

https://dspace.org/

An evaluation of orthodox and emerging alternative approaches to the industrial policy in the context of economic development

Lamola, Leonard Sekhohliwe

2013-07-11
http://hdl.handle.net/10539/12806

Downloaded from a DSpace repository. https://dspace.org/

RESEARCH TOPIC: AN EVALUATION OF ORTHOX AND EMERGING ALTENATIVE APPROACHES TO THE INDUSTRIAL POLICY IN THE CONTEXT OF ECONOMIC DEVELOPMENT

by

LEONARD SEKHOHLIWE LAMOLA

Submitted in fulfilment of the requirements

For the degree of

MASTERS PROGRAMME IN DEVELOPMENT AND THEORY AND POLICY

In the subject

ECONOMICS

at the

UNIVERSITY OF WITWATERSRAND

SUPERVISOR: PROF. BEN FINE

11/1/2013

Declaration

I hereby declare that this research work, **AN EVALUATION OF ORTHODOX AND EMERGING ALTERNATIVE APPROACHES TO THE INDUSTRIAL POLICY IN THE CONTEXT OF ECONOMIC DEVELOPMENT**, is the labour of my own work and all sources, references, and quotes used have been acknowledged by means of comprehensive references to maintain an intellectual integrity of this research.

Student Number: 693675

Word count: 12350

Acknowledgment

A research, though it is written and attributable to a single author, is seldom a product of a sole effort. It is more often an outcome of a collective effort, either in a form of influences or outlook, or both through direct or indirect contributions. I am much indebted to great individuals for their immense contribution to making this work a complete product, yet any shortcomings and errors on it can only be attributable to me for which I take a sole responsibility. I wish to express my sincerest gratitude to my supervisor, Professor Ben Fine, for making time for my proposal, his advice and counselling with his remarkable knowledge. A great gratitude to my loving, patient and caring wife, Mamiki Lamola.

Hypothesis

In a broad sense, an industrial policy is aimed at influencing the structure of an economy. Justin Lin (2010), argues that the best way to upgrade a country's endowment structure is to develop its industries according to the comparative advantages determined by its given endowment structure at that time. Then he assumes that the economy would be most competitive, the economic surplus predominant, and the capital accumulation and the upgrading of factor endowment structure will be the fastest possible. He further proposes that the private enterprises should enter industries according to the country's comparative advantages, relative factor prices must fully reflect the relative abundance of those factors as prices can only be determined through competition in a "well-functioning" market.

Therefore, the market should be the basic institution of the economy. The proposed essay will conduct a critical analysis of structuralism and industrial policy as propagated within the "New Structural Economics" realm as proposed by Justin Lin, a former World Bank chief economist. The proposed inquiry would attempt to underline that the Newly Industrialised Countries showed that specific institutions have performed a critical role in guiding market forces towards industrial development. Notably is the state as an institution in its developmental role in guiding economic strategy and industrial policies. Therefore, the basic argument is that despite the eminence of the orthodox economic approach and its responses to the recent economic crises there are numerous contradictions, including weaknesses as advocated by Lin's approach to developmental issues and the role of industrial policy, expressly with regard to the developing world.

Table of Contents

Contents **Pages no**

Chapter 1

1.0 The concept of industrial policy

1 Introduction……7

2. Research problem……8

3. Research aims and objectives……..8

4. Research approach and methodology……..9

Chapter 2

2.0 Debates around industrial policy 9

2.1. Introduction……....9

2.2. Approaches to industrial policy……9

2.3. Economic patterns and industrial upgrading……..12

Chapter 3

3.0 Debates around functionality of comparative advantage 13

3.1. Introduction…….13

3.1.2. Law of comparative advantage……13

3.1.3. Architecture-based comparative advantage…….14

Chapter 4

4.0 Defining the role of activist state 16

4.1 Introduction…….16

4.1.1. Evolving character of the state in economic development……..17

4.1.2. Theories of state interventions…….19

4.1.3. The capital flows and state functionality……...21

4.1.4 Assumed efficacy of market mechanism……..22

4.1.6 Market constraints on industrial evolution……..23

4.1.6 The role of NGOs in development…..……..24

4.2.1. The discourse of "good governance" in developing economies……25

4.2.2. Policy inconsistency of the Bretton Woods Institutions……..26

4.2.3. Multi-national institutions and the development discourse…….27

Chapter 5

5.0 Industrial policy and the developing economies 29

5.2.1. Introduction…….....29

5.2.2. New Structural Economics and Africa's industrialisation…….30

5.2.3. African case studies: Zambia, Ethiopia and Tanzania…..33

5.2.4. South Africa's industrial policy initiatives……..35

5.2.5. Impact of technological development on industrial policy……..36

Chapter 6

6.1. Conclusions……...…..38

7. References……...40

Chapter 1

1.0 The concept of industrial policy

1. Introduction

The recent global crises have put the agenda of industrial policy on the glare of the intellectual publicity. There has been rekindled interest in industrial policy from the developing world and the Bretton Woods Institutions largely led by the World Bank since last three decades of Washington Consensus debacle. Previously, debates revolved around the merits or otherwise of industrial policy. Certainly, most countries that managed to catch up with the industrialised, high-income countries are the ones whose governments proactively promoted structural changes. Simon Kuznets (1959)[1] , defined structure as "... a relatively coherent framework of interrelated parts, each with a distinctive role but harnessed to a set of common goals". Alice Amsden (1982), argues that historical and empirical evidence demonstrate that the late catching-up experience of Newly Industrialised Countries ("NIC's") was through practical industrial policy measures. Accordingly, there is a continuous search for new business models, markets and channelling of resources into favourable and socially desirable new activities.

The foremost aim of the proposed thesis is to provide a critical analysis of new thinking on industrial policy by the World Bank as led by Justin Lin and his policy articulation through "New Structural Economics". The proposition is to challenge and critically review Lin's assertion that countries' should focus solely on the existing comparative advantage and the restrictive role assigned to the state in order to successfully upgrade and competitively trade internationally. Furthermore, the assertion that the market is the most efficient way of scarce resources allocation, and dependably reflective price mechanism for demand in the economy. Also, reflecting on an ever-changing dissonance between the Bank's scholarship, advocacy and policy execution, Ben Fine and David Hall (2011), including the role of other international institutions in development. Eventually, proceed to examine the functionality of Lin's recommendations on Africa's industrial landscape, including South Africa's industrialisation initiatives.

[1] Simon Kuznets 1959, on comparative study of economic structure and growth of nations, Johns Hopkins, p 162.

2. Research problem

"…industrial upgrading and technological advance are best promoted by what I call a facilitating state, a state that facilitates the private sector's ability to exploit the country's areas of comparative advantage… the key is to make use of the country's current comparative advantage not in the factors of production that it may have some day, but in the factors of production that it has now" (Justin Lin and Ha-Joon Chang debate 2009).

This excerpt demonstrates the unwavering conviction of the mainstream economic thinking on the merits of the outcomes of market efficiency hypothesis and the imposed limitations on the activist role of the state. An examination of the past four decades of the World Bank position towards industrial policy strategy in the developing economies shows that its policies and strategies' prescription has served a narrow neoliberalism economic policy–making at the exclusion of "other" alternatives economic approaches to development. The appraisal of the World Bank's historical restrictive state role, macroeconomics policies and together with the liberalisation of markets has been the cornerstone of this policy-making approach. The polemic is that this has largely constrained the economic advancement of the developing world. The thesis proposes to show that Lin's new structural economics conception of always conforming to comparative advantage and market efficiency hypothesis prescripts in resource allocation is partly misleading and partly unreasonable, if not misinterpreting historical and empirical evidence of pragmatic industrial policy that needs to be adopted in the developing world.

4. Research aims and objectives

The primary focus of the research would be a critique of Justin Lin's (2010) proposition as championed through his *New Structural Economics* as an endorsed conventional view and the remedial industrial policy prescriptions for the developing economies. This analysis will endeavour to challenge Lin's assumptions by debunking his propositions and provide conceivable alternatives to economic development. Secondly, his supposed theoretical innovative ideas on industrial policy and methods that are disseminated partly as part of responses to the recent global crisis (2007/8), and the hegemonic nature of the World Bank in its policy recommendations, as a policy-maker, lender and the knowledge repository. It would further focus on the presumed policy shift since the adoption of Washington Consensus and current challenges to orthodox economic model. Finally, explore the prospects of alternative paradigms "post-Washington Consensus"?

5 Research methodology

Ordinarily, the three foremost purposes of research are to describe, explain, and validate findings. These allow imaginative investigation, and the organising of the findings in order to fit them with the explanations, and then test or validate those explanations. The proposed methodology for this research is a combination of approaches. The approach will primarily be qualitative and quantitative as it intends to use specific country-case studies and comparative analysis, also historical-descriptive, and the critical-analytical approaches, as it attempts to focuses on narrative analysis and interpretation of economic development. Critically, to organise facts objectively, and events that reflects an accurate historical narrative supported by the meticulous references, including careful juxtaposing of information. This can be only possible through conducting a substantial literature review, both from national and international journals, articles, as well as select books that hold relevance to the proposed research.

