A STUDY ON THE TREND AND ROLE OF MANUFACTURING INDUSTRY IN THE ETHIOPIAN ECONOMY

By

Ambachew Mekonnen Sissay

THESIS

Submitted to
School of Public Policy and Management, KDI
In partial fulfillment of the requirements
for the degree of

MASTER OF ECONOMIC AND PUBLIC POLICY

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ABSTRACT

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AMBACHEW MEKONNEN SISSAY

In the exploration of world development experience, industrialization is found to be the pillar for the strength, the engine for the speed and the main way of the struggle against poverty and towards economic development process. For this reason, many third world countries have been trying to get into the road of industrialization mainly through either import-substitution or export promotion strategy.

Ethiopia, a typical agrarian less developed country, has been struggling towards the promising economic transformation or industrialization since the shattering of WW II. It was tried to put into practice through the implementation of the above two alternative strategies in different policy regimes. What were the trend, the contribution and the international position of the sector in general and the manufacturing wing in particular are the destinations of this study. To arrive to these themes, exploratory and descriptive data analysis methods have been employed. The analysis consumes secondary data collected from different sources and is verified by tabular and graphical illustrations.

The Ethiopian economy has been characterized by its agrarian ubiquity up to the present. It contributes the largest share of GDP and employs the overwhelming portion of

population followed by the service sector. However, its industrial wing is disproportionately at low level in all aspects of contribution. Meanwhile, the manufacturing sub-sector is the main component of the industry. The manufacturing production is highly dominated by light consumer goods in that food, beverage and textile have the lion's share from the total value added.

Different policy regimes with different development strategies, economo-political systems and other conditions have resulted different industrial development achievements in that the middle socialistic regime became detrimental while the present market system-based regime becomes the finest of the three. The main weakness of the Ethiopian industry lies on its reliance on imports for its production. The weak backward and forward linkages within the sector and among different sectors of the economy are at the core of its vulnerability for external shocks on one hand and unable to support the other sectors of the economy on the other hand.

The Ethiopian industrialization could be characterized by its tortoise nature while that of the Republic of Korea resembles to the move of rabbit. Hence, comparing the distance moved by tortoise and rabbit within the same period and condition could be explained as the unwisely comparison between rat and elephant. Rather, the comparison helps us in identifying the causes of the divergence in economic performances and the lessons that could be drawn from Korean fast industrialization experience as explained in the main text.

For many reasons, the Ethiopian economy needs very close attention to direct it to its healthy and balanced growth in general and the rapid industrial take-off in particular for the coming two decades.

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KEY TO SYMBOLS AND ABBREVIATIONS

ADLI – Agricultural Development Led Industrialization

ANRSC – Amhara National Regional State Council

CSA – Central Statistical Authority

dd - Demand

EGNPI – Ethiopian GNP Index

EIA – Ethiopian Investment Authority

EPCGNPI – Ethiopian Per Capita GNP Index

EPI – Export Promotion Industrialization

EPRDF – Ethiopian Peoples Revolutionary Democratic Front

E Value Index – Ethiopian Value Index

FFYP – First Five Years Plan

FX – Foreign Exchange

GDP – Gross Domestic Product

GNP – Gross National Product

HCI – Heavy and Chemical Industry

HHI – Herfindahl-Hirshman Index

ILO – International Labor Organization

ISI - Import-Substituting Industrialization

ISIC – International Standard of Industrial Classification

K - Capital

K PCGNPI – Korean Per Capita GNP Index

K GNPI – Korean GNP Index

K Value Index – Korean Value Index

LDC – Less Developed Countries

LMSI – Large and Medium Scale Industry

MEDaC – Ministry of Economic Development and Cooperation

MOPED – Ministry Of Planning and Economic Development

MOTI – Ministry Of Trade and Industry

NBE – National Bank of Ethiopia

PC GNP – Per Capita Gross National Product

PMO – Prime Minister's Office

SFYP – Second Five Years Plan

SNNP – Southern Nations/Nationalities Peoples

SSI – Small Scale Industry

TFYP – Third Five Years Plan

TOT – Terms Of Trade

TYPP – Ten Year Perspective Plan

UN – United Nations

US – United States of America

WTO – World Trade Organization

WW II – World War Second

$ - American Dollar

CHAPTER ONE: INTRODUCTION

1.1 Background

In the history of global development, industrialization is considered as the most important role player. For this reason development and industrialization are used interchangeably by scholars and ordinary persons. This idea is emanated from the world experience in that all advanced nations had achieved their development goals through industrialization. Consequently, it is viewed by most developing countries as their chief development strategy.

Most Third World Countries are committed to transforming or changing their rural-based agricultural economies to urban-based industrialization. Developing countries desire industrialization because they realize that it is inextricably linked to development and that, historically, industrialization has been the only path to development. Countries that are categorized today as developed have all gone through an industrial revolution. Indeed, there is almost no country that one would be prepared to call developed that has not gone through an industrial transformation. (Chandra, 1992, p. XVI).

Ethiopia, as one of the least developing countries, has been laggard in the economic development arena for long time. A typical agrarian nature characterizes it in that most of the people are employed in and huge portion of the GDP is originated from this sector. On the other hand, the progress on the industrial sector has been anticipated to induce

radical changes on the living standard of the impoverished Ethiopian people. For this developmental objective, different governments have followed different strategic paths. All the strategies and policies were pursued for the purpose of improvement in the performance of the economy as a whole and the industrial sector as a promising one. The impacts of these distinct development strategies and policies are the areas of interest in this thesis. What have been the trend and the contribution of the industrial sector in general and the manufacturing sub-sector in particular are the focuses of my paper. The paper examines also the position of Ethiopian industry with respect to that of the Republic of Korea. Different aspects of the study are treated here under as specified in the statement of the problems and objectives.

1.2 Statement of the Problems

The traditional ways of production in the agricultural sector associated with the ever-rising population cause the living standard to fall down in LDCs. Further more, the under development of the industrial sector does not enable it to contribute its potential importance in employment generation as well as commodity production.

Ethiopia could be the best example in this regard, in which the economy is highly dominated by its agrarian nature. Most of the people are engaged in the traditional sector particularly in small holder farming and the industry has been stagnant at its underdevelopment stage for decades.

To address these fundamental economic problems, the three successive governments have been trying to change the situation within their respective policy regimes. With respect to the industrial development in Ethiopia, the following problems have paramount importance:

1.2.1. What have been the impacts of different industrial development strategies on the trend of the sector?

1.2.2. How much was the influence of the governments in the process of industrialization?

1.2.3. What has been the contribution of the industrial particularly the manufacturing sector?

1.2.4. What would be the position of Ethiopian industrial sector compared to other countries?

1.2.5. What problems have been detected? and

1.2.6. What can we learn from other countries' experiences?

Hence, this paper attempts to look in to the trends and contributions of the manufacturing industry by undertaking the study at national level.

1.3. Objectives of the Study

The above-identified problems give rise the following specific objectives of the paper.

1.3.1. To evaluate the effects of different industrial development strategies and policies on the expansion of the sector

1.3.2. To analyze the growth trend of the industrial/manufacturing sector

1.3.3. To assess the multidimensional contribution of the sector

1.3.4. To derive important lessons from other industrialization experiences in relation with the detected problems.

1.4. Data Source and Methods of Analysis

To succeed the above stated objectives the paper basically relies on the performances and achievements of all scale industrial establishments in the country.

1.4.1. Type and Sources of Data

The data that I employed in the process of writing this paper is fully a secondary one. It is collected from different sources including CSA documents of successive years, books written by different intellectuals, annual reports of NBE, documents of MOTI, Prime Minister's and MEDaC offices, and other secondary sources. More or less the data covers for the period since the early 1950s.

1.4.2. Methods of Data Analysis

In order to visualize the above-mentioned objectives on the face of the statement of the problems, exploratory and descriptive data analysis techniques are employed. In that, percentage changes, growth rates, ratios, absolute values and indices are incorporated. The relevant data are mostly presented in tabular forms and graphical illustrations.

In the analysis, the trend and regional distribution of industrial establishments, inter- and intra-sectoral structural transformation of the economy, contributions of the manufacturing sector to GDP, employment and export are examined. More over, the industrialization process in Ethiopia has been contrasted to that of Korea, relying on basic macroeconomic and sectoral indicators.

1.5. Significance of the Study

The study

1. helps policy makers to see the impact of different alternative strategies on the industrial development.
2. may give clear understanding about the situation and the position in which our industrial performance has stayed enabling the responsible body to make a plan consciously.
3. enables to understand the productive nature of the sector in general and the most promising manufacturing branches in particular as the basis for the designation of appropriate policy instruments.

1.6 Limitation of the Study

The study is limited to the trend, contribution and international standard of the manufacturing sector ignoring the other parts of the industrial sector. Further more, the shortage of data renders the study to confine within short period assessments for few

topics. The paper is not exhaustive in every aspect, rather it focuses on the main characteristics of the economy and the sector, and problems confronting the sector.

1.7. Organization of the Paper

The paper has six chapters. The first chapter gives general introduction to the readers. Chapter two is literature review providing theoretical ground for better understanding about the subject matter. Chapter three deals with the growth trend of the industrial sector while its contributions are treated in chapter four. Chapter five compares the Korean versus the Ethiopian industrial performances. Within it, the chapter partially discusses the causes for the economic divergence between Korea and Ethiopia; the observed problems and the lessons that can be drawn from Korea are also treated. Finally, the last chapter constitutes summary and conclusion of the study.

CHANPTER TWO: LITERATURE REVIEW

2.1. Concepts of Economic Development

Economic development is a process by which human economic circumstances change over time. It has a special immediacy because it grapples with human misery, poverty and disease, as well as the attempts to correct them. Economic development is dependent on the choice of allocating scarce resources such as land, labor, physical and human capital, technology and entrepreneurial ability. The basic concerns of economic development are the achievements of production efficiency through which the available resources could be utilized fully and efficiently, and allocative efficiency by which the best choices for utilizing them are made-no over emphasis or under emphasis on different forms of production. More over, economic development considers the continuous growth in quantity and quality of resources (Hogendorn, 1995, p.1-2). The ultimate goal of economic development is to improve life. Despite the goal seems clear and precise; it encompasses a wide range of requirements such as provision of food, shelter, clothing, utilities, living environment, health care, education, and so forth with unlimited improvement in content and extent. The process of achieving this is a complicated challenge. It involves a spectrum of different and alternative paths concerning sectoral emphasis, ownership structure and means of coordination, production mechanisms and others. However, the emphasis on sectoral and systematic transformation is probably the most important of these. Among the important examples of transformation, the shift in production from agricultural commodities and minerals ("primary products") to industrial

out put, the movement from small-scale to large-scale production and marketing are at the top. Hence this review discusses the basic issues related to industrialization process and its effects on economic development.

2.2. Essentials of Structural Change for Development

> The process of a country becoming more developed, of getting on the path to development and away from the path that reinforced a lower level of growth and progress, however, is not simply about the efficient allocation of existing resources within a given institutional regime. It is not simply about maximizing utility or profits within constraints of what is currently given to that society from the past. Rather, development is fundamentally about regime change and about the search for an optimum growth path, or at least one that is superior to the existing allocation of resources and currently efficient levels accompanied by the changing institutional patterns and organizational structures necessary to support such a dynamic process of change. To get a country on the road of development very often does require a 'leap'-often a quite substantial one-away from the past structures. Marginal modification of the economy and society simply may be insufficient to propel the economy and society forward in the needed new direction and on a higher path in the future. For the less developed nations, development compels them to undertake substantial qualitative structural change; the future cannot be, for the poor nations, just an extension of the past. The past and the path-dependent nature of its weight on the present, is precisely what has made these nations poor is what needs to be transcendent. (Cypher and Dietz, 1997, p.15)

The above idea injects the need for a number of major structural changes and patterns as the characteristics of successful development processes. These are shortly introduced as follows to suggest the nature of qualitative changes required:

i) **Industrialization**: Economic growth and development is strongly associated with an increasing share of a nations output and labor force engaging in the industrial especially in the manufacturing, activities. In the process as the level of production increases, the fruits of higher productivity can be shared by

workers and owners, production methods become relatively intensive in the use of knowledge - human capital - and physical capital accompanied with the rising share of urban population compared to the rural agricultural population.

ii) **A decrease in the role of agriculture**: Parallel to the expansion of the industrial sector of the economy is a decline in the share of the labor force employed in agriculture and of rural population since technological progress and labor productivity tend to lag in the primary (agricultural) sector. But, over time, output per person in the agricultural sector approaches the level reached in the industrial sector in successful structural change.

iii) **Change in trade pattern**: Cypher and Dietz argue that successful development is almost always marked by the maturation in the structure of trade, as a limited range of primary exports is replaced by both greater diversity of exports and by an export mix that evolves from traditional, primary products toward simpler manufactured and non traditional primary exports and ultimately toward more complex commodity exports. Consequently, manufacturing exports typically come to dominate the export profile of more developed nations.

iv) **Increased application of human capital and knowledge to production**: The increase in labor force productivity, so that incomes and the living standard of the population can be raised, is achieved partly, but quite importantly, through human capital accumulation, via both formal school process and 'learning-by-doing'. Increase in productivity is also a consequence of an expansion of the use of more physical capital and increased rates of capital accumulation that

embodies more advanced technology and knowledge that can make the labor input more efficient.

Emphasizing on human and physical capital accumulation, and technology to increase the labor force productivity, we shall stress again and again on the essential complimentarity of human and physical capital accumulation. They are also urgent for the less-developed nations to not only tap into the existing pool of world technology but also of developing over time an autonomous technological capacity.

v) **Industrial change**: Economic growth and development requires new organization such as banks, stock and bond exchanges, insurance companies and others. The role of government must change not to thwart private initiations but to facilitate them by providing social infrastructure of roads, ports, communications, water, electricity and other powers. Further more, it is required to enforce the rule of laws and defense of property rights as its fundamental tasks. But institutional change runs deeper to include basic values and motivations within which businesses must be operated with more attention to efficiency and profitability in a more competitive and open atmosphere. (Ibid, p.14-17).

In spite of the fact that the explanation focuses on few important factors, these are not the only structural changes that less developed nations must accomplish if they wish to make progress toward development. Others, such as changes in macroeconomic policy

and the roles of the state in a broader context that attend the process of becoming developed are also important focal points.

2.3. Industrialization and Development

According to Kiely, industrialization can be defined in three ways: First as "the production of all material goods not grown directly on the land", or second as the economic sector comprising mining, manufacturing and energy. Most interestingly, the third definition sees industry as "a particular way of organizing production and assumes there is a constant process of technical and social change which continually increases society's capacity to produce a wide range of goods" (p.3). In the same manner, Chandra defines industrialization as it refers to an increase in the share of GDP contributed by the manufacturing sector. It is a process that involves a change in the structure or make-up of the economy. It is necessary for the manufacturing sector to increase its relative importance in the economy more rapidly than other sectors. He says also that manufacturing is a subgroup within the industrial category. It refers to activities that transform or combine materials in to new products to make them more valuable or useful, in terms of money earned form them. It includes both factory-and non-factory-based activities. (p.5-6). In general, industrialization is regarded as a total process that increases the production of goods and services in an unprecedented occasion. This is the reason that justifies the close link between industrialization and development. However, the notion of industrialization for development is not growing without any objection. There are debates around the relation between industrialization and development.

