

Towards Ensuring Sustainable Industrialization and Human Development in South Africa: Challenges and Opportunities

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Abstract

The South African economy has registered incredible progress in the recent past through boosting living standards and lifting a large number of citizens out of poverty. However, building a stronger and more inclusive economy vis-à-vis ensuring sustainable industrialization requires bold action from policymakers. This paper explores the challenges and opportunities available for South Africa to achieve sustainable industrialization. This secondary study employed journal articles, newspapers, policy documents, and internet sources to achieve the study objectives. The focus was on the promotion of access to higher education, a stronger and fairer labor market, human capital, technology, and the use of natural resources to boost the economy. Nonetheless, South Africa faces a daunting task in achieving these objectives for instance natural resources will not be utilized efficiently without exposure and use of advanced technology. Hence, the paper argues that there should be numerous factors at play to achieve sustainable industrialization. Such factors include partnerships and cooperation with the international community to boost trade, attract foreign direct investment, and promote entrepreneurship.

Keywords: *Economy, Entrepreneurship, Investment, South Africa, Sustainable Industrialization.*

INTRODUCTION

This paper explores the challenges and opportunities available for South Africa to achieve sustainable industrialization. The South African economy has registered incredible progress in the recent past through boosting living standards and lifting a large number of citizens out of poverty. Between 2000 and 2008, South Africa's economic fortunes rose on the strength of a commodity boom and robust domestic investment DTI (2016). The economy expanded rapidly and created jobs. Through the National Development Plan (NDP), the government developed an ambitious policy agenda. Further, when the global financial crisis broke out in 2008, the healthy state of the public finances enabled the government to intervene decisively to support the economy.

This enabled the government to continue with its projects aimed at sustaining social programs and continuing to invest in infrastructure. However, by 2011, when the NDP was published, the decade-long escalation in commodity prices subsequently began to turn, signaling deeper shifts in the global economy. A plethora of unfavorable events unfolded. These include; the flagging of the pace of Chinese industrialization, the slowdown of World trade, the advent of a debt crisis in Europe, and the rising of geopolitical tensions among other things (Abramson and Boix, 2013; Lavrikova & Averina, 2015). However, against this background, building a stronger and more inclusive

economy vis-à-vis ensuring sustainable industrialization requires bold action from policymakers.

METHODS

The methodology adopted for this paper is the literature review. A research literature review is a systematic method for identifying and evaluating an existing body of published work by researchers, scholars, and practitioners. This paper provides an organized critical account of knowledge that has been published on sustainable industrialization. A secondary analysis of qualitative data was employed. Long-Sutehall, Sque, and Addington-Hall (2010) assert that "secondary analysis of qualitative data is the use of existing data to find answers to research questions that differ from the questions asked in the original research." As a result, secondary analysis involves the re-use of existing qualitative data derived from previous studies.

The major limitation of literature review as a methodology is that it relies on secondary information and if there is none, then specific questions on the new research may not be adequately answered. However, regardless of the limitations, the current study employed the literature review process in a logical way following the 'input-processing-output' approach. The approach involves sequential steps to collect,

comprehend, apply, analyze, and evaluate quality literature to provide a strong foundation for the study.

RESULTS AND DISCUSSION

Sustainable Industrialisation

The aspect of industrialization is of paramount importance on the African development agenda. Over the years, African states have re-committed themselves towards a more rapid approach implementation of industrialization. This is because of the widespread poverty, unemployment, inequality, and dependence on commodity or primary production in many African States. It has been found that in the year 2012, the growth rate in most African countries was higher than the global growth rate of 2.7 percent. Many African countries have witnessed quite high rates of growth in their Gross Domestic Product (GDP) for example, Ethiopia, Angola, Mozambique, Ghana, and Tanzania, among others. However, since 2014 Africa has had the widest disparities between men and women in terms of participation in labor markets, decision-making in Parliament, access to secondary education, and access to health services (Nzau, 2010; DTI, 2016; United Nations Human Development Report, 2016).

Studies around the world indicate that the prevalence of poverty in Africa is relatively much higher than in other regions (Kyaw, 2008; Mendes et al. 2014; Lavrikova & Averina, 2015). The continent continues to face the challenges of poverty, inequality, unemployment, and low levels of human well-being. The quest for industrialization is an attempt to resolve these challenges. The major challenge facing the continent relates to its continued dependence on the production of commodities or primary products. Scholarly evidence reviews that past experiments in industrialization in Africa led to increases in growth but not sustainable development. Instead, colonial policies attracted multinational capital, which tended to extract and export commodities rather than process them into final goods (Chimucheka, 2013). As a result, the post-independent state has struggled to transform this inherited pattern. The African Union Commission's Agenda 2030 and the United Nations Sustainable Development Goals (SDGs) under Agenda 2030 integrate industrialization as one of the key strategies to achieve structural transformation and promote human development in Africa. Africa constitutes 34 of the 48 world's least developed countries. Hence, the urgency to implement sustainable

development goals could not have been more pronounced than in the case of Africa (United Nations Development Organisation [UNIDO], 2016).