Chapter 2

2.0 Debates around industrial policy

2.1 Introduction

The debates on government failures occupy a prominent position in the literature on industrial policy imperatives. The debates outcomes largely determine the form of the policy positions adopted. Ostensibly, the 2007/8 financial crisis has challenged the conviction that unbridled market mechanism is the answer to humanity's quest for sustainable economic growth, and the eradication of poverty. It underscored that unregulated markets are vulnerable to corruption, greed and fragility. As Joseph Stiglitz (2011) argues that the global financial crisis has cast doubt over the neoclassical paradigm, both in advanced and emerging economies, occasioning rethinking of government involvement in promoting particular patterns of production. Some advocates of industrial policy claim that the performance of the most dynamic sectors of the economy depended on comparative advantages created with government aid. In contrast, others prefer the "invisible hand" that causes resources to be allocated to the most desirable uses.

2.2 Approaches to industrial policy

An industrial policy is any form of selective intervention or government policy that attempts to alter the sectoral structure of production toward sectors that are expected to

offer better prospects for economic growth than would occur in the absence of such intervention in market equilibrium. Since the onset of global economic recession there have been varied positions around industrial policy, particularly the proposition that the developing economies should conform to their comparative advantage as informed by their factor endowments. One could identify two distinct arguments underlying mainstream thinking around industrial policy, neoclassical approach and market-friendly, including structuralist approach[2] that hold a divergent view to the two latter approaches, Marcus Kurtz and Andrew Schrank, (2007). Ultimately, all have their own inferences of interventions necessary to promote industrial development. The categorisation of the concept of industrial policy is intertwined with its purpose. Its purpose is undeniably contaminated with political and ideological undertones, as debates are largely informed by these sympathies.

Moreover, there are varied definitions, comprehension and description of industrial policy. What seems to be cautious consensus is that structural change in the productive structure of an economy, including perceived or expectant concomitant positive changes, are necessary for economic development. Chalmers Johnson (1984)[3] posits that the concept of structural change should refer to the "concern with the structure of domestic industry and with promoting the structure that enhances the nation's industrial competitiveness." Reasonably, the purpose of industrial policy can be described as transformation from low to high level of production capability. Implicit from this assertion is that an industrial policy involves a level of self-conscious planning. In turn, this has to do with changing production patterns, for instance, using of production factors for something that was never produced before.

According to the extreme neoclassical approach, all markets are perfect and any intervention is susceptible to distort resource allocation. Meanwhile, the static optimisation of resource allocation obtained through the functioning of free markets is assumed to lead to the maximisation of growth. In terms of the market-friendly approach, the developing countries do experiences market failures. Functional and selective interventions are therefore recommended to address them. However, the former is supposed to be feasible and desirable, because those failures which point to selective remedies are believed to be

[2] There is plethora of approaches and arguments around the industrial policy, including Marxian approach; however, for the purpose of this research no attempt will be made to analyse them all.
[3] Chalmers Johnson, "Preface," in The Industrial Policy Debate (San Francisco, California: ICS Press, 1984).

of insignificant importance for industrial development. The selective interventions are supposed to be inherently more costly than the flaws they are supposed to correct. Though the market-friendly approach abandons some of the assumptions of the neoclassical approach, it acknowledges that factor markets may not operate perfectly, and may call for interventions in order to create the human capital base required by industrialisation, but these interferences must be market-conforming.

What is self-evident is that public policy is an essential determinant of economic development, and that industrial policy continues to be a necessity. Complementarily, a capable state remains the key institution to ensure economic development. The state's decisions shape the institutional framework that conditions economic activity and its outcomes. There is recognition that market failures in the coordination of investment decisions in an industry might be either due to markets asymmetric information, deficiencies in the capital market, economies of scale, or externalities in the creation of skills base.

According to Kenneth Jameson (1986), the Prebisch-Singer structuralist approach holds that both functional and selective interventions are needed to promote development, and governments are capable of carrying them out. The view is that industrialisation may occur in the absence of selective interventions, but its pattern and depth will be affected, as economies of developing countries tend to be fragile in most circumstances. Moreover, their market failures differ in their incidence and intensity, in different activities, and the interventions to correct them must necessarily be selective. The selective approach predicts that resource allocation would be sub-optimal and growth would be restricted.

The distinction between market-friendly and selective interventions is often viewed as false dilemma. Some policy analysts contend that there is no economic basis for drawing a distinction between functional and selective interventions as any intervention, which corrects a market failure is instantly market-friendly. Correspondingly, James Robinson (2009) declares that the assertion that the government failures are always worse than market failures seems to be based on ideology rather than theory or evidence.

The basis of the debate is that industrial policy should be based on existing comparative advantage with others arguing for an incremental steps to defy that comparative advantage. The debate is mostly not about the goal, but the path to that goal. Stiglitz (2011) maintains that much of development economics had been viewed as asking how developing countries

could successfully transition toward the kinds of market-oriented policy frameworks that came to be called "American style capitalism". However, the global financial crisis has now raised questions about that model even for developed countries. Dani Rodrik (2007) contends that industrial policy has to be tailored for specific institutions considering the binding constraints that are peculiar to a given country. This means state involvement, even with similar strategies can lead to different patterns of industrial development.

2.3 Economic patterns and industrial upgrading

According to the Bretton Woods Institutions, the World Bank's report (1993) on the East Asian miracle was interpreted as a turning point in the debate for industrial policy. It was construed as an acknowledgement that Southeast Asian countries benefited from deliberate policy interventions, and their approach to development policy-making was therefore "market conforming" rather than "market defying". The "market conforming" comparative advantages is argued to have given birth to East Asian miracle, portrayed as atypical , and attributed to private-sector led development. This ploy is almost invariably used to defend the neoclassical development orthodoxy against radical challenges. In fact, World Bank and associated institutions self-contradictorily acknowledges the latent efficacy of the institutionally demanding strategies employed by these NIC's, yet they question the model's social and political feasibility in the rest of the developing world, particularly in Africa. Accordingly, market liberalisation is offered as a "second-best" alternative, John Page (1994).

Lin's approach (2009), attempts to provide guidance on how governments should strive to shape the economy in a way that is consistent with its comparative advantage. He writes that "In summary, these severe market failures can provide a rationale for government intervention to kick start growth. But what kind of intervention? The key to answering this question is recognising that the optimal industrial structure is endogenous to the country's endowment structure, in terms of its relative abundance of labour and skills, capital and natural resources. Upgrading the industrial structure requires first upgrading the endowment structure, or else the resulting industrial structure will become a drag on development. Therefore the government's role is to make sure that the economy is well launched on this endogenous process of upgrading."

Arguably, in the theoretical structure of an industrial policy, an institution becomes a strategic variable, the governance of policy knowledge by the government impact on

economic development. Thus, industrial policy should address the problem of businesses that deal with industrial activities in newly introduced categories of industry. In other words, these amount to an interventionist approach in directing an economic developmental path. As Robert Wade (2010), points out that the rapid industrialisation in the East Asian countries experienced a rigorous government intervention, and these interventions were not aimed at "making the market work better" but on enhancing and directing production capacity of firms or industries to accelerate productive diversification and upgrading in an economy. According to Stiglitz (2011), some of the critical elements of comparative advantage might be domestic, yet a country like Switzerland' pre-eminence in watch-making has little to do with its natural endowment. Consequently, natural resource endowments need not provide the basis for explaining patterns of production and specialisation. He argues against countries limiting themselves to production patterns dictated by endowments, as orthodoxy defines comparative advantage. He reasons that one of the critical elements is the endowment of knowledge and entrepreneurship, and advocates a policy focus that enhances and shapes those endowments. In summation, he contends that even if a government were to want to avoid addressing these issues, it cannot because what the government does or does not do has consequences, either positive or negative for industrial development.

Chapter 3

3.0 Debates around functionality of comparative advantage

3.1 Introduction

David Ricardo's theory of comparative advantage[4] is one of the known economic ideas that has achieved widespread acceptance in the economics literary world, including its modern forms. Since the eminence of the theory, certain special-case exceptions to the law of comparative advantage have been demonstrated such as the Hecksher-Ohlin-Samuelson law of factor proportions, and Jagdish Bhagwati's "immiserizing growth" (1968)[5]. The principle underlying the idea of Ricardo's law of comparative advantage is an economic law that endeavoured to demonstrate that protectionism is best avoided in a free trade regime. It claimed that free trade works even if one trading partner holds an absolute

[4] The principle of comparative advantage was first described by David Ricardo who explained it in his book: On the Principles of Political Economy and Taxation (1871), in an example of England and Portugal.
[5] Jagdish Bhagwati, 1968. Optimal policies and immiserizing growth. Department of Economics, Working Paper No. 34.

advantage in all areas of production, or produces products cheaper, better and more efficiently than its trading partner.