2.3.1.Arguments for Industrialization

The argument for industrialization revolves around Kitching's (1982) view of " if you want to develop, you must industrialize". Such a view was common amongst theorists and practitioners of development in the 1950s and 1960s. Walt Rostow (1985) argued that the transition from a traditional to modern society could be described legitimately as a rise in the rate of investment to a level, which regularly, substantially and perceptibly outstrips population growth. Kitching's idea shares, if not exactly the same, the view that progress and development are desirable goals; and the most effective way to achieve them is promotion of industrial growth. To summarize Kiely's explanation, Kitching's case for industrialization is based on three principal arguments:

i) Agricultural production comes up against definite limits because of low-income elasticity of demand for agricultural (food) products. This point of argument rests on the potential effect of income-inelastic nature of agricultural products in the terms of trade (TOT). TOT can be potentially deteriorated for agrarian products as against industrial products. Consequently, agrarian producers pay relatively more for their imports than the amount they receive for their exports. Therefore, to maintain this exchange, agrarian economies would have to 'run faster' for their tortuously growing living standard. So, in the real world, where massive surpluses of cheap food exist, it is not viable for nations to try to rely solely on the basis of agricultural production.

There may also be political motives in the drive to industrialization to decrease the dependence on foreign suppliers and to build military capacity. So, it seems that there is an "economo-political" logic, which suggests that the rulers of agricultural economies will try hard to industrialize them.

ii) Economies of scale exist in mass production. Economies relied on investment in large scale capital-intensive technologies have greater opportunity to decrease the unit cost of the production as the volume of output increases–' large is efficient' principle. The primary reason why unit costs are likely to decrease is that labor productivity is intensified as technological innovation increases.

iii) External economies arise from the spatial concentration of industry in urban areas such as access to infrastructural facilities, suppliers and establish market.

iv) In addition to the above arguments, Kiely concludes the existence of significant correlation between industrialization and development. If one accepts that development is primarily about increasing productivity, output and incomes, then there is a close connection-in deed, a causal one-between industrialization and development (p.6-9).

2.3.2. Industrialization and Its Critics

The critiques of the industrial led orthodoxy are categorized under the three broader ideas against industrialization. These ideas emanate from analytical conceptions and practical experiences. The critiques include those from anti-development, populist alternatives and, agency and industrial strategy claims.

i) Critique from the anti-development side is based not only on the rejection of industrialization, but also the notion of development, progress and growth. These are highlighted as follows:

a. Some writers argue that the very idea of development is a form of cultural imperialism to project the American model on the rest of the world through which a set of values is imposed onto cultures that are misrepresented as backward. Indeed, a central argument of anti-development theory rests on the notion that industrial technology has not liberated the people of West; so, it is hardly likely to liberate people in the rest of the world.

b. Anti-development writers stress that the optimism of modernizers is misplaced. The world industry has brought new social problems, social inequalities and environmental destruction. Contemporary concerns over global warming and the partial destruction of the Ozone layer are intensified by the industrial pollution.

c. GNP figures that do not account for wider measures of social development, such as income distribution, literacy rates, life expectancy or environmental destruction, which tend to be neglected in the pro-industrialization argument, cannot justify the seemingly high account of industrial production toward development. Development has to be measured by basic universal needs provision termed as ' Seer' s six criteria of development' including income for food and healthcare, employment,

income distribution, education, political participation and belonging to a nation of true independence.

ii) Critique from 'populism and anti-development' rests on the opposition against industrialization and large-scale production in the name of small-scale individual enterprises. Their critique is rooted in the social consequences of industrialization in early 19th century Europe and Britain in particular. Writers such as Owen and Proudhon criticized the inequalities both within and outside of the factory, and the dehumanization of the modern urban life by contrasting peasants on one side, and artisans in the pre-industrial age, where work was far more independent of hierarchical management and unskilled division of labor, and communities were based on more personal and human social relationships, on the other side. They wanted to preserve small-scale peasant production based on a relatively equal distribution of private property, in which each farmer would trade with each other in a system of laissez-fair-type perfect competition. Other writers also reinforced this idea by taking the Russian case of destruction of a more organic community and a more humane modernizing process by the modernizing influence of large-scale industry as an inevitable process. In this sense populism, thus, refers to the fundamental belief that "small is beautiful", (Schumacher, 1973).

iii) The ILO, as a neo-populist and agency, argued the case for labor-intensive industrialization and development as it would provide employment and create demand for the products. The ILO, therefore, put forward for small-scale industry and agriculture with focus on greater equality of distribution as a necessary means

of achieving development-expanding demand for labor-intensive products. (Ibid, p. 9-17)

2.3.3. Compromising and Comments on the Arguments

The idea of introducing industrialization to the agrarian economies is reasonable if the objective is to improve the provision of goods and services, and thereby the living standard of the mass. As stated in the pro-industrialization points of argument, agricultural products are by their nature, income-inelastic. So, the concept of specialization according to the static comparative advantage would lead for those poor agrarian to remain agrarian and poor forever while those that engaged in the production and provision of industrial products could grow continually. For the eradication of poverty, one has to transform his economy towards industrialization beginning at the simpler and labor-intensive small-scale industry and then to proceed steeply towards mechanization, and increasing technology and knowledge intensity.

Industrialization should not be perceived to be stagnant at 'ever-small-scale' for any reason. Making the society equally poor should not be the way to prevent the challenging questions of inequality, cultural imperialism, environmental concerns and dehumanization. Rather, the solutions to the sanctions of industrialization could be found through the application of the process accompanied with complimentary equity mechanisms. The two extreme principles of "large is efficient' of Kitching and "small is beautiful" of Schumacher seem unlikely to work for the achievements of the stated wider

objectives of development. Industrialization should be accomplished and preceded in conformity with the prevailing situation of a nation. Rather, it should be evolutionary by passing, in most cases, through the three stages of sequential industrialization. If the country is at the low level of capitalization and skill, it should not set on directly at large scale. It is unpalatable and uncomfortable for the efficiency and management practices. On the other hand, a nation should not insist at stagnant and fragmented small-scale firms, which would not be enabling to reap the benefits of economies of scale, and technological innovation and advancement.

The distribution question of anti-industrialization and the tendency of pro-industrialization argument to suggest that industries should be concentrated in urban areas for the purpose of acquiring external economies are quite contradictory. However, the two objectives are sound. But their suggested ways of achieving them look ignorant of one another. These objectives, reducing inequality and access for external economies, lead us to think about the middle ways of compromising. This compromising alternative could be based on the concept of 'balanced growth' strategy. By balanced growth, I mean that rural industrialization with increasing access to rural infrastructure, rather than killing one for the conspicuous life of the other.

The social development criteria of development that tends to deny correlation between industrialization and development is really flawed. It is well known that social development criteria are also in a relatively better quality and coverage in industrialized than less-developed countries. The illiteracy and infant mortality rates are low in

industrialized countries. If they would be taken in to development account, in addition to high level of GNP, with no doubt, those are industrialized countries that could come at the top of the list. Therefore, the critique that tends to say no correlation between industrialization and development is unrealistic and quite ungrounded.

The environmental pollution and degradation need to be addressed despite not through closing the door for industrialization. For that matter, this problem always exists on both faces. If countries are not required to transform their economy towards industrialization, they have to degrade natural resources by engaging extensively to primary production as the main route of struggling to survive. On the other hand, if they do it, pollution and global warming consequences of industrialization are inevitable. This ' no-way-to-escape' confrontation of environmental deterioration suggests the great concern of environmental protection mechanism to be addressed in another way. Furthermore, industrialization does not lead to the collapse of peasant farming. It could be one part of the economy in varying degree in its contribution over time and across countries at different levels of development.

These ideas of compromising and comments are consistent to the Kiely' s conclusion that says

> Growth-based theorists in the 1950s and 1960s made powerful case for all nation-states to industrialize. These views were challenged from the late 1960s as industrial development failed to alleviate poverty in much of the world. This paved the way for a number of alternative development strategies, which focused on fulfilling basic needs and social development, rather than simply increasing industrial output. Kitching showed that such strategies were far from original and were similar to populist and neo-populist strategies in 19th century Europe and 20th century Russia. His

> theoretical case for industrialization-based on the limitation of agriculture and the efficiency of economies of scale-remains powerful argument in favor of the proposition "in order to develop, you must industrialize". (Ibid, P. 20)

2.4. Industrial Stages and Strategies

Industrialization can take place in different countries through different routs depending on the prevailing condition of a nation. The careful planning and choice of the appropriate style of industrialization reflects the issues of *sequential* and *non-sequential* industrial strategies. Hence, the industrialization of an economy would pass through a series of stages that could be either *sequential* or *out-of-sequence.*

2.4.1. Sequential Industrialization

In sequential industrialization, an economy would thoroughly examine its industrialization potentials with particular reference to the state of the economic indicators and general sociopolitical circumstances before choosing the specific types of industrialization activities. The considerations mainly include an economy's supply-side indicators (such as resource acquisition, infrastructural development, type and skill of labor force, geography, climatic conditions and environmental disposition), and demand-side factors (like size of population, per capita income, market for goods, as well as its state of development). Thus a relatively unindustrialized LDC that is seeking to follow the sequential pattern would typically begin with the establishment of light industries

(stage 1), then proceed with manufacturing industries (stage 2), and finally go into heavier industries as the economy matures. So, sequential industrialization typically involves three stages. Ordinarily, these stages could be evolutionary; that is the lower stages could smoothly evolve in to the higher one, thereby facilitating a more conducive and supportive path to industrialization.

Stage 1 sequence of industrialization involves the establishment of industries that are closely allied with the primary sector of an economy to satisfy the demand for the necessities of life rather than for other needs. These are likely to be in the class of light industries including activities like food processing, light textile manufacturing, housing, furniture, and mining and related extractive industries.

Stage 2 sequence involves a higher industrial level subsequent to stage 1 resulted from the rise in per capita income, pushing the demand for consumer durables to increase. This stage includes the engagement towards the production of stable consumer durables like radios, sewing machines, bicycles, wares and utensils, plastic products, and leather goods. At this stage the economy is said to enter the phase of manufacturing industries development.

Stage 3 sequence is characterized by the economy's significant and stable growth, infrasructural adequacy, industrial expansion and rising government revenue from the broadened tax base. In this stage, heavy industries whose out put would be supportive of the existing industries appear and are supported by the well-developed infrastructural

facilities coupled with effective demand from the population. This stage is associated with industries that produce spare parts for machinery and equipment, industrial machinery, televisions, refrigerators, automobiles, and vehicle assembling. This indicates a highly industrialized and relatively mature economy. (Ezeala-Harrison, 1996, p. 188-190)

2.4.2 Out-of- sequence Industrialization

Despite the theoretical format is regarded as that of explained in sequential industrialization, it does not mean that every country must necessarily pursue its industrialization goals by following the sequence. Indeed, countries could pursue their industrialization efforts out of sequence based on certain political and ideological considerations. The general conditions under which an economy may carry out a non-sequential industrialization program are abundance of mineral endowments that enable to establish large-scale industries like refinery or mineral smelting, pursuing export oriented strategy of development, secured high domestic demand and threshold and the lack of necessary materials (particularly to come back to stage 1). (Ibid, P. 190-191)

2.4.3 Import-Substituting Industrialization

Import substitution strategy is the emphasis of most LDCs. Chandra (1992) emphasized on three reasons why developing countries prefer to adopt import-substituting strategy rather than producing for export. First, they wished to become self-sufficient by getting

the chance to reduce their dependence on developed countries by relying on domestic markets and building an indigenous technological capacity. Second, export production is not feasible because of the inability to compete with established producers. Third, import-substituting industrialization (ISI) allows them to foster the growth of industrial activities by national entrepreneurs. (p. 95-96). ISI involves an output mix and choice of techniques, many of which tend to conflict with other development objectives involving largely to serve the high-income group within the highly unequal income distribution but not to serve the greater economic growth and development needs of the wider society and its people. It involves the establishment of industries that produce consumer goods in substitution of imports with the rationale to industrialize from the top to down ward through the home replacement of imported manufactured goods.

Various technical and logistic factors caused the ISI strategy to fail to promote industrialization in LDCs. The main factors that cause the failure are foreign exchange constraint, low per capita income constraint, foreign dependence (for raw materials, skilled labor force, managerial expertise, and finance), economic inefficiency (misallocation of resources out of the sector in which the nation is comparatively advantageous) and technological inefficiency (due to absence of competition, and high protection). The combination of these problems has helped render the ISI strategy ineffective in most LDCs that adopted it. (Ezeala-Harrison, 1996, p.191 - 194)

2.4.4. Export -Promotion Strategy

The strategy of export promotion industrialization (EPI) becomes an attractive alternative of ISI as it becomes obvious that the ISI strategy is a failure. EPI emphasizes export substitution that is the LDC can substitute industrial manufactures, finished and semi finished for primary products and raw materials in its export produce. The export-orientation would be a slant toward the LDCs non-traditional exports such as processed primary products, semi-finished manufactures and manufactured light industrial products. The EPI approach simply amounts to sequential industrialization program. (Ibid, p. 194). This strategy needs so many policy changes. Chandra (1992) summarized the set of policy changes used to achieve export orientation in the Third World as it includes exchange rate adjustment, active search for market, open trade policy, provision of foreign exchange, risk protection, discriminant tax and duty benefits, tax reductions, provision of export processing zones, government intervention in labor market, relaxation of laws, and privatization of state activities-all in favor of export production. (p.100).

2.5. The Role of Industrialization in the Process of Economic Development

Rather than its general connotation of an avenue for producing a wider variety of products by application of modern technology, industrialization is viewed primarily as a means of improving a poor country's employment conditions and living standards. Pursued in the spirit of this depiction, industrial development of an LDC must be closely interwoven with the development of all other sectors of the economy, especially

agriculture. The potential of industrialization in LDCs economic development is immense. According to Ezeala-Harrison, the most important aspects include:

1. **Employment**: Industrial development would create considerable employment avenue for the bulk of the labor force, skilled and unskilled. This would raise incomes, savings, and demand for goods and services, and would lead to higher economic growth. A high rate of stable industrial employment would enable an LDC to overcome the constraints of the vicious circle of poverty.
2. **Market for primary products**: Industrialization would provide a steady market for agricultural primary products that the industries would require as raw materials. Such a stable market would translate to stable incomes for the greater proportion of the LDCs population that are engaged in agricultural employment. This would enable a LDC to overcome this aspect of some of the problems of its agricultural sector.
3. **Foreign exchange**: The export of manufacturing goods would earn foreign exchange that is needed for promoting the further economic development of the country. Furthermore, as the economy satisfies its demand for manufactured consumer goods from its local industries, it conserves scarce foreign exchange that would have gone into their importation.
4. **Living standards:** Industrial production is a source of varieties of consumer goods that enable the population to attain improved economic and social well being.

5. **Greater economic and social stability:** Industrialization promotes a greater sense of confidence and less social tension in society, leading to more stable political systems. (1996, p. 187)

2.6. Reasons for Industrialization in the Third World Countries

The relationship between industrialization and development is surprisingly varied and many reasons have been put forward to explain why Third World Countries are so committed to industrialization. Important reasons for industrialization have been outlined above under its contribution in the process of development. However, for better understanding, we ought to refer to some of the details with respect to Third World Countries. Chandra explains further some of the principal arguments as follows:

1. Industrialization is seen in the Third World as necessary because of its historical association with development. Because of the absence of any other demonstrable model of development, historically, it is taken for granted that development entails industrialization.
2. Industrialization is also favored by developing countries because they have exhausted the possibilities of agricultural development and because prices of agricultural products have fluctuated widely in the past. These prices have also not kept pace with the prices of manufactured goods. In other words the terms of trade for agricultural commodities have been deteriorated.
3. In addition, as income increases, there is no proportionate increase in the consumption of agricultural products; that is, the income-elasticity of demand for agricultural products is low, reducing its long-term developmental potential.

On the other hand, manufactured goods have a higher income elastic demand. Moreover, many agricultural products are facing more problems of reducing consumption due to changes in lifestyle such as reduced consumption of sugar and related products, or from the rise of synthetic products.

4. Even, when manufacturing is not seen as an alternative to agricultural development, it is encouraged because it compliments the agricultural sector. Most developing countries are agricultural societies. The development of manufacturing can help the agricultural sector in many ways. The processing of agricultural commodities, which is part of manufacturing, increases the income of a country because the more processed a commodity is the higher is its value. The United Nations Conference on Trade and Development has estimated that further processing of agricult ural commodities exported by developing countries could increase their income by at least 50 per cent.

