foreign staff if needed and so on. Managed by a former Federal civil servant, a Tariff Advisory Board was established, which operated much like the days of the Federation.

“It was not government policy, as rule,” maintains Martin (1972: 57), “to manage or control industry,” but, besides the interventionist methods to attract and support

foreign capital and, to a much lesser extent, local capital, the Government also called on the Industrial Development Corporation (INDECO) as its agent to apply part of its industrial policy, although limited in function by mainly supplying financial support to private capital, and only initiating projects in strategic sectors where private capital was reluctant to traverse. If serving the national interest as defined by industrial policy, INDECO would be required to initiate projects, but eventually hand them over to private capital if interests did arise. INDECO was also charged with the responsibility of offering technical and economic advice to prospective investors.

A brief history of INDECO is worth revisiting, if only to trace the evolution of industrial policy. Assuming the role of the Northern Rhodesian Loans Board, INDECO was in 1960 in the hands of the Northern Rhodesian Government. Run by a politician, Mr. John Roberts, the Northern Rhodesian leader of Roy Welensky's United Federal Party, INDECO was seen by "federal politicians ... as a useful sop for those northern settlers who felt unhappy about the slow progress of industry in their territory by comparison with what was going on in the south" (Martin, 1972: 60). The coming to existence of the Loans Board and eventually INDECO has already been explored in Chapter Three, but it is here worth recalling that it was a reflection through the state of white settler interests. In 1963, however, it was placed in private hands, with the Northern Rhodesian Government holding minority shares. In addition to making it clear that it would not directly participate in industry as majority owner, it also restricted its realm of influence to promotion only of private capital through provision of loans and other incentives deemed necessary as enablers of germination and expansion of private capital. Between 1963 and 1966, INDECO had projected an increase in the rate of investment to only a meagre £500,000, an amount which was dwarfed by post-Independence developments up to 1966. Reflecting the inability of the existing industrial policy stance to stimulate sufficient private capital accumulation to support manufacturing sector growth, in 1962 only a handful of applications amounting to £123,000 had been approved, rising to twelve approved applications valued at £187,500 in 1963. Then, when it reverted to Government in August 1964, the number of projects doubled to 24, valued at £400,000 (Turok, 1989: 123; Martin, 1972: 60).

Two months before Independence, INDECO returned to Government majority control, although with the caveat of assuring potential industrialists that they would be fully supported, provided they were making a net contribution to the development of the country. “INDECO had,” contended Sardanis (2003: 165), “a portfolio consisting entirely of loans made to settler-owned businesses.” Running on a business model, and seeking to insulate itself from political interference, INDECO made it clear that reliance upon foreign capital and expertise would be inevitable. Although this kind of thinking would be confronted a few months into Independence, its underlying contradictions had a lasting imprint on the Zambian economy.

It will be shown below that, though industrial development expanded rapidly when INDECO management changed, and especially within the context of UDI, a number of industrial projects schemed before the newly independent Zambian Government proper took over eventually saw the light of day well into Independence. On the one hand, these will be seen to contradict Government’s policy of promoting investments with highest potential to spread linkages. On the other hand, that they represented uncoordinated investments with flawed technological designs, reinforced by absence of technological acquisition, reflects the nature and relations of interests which entrenched themselves in the state architecture, in alliance with a particular configuration of (foreign private) capital.

Thus, in its early days after Independence, industrial policy was mainly restricted to promotion of private capital through a series of interventionist strategies. For Martin (1972: 58), “[i]t all added up to a policy along conventional liberal lines.” In a similar light, Young (1973: 82) contended that “[w]hile the state was responsible for infrastructural provision, decisions on the level and direction of investment in directly productive activities [including manufacturing] were left entirely to private individuals.” In addition, localisation of capital was at the time not a specific object in the Government’s interest. Writing on the attitudes of private investors in the early 1970s, and thus with the benefit of hindsight of the rapidity and eventual levelling-off of post-Independence industrial development, Young (1973: 83) argued that “[m]any businessmen seem to have been anxious about the political stability of the Zambian economy and, in particular, about the future of private foreign investment within it. Under these circumstances, they had an understandable preference for projects

yielding quick returns, rather than those which would lay the basis of a diversified economy.” This suggests that the formulation of private-sector-led industrial development under circumstances of (political risk and) uncertainty could very well deposit/concentrate resources and, subsequently, direct development towards existing spaces of economic strength based upon prevailing demand.

Organisationally, at Independence, INDECO was under the Ministry of Commerce and Industry, with a board exclusively composed of white capitalists (Sardanis, 2003; Martin, 1972). Between April and May 1965, Andrew Sardanis, aged in his mid-thirties, was appointed as the full-time General Manager of INDECO. Sardanis would eventually leave a lasting imprint on Zambia’s industrialisation agenda, hence the need to personify his narrative.

Triggered by UDI, although the official industrial policy strategy was one of promoting private sector activity, the Government through INDECO embarked on a number of developmental projects more generally, and industrial projects in particular. However, in 1968, the Government instituted measures to ensure state participation by acquiring majority shares in a number of existing large-scale private enterprises. Thus, after 1968, industrial policy, in addition to emphasizing interventionism, would also seek to promote expansion of state participation in the economy. As will be seen below, despite the shift in policy, the material base of the underlying system of accumulation was unaffected. Reorganisation and consolidation of existing spaces of economic strength was the main feature of developmentalism, which did little to alter the structure of production. For Meyns (1984: 21), “[t]he institutionalization of state capitalism in Zambia between 1968-74 could not prevent the problems the country has experienced since 1975 because the basic economic structures were untouched.” Below (and in the next chapter), I argue that this is precisely because of the nature of the socio-political and economic interests which underpinned the structure of production; industrialisation took place without promoting learning of foreign technology.

6.4.3 Performance of the manufacturing sector

The neglect of manufacturing at the time of Independence has already been shown; it contributed around six percent of GDP. Table 6-10 Value-Added in Manufacturing in Zambia, 1965 and 1972, below, demonstrates the post-Independence growth of the manufacturing sector, growing from K48 million in 1965 to K 164.5 million in 1972.

Table 6-10 Value-Added in Manufacturing in Zambia, 1965 and 1972

Manufacturing Industries	1965		1972	
	Million Kwacha	Percent of Total	Million Kwacha	Percent of Total
Food	6.6	13.8	23.6	14.3
Beverages and tobacco	13.0	27.1	67.9	41.3
Textiles and wearing apparel	3.9	8.1	12.6	7.7
Wood and wood products, including furniture	2.4	5.0	3.3	2.0
Paper, paper products, publishing and printing	2.1	4.4	6.5	4.0
Rubber products	0.8	1.7	5.4	3.3
Chemicals, chemical petroleum and plastic products	2.8	5.8	7.6	4.6
Non-metallic mineral products	6.1	12.7	10.6	6.4
Basic metal products	5.8	12.1	2.3	1.4
Fabricated metal products, machinery and equipment	4.4	9.2	24.4	14.8
Other manufacturing	0.1	0.2	0.3	0.2
Total	48.0	100.0	164.5	100.0

Source: Seidman (1974: 602), Table 1

The dominance of consumer goods subsectors is apparent, but reflects continuities of the colonial legacy. By 1972, 'Food' and 'Beverages and tobacco' subsectors combined to account for more than half of the manufacturing sector. Surprisingly, at Zambia's level of development, the fabricated metals subsector was prominent. However, when one examines the structure of the Zambian economy, it is not difficult to see why this is the case; it was a reflection of copper-centric developmentalism. The basic metals subsector was based in the Copperbelt, providing services and inputs in the form of repairs and basic parts to the mines, the railways and Government infrastructural developments.

Indeed, the manufacturing sector recorded substantial gains during the immediate post-Independence period before levelling off in the early 1970s (see index of

manufacturing production below). Gross manufacturing output grew at 4.9 percent between 1965 and 1970, and a further 4.5 percent between 1971 and 1976. Meanwhile, while value added in the manufacturing sector grew at about 10 percent between 1971 and 1974, it experienced a continued decline for 1975 and 1976. The TNDP argued that the contraction of the manufacturing sector in this latter period was explained mainly by the inability of the sector to import inputs due to restrictions on foreign exchange and limitations placed on import licence allocations. The developments in the latter half of the SNDP took place within an environment of foreign exchange scarcity due mainly to a decline in copper revenues.

Table 6-11 Index of Manufacturing Production, 1964-1984 (1969=100)

Year	Total Manufacturing index
1964	53.5
1965	69.5
1969	100.0
1970	111.3
1974	141.0
1975	136.3
1980	122.5
1984	116.8

Source: Seshamani (1988: 54, Table 1)

Reaching its peak in the mid-1970s, industrial production began to contract, largely due to absence of foreign exchange to import inputs necessary to sustain production. By 1975, import content of manufacturing was nearly as much as 72 percent (Seshamani, 1988: 54). Thus, when foreign exchange availability became a serious problem, manufacturing production contracted. Between 1971 and 1983, for instance, “only about 50% of installed capacity was utilised” following the foreign exchange constraint (Karmiloff, 1990: 306). Between 1971 and 1974, only 2,000 jobs were created in the manufacturing sector, placing manufacturing total sectoral employment at 44,000. Accounting for this disappointing employment creation was mainly the nature of technology (capital-intensive) chosen for industrial development as well as limited real expansion, particularly following contraction in foreign exchange earnings. Capital-intensive technologies were adopted even in areas of production wherein labour-intensive techniques existed, with the Kalulushi and Nega Nega brick-making factories being examples.