3.1.2 Law of comparative advantage and terms of trade

Lin's proposition is one of the innumerable attempts to demonstrate unfailing relevance of comparative advantage. According to him, the best way to upgrade a country's endowment structure is to develop its industries according to the comparative advantages determined by its given endowment structure at a particular time. He further argues that an identification and prioritisation of new sectors, industry, and of infrastructure investment, not only must align with the country's comparative advantage, but also must have the lowest possible transaction-related costs to be competitive in the globalised world. For Lin, price competition is the *sine qua non* of comparative advantage, and therefore proposes "getting the prices right". He assert that upgrading the industrial structure requires the upgrading of the factor endowment structure from one that is relatively abundant in labour and natural resources to one that is relatively abundant in capital. Thereafter, an introduction of new technologies, and the corresponding improvement in infrastructure to facilitate economic operations.

However, Anwar Shaik (2004) contends that industrialised countries have high level technology, often certain abundant natural resources, also high real wages, while most developing countries the pattern is generally opposite. Accordingly, bringing in an international trade and competition, the developing countries are forced to compete in sectors with low wages to derive cost advantages. Dani Rodrik (2011), also criticises the idea of strictly adhering to comparative advantage. He submits that, if China with its huge surplus of agricultural labour was to specialise in the type of products that its factor endowment dictates it would not be economic giant it is today. The same could be argued about South Korea; it defied its comparative advantage by moving into heavy and chemical industries by means of building specific skills, filling specific gaps in the value chain, relying on a select set of business groups and strategic choice. It contradicted the often-repeated mantra of focusing on the "development of industries consistent with latent comparative advantages". The contention is that comparative advantage and static efficiency entailed that South Korea produce rice, certainly it might today been among the most efficient rice farmers, but it would still be a poor country.

3.1.3 Architecture-based comparative advantage

Lin's New Structural Economics places primacy of a country's resource endowment at the centre of its economic development, which he believes should determine the productive structure of its economy. The assumption is that the country's features and industry's characteristic tends to enjoy competitive advantages vis-à-vis trading partners. In accordance with the Ricardian theory of comparative advantage, what is implied is that a country that has significant endowment of a certain factor of production would have a better fit with industries that heavily uses that particular resource, assuming that technology is identical across trading countries. However, this theoretical presupposition has a difficulty in convincingly explaining, for instance, seemingly enhanced production competence of South Korea, Taiwan and China in some technology-intensive products such as DRAM, CDs media, and DVDs recorder that were assumed to be Japan's stronghold for many years.

According to Takahiro Fujimoto (2007), the feasible theoretical framework that best explains this incoherence of Ricardian comparative advantage is what he calls "architecture-based" comparative advantage. Fujimoto describes this as a "fit between organizational capacity and architecture". He contends that this framework is the outcome of building an organisational capability, which emphasises teamwork among a multi-skilled work force, an "integrative organizational capability of manufacturing"[6] that raises productivity and quality at the same time. The approach allows economically rational long-term transactions and employment of labour factor. Fujimoto presents two basic types of product process architecture, namely, integral architecture and modular architecture. The former necessitates complex interdependence between product functions and product structure such as automobiles, while the latter outlines a relationship between a product's functionality and structural elements with a simple one-to-one correspondence such as personal computers.

Elucidating that further, he declares that the essence of the architecture-based comparative advantage is informed by particularistic organisational capability, which is informed by initial capability-building process that generates region specific-specific capability. According to this framework, owing to its socio-historical circumstances, United States

[6] Early post-war years the Japanese manufacturing firms used this approach while experiencing high economic growth amid shortages of work force. Toyota Production System is a typical example of such capability.

companies show comparative advantage in technology-intensive modular architecture goods, while China and other South-eastern Asian countries are leading in modular manufacturing, because they have been functioning as production bases of Japan and Western multinationals, and have thus exhibited labour-intensive integral architecture goods. Therefore, the latter countries trained a multi-skilled work force to enhance their competitiveness and structural upgrading in manufacturing integral goods for export purposes.

Fujimoto claims that products with certain type of product process architecture tend to tie better with a particular type of organisational capability causing high productivity performance in terms of productivity, lead time and quality. This is a significant departure from Ricardian-Lin's generic theory of comparative advantage that emphasises the primacy of natural endowment and market determinism, which Fujimoto contest do not reflect the reality of trade dynamics. He avers that the Ricardian classical version might be empirically valid, but does not adequately explain why comparative productivity advantages occur in certain industries only. This is analogous to Marshall's sentiments that, (1885, p.159) an economic theory is "not a body of concrete truth, but an engine for the discovery of concrete truth". He goes further to state that it provides a "systematic and organized methods of reasoning [p.164] and an account of "manners of action of causes" [p.171][7] .

Chapter 4

4.1 Introduction

4.0 Defining the role of activist state

One of the fascinating aspects of industrial policy has been the disagreement about the role of the state in promoting the process of structural change in the economy. Received theory is of the view that most market failures are the consequence of government interference, and that the welfare cost of government remedial intervention invariably outweighs the welfare gains. Hence, the age-old debate over the relative roles of the markets and the state, and the criticism of the notion of a developmental state. Countries' developmental potentials for economic advancement and industrial upgrading, as well as, survival in any

[7] Cited from Kevin Hoover, The Past as the Future, the Marshallian Approach to Post Walrasian Macroeconomic, Beyond the Dynamic Stochastic General Equilibrium Model, edited by David Colander.

competitive market depend on the ability to create and implement effective and efficient policies and strategies. The critical part is the institutions bestowed with the responsibilities of implementing the requisite policy instruments to realise the developmental goals. It is often argued that in the past, the developing country's states have been inhibited as agents of development. Therefore, the question to pose is how the state can be reconstructed and its role re-defined?

4.1.1 Evolving character of the state in economic development

Industrial policy certainly implies state involvement in economic activities. Yet, there is no uniformity on the scale of the involvement. The extent of the government role varies from one country to another, and it could be generally described and divided into two major categories. Firstly, facilitator state, where the state plays the role of a facilitator, is setting conducive rules of the economic activities to encourage economic development in a particular direction. For example, to limit import competition, it may use import tariffs and quotas boosting domestic producers' competitiveness through subsidies, either directly through tax rebates, and/or indirectly through research and development funds. Investment incentives, such as tax breaks or cheap land, may be offered to promote production in certain sectors. Secondly, the entrepreneurial state refers to the state's role as an entrepreneur. This could be in the form of State-Owned Enterprises ("SOE") shaping and influencing production decisions planned. These enterprises can be wholly-owned by the state or joint-ventures between the state and multinational or private enterprises. State entrepreneurship is a vertical expansion of government control on economic activities. This type of state role was widespread in the developing economies during the height of import-substitution industrialisation. Lin advocates the former.

He believes that every developing country has the potential to grow at 8% (per cent) or more continuously for several decades, and become a middle-income or even a high-income country within the span of one or two generations. This is on condition that governments have the "appropriate" policy framework to facilitate the private-sector led development, including exploitation of countries latecomer's advantages. He cautions against defying comparative advantage as he believes country's factor endowments should be priorities over everything else and ultimately allow the allocative efficiency of market determination. There seems to be tenacious aversion to state involvement in managing industrial development as there is ingrained belief that the risks and outcomes are almost if

not always result in monumental distortions and failure. Lin (*ibid*) opines "…industrial upgrading and technological advance are best promoted by what I call a facilitating state, a state that facilitates the private sector's ability to exploit the country's areas of comparative advantage…" (Lin and Chang debate, 2009).

Alice Amsden (2002) credibly shows an evidence of countries that undertook ambitious projects and managed to successfully break the old barriers, defy established conventions and comparative advantages injunctions and became industrialised, even become successful global leaders in new lines of business, sectors and industries. This is recognition of markets inadequacy and co-ordination challenges that create market imperfections. However, this recognition has a few, if any concrete implications for consensus for policy-making course. For instance, the neo-liberal approach acknowledges the causal link of failing economic performance due to market and institutional imperfections, but proposes a policy intrusion that addresses these imperfections in a piecemeal manner or development of industries that depend on an underlying comparative advantage, Lin and Celestin Monga, (2011). Ha-Joon Chang (2011), cites two key reasons for the controversies and confusion about industrial policy in developing countries. First, he points out that antagonists of state activism tend to focus attention on the failed policies implemented overlooking the objectives and the broader strategic choices made in the successful cases. Second, he claims that almost always different types of government interventions are lumped together in regression analyses, with little consideration to which ones may have attempted to facilitate the emergence of industries that are consistent with latent comparative advantage.

Romer (2011) suggests that "the challenge is to find better forms of government intervention, ones that have better economic effects and pose fewer political and institutional risks".[8] He cautions that there is tendency for economists to invariably avoid to address the unpredictable political and institutional factors, which emerges during analytical undertaking and instead they work backward from a desired policy outcomes to a simple economic model that supports it. While, Stiglitz (2011), contends that there is probably no country that has developed successfully without an important role, not just in restraining and creating markets, but also in promoting industrial policies, during its developmental stages, not even today. He urges for the adoption of policies and practices

[8] Citation from *The Authors* 2011. Development Policy Review, 2011 Overseas Development Institute. Development Policy Review 29 (3)

that create effective state associated institutions that would enhance the quality and efficiency of the public sector, as successful countries did.