Manufacturing also encourages efficient forms of production and marketing in the agricultural sector, provides agricultural inputs such as machinery and fertilizer, and improves the availability of food items by making them available as processed foods. Food processing can also eliminate the problem of marketing glut by providing an outlet for excess production. Further more, increased industrialization can improve the bargaining position of regional states and national governments because processing makes commodities less perishable. Manufacturing can also help the agricultural sector by absorbing labor from the rural sector, thus enabling

the mechanization and rationalization of agriculture. A degree of mechanization is essential for increased agricultural productivity.

5. The populations of most developing countries are increasing rapidly. Employment generation has not kept pace with population growth, and unemployment and underemployment are high and increasing. Manufacturing has been seen as a major source of additional employment. This is especially so as the traditional sources of employment, such as agriculture, mining, services and construction, have become employment saturated. Manufacturing does provide for a reasonably high proportion of the employed labor force in many developing countries, but many critics of Third World industrialization policies have argued successfully that the highly capital intensive nature of industrialization has diminished its contribution to the reduction of unemployment and underemployment. These critics suggest the importance of labor-intensive industrialization rather than more of capital intensive in the face of tackling the unemployment problem.
6. Manufacturing is also favored as a development strategy because of its efficient use of land resources. Agriculture is an extensive user of land, which is a finite quantity.
7. One of the important development goals of developing countries is to evolve into integrated societies both economically and spatially. A society with a sense of shared identity, and one closely knit together, is more likely to succeed in development than one without these attributes. Industrialization promotes national integration. Manufacturing involves a large number of transactions

(farmers selling raw materials to wholesalers or manufacturers, who sell to wholesalers after processing; manufacturers purchasing electricity, legal services, communications and so on) both within the country and outside it, which helps to develop stronger and greater links. The greater the degree of linkage, the greater is the interdependence and the possibility of building a spatially integrated society.

8. Industrialization is also seen as having the potential to save and earn foreign exchange through import-substitution, and then export promotion after entrepreneurs had acquired the necessary expertise and met domestic demand.
9. Many Third World governments pursue industrialization because they wish to reduce their technological dependence on the developed countries. Technology is the chief basis of economic production and, in particular, of increasing productivity.
10. The most powerful countries of the world are also the most industrialized. This is not coincidence-rather the two are closely related. Many Third World countries, such as Brazil, India, China and Israel are all conscious of the military role of industrialization. This is especially borne out by their commitment to large-scale heavy industry and now, increasingly, to the development of advanced electronics. (1992, p. 1-4)

It is for these varying reasons that industrialization has such appeals and elicits with such strong commitment from Third World planners and politicians.

CHAPTER THREE

THE GROWTH TREND OF INDUSTRIAL SECTOR IN ETHIOPLA

3.1. Historical Overview of the Ethiopian Economy and the Industrial Sector

3.1.1. Short Review of the Core policy issues in the Three Successive Governments

Ethiopia is one of the least developing countries in the world. The people have been under severe shortage of, even, basic necessities with ever rising trend of population density aggravating the expansion of the deep-rooted poverty. Though rapid population growth is one of the culprits that accelerate the down turn of the living standard, the root causes of the poverty of the country and the impoverishment of the people have been interwoven to the historical and natural events. The latter includes mainly the drought that seems happening regularly affecting adversely (devastating) the main income-source-sector, agriculture, while the former lies on the economic systems, policies and actions by which the country was led. This part of the problem is considered to be the origin of the key economic weaknesses. Consequently, in this introductory section about the Ethiopian economy, I mention the nucleus parts of the economic policies in relation to the economic systems followed by the respective three successive regimes starting from the feudalistic imperial regime (pre-1974) up to the present federal system (post-1991/92).

3.1.1.1. Pre-1974

Prior to 1974, Ethiopia was led under the feudal system with its special characteristics in which the landlords owned all the land resource while the mass became their tenants. The economic strategies during the three five year plans were comprehensive in such away that could accelerate the productivity and growth of the economy despite unfair distribution of economic resources.

So far, an attempt has been made to adopt two basic development strategies by the country since World War II in conjunction with manufacturing industry. These were, first, export-oriented strategy (pre-early1960s), second import-replacing development strategy (early 1960s-1992) (MEDaC, Sep.1993, P.8-9). The FFYP (1957-61) gave priority for infrastructural development so as to promote the productivity expansion of sectors being under the umbrella of export-led strategy. While the SFYP (1963-67) focused on the transformation of the economy from the agriculture to the agro-industrial one via the expansion of internal market, investment on education and equipment, and equal consideration in importance for all public, co-operatives and private sectors with inward looking tendency. The TFYP (1967/68-71/72) strategy was narrowed to import-substitution industrialization targeting at reversing the unfavorable trend of the trade balance (rising deficit) by expanding manufacturing activities. (SFY, may, 1963 and Mekonnen Taddesse, 1992)

The institutional framework under which the industrial sector operated during the imperial regime was a free enterprise system with no restriction imposed on the

establishment and operation of enterprises. The role of the government and the over all direction of the economic policies and strategies were to encourage both domestic and foreign potential investors to commit resources in industrial investment and development so that it fits in to the international capitalist economic system. (Mekonnen Taddesse, 1992).

3.1.1.2. 1974-91

The period 1974-91 was the time for the military government on the chair. In this period, the country was dictated by Command Economic System. Right after the overturn of the imperial regime, the political philosophy was changed to socialism with the pervasive happenings of nationalization and state control of land, and productive and service rendering enterprises. By the policy change more affected was the industrial sector in which public ownership of enterprises became the predominant form of economic organization after 1975. As of 1975, the following few years and 1983, the number of nationalized manufacturing enterprises reached to 87, 134 and 159 respectively. With the change of ownership, the basic objective of the development of the sector was diverted to be the satisfaction of the material needs of the people in that profit maximization ceased to dictate the choice and development of industry in the economy. After nationalization no major deviation from the import substitution strategy was observed. While the basic theme of the policy remained unchanged, some intention to move into the production of intermediate and capital goods were declared in the Ten-Year Perspective Plan (1984/85-1993/94). The plan was designed to build strong national economy with adequate inter-

sectoral linkage particularly between agriculture and industry as well as mining and industry. Industry was accorded second top priority next to agriculture in terms of resource allocation. The objectives of the TYPP regarding industrialization were to:

a) increase the quantity & quality of basic consumer goods

b) establish and/or expand handicrafts and small scale industries

c) expanding the production of goods that support the agricultural sector

d) establish and/or expand metal, chemical and non-metal industries with the view to lay the basis for heavy industry

e) earn or save foreign exchange

f) create employment opportunity, and

g) bring about balanced regional development through regional distribution of industries. (Ibid, 143-145)

3.1.1.3. Post-1991

Post-1991 period can be viewed as two segments of a line. The first one-year segment (1991-1992) of the period represents the transition from the socialistic military government to the Federal Democratic Republic of Ethiopia government. This segment could be characterized by the political instability that called attention for "peace and settlement" (*"Selamna Meregagat"*) efforts beside the preparation for democratic election of the peoples representatives. The second segment started in 1992 being the ideal point of reference for the evaluation of the implementation and achievements of the economic policies of the prevailing democratic government.

The main idea of the economic development policy of this period lies on the "Agricultural Development Led Industrialization (ADLI)" strategy. This strategy has been designed and implemented as the first-best alternative to guide the struggle against poverty paying the top priority for the agricultural sector and population. This strategy was designed based on the reality that about 85 per cent of the Ethiopian people are farmers and more than 50 per cent of total GDP has been contributed by the sector. So, relied on the idea that without solving the problems of the farming people, the mass, and the largest sector, agriculture, it would be very difficult, if not impossible, to achieve meaningful and significant changes and improvements on basic economic objectives. Recognizing this basic idea, the policy strategy is designed with direct participation of the people to be ADLI on the basis of market economy. The policies have been geared towards promoting the private sector followed by denationalization and decentralization as one turning point away from the long-lived centralized command economic system. The strategy was designed in such a way that the existing economic structure would have to change from the agricultural dominance towards the industrial sector share. However, such structural transformation can only be brought about gradually and over along period of time, the immediate focus would have to be on agriculture as the base for the sustainable growth of other sectors and for the realization of structural transformation. Originated from this general strategic intention, the three inter-related sub-objectives are

a. sustainable economic growth

b. equity, including regional equity, and

c. self reliance, meaning dependence on national resources and independent national development.

Immediately next to the improvement in the productivity of peasant agriculture, the strategy is also based on an industrial development that makes extensive use of the country's natural resource base and locally available manpower in a sustainable basis. Embracing these two economic development directions, the strategy is known to be Agricultural-Development-Led Industrialization (ADLI) incorporating:

a) export-led development strategy as an engine of growth, and

b) parallel and coordinated development of agriculture and industry.

The Industrial Development Strategy is supposed to be linked much to the expansion of the domestic market besides the export through intended income increasing investments. According to this strategy, the best alternatives include

- promotion of labor-intensive technology
- utilization of domestic raw materials
- creating market for its own products, mainly consumer goods, and to some extent capital goods by strengthening its linkage with the other sectors. (MEDaC, 1993. P. 14-22)

3.1.2 Over all Economic Performance

Ranked at 210th out of a total of 210 countries in GNP per capita terms and 208th in terms of GNP per capita measured at purchasing power parity (PPP) by the most recent world Bank, World Development Report, Ethiopia is one of the poorest in the world. Ethiopia' s real per capita GNP calculated in dollar terms for 1998 was $100 while the average figure

for low income countries for the same year was $520 and the average for sub-Saharan Africa was $480 (Befekadu, 1999/2000, p.1). The people are living at extremely low living standard. This happened due to the disappointing economic performance resulted from the misallocation of productive resources. The economy has been stagnant as evaluated by structural transformation and other basic economic parameters.

Agriculture has been the dominant source of GDP and employment for long time up to the present with slight and gradual decline in its share along with unbalanced rising share of the service sector leaving the industrial share around the same share for long. In 1956/57 agriculture accounted for about 73.7 percent of GDP while about 19.9 percent and about 6.4 percent were shared by the service and industrial sectors respectively. After ten years, the agricultural share declined to 62 per cent with a shared increase of both the shares of the industrial and service sectors. The share of the industrial increased to about 11.8 percent while that of the service sector increased to about 26.2 percent. As of 1980/81 the share of the industry declined to around 10.9 while that of the service sector rose to about 31 percent. This depicts that the decline in agricultural sector share is fully gained by the service sector signifying the unbalanced transformation of the economy from the agriculture towards the service sector. This characterizes the long time trend of the structure of the economy. The Agriculture has been taking the lion's share with slight decline as a general long-term trend accompanied with stagnant growth in its share of the industry and the abnormal increasing share of the service sector.

If we take the nearest twenty years economic performance, agriculture and industry looks sensitive for natural calamities and political instability respectively. All the years in

which the agriculture share became below 50 percent were known as drought and rain short years. In the same manner, the years in which the industry performed worst were the years for critical political disruption, war expanded around the center of the country. Particularly, in years 1989/90–91/92 every thing was diverted towards the war. So, the worst performances of the sector in these years lead us to conclude that industrial sector was highly the victim of the political instability in the country. On the other hand, the trend of GDP contributions of different sectors, mainly agriculture, industry and service sectors, do no show the development or the transformation process is normal way of progress. Stagnant industrial and rising service shares may be damaging for the economy, as most of the services are non-tradable. (See table 3.1 and fig 3.1).

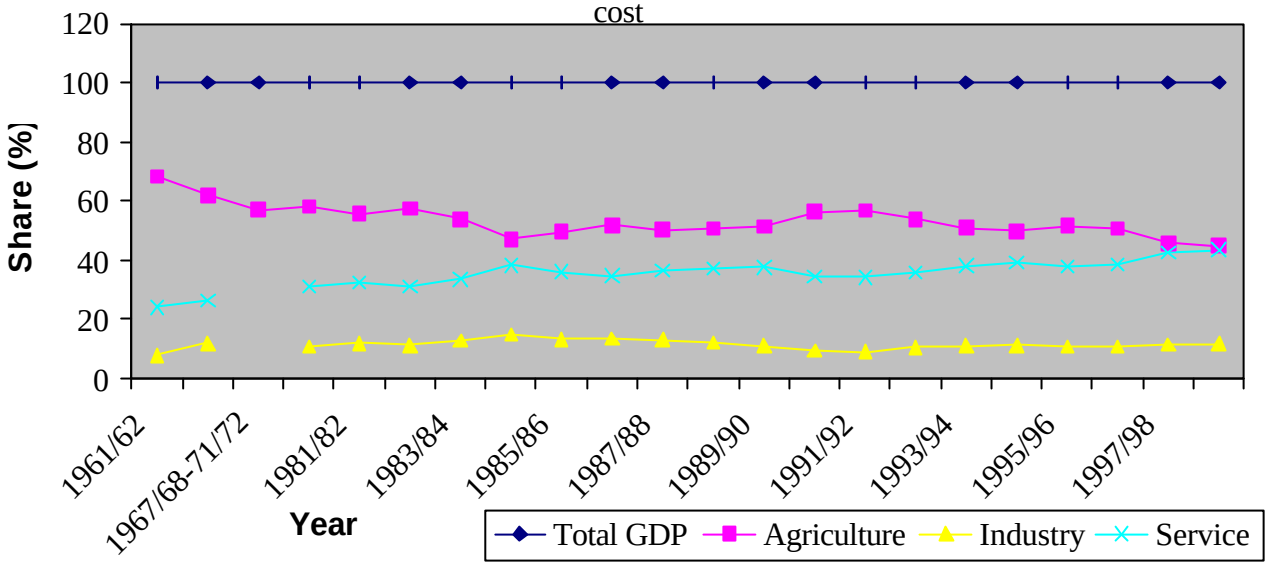
Table 3.1 Percentage Distribution of GDP BY Industrial Origin, at 1980/81factor cost

Year	Total GDP	Agriculture	Industry			Service
			Total	Manufacturing	Others	
1961/62	100	68.2	7.8	5.2	2.4	24
1966/67	100	62.0	11.8	8.0	3.9	26.2
1967/68-71/72	100	57.0	-	-	-	-
1980/81	100	58.1	10.9	6.5	4.3	31
1981/82	100	55.7	11.8	-	-	32.5
1982/83	100	57.5	11.3	-	-	31.1
1983/84	100	53.7	12.8	7.3	5.5	33.5
1984/85	100	47.0	14.8	7.6	7.2	38.2
1985/86	100	49.6	13.3	-	-	36
1986/87	100	51.7	13.6	-	-	34.7
1987/88	100	50.3	13.1	7.6	5.5	36.6
1988/89	100	50.6	12.2	7.2	5	37.2
1989/90	100	51.2	11.1	7.0	4.1	37.6
1990/91	100	56.3	9.4	4.9	4.5	34.3
1991/92	100	56.8	9.1	4.8	4.3	34.1
1992/93	100	53.8	10.4	5.9	4.1	35.8
1993/94	100	51.0	11.0	6.3	4.7	38.0
1994/95	100	49.7	11.2	6.5	4.7	39.1
1995/96	100	51.5	10.7	6.3	4.4	37.8
1996/97	100	50.7	10.8	6.3	4.5	38.5
1997/98	100	45.7	11.6	6.7	4.9	42.7
1998/99	100	44.8	11.7	6.7	5.0	43.5

Source: SFYP (May 1963), Mekonnen Taddesse (1992), MEDaC (1998), NBE (1996/97) & (1998/99) and Berhanu Nega (1999/2000).

Note: 1. Industry includes manufacturing, construction, mining and quarrying, and electricity and water
2. Manufacturing includes small scale, cottage, medium and large-scale industries.