Since independence, capital accumulation demonstrated that little meaningful structural change had taken place within the manufacturing sector itself: between 1965 and 1972, in terms of manufacturing industries' value added as a proportion of the value added of the entire manufacturing sector, there were some notable increases — fabricated metal products, machinery and equipment increased from 9.2 percent to 14.8 percent; food, beverages and tobacco increased from about 41 percent to around 56 percent — as well as some prominent reductions — non-metallic mineral products declined by half, from about 13 percent to around 6 percent; wood and wood products, including furniture dropped from about 5 percent to only 2 percent. Whereas beverages and tobacco industries alone were the only sub-sector whose increase corresponded to local value-addition rising above the value of the finished product, other industries exhibited a disappointing trend; for machinery and equipment, for instance, imports were about eight times more than domestic value added.

Whereas between 1966 and 1969 the census of industrial production recorded that the total number of establishments had fallen by about 33 percent, the remaining establishments seemed to have been of a larger size since employees per establishment and the value of fixed capital per worker doubled during this period. The value added created per establishment increased more than threefold during this period, exceeding K300,000 from about K90,000 (Seidman, 1979: 102). Capital accumulation, especially through the state, tended to be premised on promoting larger more capital-intensive economic concerns.

The growth of the manufacturing sector reinforced the pre-existing regional disparities, while deepening further the dependence on copper for its foreign exchange earnings. The copper complex itself must be seen in terms of its direct and indirect capacity to call forth industrial and infrastructural development. In a direct relational sense, inter-regional cleavages were more enduring as more manufacturing establishments were located along the so-called line-of-rail regions, accounting for almost all the employment of the manufacturing sector. The wages and salaries of this employment, including those in mainstream government and public enterprises, contributed to the pattern of manufacturing sector growth, particularly in influencing the location and output of industry. Industrial development proceeded along the lines of serving existing markets.

While manufacturing sector growth had been supported by public sector demand, a decline in copper prices by about 27 percent, and a reduction in total reserves by around 67 percent between 1970 and 1972, caused the government to respond by imposing tight foreign exchange controls and introducing import restrictions in the form of import licences as mechanisms to curtail the balance of payments deficit. Imports declined, while the rate of inflation rose to over 20 percent. Geopolitical tensions and conflict with Rhodesia also limited the amounts of imports into the country, particularly when the Rhodesian border was closed in January 1973.

While conventional statistics would imply reasonable structural change given the growth of the manufacturing sector, doubling in terms of contribution to GDP by 1972 from Independence, with the declining share of copper as a share of GDP from a peak of about 48 percent in 1969 to about 23 percent in 1972, a telescopic examination of the pattern and structure of manufacturing sector growth uncovers the enduring presence of the copper complex. In reality, this simply shows that the pace of industrial development was much faster than the growth of national output and copper given, for example, the Mufulira mine disaster which cut annual copper production by about 100,000 tons. Virtually all the manufacturing sector growth depended on a buoyant copper industry, one that could provide revenue to the state to keep public expenditure apace with the expectations and the trajectory of (industrial) development and, not least, to provide foreign exchange earnings for the import-dependent manufacturing sector.

Nevertheless, through INDECO, the government had made substantial strides in promoting industrialisation, especially between 1966 and 1972. Between 1964 and 1970, INDECO's net assets increased sixtyfold to K120 million, with profits at about K6 million, representing an increase of around 130 times (Martin, 1972: 59). By 1979, INDECO, with group assets reaching K406 million, employed about 25,000 people, accounting for more than half of total manufacturing sector employment. The expansion of INDECO followed from its acquisition of majority interests in existing enterprises as well as extensions to existing assets, and new projects as well.

Overall, between 1970 and 1975, profitability of the INDECO group averaged around six percent of total turnover, dropping to one percent in 1975, before making a loss

(of about 1.5 percent) of turnover for the first time in 1976. INDECO's enterprises had mixed results.

6.4.4 Industrial development, the state and private capital: Broader considerations

This subsection considers the role the state played — through its agencies, institutions and individuals — in promoting industrialisation, including its relation to private interests. The effects of the state's role are seen through the prism of the nature and configuration and, pace and direction, of capital accumulation. The nature and configuration of capital accumulation have to do with some detailed observations about the technology of investments, groups involved, including the potential for these to promote spread effects, defined in terms of linkages and an integrated structure of production. The pace and direction of capital accumulation investigates the main factors responsible for how quickly industrial projects came into being, and where industrial development took place. This is to situate the socio-political and economic factors within the broader context of Zambian society.

It is worth beginning here by exploring the scope of influence of expatriates on Zambia's direction of industrial development, and how it restricted production within a limited space, bereft of the features of cohesiveness and integration that would be required to launch structural transformation. By ignoring this facet, the literature on Zambia's post-Independence development has tended to be restricted in its analysis. Without understanding the nature of post-Independence thinking in its infancy, and how this influenced development in practice and the trajectory of development, it is difficult to give a fuller analytical perspective. Thus, when discussions are made regarding the kinds of projects and structure of investment underpinning them, it is important to establish the thinking behind them, and its evolution. Part of this has already been addressed by examining the thinking behind development planning. In this subsection, I examine how foreign influences determined the nature of capital accumulation, and with what effects on the subsequent trajectory of development. Nevertheless, the flawed design and execution of industrial policy reflected the broader institutional and ideological weaknesses.

When Sardanis came on the scene through a Presidential appointment, as INDECO Chairman, to reposition the organisation, a number of industrial projects had already been underway, and some under study. For example, “[a]n agreement on the sugar project, in which Indeco was to hold only 12 per cent stake, had already been reached with Tate and Lyle when Sardanis arrived on the scene” (Martin, 1972: 63). Sardanis himself also recalls that “[b]y the beginning of 1966 ... we began [him and his staff] to set up a couple of the projects, which had been on the drawing board for years.” Firstly, this raises questions over whether sufficient lessons had been learnt from the pre-Independence development record as to the forms and dimensions of dependence which would arise as a result of implementing industrial projects crafted not to reinforce structural transformation, but merely to localise production. It had already been a lesson that industrial developments, and indeed broader economic activity in Zambia, were fashioned to depend upon the South for capital inputs and expertise for their sustenance. Secondly, even more enduring, it reflected the virtual absence of industry, such that, when UDI came in November 1965, the agenda for self-sufficiency placed increasing urgency on localisation of production and installation of investments as criteria far removed from promoting coordinated and integrated investments.

Understandably, “[a]fter UDI in November 1965 the whole exercise took on a new urgency, because Zambians were seriously concerned that the Smith regime could dislocate the Zambian economy simply by interrupting the jointly run services” (Burdette, 1988: 135). Consequently, the Government called on INDECO to perform wide-ranging functions which, by not being ordered to promote a self-sustaining integrated and cohesive structure of production planted deeper the Zambian economy into dependence upon the fortunes of copper. Measured by what it was called to do, Sardanis regarded INDECO during his time to have been successful in the industrial sector: “Through the Industrial Development Corporation (INDECO), the government embarked upon a number of a projects to ease import and export bottlenecks that resulted from UDI and the Rhodesian sanctions; to kick-start local manufacturing which the Federation had steered towards Southern Rhodesia; to generate local production using local inputs, in order to substitute imported products; and generally to promote Zambian participation in business. INDECO was quite successful” (Sardanis, 2014: 34).

Yet, with the benefit of hindsight, the urgency that came post-UDI to catalyse development in Zambia was flawed in design and execution if less in motivation. Indeed, the principle behind aspirations for economic independence are well justified, but less so was the manner in which it was executed. The absence of local skilled and experienced staff in Zambia did account for part of the problem. For example, when Sardanis took over INDECO operations, it served well the purpose of placing a Zambian to manage the affairs of the state's industrial policy agency, but the subsequent structure of investments under his wing, though laudable, and not necessarily attributed exclusively to his failings, did demonstrate the broader weaknesses of the Zambian economy. Sardanis (2003: 182-183) recalls that: "One of the earliest projects we did was the construction of two international hotels ... Bechtel caused a stir when they put the International Hotels to a tender. Some of the prices they received from local subcontractors, like the supply of aluminium doors and windows, were exorbitant ... The arrival of Bechtel in the country was godsend for me. I had no experience — in fact there was no expertise in the country — for the negotiation, adjudication and supervision of large engineering projects. Over the years they would undertake those tasks for the oil pipeline from Dar to Ndola, the oil refinery at Ndola, the fertilizer factory at Kafue, the iron steel project and their executives in Zambia would give me valuable advice on many subjects I knew little about." Against the background of chronic absence of local skills, this recollection suggests the submission of design and execution of individual projects to foreign interests.

It is difficult to discern the precise implications on development of these relations, but when the details of these projects are seen in terms of the kinds of technology they required, it suggests that reliance on foreign expertise did not correspond to national development aspirations of employment and building an integrated structure of production. Young (1973: 231) observed that not only did manufacturing enterprises depend on imported inputs, but imported technology itself showed a tendency of being capital-intensive, calling for additional imported maintenance services and inputs.