He further notes that policies that either intentionally or unintentionally weaken the state are not likely to succeed as economic policies have to reflect the capacity of the state to implement them. Although the interventions will never be perfect, nor need they be to effect an improvement in economic performance, as the choice is not between an imperfect government and a perfect market, is rather between imperfect governments and imperfect markets, each of which has to serve as a restrain on the other. They need to be perceived as complementary, and seek a balance between the two, balance which is not just a matter of assigning certain tasks to one, and others to the other, but rather designing systems where they relate effectively. The definitive point is that the markets do not come into existence on their own, and neither contention is about less or more roles for either. Unlike mainstream view, which continues to control development policy frameworks, and underpinned by dichotomies like import-substitution versus export orientation, public versus private with virtues on its side and vices on the other. The developing country's state or state-led institutions are perceived to be worse than "state-in-general", so the attitude is, it should be restrained as much as possible by private markets, Robert Wade (2010).

4.1.2 Theories of state interventions

The state is more than the custodian of the rule of law, but also a critical institution in influencing country's political economy. Douglas North (1994) defines institutions as structures that shape political, social and economic interaction, with policy choices made within socio-political parameters of the institution. The dominant discourse in the state intervention is the view that its interference in the economy is a negative and market-distorting exercise. The historical prevalence of authoritarian regimes, in a number of developing economies lent credence to the Washington Consensus focus on policy reforms that diminishes government participation. Yet, there is increasing recognition that market liberalisation requires a capable state to provide more than legal security and a certain level of regulation to ensure competition. Lin (2011) alludes to a "long list" of failed attempts to "pick winners", and these failures were often the consequence of the governments' inability to design good criteria for identifying industries that are worthy of state assistance. In fact, he argues that governments' propensity to target industries that are

too ambitious and not aligned with a country's comparative advantage largely explains why their attempts to “pick winners” resulted in “pick losers”.

He postulate that “…the key is to make use of the country’s current comparative advantage not in the factors of production that it may have some day, but in the factors of production that it has now”. Although Lin concedes a certain role for state in economic development, including industrial policy, but reasons that comparative advantage defying policies will certainly fail because they will be expensive for government, even for the private sector. Additionally, he recognises the fact that there are countries that have in the past defied comparative advantage with activist state, and became remarkably successful. For example, South Korea started to produce steel when its per capita income was low compared to that of United States, and against the advice of World Bank. Yet it became one of the most efficient steel manufacturers in the world. Even so, inferences from his recommendations is that developing economies should align their trade with their resource endowment in order to benefit from global trade and finance, by implication the optimal developmental strategy is free trade and comparative advantage prescripts.

According to Jennifer Bair (2005), the remarkable trajectory of East Asia’s export-oriented economies was interpreted as evidence that integration into global economy is the only option for developing economies to pursue. This conclusion seemed valid when this success was contrasted with the disappointing economic performance of state-led industrialisation models of several developing nations that were in debt during the “lost decade”. Conveniently, recognition of government failures has been indiscriminately used to override any argument for the need for the state to address any market failures. Any model’s elaboration suggesting the need for state intrusion or explicitly drawing the state interventionist implications from its analysis in light of market defects, the strategic implications of the model is negated by arguing against the state involvement, since the conjecture is that the outcomes of government failure would be inferior to that of market failure.

Peter Townsend (2002) remarkably illuminates the unavoidability of state participation in influencing economic direction and participation in the economy owing to assumed causality of market imperfections. He declares that governments are bound to contribute to the elaboration of institutional frameworks of demand. He suggests that private citizens and by implication the private enterprises, in times of economic crisis, did not, and could

not be expected to act in the national interest. Correspondingly, neither government should shirk its responsibility for the shaping the market demand or developing the structure of the market itself. Therefore, they could not imagine being indifferent during the times of economic convulsion. In Townsend's account, complex economies could not be conceived without governments being incorporated as a structural assumption. In his own words "They were, and are, a necessary condition and determinant of operating markets". The private enterprises have a distinguished reputation for risk-averse attitude and preference for investment in promising profit from short-term speculative economic activities. Predictably, profit motive compels their reluctance to invest in economic activities that have socially optimal outcomes with uncertain profitability. Likewise, Ben Fine (2011) decries the hypocrisy of neo-liberalism's scholarship and rhetoric against state intervention. He argues that there has been mediation to promote private capital in general and finance in particular, and that the recent global recession (2007/8) is not the exception where extraordinary measures have been undertaken to bail-out financial institutions, by the state backed by taxpayers' money, to the degree of nationalising those institutions.

4.1.3 The capital flows and state functionality

Laurence Krause (1972), [cited by Conrad Herold, 2002] delineated on how capital mobility reduces governmental discretion. In his own words: "Private capital flows can have a great influence on domestic economic conditions and the balance-of-payments positions of countries, possibly undermining governmental policies…the private sector has encroached on governmental sovereignty in financial markets..." According to Herold, capital account liberalisation serves as a disciplinary device against national governments. On the negative outcomes of the capital flows he stated "… the immediate beneficiaries, the bankers and financiers that profit from the unleashing of speculative flows, what Jagdish Bhagwati called the "Wall Street-Treasury complex," are both few and powerful.

Louis Pauly (1996) notes that "…the logic of markets is borderless, but the logic of politics remains bounded". On the other hand, Susan Strange (1996) writes "Impersonal forces of world markets…are now more powerful than the states to whom ultimate political authority over society and economy is supposed to belong". According to Strange the transition in the state-market balance of power, which is driven by globalisation, is virtually overwhelming. Her point is that this change is intensely driving market structures to limit the conditions under which states could exercise a significant influence over

outcomes that matters most to the societal welfare. Though she concedes that other institutions have had a role in shaping the structure of political economy, the prevailing global forces have contributed to the weakening of the state as the centre of political influence and authority.

Strange contends that the evidence of the shift from the states to markets is manifest in a number of areas, such as the latter's participation in the ownership and control over industry and services, states inability to manipulate macroeconomics, provision of reliable social welfare systems and taxation of highly mobile capital offered as evidence. However, Pauly's assertion is that the perceived state weakening and crisis of legitimacy is the consequence of its own choices and decisions. He points out that states want to gain the advantages of integrated international markets, yet retain the authority and influence that is supposed to be weakened by the same assimilated global markets. In verbatim, he argues that "The closer we get to a world of a truly global finance the more central they become, not because they must inevitably usurp the political authority of states, but because they help states address their deepening legitimacy problem".

He claims that states have increasingly opted for openness and integration, as a consequence they have had to forfeit either fixed exchange rate or monetary policy "a choice that brought to the fore basic concerns about political legitimacy". In contrast, for Strange what is perceptible in the shift of balance of power is not necessarily the degree, but the implication of resultant policy constraints. A shift from primary production to manufacturing and finally to services has diminished the dependence of multi-national corporations on the territorial state. Accordingly, the sphere of state's power and influence in society and economy is now lessened and shared with other sources of authority, if not appropriated by them.

4.1.4 Assumed efficacy of market mechanism

The purposive principle of industrial policy could be likened with the expressive, deliberate and targeted efforts to promote some sectors if not production of certain products ahead of others in an economy. Chang (2010) writes "There are different ways to organise capitalism. Free-market capitalism is only one of them and not a very good one at that. There is no one ideal model." Clearly, there are varying types of ideal economic models, which are not just different, but with conflicting goals and priorities. The contestation might be about the different ways of organising the markets, and they

compete with each other in a number of contexts, not least when the contest is about how to secure control of scarce resources in the currently fragile economic world.

In 2008, when financial markets collapsed, finance capital was able to inflict mayhem as it had been placed beyond control by deliberate policies of deregulation in pursuit of a free-market dogma. As Jeff Guys puts it "But there is no market out there. What there is, is people. Some clever, some stupid, some honest, many dishonest, most greedy, but all trapped in the machinery of finance capital and deluded by the free-market ideology of the age."[9] Meanwhile, Gregory Mankiw (2009) had this to write referring to the 2007-8 global recession "Despite the enormity of recent events, the principles of economics are largely unchanged … Students still need to learn about … the efficiency properties of market outcomes"[10]. Seemingly, the insistence to conform to markets serves the purpose of validation of capitalists' accumulation. The orthodox economic paradigm has always exhibited less confidence in the ability of the state to be a virtuous instrument of upright policy, and enhance the societal welfare. To it the government is a malign tool of private interests, enriching its supporters, bureaucrats and cronies, and its role being limited to enabling the markets to function optimally.

4.1.5 Market constraints on industrial evolution

Developing economies faces several and varying market failures and the nature of these failures is not always the same. They depend on each country's specific objectives with regard to the activities it wishes to pursue, and the level of technological competence and endogenous innovative capacity it wishes to develop. The need for intervention is determined within this context. An industrial development does not only mean embarking on new activities as economies progress and mature, this means a deepening of the process in some areas of an economy. Amongst other things, the introduction of technological improvements in products and processes in industry, embarking on new complex productive competencies, and increasing local content in assembly operations are required to add-value. Perceptibly, each one of these industrial development activities has its own learning costs. Lin (2011) argues that the developing countries should identify the industries in which their economies may have a latent comparative advantage and remove

[9] Emeritus professor response in an article in Business Day (South Africa) attacking Marxism and left movement "A response to Cohen's letter to the left, 2012. Business Day, 18 July.
[10] Gregory Mankiw, a renowned economics writer in US, cited by Robert Wade.

binding constraints to facilitate private domestic and foreign firms' entry to operate in those industries to minimise costs.