Fig. 3.1 Percentage Distribution of GDP by Industrial Origin, at 1980/81 factor cost



The other indicators of the trend of the economy are growth rates of GDP and production of each sector. These indicators, in some portion, are references for the success of the policies implemented and reflection of the appropriateness of the different policies designed and implemented in different time periods.

During the imperial regime the economy was performing well compared to the socialist period. In the period between 1963–1974 the growth rate of real GDP ranged from the minimum 1.4 percent in 1973/74 to the maximum 6.8 per cent in 1965. As can be seen from table 3.2, the least performance indicated by the considered economic parameters had occurred in the year in which the political system was changed with the revolutionary break down of the feudal system. This was because of not the break down of the system but the political instability and the socio-economic chaos. In that year all considered indicators such as growth rates of GDP, per capita GDP, agricultural and industrial

outputs were in a worst situation from the years under consideration during the imperial regime.

Since the military government came to power, the economic situation of the nation as a whole was deteriorating. Under the implementation of the socialist economic principle, for the period 1974–78, the average annual growth rate of real GDP was estimated to be 0.4 percent while that of the agricultural and industrial output recorded at about -0.4 and -1.8 per cents respectively. Under the socialist government, the disappointing economic performance was justified mostly by negative otherwise low growth rates of real GDP, per capita GDP, agricultural and industrial outputs.

For a decade since 1981/82, the growth rates show negative for almost half of the years. Real GDP grew at negative rates for four and per capita GDP grew at negative rates for six years. These down ward growth rates could be attributed to the down turn of either the agricultural or industrial sectors, or both. Table 3.2 reveals that three of the four years real GDP growth rates were negative paralleled by the negative growth rates of the agricultural output. This proposes the total economic performance was sensitive to the shocks in the agricultural sector. Even, the extent of the down or up ward turn of the economy was paralleled by that of the agricultural performance.

In four of the six years in which the growth rates of the per capita GDP were negative, agriculture recorded negative growth rates. In 1984/85 real GDP grew at about –9.7 per cent while agriculture grew at about –20.9 per cent. These records are the worst ones

from the four decades under consideration. Mean while, the best growth rate of real GDP was also in the same decade and regime. So, it is possible to conclude that the peak and trough of the economy were in the socialist regime.

For over all assessment, the military regime could be characterized by poor economic performance as measured by growth rates of real GDP, per capita GDP and, agricultural and industrial outputs. In average, excluding the first six years performance, indicators for the economy as a whole and the main sectors recorded negative or low positive growth rates. Precisely, for the decade from 1981/82–1990/91, real GDP grew at annual average of 1.9 percents, and so did per capita GDP at about –1.2 percent while agricultural and industrial production grew at 2 and 0.57 per cent, respectively.

Year 1991/92 was known by its unstable political system. This was the turning point from the military to the present federal democratic government system. During that year, the economy was not the point of attention rather it was the peace and settlement issues that got attention resulting the worst economic down turn by any considered indicators compared to the other years performance after the fall down of the military government. However, starting from 1992/93, the economy started to recover. Table 3.2 clearly shows the growth rates of the indicators in consideration. Growth rates of real GDP and per capita GDP was at their peak in 1992/93 compared to the rates of the last six years. During the 7-year period of the market economy system inducement, the growth rate of real GDP had been negative only once. In that year real GDP and per capita GDP grew at about –0.5 and –3.5 per cent respectively. This negative growth was attributed to the fall

in production of the rain-fed agriculture resulted from unfavorable climatic condition, more critically drought. Even though the industrial sector grew at positive rate, the total GDP pulled down by the downfall of the sector's performance. This amplifies the idea that the economy is highly susceptible to the agricultural shocks mainly by the natural calamities. There fore, we can say that via agricultural sector, the economy is sensitive to the amount of rainfall out of the control of the policy instruments. In sum, for successive eight years period, since the turning of the economy toward free market system, the economy, as explained by real GDP, grew at an annual average of 4.6 percent and so did the per capita GDP at about 1.5 percent, even at the rates calculated including the adverse effect of the 1991/92 political instability. When the effect of tha t instability is ignored, by excluding the year from the account, real GDP and per capita GDP were growing at annual average of 5.8 percent and 2.7 percent. In the same account, agriculture and industry registered an average annual growth of about 3.2 per cent and 9.3 per cents respectively. This growth of the economy was incomparably higher than that of the last 10 years achievement. The living standard as measured by the per capita income growth rates; it was growing at an annual average of –1.2 percent during the late ten years period of the socialist regime. Nonetheless, it recovered to an annual growth of 2.7 per cent for the 7 years since the inducement of the market system (1992/93). In every respect, the later economic regime performed better than the former. (See table 3.2). Fig 3.2 also clearly shows the up and down swing of the indicators for the three successive regimes. In that the fluctuation was severe in the socialist regime and least before1974.

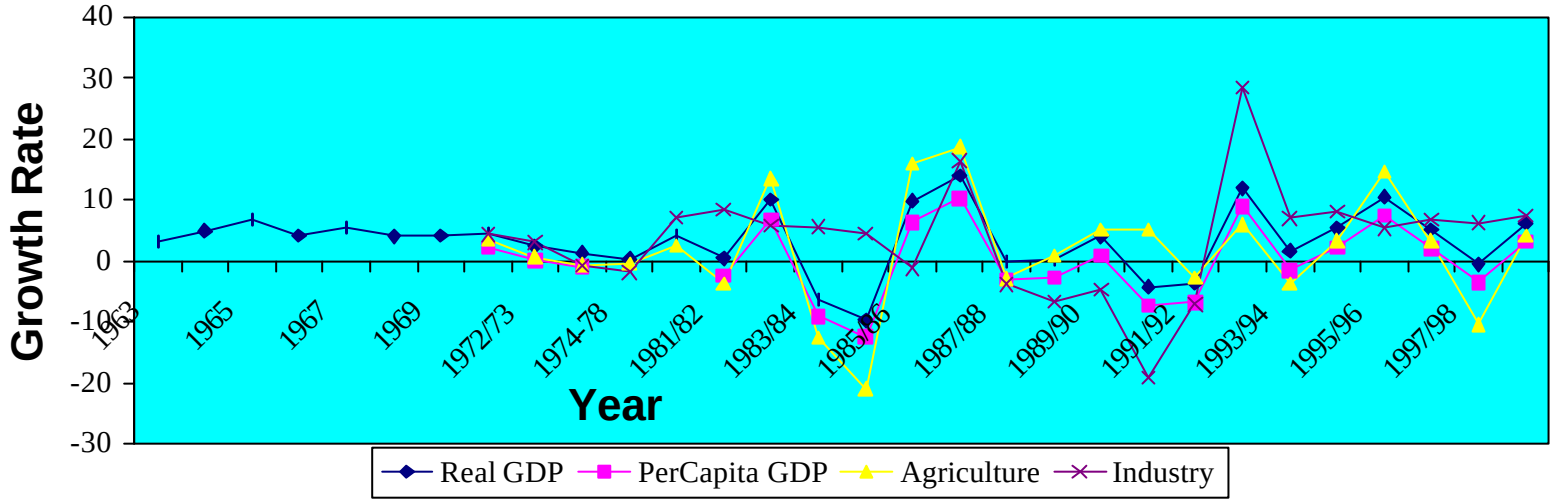
Table 3. 2 Growth rates of Gross Domestic Product by origin (in percent and average)

Year	Real GDP	Per Capita GDP	Agriculture	Industry
1963	3.2	-	-	-
1964	5.0	-	-	-
1965	6.8	-	-	-
1966	4.2	-	-	-
1967	5.6	-	-	-
1968	4.1	-	-	-
1969	4.2	-	-	-
1967/68-71/72	4.0	1.7	2.2	5.6
1971/72	4.5	2.2	3.5	4.4
1972/73	2.5	0.2	0.7	3.1
1973/74	1.4	-0.9	-0.6	-0.7
1974-78	0.4	na	-0.4	-1.8
1979-83	4.2	na	2.6	7.2
1981/82	0.51	-2.4	-3.6	8.5
1982/83	10.1	6.9	13.6	5.9
1983/84	-6.3	-9	-12.5	5.7
1984/85	-9.7	-12.4	-20.9	4.5
1985/86	9.9	6.4	16.0	-1.2
1986/87	14.0	10.4	18.8	16.5
1987/88	-0.1	-3	-2.8	-3.8
1988/89	0.3	-2.7	1.0	-6.6
1989/90	4.1	0.9	5.3	-4.7
1990/91	-4.2	-7.2	5.2	-19.1
Average	**1.9**	**-1.2**	**2.0**	**0.57**
1991/92	-3.7	-6.7	-2.7	-7.1
1992/93	12.0	9.0	6.1	28.5
1993/94	1.7	-1.5	-3.7	7.0
1994/95	5.4	2.3	3.4	8.1
1995/96	10.6	7.5	14.7	5.4
1996/97	5.2	2.1	3.4	6.8
1997/98	-0.5	-3.5	-10.3	6.3
1998/99	6.3	3.2	4.2	7.6
Average[1]	**4.6**	**1.5**	**2.4**	**8.2**
Average[2]	**5.8**	**2.7**	**3.2**	**9.3**

Source: Gill, 1974, Mekonnen Taddesse, 1992, Befekadu Degefe, 1999/2000, and Calculated from CSA and NBE (for 1991/92& 1998/99)

Note: 1. Average[1] is for the period 1991/92-1998/99.
2. Average[2] is for the period 1992/93-1998/99.
3. Average is for the period 1981/82-1990/91.

Fig 3.2 Growth Rates of Major Indicators by Industrial Origin



3.1.3. The Industrial Sector Performance

Referring back to tables 3.1 and 3.2 and the accompanying figures reveal the share and growth rate of the industrial sector for the last four decades. Its share has been stagnant at around 11 percent while its growth fluctuates a lot. It was growing by positive rates before 1974. But it did by negative for most of the period between 1974 and 1991/92. In post-1991/92 period, the sector grew by positive rates except the first year of the regime change. The sector was growing at an annual average of 9.3 percent for seven years of the

market-based economic policy regime started by the historically peak growth rate of the sector. This ever-positive industrial growth rate of post-1991/92 and more negative rates of the socialist regime lead us to conclude that the policy change of the latter was favorable for the industrial sector. As stated above, it was growing at stable growth rates of annual average of about 9.3 per cent for all of the post–1991/92 period though its percentage share in GDP do not change.

In conclusion the worst economic policy was implemented in the middle regime as evaluated by the basic economic outcomes. For the industrial sector performance the last was the best.

3.2 Development Trend of the Industrial Sector

Ethiopian industry is dominated by the manufacturing sub-sector. Therefore, the exploration for the development trend of the industrial sector mainly focuses on the issues related to the manufacturing industry. The development of the sector can be evaluated by many indicators. Among those, I used some of them including the number of establishments, its share in employment as well as output, technology level, and capital assets, expenditure and sales situation of the manufacturing industry over time by industrial branch.

3.2.1 The Trend In number of Establishments

The number of manufacturing establishments (10+) has shown different trends in the three policy regimes. In 1964/65 those industrial establishments with 10+ employs were 272 in number. After six years the number had increased to 401 increasing by about 47 per cent. It continued its growth at positive rates for the next three years of the imperial period. At the last year of the imperial period, the number reached to 436 with 8.73 percentage change from that of 1970/71.

In the 17 years of the command economy era, the number of industrial establishments went down at different rates in different time periods. From the following table, we can see that after five years on the chair of the military government (1973/74 – 1978/79), the number of establishments declined to 417. It was a negative change of about 4.4 per cent within five years. The declining trend continued until the last year of its time on power. It was declined to 404 (Percentage change of – 3.12) within 6 years from 1978/79. It further declined to 283 (a change of about –30 per cent) within 7 years from that of 1984/85, the lowest ever recorded.

Since the abolition of the old socialist and the inducement of the new market system, the trend changed dramatically. The number of manufacturing establishments increased from 283 in 1991/92 to 499 in 1993/94, an increment of about 76 per cent. The number further increased to 501 in 1994/95, 642 in 1995/96 and reached to 741 in 1996/97. In fact, it was a growth of about 162 per cent from that of 1991/92. Dr. Berhanu Nega and Dr. Befekadu Degefe also found that the number of establishments grew by 34.71 percent annually after 1992/93. (1999/2000, p. 207)

Table 3.3 Trend of manufacturing Establishments (10+ employees)

Year	Number	Percentage change	Period (years)
1964/65	272	-	-
1970/71	401	47.43	6
1973/74	436	8.73	3
1978/79	417	-4.36	5
1984/85	404	-3.12	6
1991/92	283	-29.95	7
1993/94	499	76.33	2
1994/95	501	0.40	1
1995/96	642	28.14	1
1996/97	741	15.42	1
1991/92→ 96/97	283→741	161.84	5

Source: CSO/CSA, (1964-1998) annually after 1992/93 (p.207)

There are several reasons for the decline up to 1991/92 and the up swing then after. The decisive reason for the decline was the then unfavorable government policy towards the private sector. Dr. Berhanu and Dr. Befekadu stated that it was very difficult for the private sector to obtain foreign exchange for the importation of raw materials, spare parts and replacements, credit and license. There fore, some of the establishments might fall below the "ten and above" employees category resulted from under capacity operation. Further more, private enterprises were exposed to be nationalized by government, according to the prevailing policy environment. This policy constraint was the major impediment against the expansion of the existing ones and establishment of newly entrant firms. Entrepreneurs were frustrated by that policy measure. They were refraining them selves from investing in the country. On the other hand, the country was in a prolonged civil war with an intensified trend in extent as well as in coverage over the 17 years

period. Consequently, the possibility of establishments to cease operation and contract (shrink) the size of their investment capital as well as employment was very high.

In addition to the discouraging policy content including the tedious regulations and bureaucratic bottlenecks emanating from socialist behaviors, the prolonged civil war had played an adverse role by hindering back foreign as well as domestic investors from investing in the nation. The independence of Eritrea by 1991/92 and the resulted exclusion of the establishments in it from being counted were also the other reasons for the seemingly fast declining number of establishments for the years after that.

In contrary, the up swing of the number after the over throw of the military socialist government is attributable to the merits of market based economic policies and the peaceful political environment created in the country. According to the statement of Dr. Berhanu, the primary reason for the upward trend of the number of manufacturing establishments is the improvement in the over all macroeconomic environment which alleviated some of the constraints mentioned above owing to the change in the policy regime (P.207). Far more than the once and for all policy change, any visible constraints & regulations against investment have been relaxed continuously based on the feed backs from domestic as we as foreign investors.

Based on the upward trend in the pre-1974, down ward trend between 1974 and 1991, and the dramatic up swing of the post-1991 periods, it is convincing to suggest that the middle period policy was the worst while the present policy is the best of the three for the

industrial development despite ADLI strategy. However, the effects of the policies on the trend of the number of SSIs, cottage and handicrafts, and informal establishments could not be analyzed due to the limitation, insufficiency, inconsistency and unreliability of the data.

3.2.2 The Trend in Capacity Expansion

The level of investment undertaken in connection with major expansions of existing establishments, and the setting of new establishments were low at the reference base year, 1979/80. Its trend as well shows droplets of increments except at end of the period under consideration. In 1979/80, a total of about 42.7 million birr was invested for the capacity expansion. Most of it was spent on public enterprises by government while only 3.2 per cent was invested in/by the private sector. Within the subsequent four years, despite the increment in capital expenditure by about 72 per cent, it was all public investment expenditure on state-owned manufacturing establishments. The private investment had shown a decline by about 68 per cent in amount of capital expenditure over the same period. In the second four years period, from the reference year, total investment expenditure on the sector had indicated an increment but a marginal one. From that, the public expenditure was kept to be the lion's share. As the record in 1991/92, the capital expenditure on capacity expansion had registered rather a decline by about 7 per cent from that of the 1987/88; still, the share of the private sector was kept at its droplet amount. On the other hand, in this account, value figures are in nominal terms ignoring the decline in purchasing power of the currency, ' birr' . Had the impact of inflation been

taken in to consideration, the real amount of capital expenditure would show a severe decline rather than increment.