Sardanis also mentions that one of the early challenges he faced was staffing INDECO. "There were only three Zambians, two drivers and a messenger ... [while] all senior officers (exclusively white) informed me that they would be leaving ... One

of them had been fully engaged in researching a scheme for the manufacture of grain bags in Zambia,” remembers Sardanis (2003: 167-168), although he also said he would be leaving. Not that the particular configuration of the grain bag project was influenced by the erstwhile INDECO staff, but it could be argued that when Sardanis finally pushed through this project, he could have been influenced by the then existing thought, especially because he concedes that some of his first responsibilities of work were focused on rolling out projects which had already been on the drawing board.

Between Independence and the appointment of Sardanis, there was hardly any project worthy of mention except “one to manufacture salt-glazed pipes for the building industry in conjunction with the South African Hume Pipe Company,” although it was only after Sardanis appeared on the scene that the project “came into existence as Zambia Clay Industries Ltd. [which later] ran into difficulties when it emerged that the design of the plant supplied by Hume was forty years old and only worked at sea level: by 1970, the company had lost K400,000 of its original K700,000 capital” (Martin, 1972: 61). Between his appointment and 1967, Sardanis approved a number of projects, ranging from textiles, fertilisers, explosives, copper fabrication, tyres to grain bags, including smaller establishments, which came into full operation in the early 1970s. This suggests that much of the capital accumulation in manufacturing had been overseen by the structures of INDECO more generally.

The inability of private capital led industrialisation to catalyse large-scale industrial development was something Sardanis quickly came to grips with in his experience at INDECO. Sardanis (2003: 182) himself pointed out that he “soon realized that Indeco’s participation encouraged foreign investors to go forward with their plans ... [and] that Indeco needed their management expertise.” Martin (1972: 64) earlier made this observation of Sardanis: “Sardanis grasped ... that there was no queue of foreign investors anxious to be given the chance to bring their money and skills into sunny Zambia.” Martin went on to give some practical difficulties of relying on foreign investment to promote domestic industrialisation in developing countries, arguing that, in the face of risk, whatever its forms, large multinational corporations would usually start by supplying a small developing country with exports before committing to setting up physical investments. Only if a multinational company is blackmailed into thinking its export market share hangs on a thread, either through a potential

competitor or otherwise, would it usually commit to physical location. Zambia's record demonstrated that legislation in the form of such practices as the Pioneer Industries Act, with its features such as tariff protection, did support domestic industrial growth but only in a very limited sense.

"In the first years of Zambia's Pioneer Industries Act," contended Martin (1972: 65), "only about thirty applications were considered of which eight were granted." Aiming to install a fertiliser plant, "Sardanis was unable to interest a single manufacturer of fertilisers in the project to put up a Zambian factory and had to resort to 'turn-key' deal with Kobe Steel and find the management himself" (Martin, 1972: 65).

There are a number of lessons to be grasped from this. Firstly, the design of industrial policy matters. Structures, institutions and resources must be organised in such a fashion to stimulate industrial activity, and promote it within the broader development strategy. Secondly, Zambia's post-Independence developmentalism, although promoting localisation of labour and capital, increasingly relied on foreign interests. Industrialisation in Zambia was being increasingly seen in terms of physical accumulation of capital (purchase and installation of production capacity), and less in terms of acquisition and learning of imported technology, a feature which must be contrasted with the DSP. Japan, South Korea and Taiwan all ensured that physical accumulation of capital proceeded apace learning of foreign technology (Lall and Urata, 2003; Amsden, 1989).

Faced with the emergency created by the geopolitical crisis under the banner of UDI, INDECO was called on by the state to execute a series of projects aimed at delinking Zambia from its Southern neighbour. With the help of Italian partners, INDECO mounted two large projects – Zam-Tan Road Services and the TAZAMA oil pipeline, both running all the way to Dar-es-Salaam. Another notable project was the Chilanga Cement Ltd., 45 percent owned by INDECO, which cost the Zambian government more to build with a quicker Italian contractor than it would have had if the slower British firm Mitchell Construction were awarded the project on the basis of the latter's lower bid. INDECO reckoned that a slower contractor in addition to continued importation of cement would turn out more expensive in the long term. Whether this was conducive for Zambia's development pursuits was questioned by critics who

argued that the emphasis on speed rather than cost may have worked for the cement project but its suitability as a criterion for project execution elsewhere proved far too costly. The fertiliser plant which utilised expensive local coal ended up raising the price well over imported fertiliser. In fact, delaying the project until such a time that the oil pipeline had been completed would have left open the option of setting up a cheaper and more efficient fertiliser plant running on oil rather than coal. Martin (1972) notes that the state felt pressured for at least two reasons: firstly, to meet the Independence expectations, and speed over cost as a criterion for project execution, meant that jobs would be readily available with immediate investments spill-over effects; secondly, geopolitical contradictions associated with UDI more generally had placed an urgency on the Zambian state to cut ties with the south. A possible third reason for the urgency in project implementation within the context of realigning trade options was to diversify sources of supply. This meant entering existing markets where private firms (using traditional sources of supply) already existed. Here, INDECO, created two import and wholesale companies – Zambia Steel and Building Supplies Ltd. (ZSBS) and the Zambia National Wholesale Corporation (ZNWC) – which, lacking in adequate management skills, underperformed in the face of existing competition.

On the political side, that INDECO was able to manage its operations with reasonable budget and political support, can be seen from the good relations Sardanis had developed with top personnel in the Ministry of Commerce and Industry. Since Zambia had limited trained professional and managerial personnel, including skilled artisans, recruitment was being politicised, with the Zambia Public Service Commission remaining resolute in sticking to proper civil service etiquette.

‘Turnkey’ rather than ‘build to order’ projects were by design incapable of being maximally integrated into a proper national development agenda that detailed the choice of technology and possibly the source of supply. But this was a secondary issue if INDECO’s accumulation model is to be seen within the context of an entire system. Of primary concern then, if accumulation is to be underpinned by structural change, is to determine to what extent efforts were made to stimulate economic activity outside of the existing structure of industry. This is the underlying argument of this thesis, a suggestion that structural change has not underpinned Zambia’s developmentalism

because the post-Independence accumulation has reinforced rather than modified the inherited structure of production. For example, it has been established that INDECO, conditioned by the supposed urgency to delink from the south, embarked on infrastructure development (in terms of altering trade routes and sources of supply) that did account for much of the expansion, but this took place to reinforce rather than modify the system of accumulation. The transport and trade routes for instance were primarily aimed at serving the mines, although use of them would be made to cover imports. In fact, a fleet of trucks were bought to haul copper by road and depend less on the rail to the south, while also transporting loads of oil. Once the pipeline had been completed, little use was made of these trucks and when INDECO tried to salvage them, they were found worthless, the total cost in this operation alone running to losses of about K1.5 million were mainly covered by Lonrho management as owners of the operating company running the fleet of trucks (Martin, 1972: 198).

The operations of INDECO, although on paper to be directed by the state, were not insulated from the influence of foreign private capital. The government more generally approached development with the help of foreign partners whose influences penetrated into the realm of industrial development, determining not just which industrial projects would be created, but also the pattern of industrial development itself and the structure of investment. Profit maximisation, if seen as the motive of private capital, must be understood to determine the type of technology adopted. Foreign capital will maximise profits if it can provide and maintain technology in addition to supplying technical support. Capital-intensive techniques are preferred as the blueprint of the type and form of technology that embody such profits maximising attributes. But whether these are adopted in a (foreign) host nation depends upon the willingness of the hosts. This is where Tangri (1999, 1984) sees the role of foreign advisors acting to influence choice of technique. Rather than upgrade and expand the existing labour-intensive plants, the government in 1975 created two state-of-the-art brick factories under the Zambia Clay Industries. This minimised the government's employment-creating investments, yet making the government more dependent on foreign input, be it physical or technical.

In spite of INDECO's objectives of utilising local resources, the way in which it was funded could also help explain why it failed to insulate its operations from foreign

influences. Around fifty percent of INDECO's operations were funded by foreign resources. Such funding came with its own set of conditions regarding the source and type of technology to be adopted. Arrangements such as these not only undermined the government's structure of investments, they also sabotaged the government's plans on employment since, in part, investment type, whether labour- or capital-intensive, determines how many jobs can be created.

Mansa Batteries, an INDECO subsidiary, relied upon the expertise of a Finnish firm to install machinery which was later heard, through a parliamentary committee, to be inappropriate because it could not run continuously over an extended period of time as required and subsequently came short of its expected output. A host of problems plagued the brick-making factory at Kalulushi built by a German company: in addition to extortionate charges incurred in the acquisition of the installed machinery, the machines were outdated, incompatible with local inputs such as coal, and also had no spare parts such that they could not be maintained. Nitrogen Chemicals of Zambia (NCZ), commissioned by the Japanese, established to produce fertilizer, incurred technical difficulties underpinned by construction problems causing intermittent shutdowns, so much that INDECO had to receive damages to the tune of around one million Kwacha (Tangri, 1999, 1984). These examples highlight some of the costs and problems associated with relying upon foreign assistance. Put differently, filling the void left by absence of domestic capacity with foreign capacity does not guarantee success. In fact, as the Zambian case has suggested, foreign partners, their representatives and/or expatriates made investment decisions that did not align with the national development plans. On the whole, however, this demonstrates that industrial policy requires adequate state structures to supervise even the minute and/or intricate details of projects in order to align them to national development.