However, Bernado Kosacoff and Andrian Ramos (1998) contend that the process of forming capabilities can come up against various market flaws. For example, with regard to products, free markets may not give the right signals for resource allocation, while with regard to factor inputs, they may not lead to an optimal supply of inputs, especially in the case of skills and information. Added to that free markets may suffer from two different types of flaws, namely those that affect optimum allocation of investments between simple and complex activities, and those that affect such allocation between physical investments, purchase of technology, and domestic technological efforts. The first-named provides the arguments in favour of infant industries argument. In view of the uncertainty, the lack of information and the imperfections in the capital market which are endemic in the developing countries, full exposure to competition from imports can inhibit entry into activities involving relatively complex technologies. This is contrary to Lin's assertion on the advantages of developing economies being the late developers or backwardness of their economies enabling them to avoid the costs of innovation and learning.

4.1.6 The role of NGOs in development

Since the introduction of Structural Adjustment Programmes ("SAPs"), and attendant challenges in the developing world, the use of Non-Governmental Organisations ("NGOs") became more popular within multi-national institutions and agencies. The popularity was mostly informed by their supposed efficiency in empowering and meeting the basic needs of local communities, Geof Wood, (1997). They are perceived as representative par excellence of civil societies in the developing world. Within the donor community they have become an imperative, a condition of necessity for the developing economies. The attachment to their functionality is so strong that it might be perceived to border on paternalistic attitude. There is anecdotal evidence that some NGOs play a dynamic role in creating eager and participatory civil societies in development activities, and thus making development more meaningful.

On the other end of the ledger, Arturo Escobar (1995) argues that the production and dissemination of development knowledge is always top down, from the donor agencies to the developing world or local communities. They have a self-assigned authority to problematise issues, make client groups, and define strategies. Consequently, bilateral aid

agencies and multi-lateral banks have been channelling money directly to NGOs. Even the World Bank has used NGOs primarily as implementing agencies or as advising consultants. The World Bank and the associated multi-national donor agencies have increasingly turned their attention to more than developmental concerns to include the democratisation ideals and "popular participation". On the other hand, the contradictory view is that the growing and deepening relationship between the NGOs and international governmental organisations in the developing countries pose a moral dilemma as the promotion of effective development has a potential conflict with respect for state sovereignty in those countries, David Hulme and Michael Edwards, (1998).

Any dubious liaison of NGOs involved in development projects with the intentions of manipulating domestic politics raises impasses and scepticism. Wood (1997) is cautiously optimistic regarding the exaggerated relevance of the NGOs in the developing countries. According to him, for the NGOs to operate, for markets to penetrate and hold authority, for private enterprises to influence societies effectively, the first thing done is to diminish the power and authority of the state by curtailing its role in providing services to its citizenry, and by reducing its control on resources. He contends that this is a part of the neo-liberal agenda through advocacy of the rhetoric of "good governance" which is paradoxical in meaning and operation. He calls this scenario the "franchise state", the state that franchises its responsibility to NGOs.

4.2.1 The discourse of "good governance" in developing economies

Woods states that "good governance" is explained as "democratic process with strong accountability between state and people, removing the prospects of dictatorial oppressive governments and underpinning, therefore, the protection of fundamental human rights". He reasons that this is nothing, but a developmental "hypocrisy" embodied in the Western preoccupation with the theme of "good governance". He contends that the "good governance" represents a revival of ethnocentric, modernising ideology, attempting to make the myths of one society reality in another. Similar sentiments have been expressed about "eco-protectionism" or "eco-colonialism, Robert Nelson (2003) that is emerging under the guise of addressing climate change concerns, particularly from advanced countries. The controversy is that "eco-colonialism" is one of the manifestations of neo-colonialism, in the post-colonial world, which stems from and relates to unequal power relationships in the political and economic spheres. Consequently, the industrialised

countries' values about "the environment" are projected onto the developing world, for the enjoyment of the new consumer, the tourist.

For Wood, the thrust of policy is to undermine the monopoly of the state in service provision, thus reducing the necessity for government to be good, and good governance is not universal, rather relative, and contingent upon cultural expectations and distributional outcomes. The central prescription of development strategy of international institutions for accelerating economic growth in the developing economies has become the improvement of the public administration, which is another euphemism for good governance. As Wade (2010) states we can agree that an effective and accountable public administration is desirable in itself, but international institutions expound praises of improved governance on the basis that improvements contribute to subsequent higher economic growth. Wade shows that on this basis the World Bank and IMF have built the governance reforms into their lending conditionalities. He further demonstrates that the underbelly of the notion of effective public administration is largely derived from the dubious measures, if not subjective indicators of administrative performance, as evidence reflects that the causality is more from growth to improvements in governance, than the other way around, [Kurtz and Schrank, 2007], cited by Wade.

4.2.2 Policy inconsistency of Bretton Woods Institutions

United Nations Organisation, since its inception, it has been claimed that its global role has been largely undermined by powerful nations. For example, the United States and its European allies have demonstrated a capacity to deploy it for their foreign policy objectives with impunity. The modern global capitalist accumulation can be argued that is anchored on a single pivotal foundation, the two post-war multilateral financial institutions, the IMF, and the World Bank. The IMF is charged with the responsibilities of supervising global monetary system, such as currency convertibility, exchange rate problem, financing problem short-term funding for balance of payments problems. On the other hand, the World Bank is charged with the brief of long-term loans for reconstruction and development, and knowledge sharing. Notable is that the roles of these two institutions have not drastically changed over the past decades. They have continued to feature predominantly as major agents of market fundamentalism.[11]

[11] See the World Bank report of 1991 on "The Challenge of Development, including that of 1993 on "The East Asian miracle".

An examination of the World Bank's history and position towards industrial policy strategy shows that its policies and strategies have been advancing neoliberalism economic policy–making at the exclusion of "other" alternatives approaches to economic development. Its restrictive state role, macroeconomics policies and coerced market liberalisation has been the cornerstone of this policy-making approach. This has largely limited the policy choices of most developing world, particularly considering the conditionality of SAPs. Ben Fine (2000) captures this ambiguity within Bretton Woods Institutions succinctly "…neo-liberalism offers a complex, shifting and contradictory amalgam of ideology, scholarship and policy in practice. That such contradictions exist should scarcely surprise, and addressing them offers an opportunity to explore the diversity associated with neo-liberalism rather than to reject the notion altogether as its consequence. Further, this diversity is itself variously distributed across time, place and issue..."

According to Illene Grabel (2011), World Bank and its representative institutions are experiencing what she calls "production incoherence", which she describes as a proliferation of inconsistent, even contradictory statements and strategies. She argues that the spectrum of responses from the BWIs reflect more of a substantial rhetoric and policy continuity with neo-liberalism prescription. She contends that though production incoherence has displaced the constraining neo-liberalism, all being the consequence of global recession, but she cautions that these do not in any way signal the death-knell of neo-liberalism, but merely the erosion of its stronghold. And the tentative beginning of the end of wrong-headed policy regimes that bequeathed excessive authority to the Bretton Woods Institutions over feasible policy choices in the developing economies, albeit in limited sense.

4.2.3 Multi-national institutions and development discourse

Economic ideas, like political ideas are not only about creating wealth and development, but also about power. Arturo Escobar's proposition (1992) about the nature and evolution of development discourse of the "underdeveloped" world, declares that "What characterizes a discourse such as development is the fact that the regime of formation of statements is carefully regulated. In fact, only a relatively limited number of things can be said within a given discourse. Once established through theories and institutionalized in

practices (...), this set of statements determine what could be said, thought, imagined, it defined the space of development…"

Compellingly, he outline the complexity and pervasive power of development as discourse that creates infinite prescriptions, institutions, and programmes that give an impression of an extraordinary learning process and advances. Escobar contends that the ideological orientations of development discourse lead to different perspectives. Rather than rejecting one and accepting another, he suggests a comprehensive analysis and debate as there is a possibility to arrive at a better understanding of the most important concept in a social order. He singles out the World Bank as one of the international institutions whose plethora of literatures and prescriptions are repetitive and misleadingly profess to be universal in orientation, eventually, its received development discourse distorting reality as it becomes uncontestable reality. In addition, Escobar (*ibid*) insists that almost all development projects are economics-oriented, as economics has the monopoly of authority in the area of development, and subordinates other social science disciplines. Respectively, he concedes that there has been a noteworthy shift as other disciplines such as sociology, political science, environmental studies have become not only critics but also notable contributors to the discourse of development. Accordingly, the area of development has become now interdisciplinary in nature.