Taking both considerations in to account, with out any doubt, I can conclude that the capital expenditure in total was very low and declining. Further more, it by itself was only from the government side. This low & declining trend of total capital expenditure and private source reveals the severity of the discouraging nature of the prevalent policy. The private owners were not investing even enough to maintain at the existing production capacity of their establishments. This could be, without any doubt, one of the main reasons for the stagnant industrial growth for long time.

Unlike the trend during the military government era, the capital expenditure has been increasing significantly since the policy change in 1991/92 coupled with the rising share of the private sector. Precisely, capital expenditure for capacity expansion reached to a level above 229 million birr. Comparing to the level in 1991/92- the policy turning point- it had shown a dramatic swing by about 219 per cent within four years. In the same period, the share of the private sector had also increased from 3.1 in 1991/92 to 23.6 per cent in 1995/96. As a continuation of the trend resulted from the favorable policy environment, the level of the expenditure increased to above 306 million birr in 1996/97, registering an annual growth rate in investment capital for capacity expansion of about 34 per cent. Meanwhile, the private share had rocketed to 41.1 per cent of the total, despite not enough for a capitalist nation. This trend depicts the encouraging spirit of the policy

implementation and the intensification of the characteristics of capitalist system in the nation. (Refer table 3.4)

Table 3.4. The Trend in New Capital Expenditure and Book Value of Fixed assets

	New capital expenditure by source					Net book value of fixed assets			
Year	Private	%	Public	%	Total	Private	Public	Total	%change in value within 4 years
1979/80	1354	3.2	41343	96.8	42,697	25505	389050	414555	-
1983/84	434	0.6	73072	99.4	73506	19448	544001	563449	35.9
1987/88	1100	1.4	75973	98.6	77073	18952	845235	864187	53.4
1991/92	2208	3.1	69645	96.9	71853	na	na	994997	15.1
1995/96	54007	23.6	175260	76.4	229267	na	na	2254498	126.6
1996/97	125975	41.1	180600	58.9	306575	na	na	2728490	21.0

Source: MOTI statistical Bulletins & MEDAC.

In the same manner, the trend in net book value of fixed assets can be used to reassure the above conclusions. As clearly seen in table 3.4, the book value of fixed assets of manufacturing establishments revealed increment without the consideration of the price effect. The increment was also much concentrated in the public sector as can be observed in the first three selected years. The last column of the table reveals the percentage change in value of fixed assets after four years. It was a growth in value by 35.9, 53.4 and 15.1 per cents in 1983/84, 1987/88 and 1991/92 respectively from the selected successive years. It justifies the growth in net book value of fixed assets of the manufacturing industry at varying degree with a special and habitual concentration in the

public part of the sector. Therefore, the finding in this part leads us to bring to an end in the same manner as that of capital expenditure-based.

The impact of the 1991/92-policy change is clearly visible here also. It resulted a dramatic upward swing in level as well as percentage change in the four-year period of the net book value. By far, this is the strongest indicator for the impact of the policy change towards 'relaxed-private-sector-based' capitalist system. Within four years from the change, a 126.6 per cent increment in net book value of fixed assets shows that the motive and capacity strengthening trend of the sector. Unfortunately, the non-availability of the disaggregate data for the book values disables me to say something about the trend based on ownership in spite of the expectation of increment in the private share and conversely to the public ones, after the policy change. Its upward growth trend is also supported by the 21 per cent annual change of the 1996/97.

3.2.3 The Trend in Sales

Unfortunately, the available data on the sales revenue do not include that of all level industries and the achievement of pre-1991/92 hindering the possibility for the total sort of assessment related to the central issues and comparison among different policy regimes. However, using the data on LMSIs from 1991/92 on, we can investigate the trend despite the period is not long enough to draw the long-term time series trend.

By looking over table 3.5, one can easily understand the revenue obtained from sales of products of LMSIs for the years under consideration. According to the data, total sales was increasing firstly at increasing but then after at decreasing rates. In level terms, total sales revenue was about 1.66 billion birr in 1991/92. Within two years, it became double. It consistently increased and reached to about 5.7 billion birr in 1996/97. In average, the annual growth rate for the five years is estimated to be 29.2 per cent.

During the time period under consideration, large portion of the total revenue was obtained from the local sales, ranging from the minimum 91.5 per cent in 1994/95 to its maximum 94.3 per cent in 1991/92. In annual average, 92.3 per cent of the total revenue was earned from domestic sales while the rest 7.7 per cent was dropping from export. These low export earnings might be partly because of the weaknesses in the promotion of exportable commodities and other related activities.

On the other way round, the share of total sales from the total manufacturing production had never been under 90 per cent even if foreign market exploration is suggested to be very weak. Extremely, very much portion of the production had been sold in domestic market. This figure, as indicators of market, emits prosperity to expand production and to sell as much as possible in domestic as well as foreign markets with some adjustments in promoting exportable products. Because the country is in a development and reconstruction process being large market for foreign exporters. Therefore, if the manufacturing industry adjusts it self in accordance to the provision of goods that are highly demanded by the development projects and consumers along with a scheme of

quality improvement, it is possible to sale much more than the previous seemingly high sales in share. On the other hand, the low export share shows the unutilized potential of export promotion. The importance of export is not limited only to creating market for the products but also it is the main source of foreign exchange that can be used for importation of investment goods, experience in the sense of fierce competition, technological diffusion and so on. Hence, attention should be paid for the diversification of products so as to utilize the potential domestic as well as foreign markets.

Table 3.5 Sales of LMSIs, 1991/92-1996/97, (in ' 000 Birr)

No.	Indicators	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	Annual Average
1	Total Sales Revenue	1662935	2454387	3699814	4656155	5461571	5720371	3942457.5
	Percentage change	-	47.6	50.7	25.8	17.3	4.7	29.2
2	Domestic Sales	1570014	2250796	3416628	4262374	5060455	5273084	3643892.3
	Percentage change	-	43.4	51.8	24.8	19.4	3.6	28.6
3	Export	92921	203591	283246	393781	401116	447287	303657
	Percentage change	-	119.1	39.1	39.0	1.9	11.5	42.1
4	Share of total sales from total production	94.3	91.8	92.3	94.4	94.2	95.4	94.0
5	% Share of export	5.6	8.3	7.6	8.5	7.3	7.8	7.7

Source: MEDaC, Jun 1999, p. 43

3.3 Structural Transformation of the Industrial sector

As it has been discussed in the above sections of the paper, the Ethiopian economy has been agrarian with low share and stagnant trend of the industrial sector of the economy in its history. Within the three policy regimes, strategies were designed and implemented to gear the industrial sector to attain increasing share in the economy and divulge

transformation to high teleological level and to the chemical and metallic branches as the base of the development towards heavy industrial complexes.

Unfortunately, the policy strategies followed by the regimes were inconsistent of one another. In the imperial regime based on the two-segment strategy, export promotion followed by import substitution, public, cooperatives and private sectors were treated equally with the view of they were equally important. In the socialist regime, public sector followed by cooperatives were at the top of the priority list while the private sector was disfavored for the reason of communal system of ownership. In the present government, very critical roles have been pushed toward the private sector coupled with step by step privatization of the previous state-owned enterprises. Consequently, the most favored sector by the policy deviation is the private sector. For example, if we see the credit allocation in the last two systems, it was biased towards public sector in the former regime where as it is the private sector in securing the highest share of the credit since 1990/91. Since 1994/95, cooperatives have been the second favored clients of this policy instrument. (See table 3.6)

Table 3.6 Credit Disbursement by Client and Source, (Million Birr)

Clients	1980/1	82/83	84/85	86/87	88/89	90/91	91/92	92/93	94/95	96/97	97/98
Public Enterp.	547.50	877.80	478.9	482.4	454	207.5	229.8	627.80	216.80	379.10	163.90
Cooperatives	23.40	53	35	94.20	178	119.8	74	124.70	425.40	494.50	550.30
Private	227.50	362.80	230.3	172.4	187.6	216.5	247.1	723.80	2695.9	3145.3	3867.1
Total	798.40	1293.6	744.2	749	819.6	543.8	550.9	1476.3	3338.1	4018.9	4581.3

Source: MEDaC, 1999, P.474

Having this idea concerning the orientation of each policy regime, the structural transformation of the industrial sector can be discussed as follows in terms of dominant branch, ownership pattern and composition in level of technology.

3.3.1. Structural Transformation by industrial Branch

In general perception, the Ethiopian industry is characterized by light manufacturing producers. Nonetheless, it is almost impossible to present an accurate structural transformation of the manufacturing activities because of the unavailability of reliable time series data on the number of SSIs, cottage/handicraft & informal establishments with respect to each category. However, we can visualize the structural change based on LMSIs.

According to the number of establishments in the LMSIs, food producers in the history of the sector dominate the manufacturing sector. It accounted about 23.4 in 1970/71, 24.4 per cent at the end of the imperial regime; it further increased to 33 per cent in 1983/84 and then declined back to the previous share (23.1 per cent) in 1995/96 & 1996/97. Wood and wood products industry had the second rank in number of establishments for the whole period under consideration except for the second half of the socialist government in which textile took the rank. From the bottom, cigarette industry had the least number of establishments for the whole period followed by leather and shoe as the second least for the whole period before 1992/93.

However, after the policy reform, leather and shoe industry had shown great expansion over taking the third rank from the top as recorded in 1993/94 and 1994/95. Similarly, comparing the end points of the regimes in consideration, metal industry has shown significant expansion in absolute number of establishments and relative ranks.

In contrary, textile and beverage industries have shown deterioration in percentage share of establishments and relative ranks. Beverage industry was ranked around 6th at the beginning of the period, but in the latter years, it became the second from the last, next to tobacco, that is consistently the least in number of establishments even at decreasing trend. (See table 3.7)

Targeting at the same issue of looking the structure of the manufacturing industry but from different angles, food manufacturing has been the first dominant source in industrial value of production since 1977/78. It accounted the highest share ranging from the minimum of 17.2 per cent in 1993/94 to the maximum 31.4 per cent in 1977/78. As can be observed from table 3.8, for the pre-1977/78 period, it was the second in contributing to the value of production. During the pre-1977/78 period, textile manufacturing was the first contributor. However, it had been surpassed by the food manufacturing since then and also by beverage industry in the latter years. Consistent to the conclusion arrived

Table 3.7 Number of Operating Establishments (with 10^{+} employees) by Industrial Branch (ISIC),

Year	Industrial Branch										Total
	Food	Beverage	Tobacco	Textile	Leather & Shoe	Wood	Paper,Printig Publishing	Chemical	Non-metallic Mineral prod	Metal Products	
1970/71	94	32	2	51	19	75	21	35	43	29	401
1971/72	100	32	2	54	17	81	22	36	46	30	421
1972/73	102	32	2	54	18	77	22	37	47	30	421
1973/74	105	32	2	62	18	78	21	42	46	30	436
1974/75	106	32	2	62	17	80	21	40	46	29	435
1975/76	114	30	2	62	17	77	28	32	37	31	430
1978/79	130	30	2	48	21	77	28	31	25	25	417
1979/80	124	27	2	49	19	67	29	29	25	24	395
1980/81	123	28	2	57	20	68	28	33	25	24	408
1983/84	134	30	2	58	25	31	31	31	31	31	404
1984/85	131	30	2	60	26	30	28	31	31	35	404
1987/88	138	30	2	55	28	33	30	30	34	33	413
1991/92	100	21	1	31	21	29	22	19	19	20	283
1992/93	103	21	1	31	21	30	23	21	17	19	289
1993/94	145	23	1	46	52	78	28	41	41	41	499
1994/95	130	23	1	42	50	85	32	41	48	46	501
1995/96	148	26	1	55	63	101	43	52	83	57	642
1996/97	171	27	1	60	61	133	46	66	97	79	741

Source: Evaluation Document, 24, MOTI Statistical Bulletin Vol. I, IV and VIII, CSA Statistical Bulletin # 178, and191, CSA Statistical Abstracts and PMO, Jun 1999.

based on the number of establishments, textile industry had shown declining trend in its share from total value of industrial production. For most of the considered period, it was the second highest contributor. However, it became the third contributor for the latter years whereas beverage contributed thirdly for long time and secondly in the later years despite its tortuously expansion and lastly attained the second from the least in number of establishments. In this regard, wood and wood products industry had been the least

contributor for almost all the periods contrary to its rank in number of establishments. In the mean time, metal, leather and shoe and to a limited extent chemical industries revealed an augmenting trend in cont ribution parallel to that of the trend in number of establishments expansion while paper, printing and publishing contributed almost at stable share despite some fluctuations. (See table 3.8)

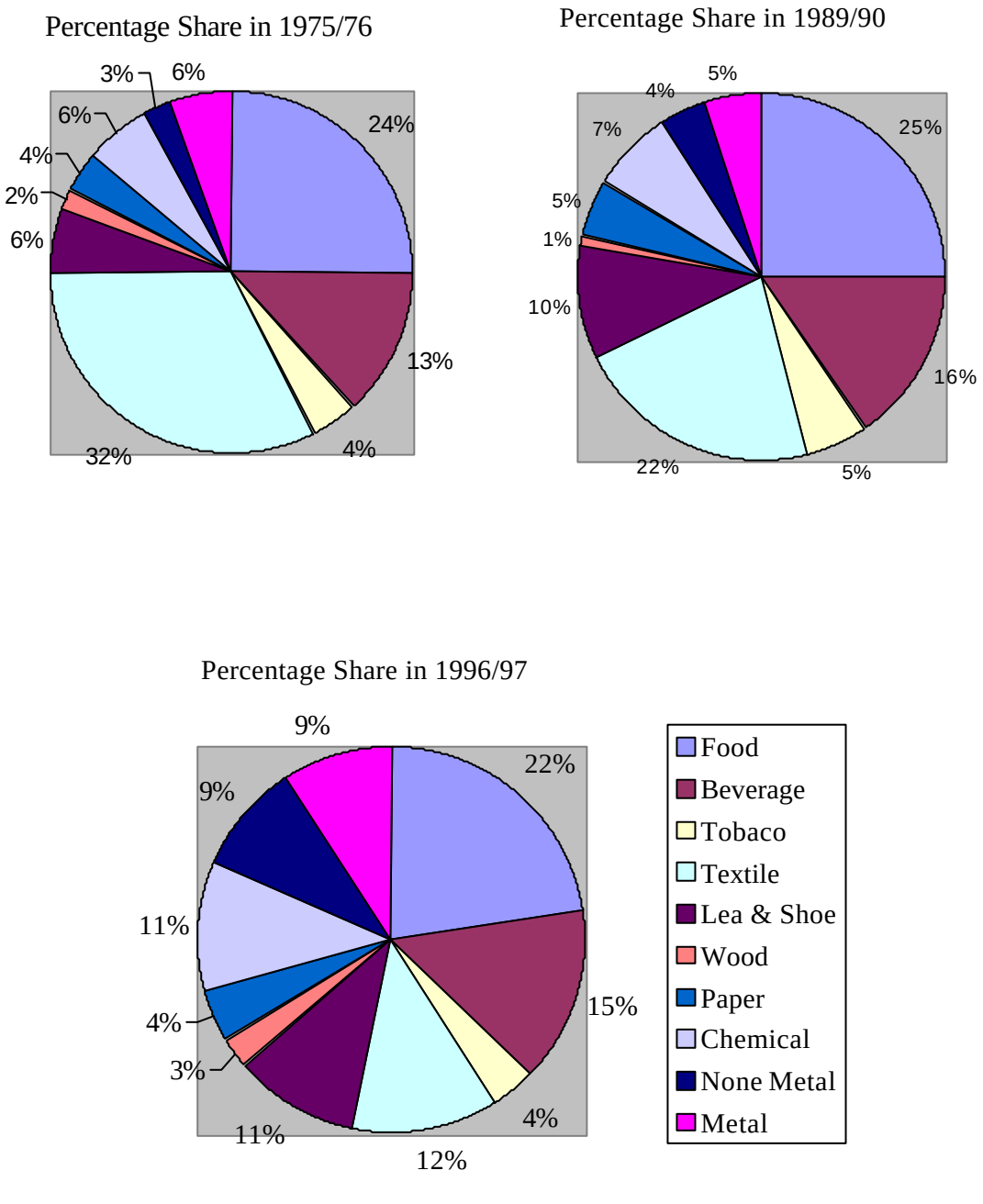
Table 3.8 Percentage Distribution of Value of Production by Industrial Branch