A number of home-grown factors were identified in explaining part of the poor performance of INDECO. First, there was absence of a cohesive and coherent industrial development plan, highlighting in clear detail the specific strategies and approaches necessary for industrial development. This is partly seen in how the state left to the foreign partners many of the important decisions regarding composition of investment. Such a plan would underwrite and guide the principles and standards for project selection and approval. Instead, a good number of INDECO projects were

adopted on an impromptu basis (Tangri, 1984). Indeed, such guiding principles could also establish and ground an investment criterion necessary to insulate INDECO from capture by interests. Too much was left in the hands of managers, such that no proper index could be used to judge how far off management choices moved from corresponding overall development goals. Subsequently, projects that would be easily deemed cost-effective would be those that aligned themselves with demand, and these tended to meet immediate needs (consumer goods), irrespective of the nature of technology and direction of accumulation.

Political interference is normally cited as distorting the pattern of industrial development and sabotaging the use of INDECO projects to gain political rather than economic mileage. The struggle for the state to balance development regionally often influenced the direction and location of accumulation. But this failed to incorporate the economic costs, much to the detriment of its intended purpose to even out development while creating employment. Balanced regional development appears to be underpinned by the privileging of politics over economics. Supported by notions of employment creation in less developed regions, some notable projects that bore the weight of political directives regarding their location were Mansa Batteries, Kapiri Glass Products, and Livingstone Motor Assemblers. However, good or bad, the government had as its key priority an agenda to strike a balance in regional development, and this influenced the location of investment. From the instructions of the higher echelons of political power and without the advantage of a cost-benefit survey, while subverting an already appraised and approved project, the Chinese maize mill in Chingola replaced one in Kitwe. At times, cost-benefit studies were simply set aside even when they warned of non-viability of certain locations for certain projects such as was the case for Mansa Batteries in Mansa.

While political interference served important functions in attempting to even out regional development, in hindsight, it was unnecessary to do so at the expense of the broader benefits and linkages stemming from economically viable projects. Two rural areas—Nega Nega and Kalulushi—enjoyed short-lived economic benefits when they were chosen to lodge two large-scale brickmaking factories. However, such investment projects are pinpointed to have ignored wider economic costs (Tangri, 1999). These factories were located in distant places from the demand sites in urban

areas, hence requiring high road haulage costs to transport the bricks. When the high transport costs of transportation inflated the prices of bricks, consumers opted for a cheaper substitute, concrete blocks. Eventually, the brickmaking factory at Nega Nega shut down in 1979 due to insufficient demand, while the Kalulushi outlet was running serious losses for similar reasons. Existing demand in the urban areas was sufficient to support these factories had they been located in close proximity because this would have kept costs low. Indeed, the government would have profited from fiscal linkages these factories would have potentially provided, and used these instead to support agriculture development in the rural areas. Ikpe (2011) and Karshenas (1995) make a case for intersectoral transfers in the process of structural change more generally, and agriculture development specifically. By means of fiscal and sectoral linkages, the state can support rural areas by promoting agriculture development through a mix of interventions such as direct funding, technical and input support. There is no automatic transfer of resources across sectors to a scale that can be said to support structural transformation. A decisive form of intervention, including appropriate structures and institutions, is necessary.

The dearth of local skilled management must also be sought as an explanation of INDECO's substandard performance, yet it was politics that interfered the most with effective management of parastatals. The government's way of dealing with, or minimising, corruption was to reshuffle management across the parastatals. Tangri (1999) views this as disruptive and one of the causes of poor management. Compounding this problem were unprofessional practices of placing in top positions in the state companies on political grounds to individuals that did not possess the qualifications and/or proficiency for the job. Hence, INDECO operations were sabotaged by personal gain and political connections. But if post-Independence developmentalism is traced in context, it appears the more decisive element was the structure of investment which impacted upon subsequent development and political discourse.

While TFP calculations in Chapter Two suggested that the pre-1968 situation in Zambia was more or less market-based, the failure to investigate details leads to misleading recommendations which attribute to market-based policies the favourable economic circumstances Zambia experienced before the economic reforms of 1968.

A considerable portion of economic activity before the reforms can be accounted for largely by direct state participation in economic activity, in erecting infrastructural and industrial projects. Even before the economic reforms, the Government through INDECO already started buying off private capital. To cite one example, following approval by Cabinet, in May 1965, INDECO bought forty percent of Chilanga Cement. In addition, it also created a number of establishments with foreign partners — Zambia Clay Industries in December 1965, with 56 percent Government shares.

Although INDECO's assets skyrocketed to K35.6 million, by 1967 the pace of capital accumulation was insufficient to promote adequate growth in the manufacturing sector. Reinforced by socio-political contradictions, particularly localisation of capital, and its wider implications, the April 1968 Mulungushi reforms marked a watershed in Zambia's developmentalism more generally, and industrial policy in particular. President Kaunda announced that, through INDECO, the Government was to take over majority shares in about 24 existing large-scale, mainly foreign-owned, businesses. INDECO's net assets ballooned to K108 million in 1969, with new developments accounting for only 43 percent of this figure (Tangri, 1984: 114). Chapter Five has shown that despite the Government's commitment to alter the structure of production through diversification, the scale and scope remained limited partly because insufficient resources were allocated to industrial development.

Burdette (1988: 82; emphasis added), questioned whether by the amount of resources under its control, including its underlying ideology, INDECO could launch meaningful industrial development: "The tiny state Industrial Development Corporation (INDECO) whose assets in 1967 were only K35.6 million, was practically and ideologically unsuited to redirect manufacturing development in an aggressive fashion." Indeed, genuine, as opposed to rhetorical, "political support enjoyed by a policy determines the amount of resources that will be allocated to its execution out of all transferable resources available in that society" (Dror, 1968: 35). Thus, if resource allocation is seen as a result of the interplay of socio-political forces (Groth and Wade, 1984; Dror, 1968), then it is imperative to examine the nature of these influences.

The TNDP, for example, noted that only twenty percent of Government's capital budget was spent on directly productive a sector, while 26 percent on social and community services, with economic infrastructure consuming 47 percent. For Turok (1989: 137), this demonstrates that "official documents acknowledged that available resources were not allocated to encourage growth."

Some evidence exists that selective industrial projects were called into being due to their potential for backward linkages with agriculture and, potentially, their ability to gain political mileage. Given that Zambia's agriculture sector supported more than half the population, particularly on a subsistence basis, a case can be made that Government through INDECO supported the establishment of a number of manufacturing projects in consumer goods and textiles — for example, the maize milling project, the pineapple canning plant at Mwinilunga and the textile industry. Nostalgic about his INDECO days, Sardanis (2003: 186) recollects what he perceived as successful industrial projects with strong backward linkages with agriculture. In general, Sardanis contended that the white settler community mocked most government development projects, arguing that they were doomed. For example, on grounds that local cotton production was insufficient to justify construction of a textile plant, the white settler community was sceptical about the economic viability of localising textile manufacturing. Consequently, when Sardanis approved the construction of the Kafue textiles, he faced grave opposition from the white community so much that the then Minister of Finance, Arthur Wina, who had been influenced by the white settlers, got involved to bar the project. It took Sardanis' own influence from personal relations to convince the Minister of the project's viability. A couple of years later, with the help of Chinese contractors, another textile mill at Mulungushi would be opened. Measured by the textile industry's ability to stimulate local cotton production, Sardanis was especially pleased by his decision to support the establishment of textile mills. However, from the encounter with the Minister, this narrative suggests the potential for existing structures to facilitate political interference.

Whatever the weaknesses, that wide-ranging industrial projects saw the light of day under the guidance of the state reflect the effectiveness of the Zambian state's interventionism in ordering development to whatever path. That is, the Zambian state

possessed reasonable capacity and policy tools to intervene effectively and it executed these successfully, although not necessarily sustainably developmentally. Thirdly, it illustrates the divergence in motivation for interventionism between the Zambian state and the developmental states discussed in Chapter Four. For the latter, interventionist policies such as restrictions on import licensing and foreign exchange allocations were mainly used to promote an integrated structure of production rather than to preserve foreign exchange as did the Zambian economy when it was faced with foreign exchange difficulties. Understandably, the lack of sufficient foreign exchange required the state to restrict its use, but this shows that the state had its disposal this instrument as part of its arsenal for industrial development.

Wade (1990: 129) explains how interventionism, specifically through import licensing, was tied to industrial development and export promotion. Import licences would be awarded on condition that producers were expanding their exports: “This tying of import licenses to exports is designed insure that those who get the windfalls (“rent”) from importing scarce commodities are at the same time contributing to the economic success of the country by exporting” (Wade, 1990: 129). Wade goes on to explain how import licence applications are assessed through an elaborate interaction of banks and state agencies, with industrial development kept as the overriding goal. “When a would-be importer applies to a bank for a license to import,” explains Wade (1990: 129), “the bank must check ... [with] ... the Board of Foreign Trade, which generally passes it on to the Industrial Development Bureau.” Thus, by mounting restrictions on foreign exchange and imports without due regard to how it might affect the promotion of industrial development, the Zambian government diminished the growth of industry. Therefore, because it cannot be a universal truth that interventionism is bad, one must examine the motivation and mechanisms under which interventionism is executed.

Meanwhile, in Zambia, “import policy [was] used as a means of regulating transnational corporations,” such that, “gaining approval of their licenses application ... [measured] government’s favorable or preferential treatment of them“ (Libby, 1983: 383). Fundamentally, in this study, Libby argued that import licensing gauged the strength of “alliance formation between foreign capital and dominant class interests” (Libby, 1983: 383). Thus, in seeing how import licences were awarded, it is

here suggested that such policy instruments were used less to promote structural transformation more generally, or, specifically, industrialisation; instead, they were used to advance both the interests of the personnel manning the state architecture and those lodged in a particular configuration of capital. The nature of material base and interests lodged upon it, in alliance with interests within the apparatus of the state, largely determined the direction and intensity of accumulation, within the context of the prevailing economic conditions.