He urges that to appreciate the profundity of development as a discourse, examination of the system of relations established between the developed world, international institutions, and the developing world "… is a system that allows the systematic creation of objects, concepts, and strategies… the system of relations establishes discursive practices that set the rule of the game, who can speak, from what point of view, with what authority, and according to what criteria of expertise. It sets the rules that must be followed for this or that problem, theory, or object to emerge and be named, analyzed, and eventually transformed into a policy plan".

Angus Deaton research concluded that (2006) "The World Development Reports have sometimes been instrumental in changing the way that the world thinks about some aspect of development …they often seeks to minimize conflict and to emphasize "win-win" situations instead of trade-offs. They often lack sharpness and focus, and are sometimes incoherent, especially when it proves impossible to reconcile the views of the various commentators and authors. …[it] provide the Chief Economist with a highly visible

vehicle for summarizing and disseminating research on issues that he or she considers to be important…"

This largely accounts for an ever-changing dissonance between these institutions' scholarship, advocacy and policy execution, Ben Fine and David Hall (2011). Ajit Singh (2011) analysed the evolution of the World Banks' industrial policy views using its two seminal works, the 1991 report "*Developmental Challenge"*, and the 1993 report on the "*East Asian Miracle"*. He critiques the negative attitude, which the World Bank has always had towards policy measures linked with the industrial policies. He claims that there is renewed interest in industrial policy and insistence on developing countries to pursue an industrial policy that conform to their current comparative advantage.

Singh highlights that the Development Challenge report although, even if it recognises the effect of the international factors, it downplays their significance and effect, compared to domestic policies, especially in raising domestic per capita income. Essentially, Singh suggests that the report prescribes the state involvement in a market conforming manner, best illustrated in what Lin calls the state provision of "tangible" (roads) and "intangible" (education) infrastructures to create suitable environment for private sector to operate optimally. On the subject of the 1993 report "East Asian Miracle", Singh argues that even though the report concedes the unavoidable fact that there was significant state involvement, it is ambiguous about developmental experiences that are informed by state intrusion. Singh demonstrates that the post-War East Asian economic history unquestionably revealed a case for adopting an industrial strategy that guided the market, and not market friendly approach as enunciated by the World Bank reports.

Chapter 5

5.0 Industrial policy and the developing economies

5.2.1 Introduction

The market outcomes depend on the participation, and the exchange of goods and services through markets. The structure of the economy does not only have to do with the endowments of countries, but also of groups and institutions, which enable them to participate in market exchange. And powerful groups and institutions shape markets, and influences what can be exchanged and on what terms. In turn, size and positions in trade are important for the relationship between industrial structures and market outcomes. The

choice and design of policies, institutions and economic structures are reflected in the ability to participate competitively in global trade.

5.2.2 New Structural Economics and Africa's industrialisation

According to Justin Lin, Ann Harrison and Lixin Xu (2011), Africa's policies program should focus on exploiting its latent comparative advantage in select light manufacturing industries, particularly in agricultural processing, garments and leather products. The assumption is that these industries could initiate rapid productivity, exports and create employment opportunities. Furthermore, the anticipated China's "diminishing" cost advantage, which is linked with rising wages and non-wage labour costs, will allow Africa to fill in that space, and possibly lifting majority out of poverty, like China did.

For Lin *et al*, one of the explanations of Africa's poor performance relative to other fairly successful developing economies is "firm size, infrastructure, government expropriation, crime, and the access to informal finance". They further suggest that Africa's conditional advantage is "higher in low-tech than in high-tech manufacturing, in small than in large and medium firms, suggesting that Africa may have comparative advantage in simple light industries". To buttress the point, Monga (2011) reasons that "…country with abundant labour or natural resources and scarce capital will have comparative advantage and be competitive in labour or resource-intensive industries. Similarly, a high-income country with abundant capital and scarce labour will have comparative advantage and be competitive in capital-intensive industries." Implicit in this assertion is that a country endowed with abundant labour and other resources has to heavily rely on importing capital, which delays its capital accumulation for its development.

On the contrary, Christopher Chase-Dunn and Peter Grimes (1995) describes the prevailing world-system as characterised by power-hierarchy relation between developed, powerful and wealthy core societies and the less developed, weak impoverished periphery societies. A significant factor in the positioning of a region in the core or the periphery is technology. If that be the case, Africa reliance on low technology is more of a weakness than a conditional advantage. Currently, Africa is structurally constrained to experience a kind of development that reproduces its subordinate status owing to resource-dependency. According the world-system theory "The transfer or exchange of economic surplus is the fundamental criterion of a world systemic relationship…"

Furthermore, as Celestin Monga, (2011) notes "Over the long term, productivity growth is associated with technological and structural change, namely, to reduce the costs of producing the same outputs with better knowledge and to relocate resources from lower value-added to higher value-added industries". From this theoretical construct, the hegemonic relations between highly technological and industrialised societies and technologically impoverished is constantly maintained and enforce to preserve free unequal trade exchange as long as it is to the advantage of the former. Fundamentally, the capitalist world-economy rewards accumulated capital, at a higher rate than mere availability of abundance of factor production, namely, labour, and the geographical maldistribution of these occupational skills involves a strong trend toward self-maintenance, and the division of a world-economy involves a hierarchy of occupational tasks, in which tasks requiring higher levels of skill and greater capitalisation are reserved for already technologically advanced world-locations.

The forces of the marketplace have shown to reinforce rather than undermine them. According to United Nations Industrial Development Organisation ("UNIDO") report (2009), Africa has experienced insignificant structural change in its export bundle. The export bundle mainly comprised of low levels of manufactured exports and the utilisation of almost obsolete technology in marginal manufacturing sectors, even agricultural-led industrialisation is constrained because of the lack of technological innovation in agriculture. The markedly improved economic performance between 1994 and 2008, which averaged approximately to 5% (per cent) per year showed little evidence to suggest that significant changes in structural variables underpinned it, John Page (2011). Page further explains that the structural change deficit was caused by lack of diversification and sophistication in the manufactured goods as with specialisation in a relatively narrow range of economic activities. He cites empirical studies that found a strong, positive correlation between the level of sophistication of a country's industrial production and export structure and its subsequent growth. These studies showed that the degree of product sophistication is positively related to a high income due to product added-value. The added-value products requires more than product sophistication, but also introduction of new product lines and addition of new economic activities in existing sectors to achieve high levels of income.

Meanwhile, Lin *et al* (2011) emphasises Africa's comparative advantages in many sub-sectors of agriculture, livestock, and forestry. Their report recommends these as strengths

and foundation for policy initiatives to kick-start light manufacturing industries. It also insists on the use of abundant inputs to create much needed non-farm employment, expand foreign exchange earnings potential, export expansion to increase the demand for crops, animal products, timber, and other low-cost sectors with ample scope for future production increases. The assumption is that such initiatives hold the promise of sparking an upward spiral of growth, structural transformation, productivity, employment, and penetration of global markets. However, Thomas Lines (2006) argues that the agricultural and animal products are vulnerable to pests and diseases, and their yields are subject to natural forces in a way that affects few other products. Above all, these variables influences on supply cannot be easily predicted. Moreover, prices of manufactured exports are less volatile and less susceptible to long-term deterioration than those of primary goods, such as raw minerals, crops and animal products, making manufacturing particularly strategic in highly commodity-dependent developing countries.

The overproduction of agricultural and animal products for export markets has been encouraged through export orientation strategies advocated by the World Bank and other donors since the 1980's. The countries exporting to the same markets and heeding the same advice, cause increase in total supply, leading to a fall in prices in which all would be worse off. Basically, any sudden shortages or surpluses on the market would have inevitable effects on price. Even worse, the futures exchanges markets and hedging activities facilitate speculative business since the speculators only buy or sell a "paper'' contract and are not obliged to store the material themselves, nor are they required to put up more than a small share of the full price, Robert Pollin (1997).

Certainly, industrial production creates job opportunities at higher skill levels, facilitates deeper links across the services, agricultural, and capital goods industries, including between rural and urban economies. Chalmers Johnson's (1984) maintains that industrial policy refers to the "concern with the structure of domestic industry and with promoting the structure that enhances the nation's industrial competitiveness." Essentially, the primary goal of industrial policy is the transformation of the economy's productive structure from low to high level. This means the use of production factors for something that was not manufactured previously.

5.2.3 African case studies: Zambia, Ethiopia and Tanzania

A recent comparative study conducted by Dinh Hinh Dinh, Vincent Palmade, Vandana Chandra and Frances Cossar (2012) examined the economic performance of five economies, two Asian (China and Vietnam), three African (Ethiopia, Tanzania and Zambia). Predictably, it reveals a dismal performance of Africa's structural adjustment relative to Asian countries. China is considered an emerging economic power, Vietnam as an economy in "transition out of agriculture", while the economies of other African countries' industrial sectors are less advance and minerals-dependent and chiefly agrarian. For instance, Ethiopia's output structure, which is the bigger of the two, still remains "typical of a poorer developing economy in early transition", as agriculture accounts for 44% percent, industry 13%, manufacturing 5% and services 42%.