Year	Industrial Branch										
	Food	Beverage	Tobacco	Textile	Leather & Shoe	Wood & wood Prod.	Paper,Printig Publishing	Chemical	Non-metallic Mineral prod.	Metal Products	Total
1969/70	24.5	11.1	3.3	31.8	3.5	2.7	2.4	9.7	4.2	6.8	100
1975/76	24.9	13.5	4.1	32.6	5.6	1.8	3.7	5.7	2.6	5.5	100
1976/77	25.6	13.8	3.8	30.0	6.6	1.8	4.0	5.6	2.9	5.9	100
1977/78	31.4	13.9	3.6	24.8	6.3	1.7	3.8	5.4	2.2	6.9	100
1978/79	31.0	12.7	3.6	24.6	6.5	1.6	4.1	6.7	1.8	7.4	100
1979/80	29.9	12.1	3.4	25.0	7.2	1.5	4.5	6.9	2.3	7.2	100
1980/81	30.1	12.6	3.2	24.9	6.7	1.6	4.5	7.0	2.3	7.1	100
1981/82	29.3	12.9	3.6	24.2	6.7	1.5	4.8	7.4	2.6	7.0	100
1982/83	25.2	15.6	4.7	22.6	7.5	0.6	4.8	9.0	2.4	7.6	100
1983/84	25.7	15.5	4.7	21.5	8.0	0.7	5.0	9.3	2.0	7.6	100
1984/85	25.2	17.8	5.1	20.0	7.5	0.6	5.2	8.2	3.2	7.2	100
1985/86	25.5	17.4	5.8	20.1	7.8	0.6	5.3	7.2	3.7	6.6	100
1986/87	23.0	17.6	5.4	20.7	8.2	0.6	5.2	8.8	3.8	6.7	100
1987/88	21.1	17.0	5.9	20.9	9.3	0.6	4.8	8.4	4.4	6.6	100
1988/89	24.7	16.9	5.7	18.5	10.8	0.7	5.0	7.3	4.9	5.5	100
1989/90	25.0	15.6	5.4	21.8	10.1	0.7	4.9	7.3	4.1	5.1	100
1990/91	25.9	15.5	7.9	18.7	12.1	0.8	5.8	4.0	5.3	3.9	100
1991/92	23.5	20.3	8.3	15.2	10.3	2.2	5.1	6.3	3.9	4.8	100
1992/93	19.5	17.8	7.1	17.0	10.8	2.0	5.3	9.3	4.8	6.6	100
1993/94	17.2	15.5	4.9	18.4	9.6	2.7	5.3	11.2	5.2	11.3	100
1994/95	19.2	16.1	4.1	13.2	12.2	2.4	4.1	9.0	6.8	12.9	100
1995/96	22.7	14.9	4.2	13.3	10.9	2.3	5.0	8.7	7.2	10.7	100
1996/97	22.5	14.6	4.0	12.1	10.8	2.5	4.4	10.8	9.1	9.2	100

Source: Computed from the data of MOTI Statistical Bulletin I IV and VIII, Survey of the Ethiopia Economy (MEDaC), 1999 and NBE

This is also clearly illustrated in the figure 3.3 for three end years of each regime.

Fig. 3.3 Percentage Share by Industrial Branch for Selected Years



In conclusion from both indicator-based assessments, we can infer that the structure of the Ethiopian industry had been stagnant with no visible trend of transformation for long time except the deterioration of the textile industry and little improvements in the leather & non-metal and metal industries since few years ago. Further more, it is plausible that most of the value of production comes from the food, beverage and textile industries. For example, at the end of each regime (i.e. in 1975/76,1990/91 and 1996/97), these sectors contributed about 70, 60 and 49 percents of the total value of production. Even though their share is declining, still it is at its huge portion enabling to say the sectoral development is biased towards these branches in order, while the rest branches contribute the small portion in sum. In fact, the decline in share of these three sub-sectors from 60 to 49 percents and the rising in that of metal chemical, & non metal, industries from 13.2 percent in 1990/91 to 29.1% in 1996/97 justifies the encouraging policy effect on the avenue towards heavy and chemical industries. This trend is also visible on the distribution of establishments. For example, about 46 percent of the establishments were in food, beverage and textile industries. In 1987/88, it further increased to about 54 percent. But after the policy reform the share has been falling. As of 1996/97 their share in number of establishments was recorded to be 36.5 percent. This shows not the decrease in or unchanged number of establishments in food, beverage and textile but the relatively fast rate of growth in number of establishments in the other ones particularly, in leather and shoe, metal, non-metallic and chemical industries. This short-term trend pledges the initial tendencies of structural shift towards a higher stage of industrial development such as metal and chemical manufacturing.

3.3.2 Transformation on ownership pattern

The socialistic practice of the middle government stylized the public ownership pattern to be up- ward-bending curve. In the imperial & even at the very beginning of the military regimes, private ownership dominated the industrial sector. In 1975/76, after one-year period of the military government in power, about 66 percent of LMSIs (with 10^{+}employees and power driven machines) were in the hands of private owners. It declined to about 54 per cent in 1979/80. Resulted from the exercise of socialist principle, the publicly owned establishments further increased at the cost of the private ones along with the implementation and intensification of nationalization. As the instantaneous impact of the exercise of the policy instrument, the number of public enterprises increased from 147 in 1975/76 to 180 in 1979/80, 197 in 1983/84, and to 211 in 1987/88 while the reverse happened for the private establishments from 283 to 215, 207 and 202 over the same period. As a cumulative effect, the share of publicly owned establishments increased from 35.2 in 1975/76 to about 54 percent in 1991/92. As the second side of a coin, the share in number of the private sector had shrunk from its maximum about 66 per cent in 1975/76 to its minimum about 46 per cent in 1991/92.

Within four years period of the policy change towards free market system, the share in number of public owned establishments dropped dramatically from about 54 per cent in 1991/92 to about 26 in 1995/96 and it further declined to 21.7 per cent in the following one year. The private sector has been flourishing as can be seen on the absolute as well

as percentage figures. As of 1996/97, private owners owned 580 LMSIs, which are about 78 per cent of the total, while the rests were kept publicly owned. (Refer table 3.9)

Table 3.9 Number of all Medium and Large Manufacturing Establishments (10^+ employees and use power driven machines) by Social Sector and Industrial Branch for 1979/80, 1983/84 and 1987/88

No.	Industrial branch	1975/76			1979/80			1983/84		
		public Sector	Private Sector	Total	public Sector	Private Sector	Total	public Sector	Private Sector	Total
1	Food &Beverage	55	89	144	70	81	151	86	78	164
2	Tobacco	2	-	2	2	-	2	2	-	2
3	Textile	25	37	62	21	28	49	23	35	58
4	Leather and Shoe	10	7	17	12	7	19	12	13	25
5	Wood and Wood Products	8	69	77	22	45	67	9	22	31
6	Paper, Printing, and Publishing	10	18	28	12	17	629	15	16	31
7	Chemical	18	14	32	18	11	29	18	13	31
8	None-Metallic Mineral Products	12	25	37	13	12	25	17	14	31
9	Metal	7	24	31	10	14	24	15	16	31
	Grand Total	147	283	430	180	215	395	197	207	404
	As % of Total	34.2	65.8	100	45.6	54.4	100	48.8	51.2	100

No.	1987/88			1991/92			1995/96			1996/97		
	public Sector	Private Sector	Total	public Sector	Private Sector	Total	public Sector	Private Sector	Total	public Sector	Private Sector	Total
1	93	75	168	67	54	121	63	111	174	55	143	198
2	2	0	2	1	-	1	1	-	1	1	-	1
3	25	30	55	22	9	31	24	31	55	24	36	60
4	13	15	28	9	12	21	9	54	63	9	52	61
5	12	21	33	11	18	29	18	83	101	15	118	133
6	13	17	30	9	13	22	9	34	43	8	38	46
7	18	12	30	12	7	19	13	37	50	15	51	66
8	17	17	34	10	9	19	21	64	85	22	75	97
9	18	15	33	11	9	20	11	59	70	12	67	79
	21	202	413	152	131	283	169	473	642	161	580	741
	51.1	48.1	100	53.7	46.3	100	26.3	73.7	100	21.7	78.3	100

Source: MOTI Statistical Bulletin Vol. I, IV and VIII, CSO, 1987, CSA Statistical Bulletin # 178, and 191, and Statistical Abstract, 1997.

As of 1995/96, the total number of all scale manufacturing establishments was estimated to be about 1,172,379. Among these, 76.15 and 23.57 per cents were cottage/handicrafts and informal establishments respectively; while merely 0.05 and 0.23 per cents, in their respective, were in the LMSIs and small-scale categories. This further magnifies the infancy of the Ethiopian manufacturing industry in that most of the producers are in the stage of cottage/handicrafts. This might be advantageous in employment creation being implemented at low amount of initial capital. Nonetheless, it disables to ripe the advantages of economies of scale and technological advancement.

To come back to the issues of ownership, in 1995/96 only 169 LMS manufacturing establishments were in the hands of government while the rest 1,172,210, including 473 large and medium scale establishments, were privately owned. This ownership pattern clarifies the increasing dominance of the private sector and the action of the government in pulling out its hands from the market.

Table 3.10 Ownership Structure of Manufacturing Establishments as of 1995/96

Group	Public	Private	Total	% Share
10^{+}	169	473	642	0.05
Small-Scale	-	2731	2731	0.23
Cottage/handicraft	-	892719	892719	76.15
Informal	-	276287	276287	23.57
Total	169	1,172,210	1,172,379	100

Source: Dr. Berhanu Nega, 1999/2000, P. 211

This dramatic flourishing in the private sector is still the cumulative effect of the exercise of market system on the one hand and the privatization of public establishments on the other hand. The practice of privatization has been continuing guided by its own agency. Table 3.11 presents the number of privatized enterprises until two reference years.

Table 3.11 Number of state owned Manufacturing Establishments privatized

No.	Industrial Branch	Until Dec.1998/99		Sold Until Feb. 2000
		Provided for tender	Sold	
1	Wood	5	3	6
2	Publishing	1	1	1
3	Food	20	12	14
4	Beverage	7	6	6
5	Chemical	3	3	4
6	Metal	1	1	1
7	Leather	10	3	3
8	Tobacco	1	1	1
9	Textile	8	-	3
10	Non-metallic min.	-	-	2
	Total	56	30	41

Source: MEDaC, Jun 1999 and EPA, February 18, 2000.

3.3.3 Structural Composition of Industrial Establishments by Technological level

From the over all industrial sector view, it is highly dominated by the low technological level ones. Cottage/handicraft manufacturing followed by SSIs is the highest portion extremely compared to the number of LMSIs. As of 1995/96, above 99 per cent of all

establishments are characterized by cottage/handicraft manufactures. Even SSIs are representing very small portion of the whole establishments while the LMSIs are nearly negligible in number compared to the total number of establishments. To be precise, cottage/handicraft, SSIs and LMSIs attained 99.62 per cent, 0.31 per cent and 0.07 per cents, respectively. So, the Ethiopian industrial development is extremely at its low and infant stage.

On the other side of the assessment, the food producers dominate LMSIs and SSIs. It accounted for 23 per cent and about 40 per cent in the LMSIs and SSIs respectively while beverage accounted about 34 per cent dominantly in the cottage and handicraft part of the sector. From the over all sectoral composition, beverage, and textile, only shared above 65 per cent of all establishments. (See table 3.12)

Table 3.12 Distribution of LMS, Small Scale and Cottage/Handicraft Industries by Branch, 1995/96

No.	Industrial Branch	Industrial Group by Technological level/Category							
		LMSIs	%	SSIs	%	Cottage/ Handicraft	%	Total	%
1	Food	148	23.0	1090	39.9	50671	5.7	51909	5.8
2	Beverage	26	4.1	-	-	305692	34.2	305718	34.1
3	Tobacco	1	0.2	-	-	54	0.01	55	0.01
4	Textile	55	8.6	22	0.8	279769	31.3	279836	31.2
5	Leather and Shoe	63	9.8	439	16.1	29983	3.4	30485	3.4
6	Wood & Furniture	101	15.8	424	15.6	45453	5.1	45978	5.1
7	None-Metal	85	13.2	94	3.4	151267	16.9	151446	16.9
8	Paper, Printing,	43	6.7	74	2.7	-	-	117	0.01
9	Chemical	50	7.8	9	0.3	91	0.01	150	0.02
10	Metal	70	10.9	579	21.2	29749	3.3	30398	3.4
	Total	642	100	2731	100	892719	100	896092	100.0
	% Share of the Group	0.07	-	0.31	-	99.62	-	100.00	

Source: CSA, 1997

Generally, the Ethiopian manufacturing establishments are engaged in the production of food, beverage, textile and non-metallic mineral products. These sectors accounted for about 88 per cent of the total establishments registered in 1995/96. As states by Dr. Berhanu, the high local input content and the existence of large local market for these products mainly explain the dominance of these manufacturing activities (199/2000, p.209). The main four sectors and their importance in each group can be deducted as follows in table 3.13

Table 3.13 Main sectors in each group

10^+	% Share	Small scale	% share	Cottage /handicraft	% share	Total	% share
Food*	23	Food*	39.9	Beverage	34.2	Beverage	34.1
Wood	15.8	Metal	21.26	Textile	31.3	Textile	31.2
Non-Metal	13.2	Leather & shoe	16.1	Non-Metal	16.9	Non-metal	16.9
Metal	10.9	Wood	15.6	Food*	5.7	Food*	5.8
Total	62.9	Total	92.8	Total	88.1	Total	88

Source: Table 3.12
* Common in all groups

Table 3.13 summarizes the percentage share of four main branches within each group. The common element in each group is food manufacturing despite with varying order in its importance. It is the first in the 10^+ and SSIs, but the last in cottage handicrafts manufacturing group. However, the four dominant branches that accounted for about 88 per cent in cottage/handicraft manufacturing industries are beverage, textile, non-metal and food accounting for 34.2, 31.3, 16.9 and 5.7 per cents of the total number of the respective group. Realizing its very dominant share in number, the type and the relative

importance of the branches in order derived from the total number of manufacturing industries are almost the same to that drawn based on the cottage/handicrafts only.

On the contrary, the four dominant industrial branches that account for about 93 per cent in SSIs are food, Metal, Leather and Shoe, and wood and wood products in that order. Thus, small-scale industries in Ethiopia are engage in the production of food, fabricated metal products, leather and shoe, and furniture. The most palatable reason for this pattern of concentration in both cottage/handicraft and SSIs is their access for local determinants including the provision of raw materials and the existing market demand for their products.

In the 10+ group the concentration is less severe in that the four main branches such as food, wood, non-metal and metal industries account for about 63 percent of the total number of establishments in the group. While those in SSIs and cottage/handicrafts account for about 93 and 88 per cent respectively. Herfindahl-Hirshman Index (HHL)[1] which is the measure of extent of concentration with the possible value varying between 0 and 1 also reveals these differences in concentration. The higher the HHI is the strong is the concentration

[1] Foot note

note that (Berhanu and Befekadu, 1999/2000, p.210)

HHI= Si^2; I= 1,2,.... N Where Si^2 is the square of the share of the i^{th} sector, measured as that sectors number of establishments divided by total number of establishments in the group,

n= the number of sectors in the measure (the major four sectors in each group in this case).