Although Libby is correct in making these observations, he does not delve into the area of understanding what mechanisms and power dynamics within the state architecture facilitated alliance formation between dominant political-administrative interests and (private) capital. Enabling this kind of interaction and direction of accumulation is the nature of the inherited institutions which kept the power of the state architecture in centralised institutions. The failure to transform the state deprived Zambia of the opportunity to enjoy diffusion of power and interests. It will be suggested in the next chapter for further research that socio-political and economic interests have bearing upon the trajectory of development. For example, in Zambia, the consequences for development from the centralisation of power in central state institutions were well understood by the state actors, and this led to attempts to transform the state through so-called administrative reforms. However, these reforms led to a reorganisation of the state without transforming it. In the end, the reorganisation, faced with external geopolitical and economic influences, only worked to strengthen the dependence upon the existing system of accumulation, with the alliance of state actors and capital being a reflection of it.

Seidman (1974; 1979) explains the lack of structural change as a result of the planning and implementation strategy of industrial policy adopted by the state, embedded within the notion of import-substitution and the institutional framework underpinning capital accumulation. The structure of imports reflected the nature of domestic demand, dominated by consumer goods meeting the demands of the affluent dominant class. This class was responsible for designing and executing industrial policy, including influencing what kinds of projects would be approved and funded. As a proportion of the total population, this dominant class was only about one-tenth, yet it received between 50 percent to 75 percent of the nation's domestic income. By

replacing previously imported goods with domestic manufactures, the state was in part conceding to the existing structure of demand aimed at serving the interests of the dominant class. But the nature of capital accumulation in such industries must be examined on its merits and potential to diffuse productive linkages to the rest of the economy. Hence, questioning the scope of linkages of domestically produced goods that were previously imported becomes essential.

Some of the noteworthy domestically-established industries which emerged to substitute imports were the car assembly plant in Livingstone and the textile mill in Kafue. These were capital-intensive, requiring imported inputs, spares, parts and repair services, hence limiting the scope of spreading productive linkages. Seidman (1974; 1979) views such industrial development as experienced in Zambia as a failure to discern and prioritise correctly what would bring about meaningful productive linkages to fuel structural change. She asked, “should Zambia, at this stage of development, use scarce government investment funds to produce private cars for the few people with high incomes? Or should it give priority to the production of simple tools and equipment — for example, animal-drawn ploughs, maize-grinding machines, bore-hole drills — to increase rural productivity and levels of living?” (Seidman, 1979: 104). While this examination is important in uncovering the direction of accumulation, and how it blocked structural change, it does not analyse what forces and processes necessarily influenced the trajectory of such capital accumulation. Understanding the socio-political processes and the role of the dominant class adds an explanatory dimension that makes thorough the analysis of structural change. This has to be discussed in terms of the nature of the polity, particularly how the political and technocratic classes used the state structures to serve their own interests.

The manner in which import-substitution industrialisation was pursued as an industrial development strategy in Zambia appears to demonstrate its nature and potential to exacerbate rather than alter the existing structure of production. However, this is not to say that ISI is inherently problematic as some have suggested since it is “by its very definition ... biased against exports” (Seshamani, 2008: 270). Again, the DSP experience is instructive; ISI need not necessarily underprivilege nor fail to create/spread productive linkages. The nature of projects in terms of the type of technology being used will speak more on the ability of the policy to spread productive

linkages. For example, South Korea did create capacity in steel production through ISI before becoming a net exporter of this product.

In fact, conventional analysis has proceeded along the lines of seeing import substitution strategy in technical terms: first, as a ratio of imports to total supply (local and imports) of goods, so that a declining ratio represents successful import substitution. Second is a measure of how reliant domestic manufacturing is on imported inputs (that is, imported inputs as proportion of total manufacturing output). Again, a declining ratio is indicative of successful import substitution. But such statistics do not speak of the social and political processes that reproduced them, although reference is usually made to the institutional structure of the state machinery executing import substitution strategies. The inefficient state hypothesis is well known; it underscores state machinery as a political tool to reward supporters by giving them jobs without corresponding increases in productivity. Additionally, the response by Africans to inequality in the workplace by seeking to indigenise administrative and management-level positions is seen as the wrong approach given the dearth of skills within the pool of the African workforce.

The bureaucratic nature and associated red-tapeism of the parastatal enterprises are argued to compound the problems of an already inefficient delivery structure. Further, although also encompassing the private sector, the state's response to dwindling foreign exchange by instituting exchange controls and designing structures to implement import licensing strategies is also seen as problematic in efficiency terms. Little is said about the socio-political and geopolitical conditions under which these policies were applied; yet these policies are universally negated.

The structure of mainstream government in terms of ministries and other governmental agencies were seen as a continuation of colonial administrative structures, focused on administration and implementation of infrastructural development to create an environment for business. This was a critique not so much the notion of ministries per se, but of their purpose and function. Underpinning the state structure embedded in ministries was the presumption that the domestic economy's productive development funds needed to be augmented by foreign capital in order to bring about meaningful development. Ministries were thus less aggressive

in supervising development projects, leaving the decisions on composition of investment to be made by INDECO through the operating companies of its subsidiaries. This should be contrasted with the Japanese Ministry of International Trade and Industry (MITI), which had central planning structures for making decisions not just on what type and location of projects but also on what kind of technology would be permissible within the context of an overall development strategy (Johnson, 1982).

Accordingly, the state structures, at least seen by the notion and purpose of ministries, were created, and functioned, to attract and retain foreign capital. In other words, the opportunities for structural change that Independence brought should have confronted the structure and pattern of production, partially in the way the state itself was perceived, formed and developed. In fact, Seidman (1974) showed that Zambia's problem was not a lack of funds for productive investments per se, but a failure to discern where investible surplus would be extracted and then allocated under a decisive drive to stimulate and condition structural change. The inequality of income distribution within urban centres and across urban and rural centres not only influenced the pattern of demand and industrial development, it also hid the sources of investible surplus.

The state's instrument for industrial development and direct productive participation in the market, INDECO, had total assets half of what would have been potentially extracted as investible surplus from the economy. But a number of factors, events and activities prevented this. First, through the Mulungushi reforms, the state nationalised private enterprises, consequently requiring the government to undertake payments as compensation for its acquired shares. Second, partly related to the dearth of skilled personnel, the government paid substantially attractive salaries to foreign expatriates who then remitted large portions of these earnings. Third, fractions of private capital operating in business in Zambia did not take a long-term view, integrating and placing their interests in Zambia's, thus they too remitted their profits, salaries and dividends despite the government's attempts at clamping down repatriation of such funds. Overall, funds repatriated out of Zambia between 1970 and 1972 were well over INDECO's assets, even exceeding the total value of foreign capital, including private mining interests, invested in the Zambian economy in any given year since the

takeover of black African leadership. This reflected absence of state structures to extract investible surplus.

By comparing Zambia with East African countries, (Seidman, 1974a, 1979) showed convincingly that part of Zambia's problem was not a lack of financial means per se, but rather one of ordering its development priorities properly since sufficient funds existed within the spaces of the Zambian dominant class. Tax revenues that the Zambian state extracted were consistently higher in per capita terms than its East African neighbours, even as much as threefold in 1972 alone. In the context of the 1972-1976 so-called second national development plan (SNDP), the government had retreated its lead role in industrial development, limiting public investment in manufacturing to no more than eight percent of total public investment, leaving private capital to occupy up to fourfold as much. But this approach to industrial development came into conflict with the government's view of private capital.

The cutback of public investment in industrial development, while maintaining high social or recurrent spending, could not have supported the state's posture of diversifying the economy. If high social spending and recurrent expenditure are seen as a political strategy as a government sop to its political base, then this is to place the interests of the beneficiaries at the heart of development policy. Hence, national development plans simply reflected the dynamics of socio-political processes, with the state choosing to gain short-term political legitimacy over short-term political sacrifices for long-term development. But again, it is precisely because the interests upon which the state derived its legitimacy and support were lodged within the institutions of the state architecture absorbing much of the investable surplus.

This argument can be stretched further if it acknowledged that "[t]he state itself is not monolithic, but reflects the struggle within local classes. Thus, variations in the nature of control and in relations with foreign capital, which are frequent responses to changes in class relationships, must be understood in detail. Although local ownership does not guarantee control, it nevertheless brings the control of industry within the sphere of national class relationships, and it is at this level that that analysis must begin" (Fincham, 1980: 312). In the next chapter, I will suggest for further research how the expansion of the state architecture can establish interests within the state more

generally which, lacking an economic base, may act in a manner which denies the productive economy of capital investment, as reflected in growth of recurrent expenditure discussed earlier.

6.5 Conclusion

The 1970s, particularly after 1975 were a turning-point in Zambia's developmentalism. Real copper prices came down, reflecting low demand for copper, but geopolitical tensions after the closure of the Rhodesian border in 1973, made it increasingly more expensive to transport copper. Zambia's balance of payments went into deficit and, in response, the government erected a series of interventionist strategies to cushion the economy. These developments were, however, a reflection of the failure in an earlier period of the Zambian Government to genuinely promote structural transformation.