1. Industrialization and Africa's Development

Industrialization is the back born of Africa's development. UNIDO (2016) provides an immensely sound argument for why industrialization is important for any country. Four pertinent reasons were identified. Evidence for this is drawn from industrialized regions which demonstrate that industrialization is pivotal to economic growth and in improving human well-being through job creation and higher incomes. This suggests that South Africa's development will only be sustained through industrialization. SDG Goal 9 is on industry, innovation, and infrastructure development. Some countries in Africa have experienced very high rates of growth in the last ten years due to a commodity price boom while others have increased modest rates (DTI, 2016). While there have been some improvements in human development and reduction in poverty, evidence shows that except for a few countries (for example, Morocco, Tunisia, Egypt, Mauritania, South Africa, Botswana, Mauritius, and Seychelles), most countries still fall in the Low Human Development (LHD) category when the United Nations Human Development Index (HDI) is used. Furthermore, rural poverty, youth unemployment, and income inequality are relatively higher than in other regions. For these reasons, Africa has to pursue comprehensive strategies, which include industrialization to resolve those challenges.

2. Promotion of Access to Higher Education

Higher education is a significant form of investment in human capital development. It forms a specialized form of human capital, which is significant for economic growth. Castells (1994) regards it as the engine of development in the new world economy. Higher education provides not just educated workers, but knowledgeable workers who ensure the growth of the economy. Higher education also assists through teaching and research, in the creation and dissemination of knowledge. This suggests that South Africa needs to embrace free education and support research and innovation through grants and scholarships to achieve rapid industrialization. Inasmuch as higher education is important to economic growth, one vital question that needs to be answered is, how does higher education really impact economic growth? This is because there is a general presumption

that higher education is not necessary for economic growth and development, particularly in developing countries (Chimucheka, 2013; DTI, 2014; Dowey, 2014). This school of thought suggests that literacy and primary education are important for economic growth.

Many scholars argue that the contribution of education to economic development is analyzed in terms of education-earnings relationships in the form of rates of return (Abadie et al. 2004; Bloom, and Van Reenen, 2007). Rates of return are a summary statistic of the relationship between lifetime earnings and the costs of education. Again, as pointed out briefly earlier, available estimates on rates of return show that the social rates of return to investment in primary education are the highest, followed by secondary education. According to this type of analysis, the returns to higher education are the least. The pattern is more or less true in general with respect to private rates of return also.

3. Labour Markets

Industrialization is primarily a macro-economic phenomenon, comprising of various micro-economic components. Therefore, the study of industrial history includes a macro as well as a micro approach. The study of the broader phenomenon of industrialization since the eighteenth century is part of the scope of economic history, which is essentially a macro-economic discipline (Nzau, 2010; Dittmar, 2013). Most of the neo-Marxist writers since the early 1970s were sociologists who had a political-economy approach. This means that a specific paradigm pertaining to the relationship between politics and the economy was accepted (Kyaw, 2008). The revisionist writers had a specific political agenda since the early seventies, namely to point out the functionality of capitalism as a specific economic system for the political model of racial segregation in South Africa. In that process, the political economy of industrialization was written according to the abstract value theory, and not as the economic history of industrialization in South Africa. The study of the growth of specific industries or industrial enterprises is then the micro-economic discipline of business history. In South African historiography thus far, little has been researched on the macro-economic and micro-economic aspects of industrialization as such few economic historians write about industrial development (Mendes et al. 2014). It seems, however, that historians with training in social and political history, in particular, have attempted to

describe and explain the social phenomena of industrialization. In the writing of the South African history of industrialization, the emphasis was rather on the relationship between industrialization as a definite phase of capitalist development and the specific political model of the country.