HHI of the 10+ group is 0.107 while it is 0.247 and 0.254 for cottage/handicrafts and small scale groups respectively consistent to the above conclusion that justifies the SSIs as the most severe where as the 10+ group as the least severe in concentration. When we see the same index for the three main branches of the three groups, it declines to 0.095 and 0.230 for the 10+ and small-scale groups while it rises to 0.384 for the cottage/handicrafts. This supports the less severity of the former and the extreme severity in concentration of the latter.

Considering the aggregate industrial sector, HHI is 0.214, 0.242, 0.246 and 0.250 for the first two, three, four and all branches respectively. It is clearly observable that HHI for the entire industrial sector is not that much different from that of the indices computed for the first two, three and four branches. This reassures the highly skewness of the sector towards few branches.

From the long-run point of view of structural transformation within LMSIs group, HHI was 0.110 for the three main branches at the end of the imperial (or the very beginning of the military government), 1973/74. Resulted from 17 years sectoral performance, the sectoral composition went biased towards few sectors (food, wood, and textile) rendering the HHI to reach 0.147 for the three main industrial branches. It magnifies how the sector is dominated by some of the branches; however, it declined to 0.103 in 1996/97. (Refer table 3.7). This is the reflection of the transformation tendency from food, textile & beverage towards those that are expected to play critical role in the process of development including, non-metal and chemical industries.

3.4 Regional Distribution of Industrial Establishments

3.4.1 Trend

Table 3.13 shows the regional distribution of LMSIs since 1991/92. At the beginning of the period under consideration, 76 per cent of the total establishments were found in the capital region. Next to the capital, the region enjoying more number of establishments was Oromia with 11.6 per cent of its own share. At that time, Amhara region was at the third rank in attaining more number of establishments. While three regions (Gambella, Somalie and Benshangul/Gumz had no any establishment and two regions (Afar and Tigray) had not more than two establishments. This unfair distribution was partly due to uneven infrastructural distribution in the country. Infrastructural facilities were, relatively, more densely provided around the capital and the neighboring regions. That is why the capital and Oromia regions have hosted (gotten) the highest share of total number of establishments in the nation in that order. This unfair distribution in infrastructure and industrial plants could be one of the reasons up on which the people from the neglected part of the nation were complaining and fighting against the prevailed political systems and governments for historically long period.

Nonetheless, after the introduction of multiparty parliamentary self-administration system, some improvements have been observed. If we take the last possible year in which data is available, 1996/97, all except one regions had gotten at least one (Somalie) at most 269 establishment (Addis Ababa) while the rest got in this range but closer to the lower point.

Oromia has been the highest beneficiary in this regard next to the capital followed by SNNP region.

From the total percentage change within the five years perspective, Tigray followed by SNNP region had recorded apparently the highest while Hareri revealed the lowest from those that registered improvements. However, the apparent highest increments recorded in Tigray & SNNP do no show the highest number of establishments but due to the bases were very low. In absolute number, still very large portion of the expansion has been concentrated in the capital region firstly and Oromia region secondly. These two regions have gotten an increment of 269 and 68 establishments respectively. From the bottom, Benshangul/Gumz, Somalie, Afar, Hareri and Gambella have gotten zero, one, two and three additional industrial manufactures, respectively. According to the data, the percentage share of some regions including Addis Ababa & Hareri, had declined consistently from year to year (except one year rise in Hareri) while some other regions such as Oromia, SNNP, Dire Dawa, Tigray & Gambella had increased in share with some fluctuations. The Amhara region had shown increment in share for three successive years and a decline for the latter two successive years; however, it shows ever increasing in number.

The differences in regional distribution of LMSIs show a declining trend with the exception of one region. Even if the achievement within a given period is encouraging, it is not satisfactory. Some regions like Addis Ababa and Oromia have the lion's share

while some backward regions are with not more that three establishments, (Afar, Gambella & Somalie) while Benshangul Gumz has nothing.

These four regions are known by their worst situation in infrastructural facilities. The infrastructural facilities provision is at its lower stage in the country generally and in these back ward regions badly.

While these regions have immense natural resources and potentially large investment opportunities, they have been grazing mere the external grasses and degrading the environment, unwisely. In my opinion, these very extremely under and inefficient utilization of resources & poor expansion of industrial producers are clearly blamed to the low level of infrastructural facilities both in quality and density. Even though, the low level of infrastructural facilities characterizes the nation as a whole, the shortage is still most terrible in the backward newly recognized regions. Therefore, for the balanced regional and shared income growth, the attention given since the onset of the federal system should be extended targeting at the creation of relative balances among regions. However, this is not an easy and short-term task. Rather, it is heavy and long lasting justifiable mission. They have to be supported by the central as well as well-performing regions in a direction that they can ensure the need of their efforts for the administrative rulings and developmental project implementations.

On the other hand, the second-step attentions and policy measures should be given to divert investment flows from the capital to the middle way regions-the Amhara, Tigray

and SSNP regions, and backward regions as much as possible. It could be done mainly through focusing at the expansion of infrastructural facilities and other incentives favoring investors tending to invest to the remote regions.

3.4.2 Distribution by Technological level

According to the 1997 CSA survey, on the regional distribution of manufacturing establishments as of 1995/96, LMSIs and SSIs are concentrated in the capital & Oromia regions in that order. Next to these, Amhara, SNNP and Tigray have medium rank in retaining manufacturing establishments. But, regarding the distribution of cottage /handicraft manufactures, Oromia followed by Amhara comes first, and SSP followed by Addis attains the second in order. In the mean time, the other unmentioned regions retain the small share even in sum. Considering all scale/technological level establishments, the position in rank of the capital region becomes the fourth. But the ranks in number of establishments for the other regions mainly Oromia, Amhara, SNNP and Tigray, look consistent to that order on the basis of SSIs and LMSIs. The only inconsistency is the situation in the capital in that it is the first share holder in the case of both LMSIs and SSIs but the fourth in the case of cottage handicrafts. (See table 3.14)

This finding gives us some insight to support the above judgement in that LMSIs and even SSIs look to be high in number in those regions with better facilities and communication network, while cottage/Handicrafts are relatively not highly sensitive to the infrastructural facilities. Any way, even if the share of the capital region in retaining

Table 3.14 Regional Distribution of Industrial Establishments by Level of Technology, 1995/96

No.	Region	Industrial Group by Technological Level								Total Regional Share	
		LMSIs				SSIs		Cottage/Handicraft			
		Privat	public	Total	%	Total	%	Total No	%	Total No.	%
1	Tigray	24	1	25	3.9	155	5.8	25012	2.8	25192	2.8
2	Afar	-	1	1	0.1	8	0.3	5443	0.6	5452	0.6
3	Amhara	30	11	41	6.4	386	14.1	213607	23.9	214034	24.0
4	Oromia	34	37	71	11.1	625	22.9	348673	39.1	349369	39.1
5	Somalie	1	-	1	0.1	8	0.3	1245	0.1	1254	0.1
6	Ben/gumz	-	-	-	-	5	0.2	7328	0.8	7333	0.8
7	SNNP	21	10	31	4.8	217	7.9	155393	17.4	155641	17.4
8	Gambella	-	1	1	0.1	2	0.1	1830	0.2	1833	0.2
9	Hareri	4	3	7	1.1	74	2.7	1203	0.1	1484	0.1
10	Addis A.	340	99	439	68.5	1173	42.9	103731	11.6	105343	11.8
11	DireDawa	19	6	25	3.9	78	2.8	1263	0.1	1366	0.1
12	Unstated	-	-	-	-	-	-	27991	3.2	27991	3.00
	G. Total	473	169	642	100	2731	100	892719	100	896092	100

Source: MEDaC, June 1999

cottage/handicrafts is low, the economic power concentration has been high and swelling in it and regions around that particularly in LMSI, & SSIs. This is partly because of the biased distribution of public enterprises in addition to the facility elements in that from the total 169 public establishments still operating in the county, 99 are operating in the capital while 37 are in Oromia region. These numbers account for about 60 and 22 per cents of the total respectively. In sum, as of the 1995/96 matriculation, the capital and the region around it retain about 80 percent of the total public industrial plants. Therefore, since this trend is not neutral in intensifying the regional imbalances within the country, the balanced regional development issue critically needs the policy attention focusing at the expansion of infrastructural net work towards the lagging regions.

To be critical, the scenario on regional distribution of industrial production, as of 1995/96, shows the huge proportion of the sector's production is obtained from these two

neighboring regions. Precisely, by considering all level manufacturers, 81 per cent of the total industrial production is produced in these regions sharing 49.2 per cent for Addis and 31.8 per cent for Oromia while the share of other regions is far below their share in number of establishments. This by itself pushes us to raise the question of productivity and efficiency in relation to capacity of establishments in each respective region. Clearly, when it comes to production/level of out put, what matters is not the number but the size and production capacity of firms.

When we explore the sub-sectoral contribution towards total industrial production of a region, 81 per cent is originated from the LMSIs only in Addis while it is 73 per cent in Oromia. This indicates that the production contribution of LMSIs is incomparably far more than its percentage shares in number of establishments. Hence, the economic imbalance among the regions could be blamed to the unbalanced regional distribution of LMSIs, merely. This conclusion could be helpful in clearly detecting the extent and main cause of the imbalances regarding industrial development in the nation. (See table 3.15)

Table 3.15 Regional Distribution of Industrial Production, 1995/96

No.	Region	LMSIs		SSIs		Cottage/Handicraft		Total	
		Output	Share (%)	Output	Share (%)	Output	Share (%)	Output	Share (%)
1	Amhara	244250	4.2	29544	15.7	289735	14.2	563529	7.0
2	Oromia	1856557	32.0	50564	26.9	643660	31.5	2550781	31.8
3	SNNP	175283	3.0	11236	6.0	279155	13.7	465674	5.8
4	Hareri	84941	1.5	1646	0.9	15029	0.7	101616	1.3
5	Addis A.	3204790	55.3	82089	43.7	667283	32.7	3954162	49.2
6	DireDawa	152381	2.6	2716	1.4	10794	0.5	165891	2.1
7	Others	80901	1.4	10088	5.4	137275	6.7	228264	2.8
	Total	5799102	100	187882	100	2042930	100	8029914	100
	% Share	72.2	-	2.3	-	25.5	-	100	-

Source: PMO, June 1999

3.5 Future Prospects of Manufacturing Industry In Ethiopia

The future prospect of industrialization in Ethiopia can be predicated based on the streams of investment flows from both domestic and foreign sources towards the sector. At the same time, this investment achievement could be one of the criteria for the evaluation of the policy in practice. Based on the data obtained from Ethiopian Investment Authority (EIA), I tried to summarize the manufacturing investment achievements for the period between July 1992 and January 2000 from both domestic and foreign sources, which are under implementation and operation. As it is indicated in the following successive tables, a total of about 8.6 billion birr of capital have been invested on 1298 manufacturing investment projects during the given period. From the total manufacturing investment, 745 projects amounting for about 3.1 billion birr capital have started operation while the rest 553 projects with an investment capital of about 5.5 billion birr are still under implementation. The details of domestic and foreign manufacturing investments are treated exclusively as follows.

3.5.1 Manufacturing Investment from the Domestic Sources

The domestic sources have been the main origins of investment. About 6.7 billion birr from the total of about 8.6 billion birr investment capital is emanated from the domestic source. In relative terms, it accounts around 78 percent of the total manufacturing investment. Large portions of the numbers of manufacturing projects are also operated and implemented by the domestic entrepreneurs. 1243 projects, including both under

operation and implementation, from the total of 1298 manufacturing investment projects are undertaken by domestic investors while only 55 projects are from abroad.

On the other hand, the domestic investment is expected to create above 42 thousand employment opportunities in the manufacturing sector. It is estimated to be around 86 percent of the total expected employment generation of the new investment in the sub-sector.

From this total sort of contrast among the foreign and domestic investments, the domestic source has been playing the major role in the integrated move towards industrial expansion in the country. Foreign investment, however, has not been big in the sub-sector. Over the seven years period, the total investment capital inflow to the manufacturing did not exceed 2 billion birr. It indicates that part of the investment source is not yet well mobilized. It is still at its minimal level. Hence, "why it could be?" should be evaluated and tackled by a series of momentous FDI promotion endeavors. The way to do it might include facilitating the infrastructural density of the country, simplifying investment codes and regulations, and development of foreigner to domestic investors partnership mechanism along with the maintenance of stable and peaceful political situation in the country.

Along with its merits, the domestic investment trend is also inadequate. For one reason, its amount is still low in absolute terms. Secondly, its regional distribution seems to follow the past trend being concentrated in the regions that have better infrastructural

facilities. Many of the investment projects are planted in and around the capital region. About 31 percent of the total manufacturing projects undertaken by domestic investors are established in Addis. The region around it still attains its second rank in domestic manufacturing investment concentration, even excluding coffee hulling/processing, with a share of about 18 percent. The other gloomy feature of the distribution is the inconsiderable number or total absence of industrial investment projects in the remote regions including Afar, Benshangul/Gumz, Gambella and Somalie. On the other hand, the important and encouraging feature of the trend is its diversion towards some regions like SNNP, Harerei and Tigray. These regions had low number and share of manufacturing establishments previously. Now, the figures show that the actual number of projects and their respective shares have revealed great improvement while that of the Amhara region is at its modest stage. (See table 3.16 and 3.17)

Table3.16 Domestic Manufacturing Investments, which are Under Implementation, (July 1992 - January 2000)

No.	Sub-Sector of the Investment Project	No.of Projects/Esta.	Investment Capital (million Birr)	Expected Job opp0rtunities	Regional Distribution By Number of Investment Projects										
					Oromia	Amhara	SNNP	Tigray	Somalie	Gambella	Ben/Gumz	Afar	Hareri	D/Dawa	Addis Ababa
1	Food	109	1177.24	6069	40	18	4	6	2	-	-		5	2	32
2	Beverage	4	187.49	700	1	1	-	1	-	-	-	-	-	-	1
3	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Textile	21	816.45	3064	2	-	-	1	-	-	-	-	3	-	15
5	Leather & Shoe	29	192.65	1131	3	3	-	2	-	-	-	-	1	-	20
6	Wood & Furni.	17	45.37	571	-	3	-	1	-	-	1	-	4	-	8
7	Paper,Printing	43	212.01	1489	4	2	2	2	-	-	-	-	-	1	32
8	Chemical	68	455.6	2361	9	2	-	4	-	-	-	-	1	1	51
9	None-Metallic	33	586.87	1578	4	2	2	3	-	-	1	-	7	-	14
10	Metal	53	621.37	3057	3	6	-	13	-	-	-	-	2	1	28
11	CoffeeHul/Proc	148	291.51	2693	49	-	94	-	-	1	-	-	-	4	-
12	Others	5	20.43	132	-	-	-	-	-	-	-	-	1	-	4
	Grand Total	530	4606.99	22845	115	37	102	33	2	1	2	-	24	9	205
	%	100	-	-	21.7	7	19.2	6.2	.4	.2	.4	-	4.5	1.7	38.7

Source: My own Computation from the data of EIA

Table 3. 17 Domestic Manufacturing Investments which are Under Operation, (July, 1992 - January, 2000)

No.	Sub-Sector of the Investment Project	No. of Projects/Estab	Investment Capital (million Birr)	Expected Job opp0rtunities	Regional Distribution By Number of Investment Projects										
					Oromia	Amhara	SNNP	Tigray	Somalie	Gambella	Ben/Gumz	Afar	Hareri	D/Dawa	Addis Ababa
1	Food	108	417.02	3341	38	16	4	11	3	-	-	-	2	6	28
2	Beverage	2	33.65	148	-	1	-	-	-	-	-	-	-	-	1
3	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Textile	15	68.15	2237	-	-	-	2	-	-	-	-	-	-	13
5	Leather & Shoe	47	265.46	2157	6	4	-	2	-	-	-	-	-	1	34
6	Wood & Furnit.	24	82.33	821	6	1	2	3	-	-	-	-	1	-	11
7	Paper,Printing	31	84.72	801	2	1	1	4	-	-	-	-	-	3	20
8	Chemical	50	237.21	2491	9	1	-	2	-	-	-	-	-	-	38
9	None-Metal	17	58.77	638	4	-	3	4	-	-	-	-	-	1	5
10	Metal	57	228.81	1497	4	5	1	20	-	-	-	-	1	-	26
11	CoffeeHul/Proc	361	583.46	5208	85	-	272	-	-	2	-	-	-	2	-
12	Others	1	1.97	18	-	-	-	-	-	-	-	-	-	-	1
	Grand Total	713	2061.55	19357	154	29	283	48	3	2	-	-	4	13	177
	%	100	-	-	21.6	4.1	39.7	6.7	.4	.3	-	-	.6	1.8	24.8

Source: My own Computation from the data of EIA

The other important detected feature, in two particular regions i.e. SNNP and Oromia, is the increasing linkage of the manufacturing establishments to the agriculture in that it is creating market for and upgrading agricultural products. These two regions are well known in Coffee production. Attributed to this tendency of resource-based specialization, coffee hulling and processing projects have been mounting in number in these regions.