Reflecting high copper prices, "the FNDP was the most successful of all the Zambian national development plans [in the Kaunda era]" (Burdette, 1988: 85). Zambia's immediate post-Independence development record witnessed the coming into existence of a number of development projects but these did not strengthen the Zambian economy. Whatever the achievements, these developments, both in infrastructure and industry, tied the Zambian economy tighter to the fortunes of the copper sector. The performance of the Zambian economy in the SINDP period, and afterwards, was disappointing.

Partly accounting for the weaknesses in developmentalism, the examination of the SINDP showed that copper continued to be at the centre of development thinking. In addition, the restricted understanding of industrialisation, which aimed to replace hitherto imported goods, led to a series of developments in consumer goods industries, reflecting continuities with the colonial structure of production.

But industrial development was also undermined by a lack of adequate political commitment. This is shown by the allocation of public expenditure. The allocation of public resources in the development plan, as well the actual developments in the manufacturing sector, showed that where there is political will, corresponding results

will most likely follow. In addition, absence of foreign exchange denied further industrial growth by limiting import of inputs for industry. If recurrent expenditure is to be seen as resources committed to the apparatus of the state, then it is not difficult to see that socio-political interests embedded in the state architecture continued to act in ways which concentrated resources in their structures.

Overall, however, industrial development was flawed in design, and the deployment of existing capacities only reinforced the problem. The various industrial projects which came to light were defective in that they were characterised by dependence upon foreign technology. Indeed, the form in which dependence came derailed industrial development as the basis for promoting structural transformation. Yet, this was merely a reflection of the socio-political and economic interests acting through the state. Ultimately, industrialisation in Zambia was restricted to installing uncoordinated investments which depended on foreign technology.

7 Conclusion and further thoughts on investigating Zambia's post-Independence system of accumulation

7.1 Rethinking the growth process and capital accumulation: bringing back the social

The focus on technicalities of the growth process has sabotaged the study of development as a process and outcome of socio-economic and political processes and interactions. By neglecting the role of social forces which can inform the features of development such as distribution of income and structure of production, too much attention has been placed on one-dimensional ahistorical factors such as techniques of production. But technicalities of the growth process such as choice of technology in the production process and indeed its wider role in development cannot fully be accounted for by economic rationalisation alone. The social is important as well as the economic. While the thesis has not delved into deeper understanding and analysis of social processes of development, it offers an opportunity to begin further analysis by, first, submitting a critical appraisal of studies which downplay the role of social forces in understanding the growth process and, second, exploring in what ways the social forces might be responsible for the trajectory of development more broadly.

The extent to which an economy will design, adopt and implement economic policies reflects the configuration of socio-political and economic interests, confounded by structural and external contradictions. For example, as the thesis has argued, Zambia's post-Independence developmentalism was one which sought to confront the socio-structural dislocations festered in the colonial era, which denied indigenous participation in the modern economy. Yet, the administrative and economic policies which resulted through colonial governance were premised on social conceptions of a superiority-complex, designed to advance one group over people over another, solely in terms of race. In addition, the direction, pace and scope of capital accumulation itself, although processed and promoted by (interventionist) economic policies, was underpinned by socio-political and economic interests, interacting and impacting upon the economy in different ways and with varied rhythms across time and place.

Accordingly, capital accumulation must also be understood in terms of the structural and social context, and not solely as an outcome of which technique of production to adopt, or what kind of economic policy to implement. The idea of universalistic (if successful) notions of policy in every time and place must be questioned, or, indeed, placed within a particular context. Again, this requires an understanding of unique processes which reflect a particular interaction of socio-political and economic interests.

If analysis begins by questioning the factors responsible for resource allocation, then it is set on an open path of discovery. However, if resource allocation and, subsequently, capital accumulation, is placed within a model, then analysis is liable to stretch facts and imposes conditions which obscure rather than illuminate. That has been shown to be true for the computation of total factor productivity, and understanding of structural transformation within it.

Political processes and capital accumulation underscore a two-way relation in that the nature of the political discourse can bear upon the degree, direction and intensity of capital accumulation while the nature of capital accumulation can stamp its influence on the range and scope of the political discourse. It has been a contention in the thesis in launching an alternative framework of understanding structural transformation that the state can influence both the direction and pace of accumulation through wide-ranging interventionist policies, but this merely reflects the configuration of underlying socio-political and economic interests. A brief account of this was given in chapter 3, discussing the pre-Independence state of developmentalism. For example, in pre-Independence Zambia, as white settler populations began to associate their progress with accumulation outside the core (the copper sector), there was a decisive influence on the political process and, subsequently, the functioning of the state, nudging the balance of power and resource allocation. Chapters 5 and 6 proceeded on the assumption that socio-political and economic interests are reflected in the design and execution of development planning. Some detail was shown in post-Independence industrial policy of the nature of interests embedded within the state when analysing in some detail industrial policy more generally.

While Zambia's post-Independence state promoted wide-ranging development, it bumped into a number of constraints, among them absence of skilled workers. Forced to rely on foreign assistance in form of capital and expertise, and confounded by structural and geopolitical contradictions, capital accumulation via uncoordinated investments was characterised by a form of dependence which precluded structural transformation. The material base which underpinned Zambia's post-Independence developmentalism thus could not be self-sustaining; it lacked export capacity and relied instead on further imports of technology, reflecting both its lack of competitiveness and absence of an integrated structure of production. Although unprecedented industrialisation took place, it was not characterised by learning as was the case for developmental states of East Asia. Overall, however, this raises questions for the motivation of economic policies, with motivation itself being shaped by the underlying socio-political and economic interests.

If structural transformation, narrowly conceived in terms of industrialisation, is a feature of development, then it follows that underlying characteristics and functioning of social forces must be unpacked. Industrial policy is therefore not simply the execution of economic policy, but an agenda to promote a particular configuration of interests, within a given socio-structural context. Thus, the conflation of socioeconomic and political processes is reflected in the notion of a system of accumulation which steers development in whatever direction. A trajectory of development is underpinned by a system of accumulation which, in context, serves a particular configuration of interests. Thus, shifting composition of output in favour of industry is the creation and promotion of a particular configuration of interests. This is where further analysis must begin.

7.2 Towards interrogating a system of accumulation for Zambia's post-Independence developmentalism

Development planning in the previous two chapters has demonstrated that the strategy of the post-Independence Government was to deploy, adopt and marginally adapt existing capacities and institutions and models to promote development. However, this strategy faced a number of structural constraints. Firstly, given the colonial inheritance of a dual economy, with limited economic activity and development

outside of mining, including virtual absence of socioeconomic development for at least three quarters of the population, the existing structures, institutions and capacities including the development model inherited from the colonial era could only succeed in a very narrow and limited sense. Secondly, also a feature of the colonial legacy, absence of indigenous education and skills hampered the ability of the post-colonial state to deliver development on a national-wide scale. Thirdly, while using resources from the spaces of economic strength, specifically a flourishing copper sector, the state embarked on a programme of indigenisation of labour and capital, both in the public and private sector, but this created elites (or, loosely, groups or people) with interests. Fourthly, however, these vested interests were not homogenous, they were fragmented and differentially based, made up of politicians, bureaucrats, entrepreneurs and the variegated labour force. Thus, their constituency also implied a conflict of interest, but it is important to examine in what ways their contestations hampered or promoted structural transformation.

Development strategy thus bumped into at least one of these constraints, with differing intensity and outcomes across time and place, with the most binding and severe being the deterioration of the economic strength of the system of accumulation, particularly, a fall in copper revenues. These constraints have often been analysed in isolation. For instance, in Charles Elliott's (1971) edited book entitled 'Constraints on the Economic Development of Zambia', contributors ranged over constraints specific to sectors and themes, from the skilled manpower constraint, contradictions in industrial relations and incomes policy, the fiscal system and financial constraints, to mining agricultural and manufacturing sector developments, and then to constraints in transport and construction. This book is an indispensable contribution to Zambia's post-Independence development literature, and provides numerous insights and lessons. However, because these constraints are analysed in isolation from one another, the contributions in the book, individually and together, do not adequately address nor demonstrate Zambia's accumulation model as a system.

Another notable contribution to Zambia's post-Independence development literature is William Tordoff's (1980) edited book entitled 'Administration in Zambia'. Primarily, it sets out to explore the evolving socio-economic and political framework under which administration is exercised. The contributions in the book trace the

expansion of the state apparatus as well as the political system, including administrative aspects of implementing government policy in, for example, rural development. Again, each of the themes are more or less treated remotely, with minimal interaction. Perhaps not the weakness of the book but a reflection of its focus, it does not address the underlying economic base as having restricted both further accumulation and administration.

By viewing post-Independence developmentalism as a system, the processes of accumulation can be uncovered, and the failure to build the Zambian economy on a sustainable developmental path underpinned by structural transformation can be demonstrated. This can be done by highlighting how post-colonial socio-political and economic interests emerged and got entrenched, and on what kind of economic base they thrived. Accordingly, analysing these processes would give meaning to aggregate developmental statistics which demonstrated the dependence of the Zambian economy on copper, the restricted form of industrial development and the nature of the distribution of income, including the structure of the Zambian economy. The foregoing two chapters through the lens of development planning have unpacked resource allocation and the nature and scope of capital accumulation.