4. Human Capital and Technology

Education is a strong predictor of economic growth and of per capita income at the national and regional levels. Both theory and evidence explain these findings as worker skills facilitating technology adoption and innovation. In contrast, the role of human capital during the Industrial Revolution is typically described as minor. In Britain, the cradle of industrialization educational attainment was low and inessential for economic growth (Mitch, 1993). The micro-level analysis of technology in developing countries has drawn inspiration from the “evolutionary theories” developed by Nelson and Winter (1982). The starting point of these theories is that firms cannot be taken to operate on a common production function. Technological knowledge is not shared equally among firms, nor is it easily imitated by or transferred across firms. Transfer necessarily requires learning because technologies are tacit, and their underlying principles are not always clearly understood. Thus, simply gaining mastery of new technology requires skills, effort, and investment by the receiving firm, and the extent of mastery achieved is uncertain and necessarily varies by firm according to these inputs. Furthermore, firms have more knowledge of their technology, less about similar technologies of other firms, and very little about dissimilar alternatives, even in the same industry.

5. Natural Resources

Agenda 2063 advocates an industrialization approach, which is reinforced by beneficiation and value addition. Mineral beneficiation has been identified and prioritized by many African countries as an economic opportunity to stimulate industrial development and diversification for multiple job creation opportunities. This is based on the continent’s vast mineral resources which range from diamonds, gold, uranium, bauxite, steel, aluminum, copper, platinum, coal, etc. (African Union, 2017). The agenda of industrialization therefore, is basically concerned with how the continent can achieve structural transformation, strengthen its productive capacity and improve performance in Manufacturing Value Added

(MVA), increase the share of manufactured exports in its total exports, and also shift from Low to medium and high-technology manufacturing (Moyo, 2017).

Engaging the International Community

It is important to assess the role of foreign trade in industrialization. The pace and character of industrial development are not simply the result of trade policies. Numerous other factors can be considered. A country's size, its natural resources, the skills of its people, the stability of its government and institutions and their ability to promote change, and the fiscal, monetary, and exchange rate policies that the government pursues. These factors influence a country's ability to industrialize. The role of foreign trade in industrialization is an important issue for several reasons (Kyaw, 2008; DTI, 2014). These include the fact that although the relationship between trade policy and industrial development has concerned policymakers for a long time, empirical evidence makes it possible for useful lessons to be drawn concerning the advantages and disadvantages of different trade policies. Also, many fear that slow world growth and rising protection in industrial countries may cloud the prospects for developing countries' exports. The other challenge is that continuing debt problems increase the number of developing countries that need to raise their net earnings of foreign exchange to service debt and maintain adequate growth. This does not mean that other factors can be ignored. If, for example, a country reduces its trade barriers but fails to make appropriate changes in its fiscal, monetary, and exchange rate policies, the benefits it hoped for may not materialize (Kyaw, 2008). Domestic inflation and an overvalued exchange rate could discourage the investment flows needed to respond to the new price incentives. Analysts looking at the past and governments setting policies for the future have to bear in mind the complexity of the relationships among policies.

The World Bank's Support for Industrialization

The debate on international partnerships will not be complete without mention of the World Bank. The World Bank has always viewed industrialization not as an end in itself, but as a means to raise productivity and incomes (DTI, 2014). It is this view that has shaped and guided the Bank's support for industrialization in its member countries. The Bank has supported the efforts of its member countries in building new industrial capacity, improving the efficiency of existing

capacity, and providing training and technical assistance to accelerate the acquisition and mastery of new skills and new technology. Until the late 1970s, it did this by financing industrial subsector studies, project feasibility studies, project design and engineering, technical assistance, and industrial investments. It also financed industry indirectly by lending to industrial development banks; these loans served the additional purpose of deepening financial markets in developing countries. To complement these efforts, the International Finance Corporation (IFC), an affiliate of the World Bank, supports the projects of private investors through loans as well as equity participation.

More recently, the Bank's support for industrial development has added a new dimension to its emphasis on projects. It now includes support for improved policies and strengthened institutions (Abadie et al. 2004; Bloom et al. 2007; Abramson and Boix, 2013). This was in response to the structural adjustment problems faced by developing countries following the international recession and to a growing awareness of the influence of policies and institutions on industrial development. The Bank, jointly with its member countries, devises a lending program that supports policy reforms and structural change across the whole economy, as well as at the level of the individual enterprise or institution. In recent years, the Bank has made several structural adjustment and sector adjustment loans to developing countries in support of changes in their macroeconomic, trade, and industrial policies.

CONCLUSION

In conclusion, it can be argued that the South African economy has registered incredible progress in the recent past through boosting living standards and lifting a large number of citizens out of poverty. Also, through the National Development Plan (NDP), the government developed an ambitious policy agenda. Rapid industrialization in South Africa will only be achieved if policymakers promote access to higher education, a stronger and fairer labor market, improve human capital and technology, and promote the utilization of natural resources to boost the economy.

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