It essentially shows that the effects of global recession affected African exports of minerals and manufactured goods, especially textiles and leather, thus government revenue collection. While agro-processing such as coffee, cotton and flori-culture also suffered from low prices and weak export demand. The marginally "diversified" exports of non-traditional export are still dependent largely on primary products, and remains highly vulnerable to fluctuations in the prices of these minerals. These findings validate the argument since advanced Prebisch-Singer proposition (1950) that the decline in relative prices of primary commodities is largely structural, and the demand for these commodities is inelastic while that of manufactured goods was elastic.

Furthermore, the declining prices is induced through interaction of inelastic demand with a supply position that could be highly variable due to natural endowment, as well as the tendency for price increases to generate over-investment in those primary commodities. This simply shows that the challenge facing Africa is to transform its economy from a resource-dependent one to a dynamic, diversified industrial economy. The resource dependency of African economies will not harness its comparative advantage by heavily depending on global trading on largely commodity-based products. To convert its comparative advantages into competitiveness requires deliberate planning to transform the structural production pattern of their economies and ensure a solid manufacturing base, DPR Debate, Lin and Monga, 2011.

Dani Rodrik and Margaret McMillan (2011), argue that recent researches show that there are significant differentials between sectors of modern economic activities such as

manufacturing. The advantage is that if labour and other resources are transferred from unproductive to more productive activities, the economy grows even if there is no productivity growth within sectors. This type of growth-enhancing structural change plays a critical impetus that contribute to overall economic growth, as high-growth countries are typically those that have underwent substantial growth-enhancing structural change.

Lin *et al* (*ibid*, 2011) predict that China's development will cause a movement up to high-end, value-added chain of manufacturing, thus creating opportunities for Africa to locate up within value-chain of light manufacturing and related industries. This is untenable. Robert Wade (2010) explains that many developing countries are ensnared into what is called a "middle-technology trap", where their firms are caught in the relatively low value-added segments of global production chains, unable to break into innovation-intensive production. This underlines the idea that the world economy is not an open-ended system in which all can raise their long-term growth rate and reduce the gap with the industrialised countries if they "get their prices" and "governance right". Similarly, the supply-chain industrialisation, may lead to fast growth, but it could have limited spill overs, because it comes with the risk of further relocations of production. Therefore, a special attention should be paid to the fickleness of production fragmentation.

Research by Business Monitor International (2012) suggests that any slowdown in China's economy due to on-going global recession and its transition to a more domestic consumption-based economy, will depress demand for African exports. Less investment in industry and more consumption in China mean structurally lower demand for raw materials and more for consumption goods. Disconsolately, Africa does not make any consumption goods outside of food exports, so this opportunity will likely accrue to other developing economies. The report further declares that Africa's exporters of industrial metals are heavily exposed to China's construction sector, and fall in export demand will be significantly felt. Thus, Africa's dependence on commodity exports makes it more susceptible and less well-suited to adapt to a consumer-focused China than many other emerging markets, thus exports will falter, perhaps less so as an energy-source such as oil.

This scenario interestingly shows that for African economies to avoid global trade marginalisation their development requires non-marginal change that market forces alone could not generate nor sustain. It is only through targeted public policy interventions and the commensurate public and private investments that Africa can begin to raise

manufacturing output and increase its share of global trade and production. A strong manufacturing sector boosted by intellectual capital and innovation, driving growth in demand for skilled workers. Africa's past trade indicator record shows that its growth has mainly been underpinned by the commodities' boom and the rise of service industries on the back of products not produced in Africa. A genuine and sustainable growth had to be rooted in manufacturing and adding value to the products Africa is endowed with.

5.2.4 South Africa's industrial policy

South Africa's industrial policy has largely been driven by the development of the economy around the minerals and energy sectors and associated interests, known as the minerals energy complex, ("MEC"). The industrial support is at the same time selective and broad, and a combination of pro-market and state-driven policies. The selective protection is targeted at some of the consumer goods sectors such as motor vehicles, textiles, clothing through extensive tariffs, quotas and subsidies whilst the broader economic measures supported the needs of the dominant capital-intensive industry. There seems to be continuity in the economic structures and the dominance of MEC with the shift largely in rhetorical, which is indicative of poor manufacturing performance and increasing unemployment that has plagued the economy since the 1980's. South Africa's key industrialisation challenge like other developing economies is to grow and diversify manufacturing and tradable services.

Chang (1996) avers that South Africa's industrial policy orientation has changed from a demand-side to a supply-side industrial promotion with the end of the apartheid, yet guaranteeing domestic demand alone is hardly enough to get a viable successful infant industry. Certainly, global and domestic economic factors affect a country's industrial performance, some factors might be beyond the scope of industrial policy such as global business cycle, domestic macroeconomic policy, and the education and training system. Significantly, skills, and research capabilities are necessary for effective industrial upgrading. Chang suggests that industrialisation and diversification should not allow restricting South Africa's development path to its comparative natural-resource advantage, they have to intervene selectively to build competitive advantages in a range of other industries.

For Chang the fact that South Africa is earning high levels of resource rents from its resource endowments does not mean that the only way forward is to upgrade into

industries related to such natural resources. Also Robert Wade (2010) demonstrates evidence of how East Asian industrial policy comprised two types of market approaches, "leading the market" and "following the market". A classic example of leading the market industrial policy initiative being Posco, the Korean integrated steel firm, which the World Bank advised the Korean government not to undertake on the grounds that Korea had no comparative advantage in steel. The success of industrial policy anywhere in the world is dependent on adequate administrative and institutional capabilities to achieve the pronounced policy objectives and appropriate coordination between industrial policy and other related economic policies.

5.2. 5 Impact of technological development on industrial policy

According to Banji Oyeyinka-Oyelaran (1998), technological society is distinguished from previous epochs by the emergence of the extensive and systematic use of new techniques and production processes. The technological systems have developed into a highly organised one for research and deliberate technological innovation coupled with extensive and complex information processing system. Kim Linsu (2000) posits that technological capability refers to the ability to make effective use of technological knowledge in production, engineering and innovation to sustain competitiveness. He further suggests that such capability should enable the domestic firms to assimilate, use, adapt and alter existing technologies.

Although the drive to develop technological capabilities comes from firms themselves, public institutions still have a supporting role to play. The mechanics of international trade reveals that domestic firms cannot depend on imported technologies alone, they must have a foundation of internal capability. Technology acquisition and domestic learning efforts, both inside firms and within public institutions, are therefore complementary processes, not substitutes for each other. Most firms in developing countries rely on imported equipment, knowledge, information and software as part of their capability development strategies. This process is commonly referred to as "technology transfer", which should not be misconstrued to imply a passive role on the part of importing firms. As Arrow pointed out (1962), "one learns by doing and one learns how to learn by learning" [Stiglitz 1987, cited by Arrow].

Incontestably, training and skills development are crucial for country to enhance its economic efficiency, boost GDP growth, and achieve poverty alleviation and improved

general welfare. The inter-linkages between skills and competitiveness should be the focus of the structurally innovative production economy. In a global trade, technologies and modes of production are in a perpetual state of change. Today's scarce skill and innovative technology may be redundant in a few years, depending on new technological advances. Lin (2011) contends that the developing economies can easily purchase new technological products and services in the global technological market. He suggests that instead of attempting to enter "technological frontiers", they should focus on economic activities that are informed by abundance of their factor endowments. Granted it is available to all countries, but it is not indiscriminately accessible owing to barriers to adoption.

For instance, limitations imposed by geographically dispersed and dis-integrated production systems as result of "compressed development", Hugh Whittaker (2008), serves as a major constraint. Moudud Jamee and Botchway Karl (2007) subliminally underscore that vertical dis-integration and geographical dispersal of production processes by trans-national corporations ("TNCs") is not a guarantee of making available innovative technology invested in particular country, because TNCs situate each process of production in different locations to benefit from individual country's readily available cheap labour pool and other reduced factor inputs. Moreover, the present World Trade Organisation ("WTO") agenda allows limited manoeuvre for selective protection of industry, including its coercive trade regime to liberalise domestic market for products, services and investments. This means that there is no simple approach to the question of how accessible is new technology in a global market to ensure that it combines with the right skills best to serve the economic needs of the country.

Therefore, the assumption that domestic firms will somehow and someday in future instantaneously upgrade their technology, and become globally competitive is practically suspect. In addition, Robert Wade (2010) argues that the reliance on multinationals typically produces an import-intensive industrialisation in developing economies. The exports of natural resource processing industries, foodstuffs and primary commodities grows fast, while imports of capital goods and intermediate goods grown even faster. This pattern of industrialisation-led growth causes a rapid increase in economic concentration, as small and medium enterprises which had earlier supplied big national firms are marginalised by imports.

Chapter 6

Conclusion

Certainly, it is not easy to have a practical execution of the industrial policy, particularly without government's intervention. There is ample empirical evidence of other economies that have been remarkably successful with prudent state involvement in advancing economic development and structural transformation. Given the nature and scope of industrial challenges of most developing economies, there is compelling argument to have an influential and capable state that underpins industrial policy, remedying any institutional and structural rigidity to allow socially acceptable economic development. Economic reality is that economic theories evolve through not only rational innovation, but ideological assumptions as well as external historical influences. The historical circumstances in which theories occur are very unique and specific to a historical epoch. Accordingly, this greatly affects particular position of a country in the prevailing power relations of the world economy.