If to shed light on Zambia's post-Independence developmentalism by dispelling the neoclassical total factor productivity model discussed in Chapter Two, van Arkadie's (1973: 91) insights are instructive: "The neo-classical model of the market economy rests heavily on the notion of commodity exchanges in which the two sides meet under conditions of equality... [However,] [i]f the actual relationships between people, rather than the idealised relationship between commodities, are considered then the equality of the market place seems more an ideological mystification than an analytical tool." By examining the nature of socio-political and economic interests, it can be shown that economic development is much a social as it is an economic process. Relations between people or groups determine in what ways and on what resources will be used. Interventionism then becomes determining of which interests to promote and with what implications.

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Appendix 6.1 GDP, consumption of fixed capital and compensation of employees by kind of economic activity, 1965-1973

GDP, consumption of fixed capital and compensation of employees by kind of economic activity, 1965-1973										
Kind of economic activity	OLD SNA						NEW SNA			
	1965	1966	1967	1968	1969	1970	1970	1971	1972	1973
Total GDP*	730.4	852.8	922.7	1,083.2	1,326.0	1,231.2	1,277.7	1,188.6	1,348.0	1,591.3
Total Compensation of employees	244.1	282.1	349.3	391.3	396.6	468.8	481.4	567.7	618.6	672.0
Total Compensation of employees as a % of total GDP	33.4	33.1	37.9	36.1	29.9	38.1	37.7	47.8	45.9	42.2
Total Consumption of Fixed Capital	56.6	61.6	73.6	99.6	109.0	114.9	136.7	163.2	194.6	211.7
Total Consumption of Fixed Capital as % of total GDP	7.7	7.2	8.0	9.2	8.2	9.3	10.7	13.7	14.4	13.3
<i>Agriculture, forestry and fishing</i>										
Sectoral GDP	99.5	109.2	112.8	117.4	122.0	124.0	136.1	154.0	172.2	179.6
Sectoral compensation of employees	6.8	9.2	9.8	9.7	11.0	13.3	19.7	28.9	36.2	32.6
Sectoral compensation of employees as % of sectoral GDP	6.8	8.4	8.7	8.3	9.0	10.7	14.5	18.8	21.0	18.2
<i>Mining and Quarrying</i>										
Sectoral GDP	303.0	376.2	331.9	411.5	645.0	458.0	460.3	275.1	324.4	515.0
Sectoral compensation of employees	77.6	81.3	92.6	95.2	93.9	117.5	118.7	126.2	126.1	145.1
Sectoral compensation of employees as % of sectoral GDP	25.6	21.6	27.9	23.1	14.6	25.7	25.8	45.9	38.9	28.2
<i>Manufacturing</i>										
Sectoral GDP	48.0	69.0	86.1	109.3	112.2	129.1	129.2	149.7	181.4	195.3
Sectoral compensation of employees	18.9	26.4	31.4	39.4	39.9	49.0	49.0	55.5	61.3	72.8
Sectoral compensation of employees as % of sectoral GDP	39.4	38.3	36.5	36.0	35.6	38.0	37.9	37.1	33.8	37.3
<i>Electricity, gas and water</i>										
Sectoral GDP	5.4	7.4	8.4	12.6	14.2	19.4	19.4	22.5	30.7	32.5

Sectoral compensation of employees	1.6	1.8	3.3	3.2	3.7	5.3	5.3	5.8	7.4	11.9
Sectoral compensation of employees as % of sectoral GDP	29.6	24.3	39.3	25.4	26.1	27.3	27.3	25.8	24.1	36.6
<i>Construction</i>										
Sectoral GDP	44.7	59.2	63.6	69.6	75.2	80.8	90.3	98.2	99.8	102.7
Sectoral compensation of employees	22.3	32.4	32.8	42.8	48.0	51.6	51.6	61.1	71.0	65.5
Sectoral compensation of employees as % of sectoral GDP	49.9	54.7	51.6	61.5	63.8	63.9	57.1	62.2	71.1	63.8
<i>Wholesale and Retail trade</i>										
Sectoral GDP	81.9	76.0	105.1	126.2	94.7	118.7	118.7	112.4	127.9	139.5
Sectoral compensation of employees	25.3	26.1	37.5	46.3	43.1	49.0	49.0	54.6	63.8	72.2
Sectoral compensation of employees as % of sectoral GDP	30.9	34.3	35.7	36.7	45.5	41.3	41.3	48.6	49.9	51.8
<i>Hotels, bars and restaurants</i>										
Sectoral GDP	4.6	6.3	7.4	10.5	13.1	14.8	14.9	16.7	18.7	18.4
Sectoral compensation of employees	2.0	2.6	3.2	4.3	4.6	5.4	5.4	7.8	9.0	9.3
Sectoral compensation of employees as % of sectoral GDP	43.5	41.3	43.2	41.0	35.1	36.5	36.2	46.7	48.1	50.5
<i>Transport, communication and storage</i>										
Sectoral GDP	31.3	31.4	47.6	45.7	42.2	39.3	48.8	62.3	63.5	64.9
Sectoral compensation of employees	16.5	19.5	28.2	28.9	28.3	31.2	32.5	43.1	41.1	43.3
Sectoral compensation of employees as % of sectoral GDP	52.7	62.1	59.2	63.2	67.1	79.4	66.6	69.2	64.7	66.7
<i>Financial institutions and insurance</i>										
Sectoral GDP	10.7	11.4	15.9	19.2	31.2	42.9	42.9	40.7	44.6	53.1
Sectoral compensation of employees	4.8	5.8	6.2	7.9	8.4	8.5	8.5	12.2	16.4	19.4
Sectoral compensation of employees as % of sectoral GDP	44.9	50.9	39.0	41.1	26.9	19.8	19.8	30.0	36.8	36.5
<i>Real estate</i>										
Sectoral GDP	10.5	12.3	17.9	20.1	22.4	28.0	28.0	35.7	35.1	36.2
Sectoral compensation of employees	1.8	2.3	4.9	5.5	3.8	4.3	4.3	4.6	4.1	5.0

Sectoral compensation of employees as % of sectoral GDP	17.1	18.7	27.4	27.4	17.0	15.4	15.4	12.9	11.7	13.8
<i>Business services</i>										
Sectoral GDP	9.5	8.7	13.4	15.6	13.6	16.7	16.7	20.4	24.1	29.9
Sectoral compensation of employees	2.1	3.5	6.8	7.5	7.2	9.7	9.7	13.9	16.5	19.3
Sectoral compensation of employees as % of sectoral GDP	22.1	40.2	50.7	48.1	52.9	58.1	58.1	68.1	68.5	64.5
<i>Community, social and personal services</i>										
Sectoral GDP	66.8	73.4	97.6	106.2	112.4	131.0	150.0	176.9	193.4	204.6
Sectoral compensation of employees	64.5	71.2	92.6	100.6	104.7	124.0	127.0	154.0	165.7	175.0
Sectoral compensation of employees as % of sectoral GDP	96.6	97.0	94.9	94.7	93.1	94.7	84.7	87.1	85.7	85.5
Less imputed service charge										

Source : CSO, 1980 'National Accounts and Input-Output Tables 1973', Lusaka.

*GDP at Producers' values at current prices in K' million

The results show that labour and capital shares fluctuated considerably in the post-Independence period, contrary to the assumption of constant factor shares implanted in models which make use of a Cobb-Douglas production to compute Total Factor Productivity.

Appendix 5.1 Actual Educational Attainment of Employed Civilian Labour Force By Race and Occupation, 1965-1966

Actual Educational Attainment of Employed Civilian Labour Force By Race and Occupation, 1965-1966																			
Occupational categories		Total; All Races						Africans						Non-Africans					
		Total	Less than form 2	Form 2	O Level	Diploma A Level	Degree	Total	Less than form 2	Form 2	O Level	Diploma A Level	Degree	Total	Less than form 2	Form 2	O Level	Diploma A Level	Degree
Code		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17))	(18)
	Architects and Quantity Surveyors	135	3	1	26	63	42	2					2	133	3	1	26	63	40
001	Civil Engineers	277	1	2	20	96	158	1	1					276		2	20	96	158
002	Electrical and Mechanical Engineers	327	2	41	61	108	115	0						327	2	41	61	108	115

004	Chemical, Metallurgical and Mining Engineers	414	3	51	81	98	181	6		2	3	1		408	3	49	78	97	181
006	Mining Technicians	498	13	188	194	64	39	1		1				497	13	187	194	64	39
008	Surveyors	195	3	17	71	70	34	3		1	1		1	192	3	16	70	70	33
010	Chemists	112	0	0	17	32	63	1					1	111			17	32	62
011	Other Physical Scientists	180	4	12	5	79	80	3		2			1	98		4	10	5	79
012	Animal Scientists	310	45	24	25	73	143	69	43	9	1	12	4	239	2	15	24	61	139
015	Physicians and Dentists	295	0	0	2	2	291	11					11	284			2	2	280
019	Other Medical Workers	1841	597	384	310	487	63	927	586	273	52	15	1	903	11	111	258	472	62
020	Teachers	10765	5595	3003	222	915	1030	8849	5595	2975	159	99	21	1916		28	63	816	1009

021	Training Instructors	464	63	176	136	41	48	283	56	123	79	19	6	174	7	53	57	22	42
022	Clergy	215	44	44	19	15	93	60	35	16		6	3	146	9	28	19	9	90
023	Jurists	167	3	10	19	40	95	21	3	5	2	1	10	146		5	17	39	85
026	Artists and Writers	189	10	47	71	31	30	95	9	45	31	5	5	93	1	2	40	26	25
027	Accountants	671	17	29	167	352	106	40	16	7	7	8	2	630	1	22	160	344	104
029	Social Workers and Librarians	456	156	104	77	59	60	318	151	89	46	30	2	133	5	15	31	29	58
030	Social Scientists	41	0	4	1	3	33	7				1	6	34		4	1	2	27
031	Personnel Officers	398	14	102	124	99	59	80	14	27	25	6	8	318		75	99	93	51
032	Draughtsmen	297	23	46	159	48	21	33	19	7	6	1		260	4	39	153	47	21
034	Other Technicians	1167	301	339	355	130	42	350	262	38	36	9	5	778	39	301	319	121	37

Sub-total: profession and Technical		19335	6893	4618	2167	2831	2826	11160	6790	3620	448	213	89	8096	103	998	1719	2618	2737
042	Administrative	3698	273	718	1399	912	396	594	169	190	153	40	42	3000	104	528	1246	872	354
043	Clerical	11656	1689	4167	4313	1334	153	3967	1525	1665	589	175	13	7525	164	2502	3724	1159	140
052	Sales	4189	829	1528	1341	417	74	754	414	260	50	29	1	3020	415	1268	1291	388	73
054	Agricultural	1169	156	254	378	304	77	92	72	18	2			993	84	236	376	304	77
058	Mining	1991	187	1098	550	130	26	228	62	136	23	4	3	1638	125	962	527	126	23
068	Transport and Communications	2693	1201	980	432	76	4	1781	1128	499	128	26		839	73	481	304	50	4
093	Craftsmen	9503	1789	4833	2462	378	41	1856	1066	700	63	27		6924	723	4133	2399	351	41
100	services	1802	851	471	391	78	11	1048	789	194	60	3	2	692	62	277	331	75	9
Sub-total with or requiring Secondary Education of above		56036	13868	18667	13433	6450	3618	21480	12015	7282	1516	517	150	32703	1853	11385	11917	5933	3468

Others	214871	214757	24	48	11	31	214666	214666					114	91	24	48	11	31
Total Employment	270907	228625	18691	13481	6461	3649	236146	226681	7282	1516	517	150	32817	1944	11409	11965	5944	3499
Percentage Distribution	100.0	84.4	6.9	5.0	2.4	1.3	100.0	96.0	3.1	0.6	0.2	0.1	100.0	5.9	34.8	36.5	18.1	10.7
Source: Manpower Survey, 1965, and Statistical Records Division, Office of the President quoted in Sindab (1984: 102, Table 5.1)																		
N.B. Occupations are defined in terms of the work done, not the qualifications presented. This accounts for some cases in which persons are classified as professionals even though having fairly low levels of educational qualifications.																		

Appendix B: Industry Shares of GDP by Type of Economic Activity

KIND OF ECONOMIC ACTIVITY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agriculture, Forestry and Fishing	13.5	16.2	15.5	16.4	18.7	21.6	19.8	19.6	19.9	20.7	21.4	21.0	20.2	19.8	19.8	20.8	20.1	19.4	19.2
Agriculture	4.9	7.1	6.6	6.3	6.0	6.1	5.5	4.8	4.6	4.9	4.8	4.4	4.0	3.4	3.3	3.6	3.6	3.6	3.8
Forestry	4.8	5.6	6.3	8.3	11.0	13.8	12.7	13.5	13.9	14.4	15.4	15.4	15.2	15.4	15.6	16.3	15.8	15.2	14.9
Fishing	3.9	3.6	2.6	1.9	1.7	1.7	1.5	1.3	1.4	1.3	1.2	1.2	1.1	0.9	0.9	0.9	0.7	0.6	0.6
Mining and Quarrying	16.7	14.4	12.1	9.9	6.3	3.8	4.1	3.9	3.5	2.7	3.1	3.2	4.2	4.4	3.6	2.6	3.7	3.4	2.6
Metal Mining	16.5	14.2	11.9	9.8	6.2	3.7	4.0	3.9	3.5	2.7	3.1	3.2	4.1	4.4	3.6	2.6	3.6	3.4	2.6
Other mining and quarrying	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>PRIMARY SECTOR</i>	30.2	30.6	27.6	26.4	25.0	25.4	23.9	23.5	23.4	23.4	24.5	24.2	24.4	24.2	23.5	23.4	23.8	22.8	21.8
Manufacturing	9.8	9.9	11.8	11.6	11.5	10.8	10.1	9.8	10.4	10.9	10.9	10.7	10.4	9.7	9.4	9.3	8.7	8.3	8.4
Food, Beverages and Tobacco	6.0	6.5	8.1	7.1	7.0	6.7	6.1	5.8	6.3	6.8	6.6	6.6	6.3	5.9	5.9	6.0	5.6	5.4	5.3
Textile, and leather industries	1.1	0.9	1.1	1.8	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.3	0.9	0.7	0.3	0.1	0.1

Wood and wood products	0.9	0.7	0.8	0.9	0.8	0.7	0.6	0.7	0.7	0.8	0.9	0.9	0.8	0.9	0.9	1.0	1.0	1.0	1.0
Paper and Paper products	0.3	0.2	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.9
Chemicals, rubber and plastic products	0.8	0.8	0.9	0.9	0.8	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Non-metallic mineral products	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Basic metal products	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fabricated metal products	0.4	0.5	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Electricity, Gas and Water	3.2	3.1	3.3	4.2	3.7	3.3	3.2	3.4	3.0	2.9	2.7	2.9	3.0	2.9	2.8	2.8	2.8	3.1	3.0
Construction	5.0	4.1	3.5	4.4	4.4	4.3	4.9	5.5	6.5	7.7	8.9	10.0	12.2	14.5	16.1	18.3	20.2	22.3	23.3
<i>SECONDARY SECTOR</i>	18.0	17.1	18.6	20.2	19.6	18.4	18.3	18.7	19.9	21.5	22.5	23.6	25.6	27.1	28.2	30.4	31.8	33.8	34.7
Wholesale and Retail trade	14.8	14.6	17.5	16.6	17.4	18.5	18.6	17.7	18.4	18.8	18.6	18.3	16.9	16.0	15.6	15.3	14.4	14.0	13.7
Restaurants, Bars and Hotels	1.6	1.7	2.2	2.2	2.2	1.9	2.0	2.4	2.5	2.6	2.6	2.8	2.9	2.9	2.9	2.4	2.4	2.3	2.1
Transport, Storage and Communications	6.0	5.9	5.9	5.3	5.7	5.7	6.3	6.5	6.5	5.1	4.8	4.4	4.2	4.3	4.1	3.6	4.0	3.8	3.8
Rail Transport	0.6	0.6	0.6	0.4	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1

Road Transport	2.3	2.4	2.4	2.2	2.3	2.3	2.5	2.4	2.0	1.9	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6
Air Transport	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.8	0.7	0.8	0.8	0.9	1.1	1.0	0.7	0.8	0.8	0.8
Communications	2.1	2.0	2.0	1.8	2.0	2.0	2.2	2.5	3.1	2.1	1.9	1.6	1.4	1.4	1.3	1.2	1.4	1.3	1.3
Financial Institutions and Insurance	8.2	10.3	8.8	8.8	9.1	9.0	9.7	9.4	9.1	9.0	8.8	8.6	8.4	7.9	8.0	8.6	8.7	8.1	8.5
Real Estate and Business services	5.0	5.4	5.6	5.7	6.3	6.6	6.5	6.3	6.4	6.5	6.5	6.2	6.0	5.8	5.7	5.7	5.5	5.7	5.5
Community, Social and Personal Services	8.0	8.3	7.1	8.0	8.5	8.9	9.4	9.8	9.1	8.9	8.2	8.8	9.0	9.4	10.0	10.3	10.5	10.4	11.1
Public Administration & Defence/Public sanitary services	4.6	4.8	3.3	4.2	4.5	4.4	4.9	4.6	4.0	3.7	3.1	3.1	2.5	2.7	2.6	2.5	2.2	2.2	2.5
Education	2.1	2.3	2.5	2.5	2.6	2.6	2.5	3.0	3.0	3.4	3.3	3.9	4.8	5.1	5.6	6.0	6.0	5.9	6.1
Health	0.5	0.5	0.6	0.6	0.6	1.1	1.1	1.3	1.2	1.2	1.1	1.1	1.0	1.0	1.1	1.1	1.6	1.6	1.8
Recreation, Religious,Culture	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Personal Services	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
TERTIARY SECTOR	43.6	46.3	47.1	46.6	49.2	50.8	52.5	52.1	51.9	51.0	49.5	49.1	47.4	46.3	46.3	45.9	45.5	44.4	44.6
Less: FISIM	(4.7)	(5.9)	(5.1)	(5.0)	(5.2)	(5.2)	(5.6)	(5.4)	(5.3)	(5.2)	(5.0)	(5.0)	(4.8)	(4.5)	(4.6)	(4.5)	(5.0)	(4.7)	(4.9)

TOTAL GROSS VALUE ADDED	87.1	88.0	88.1	88.1	88.5	89.3	89.2	88.9	90.0	90.8	91.5	91.9	92.6	93.1	93.4	95.2	96.1	96.2	96.2
Taxes less subsidies on Products	12.9	12.0	11.9	11.9	11.5	10.7	10.8	11.1	10.0	9.2	8.5	8.1	7.4	6.9	6.6	4.8	3.9	3.8	3.8
TOTAL G.D.P. AT MARKET PRICES	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0

Source: Central Statistical Office