Lin's New Structural Economics is an imperative work of development policy, yet an ambitious and contentious one. It endeavours to provide an alternative to the now discredited Washington Consensus policies that guided the BWIs for years. In summary, Lin's new structural economics argues that the best way to upgrade a country's endowment structure is to develop its industries according to the comparative advantages determined by its given endowment structure at that time. The NSE could be viewed as a milder version of economic structuralism, an approach from the 1960-70s, but a step closer to the "Washington Consensus" as it affirms that markets are basic determinant for effective resource allocation at each level of development.

Therefore, implicit in the assertion is that governments must "follow" markets, not "lead" them if ever they hope to succeed. The propositions of strictly conforming to comparative advantages and allowing unfettered market forces denies developing economies an acceptable scope to successfully industrially upgrade. Certainly, the international policy environment today imposes constraints on the use of national policies that were absent even thirty years ago and the constraints are backed up by the potent dispute settlement procedure of the WTO. Furthermore, globalisation in its current form and its fiercely competitive open trade serves the interests of the industrialised economies. Thus, ensuring dominance of global markets for their products and frustrating developing economies

efforts to “catch-up”. What is instructive is that successful industrialisation cannot be attained through mere competitive markets or state support of just removing binding constraints. Critical factors such as capital, technology and entrepreneurship are necessary, which are unlikely to emerge from the market forces alone. The inherent features of commodity markets, which are peculiar to emerging economies can prevent demand, supply and price signals from interacting with any degree of efficiency. Therefore, the state is bound to intervene either way. Market economics remain dominant even as the socio-economic effects of globalisation of unemployment and income inequality and financial deregulation wreaks havoc in the developed world. Though economic perspectives will inevitably shift as emerging economies demand alternative capable economic perspectives that will partner market efficiency to develop a humane global economic future.

6. References

Anwar, Shaik 2004. "*The Economic Mythology of Neoliberalism*," in Alfredo Saad-Filho (ed.), Neoliberalism: A Critical Reader, London; Pluto Press.

Bair, Jennifer 2005**.** *Global Capitalism and Commodity Chains: Looking back, going forward*. Competition and Change, volume 9: 153-180.

Banerjee, Abhijit (MIT), Angus, Deaton (UNDP), Rogoff, Ken (Harvard), 1998-2005. *An Evaluation of World Bank Research*, [Online] Available at:.http://siteresources.worldbank.org/DEC/Resources/84797-1109362238001/726454-

Business Monitor International.2012 *Africa; Country Risk. Economic Outlook* – China & Africa: Is the Party Over?

Cimoli, Mario and Porcile, Gabriel, 2010. *Global growth and international cooperation: a structuralist perspective*. Cambridge Journal of Economics 2011, 35, 383–400.

Chang, Ha-Joon, 1996. Evaluating the current industrial policy of South Africa. *Transformation,* No. 36.

Chang, Ha-Joon, 2010. *23 Things They Don't Tell You about Capitalism*. Published by Bloomsbury Press, New York.

Chase-Dunn, Christopher and Peter Grimes, 1995. *"World-Systems Analysis."* Annual Review of Sociology. Vol. 21 p. 387-417.

Dinh, Hinh, Palmade, Vincent, Chandra, Vandana and Cossar, Frances, 2012. *Light manufacturing in Africa: Target Policies to Enhance Private Investment and Create Jobs*. Africa Development Forum. Published by World Bank.

Escobar, Arturo, 1992. **'**Reflections on "Development": Grassroots Approaches and Alternative Politics in the Third World. *Futures* 24 (5): 411-36.

Fine, Ben, 2000. Endogenous Growth Theory: a Critical Assessment, *Cambridge Journal of Economics.*

Fine, Ben and Hall, David, 2011. Actors, issues and ideologies: Terrains of neoliberalism: Constraints and opportunities for alternative models of services delivery.

Fine, Ben and Hailu, Degol, 2011. *Convergence and Consensus. The Political Economy of Stabilisation, Poverty and Growth*. London.

Goldstein, Jonathan, 2007. *An Introduction to a Unified Heterodox Macroeconomic Theory*. Department of Economics, Bowdoin College.

Herold, Conrad, 2002. *On financial crisis as a disciplinary device of empire*. Emergence and crisis of the crisis. New College, Hofstra University

Hulme, David and Edwards, Michael, 1998. Too *Close For Comfort?* Jameson, Kenneth, 1986. *Latin American Structuralism*: A methodological perspective. World Development, Vol, 14, Vol, pp. 223-232.

Kosacoff, Bernado and Ramos, Andrian, 1999. The Industrial Policy debate. *CEPAL* 69, P 3—60.

Kurtz, Marcus and Andrew, 2007. Growth and Governance', *Journal of Politics*, 69.

Lin, Justin and Chang, Ha-Joon, 2009. Should industrial policy in developing countries conform to comparative advantage or defy it? A debate between Justin Lin and Ha-Joon Chang. *Development policy review*.

Lin, Justin, 2012. *New Structural Economics*: *A Framework for Rethinking Development and Policy*. International Bank for Reconstruction and Development / International Development Association or the World Bank.

Lin, Justin, Harrison, Ann and Xu, Lixin, 2011. *Light Manufacturing in Africa: Targeted Policies to Enhance Private Investment and Create Jobs*. The World Bank Group, vol. III. Background Papers.

Lin, Justin and Monga, Celestin, 2011. Growth and Facilitation: The role of the state in the dynamics of structural change. *Development Policy Review*, 29 (3) 264-290.

Lin, Justin, 2011. New Structural Economics: A Framework for Rethinking Development. *The World Bank Research Observer*, vol. 26, no. (2).

Linsu, Kim. 2000. The dynamics of technological learning in industrialisation. *International Social Science Journals*. Institute for New Technologies.

Monga, Celestin. 2011. *New Structural Economics*. Growth Identification and Facilitation: The role of the State in the Dynamics of Structural Change.

Moudud, Jamee and Botchway, Karl, 2007. Challenging the Orthodoxy: African Development in the Age Openness. *African and Asian Studies* (6) (2007) 457-493.

Nelson, H. Robert, 2003. Environmental Colonialism; "Saving" Africa from Africans. *The Independent Review*, volume VIII, Number (1), pp. 65-86.

North, Douglas, 1994. Economic Performance Through Time, *American Economic Review*, 84, 359-368.

Oyeyinka-Oyelaran, Banyi 1998, Technological capability building in the South: Lessons and opportunities for Saharan Africa. *United Nations Economic Commission for Africa*.

Page, John, 2011. Should Africa Industrialize? United Nations University, *World Institute for Development Economics Research*. Working Paper no. 2011/47.

Page, John, 1994. *The East Asian Miracle: Four Lessons for Development Policy*. The World Bank, p 218-282.

Pauly, Louis, 1998. *Who Elected the Bankers? Surveillance and Control in the World*. Ithaca: Cornell University Press. 184 pp.

Pollin, Robert, 1997. The Relevance of Hyman Minsky. Political Economy Research Institute, University of Massachusetts, *Working Papers Series*, Number (183).

Rhee, Sung Sup, 2008. *Industrial policy and Institutions: Cases and Analyses of the Heavy-Chemical Industrial Promotion Policy* (1973-79), Korea, Vol. 1, No 1, 5-16.

Rodrik, Dani, 2007. One Economics, Many receipts, Prince

Rodrik, Dani and McMillan Margaret, 2011. Globalisation, Structuralism Change and Productivity Growth. *Paper presented for a joint ILO-WTO volume.*

Robinson, Jameson, 2009. *Industrial policy and Development: A political economy perspective*. Harvard University, Department of Government and IQSS.

Strange, Susan, 1996. *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge. Cambridge University Press. 219 pp.

Singh, Ajit, 2011. Comparative advantage, industrial policy and the World Bank: Back to first principles. Centre for Business Research, *University of Cambridge Working Paper No. 418.*

Stiglitz, Joseph, 2011. Rethinking Development Economics. *The World Bank Research Observer*, Vol 26, No 2.

Syrquin, Moshe, 1998. *Handbook of Development Economics*, Volume 1 Bar-Llan University.

Takahiro, Fujimoto, 2007. Architecture-Based Comparative Advantage – A Design Information View of Manufacturing. Faculty of Economics, University of Toronto, *Institute of Economic Review*. Rev. 4(4): 55-112.

Townsend, Peter, 2002. The Restoration of "Universalism": The Rise and Fall of Keynesian influence on Social Development.

The Authors, 2011. Development Policy Review: Overseas Development Institute.

Development Policy Review 29 (3).

Wade, Robert, 2010. After the Crisis: Industrial policy and the Developmental State in Low –Income Countries. *Global Policy* volume 1, Issue (2).

Wood, Geof, (1997). "States without Citizen: The problem of Franchise State" in David Hulme and Michael Edwards (eds.). *NGOs, States and Donors: Too Close for Comfort? The Impact of Official Aid on Non-governmental Organisations.*