3.5.2 Foreign Direct Investment in the Manufacturing Sector

In absolute terms, the manufacturing investment from abroad has been low. Its investment capital is very small portion of the total amounting merely about 1.7 billion birr on 55 projects that are expected to generate only around 6667 job opportunities.

Compared to the potential role that can be feasible in the country' s development process, the foreign investment is quite marginal.

Among the total 55 foreigner owned manufacturing investment projects, 32 have started operation while the rest 23 are under implementation. The salient features of the investment from abroad are its concentration in metal, chemical and beverage as evaluated by the capital amount, the expected job opportunities and number of projects. This tendency has very essential implication for the transformation of the Ethiopian industrial structure from the prevailing food and beverage dominated to the one that includes heavy and chemical manufactures considerably. It bolds its promising feature in the industrialization process of the country (Refer tables 3.18 and 3.19).

Table3.18 Foreign Manufacturing Investments which are Under Operation,

(July, 1992 - January, 2000)

No.	Sub-Sector of the Investment Project	No. of Projects/Estab.	Investment Capital (million Birr)	Expected Job opp0rtunities	Regional Distribution By Number of Investment Projects										
					Oromia	Amhara	SNNP	Tigray	Somalie	Gambella	Ben/Gumz	Afar	Hareri	D/Dawa	Addis Ababa
1	Food	3	28.39	172	2	-	-	-	-	-	-	-	-	-	1
2	Beverage	4	287.36	838	-	1	-	-	-	-	-	-	-	-	3
3	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Textile	2	21.2	210	1	-	-	-	-	-	-	-	-	-	1
5	Leather and Shoe	3	28.98	435	2	-	-	-	-	-	-	-	-	-	1
6	Wood & Furniture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Paper,Printing/Publi	1	55.42	67	-	-	-	-	-	-	-	-	-	-	1
8	Chemical	10	160.15	619	-	-	-	-	-	-	-	-	-	-	10
9	None-Metallic	2	28.98	161	-	-	-	-	-	-	-	-	-	-	2
10	Metal	7	459.32	1520	-	1	-	-	-	-	-	-	-	-	6
11	Coffee Hull/ Process	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Grand Total	32	1069.8	4022	5	2	-	-	-	-	-	-	-	-	25
	%	100	-	-	15.6	6.3	-	-	-	-	-	-	-	-	78.1

Source: My own Computation from the data of EIA

Table3.19 Foreign Manufacturing Investments which are Under Implementation,

(July, 1992 - January, 2000)

No.	Sub-Sector of the Investment Project	No. of Projects/Establ.	Investment Capital (million Birr)	Job Expected opp0rtunities	Regional Distribution By Number of Investment Projects										
					Oromia	Amhara	SNNP	Tigray	Somalie	Gambella	Ben/Gumz	Afar	Hareri	D/Dawa	Addis Ababa
1	Food	3	77.31	325	2	-	-	-	-	-	-	-	-	-	1
2	Beverage	3	255.91	845	-	-	1	1	-	-	-	-	-	-	1
3	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Textile	1	3.85	73	-	-	-	-	-	-	-	-	-	-	1
5	Leather and Shoe	2	153.33	307	-	-	-	-	-	-	-	-	-	-	2
6	Wood &Furniture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Paper,Printing/Pu	1	9.93	40	-	-	-	-	-	-	-	-	-	-	1
8	Chemical	7	244.77	754	2	-	-	-	-	-	-	-	-	-	5
9	None-Metallic Mi	2	57.8	125	-	-	-	-	-	-	-	1	-	-	1
10	Metal	4	56.65	176	1	-	-	-	-	-	-	-	-	-	3
11	CoffeeHull/Proces	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Grand Total	23	859.55	2645	5	-	1	1	-	-	-	1	-	-	15
	%	100	-	-	21.7	-	4.3	4.3	-	-	-	4.3	-	-	65.2

Source: My own Computation from the data of EIA

Its evil features include its imbalance in regional distribution and its high capital intensity. When we see the regional distribution of foreign investment on manufacturing, it has been concentrated in the capital and the region around it. From the total of 55 projects, 40 are situated in Addis while 10 are in Oromia. The rest 5 projects are in other four regions. This has an aggravating effect on economic power concentration around the capital region creating great imbalance among regions and thereby exacerbating the rural–urban migration in search of employment opportunities.

The second unpleasant feature of the foreign investment is its high capital input intensity. When we compare the investment capital to labor ratio of the domestic and foreign investments, it is 0.16 in the former but 0.29 in the latter. As Ethiopia is a labor abundant

country, industrial establishments would have been labor intensive in such a way that can use the cheap labor force enabling them selves to mellow higher profit on one side and generating job opportunities for the unemployed and excess labor force in the agriculture, on the other side.

In a comprehensive sort of sight, the manufacturing sub-sector has been attracting both domestic and foreign investors. In 1995/96 the number of LMSI employing more than 10 persons and power driven machine was registered to be only 642. It was quite low. But within the period between July 1992 and January 2000, the number of total manufacturing investment projects, including both under operation and implementation, were 1,298 with employment capacity of about 48,869 persons. This shows the significant expansion of the manufacturing sector. It, in turn, justifies the conducive policy environment in that the country is almost left for the private sector to play a critical role in its development. This has been achieved by a series of efforts to the extent that its own one-door-stop investment promotion agency (Ethiopian Investment Authority) is established at both federal and regional levels.

Based on the above, we can forecast that, the future industrialization process will be laid on the private sector participation and much faster and smoother than the past. However, seemingly due to the infrastructure unfair expansion, the industrial investment projects regional distribution has been following the same trend in that those regions with better infrastructural endowments are attaining the lion's share of the total while those with out the facilities could not be main beneficiaries of the industrial expansion. If this trend

continues with out any curb, the level of regional imbalance will be stinging. That, by itself, would create population flooding towards the advanced regions.

Therefore, for the balanced regional development in that all people can benefit, due attention should be given, appropriate policy measures should be taken to divert the flow of investment from those with better industrial bases to the poorest ones, in relative terms, in addition to the rapid expansion of infrastractural networks.

CHAPTER FOUR

THE ROLE OF INDUSTRIAL SECTOR IN ETHIOPIA

It is widely recognized that successful development of the industrial sector plays decisive role in the economic and social progress of a country. The central theme of industrialization lies not only on the production of a wide range of commodities needed for the wellbeing of the society but also in building domestic capacity to expand and sustain growth in the long run (MEDaC, 1999 p. 202)

In Ethiopia, the fixed size of agricultural land and the depletion of agricultural resources along with the rapid population explosion have made it difficult for the sector to accommodate the people by providing gainful employment and sufficient income. This implies that non-agricultural sectors particularly the manufacturing sector need to expand so as to create not only demand for the unemployed labor force but also for the fast, sustainable and ecology insensitive development of the economy. More over, the expansion of the industrial sector creates propitious atmosphere for the development of other sectors generally and mechanization of agricultural sector specially. It can pull out the excess labor force from the rural economy and create close interdependence with the other sectors through forward and backward linkages even within the sector itself. Regarding these and other main contributions, the Ethiopian manufacturing industry is evaluated as follows.

4.1. **Its contribution to GDP**

By referring back to table 3.1, it is visible that the industrial sector including mining & quarrying, manufacturing, construction, electricity and water, has been contributing to GDP at nearly stagnant share of below 12 percent for the period since 1966/67. From this small share of the whole industry, manufacturing has been contributing at not more than 7 percent while the other industrial sub-sectors contributed around 5 percent in sum. Although the contribution of the manufacturing looks greater than the sum of the other industrial branches, it could be the lowest from the international standard. Table 4.1 enables us to see the position of Ethiopia in international standard.

Table 4.1. Distribution of GDP in per cent around the world

Countries	Manufacturing		Industry		Agriculture		service	
	1980	1995	1980	1995	1980	1995	1980	1995
World	23	21	38	33	7	5	53	63
Low income economies (LIE)	21	27	32	38	34	25	2	35
LIE with out china & India	na	13	na	25	na	33	na	41
Ethiopia	**6.5**	**6.3**	**10.9**	**10.7**	**58.1**	**51.5**	**31**	**37.8**
Egypt	12	15	37	21	18	20	45	59
Nigeria	8	5	40	53	27	28	32	18
Kenya	13	11	21	17	33	29	47	54

Source: Berhanu Nega (1999/2000:205) for the international data and MEDac (462) for the Ethiopian case.

From the table, we can understand that, the share of the Ethiopian agricultural sector is the highest while the industry accounts for the lowest share compared to that of around the world. Even, the contribution of the Ethiopian industry to GDP is far less than to that calculated for the low-income economies with out china and India. More over, compared to one of our neighboring poor African Country, Kenya, there was a difference in 6.3

percentage points in that the Ethiopian industry accounted for about 11 percent while that of Kenya accounted 17 percent, as registered in 1995.

Similarly, the manufacturing sector accounted for 6.3 percent in the Ethiopian GDP and 11 percent in that of Kenya at the same time. In contrary to the achievement of the aggregate industrial contribution to GDP, the Nigerian manufacturing sector injected less compared to that of the Ethiopian manufacturing.

In finalizing, the Ethiopian manufacturing industry contributes to GDP not only low but one of the least around the world. Far more than its low contribution, the dismal feature of the sector is magnified by its static nature in contributing to the national economy. Looking at different categories in different basis, the table depicting the distribution of manufacturing value added reveals that the public sector is still the highest contributor towards the total value added of 10+ group from ownership point of view. Where as the group as a whole i.e. LMSIs (10+), at far distance, followed by cottage/handicrafts is the highest contributor from the industrial categories based on technological classification.

Table 4.2 Distribution of Manufacturing Value Added

Groups	Value added at factor cost in 000 birr				
	Public	Private		Total	
		Value	%	Value	%
10+	1400585	193254	14.8	1593838	59.0
Small scale	-	60605	4.7	606605	2.2
Cottage/handicrafts	-	638,836	49.1	638836	23.6
Informal	-	409,534	31.4	409,534	15.2
Total	1,400,585	1,302,229	100	2702814	100

Source: CSA (1997)

In searching which industrial sub-sector within the 10+ group, table 3.8 might help us by providing us the percentage distribution of total value of manufacturing production in branch basis for 23 years. According to the table, the food producing sub-sector followed by beverage and textile, with interchangeable character in rank of the latter two branches, had been historically the main sources of the manufacturing production. At the bottom of the list in order of contributing to the value of production is wood and wood products sub-sector for almost all of the time covered by the assessment. The second from the bottom had been non-metallic mineral products branch until 1992/93. Resulted from the policy change, it has been improving in its contribution starting from its minimum1.8 percent in 1978/79 to its topmost 9.1 percent in 1996/97 starting to going up in the ranked list based on contributing to the total industrial production. Similarly, the contributions of chemical and metal industries have shown improving share since the 1992/93 policy change with some fluctuations. It confirms the effectiveness of the strategy targeting at improving their contribution emanating from the idea that these sub-sectors could play as the engine for the development of other sectors and then the economy too.

In summary, the evaluation of the industrial sector contribution enables us to say the share of the sector towards aggregate domestic production has been the lowest from the international standard and at its static state. On the other hand, large portion of the total production comes from the LMSIs (10+ group) while the public sector from ownership and food, beverage and textile from branches points of view have been the main origins of the production within the group.

4.2. Its contribution to Employment

About 85 per cent of the Ethiopian people are employed in the agricultural sector (MEDaC, 1999) while the rest are distributed to industrial, government and other private service sectors. The manufacturing sector employs a very small portion of the economically active population. As of 1995/96, total manufacturing employment reached to about 1.4 million. This employment level includes permanent and temporary, paid employees and unpaid family workers. The role of industrial branches and groups in generating employment is exhibited as follows in table 4.3. From the three industrial categories, cottage/handicrafts sub-sector generates generously the largest portion of total manufacturing industry employment. As the record of 1995/96 it account about 93 percent while LMSIs & SSIs account for 6.5 and 0.6 percent, respectively.

When we assess on the basis of industrial branches, the distribution of industrial employment is skewed towards few sub-sectors. From the total employment of 1,411,873 only textile and beverage accounted 942,269.It is 66.7 percent of the total manufacturing employment. Next to these is non-metallic mineral producing branch sharing 14.5 percent of the total manufacturing employment while the other seven sectors covered a sum of below 19 percent.

However, the dominant branch varies from group to group. The total employment distribution towards the branches is dominated by that of cottage/handicrafts and reflects mainly the distribution of employees to different branches within it. If we see the major employer in each group separately, textile followed by food in the LMSIs, food followed

by metal industries in the SSIs and textile followed by beverage in the cottage/handicrafts categories take the first place of the order of branches on the basis of their employment share.

Table 4.3. Employment in the manufacturing industry, 1995/96

No	Industrial branch	Technological group			Total	% share of a branch
		LMSIs (10+)	Small scale	Cottage/handicraft		
1	Food	15980	3313	78552	97845	6.9
2	Beverage	7749	-	417279	425028	30.1
3	Tobacco	982	-	59	1041	0.1
4	Textile	32523	817	483901	517241	36.6
5	Leather & shoe	7863	274	21977	30114	2.1
6	Wood & Furniture	4984	1804	56987	63775	4.5
7	Paper, print & publ.	5579	191	-	5770	0.4
8	Chemical	5071	49	130	5250	0.4
9	Non-Metal	6120	454	198254	204828	14.5
10	Metal	4348	2027	54606	60981	4.3
	Total	91199	8929	1311745	1411873	100
	%share of a group	6.5	0.6	92.9	100	

Source: CSA, Report on LMS, SS and Cottage/Handicrafts Industries survey, 1997

In terms of regional distribution of employment, Addis Ababa has 55,320 or 66.6 per cent of the total workers engaged in the 10^+ group industrial establishments followed by Oromia with 14,946 or 16.5 per cent and Amhara with 7,922 or 8.7 percent. These respective percentage figures of the total 10^+ group employees are engaged in 439, 71 and 41 establishments in Addis Ababa, Oromia and Amhara regions. This outcome further confirms the existing regional imbalances in the distribution of manufacrtuing enterprises seeking a closer look by policy makers at the factors that have been causing this bias including the infrastructure element at the core. In the same manner, the leading role of Addis Ababa in small scale industrial activities also is magnified by 41.7 per cent of the total small scale employment or 3721 workers engaged in 1173 establishments

while Oromia region has 22 percent or 1967 workers employed in 625 establishments. The third in this regard is Amhara region with 1291 employs working in 386 small-scale establishments.

Small regions like Harrari with a population of 150 thousand and Dire Dawa with a population of 294 thousand as of the 1998 projection are also enjoying relatively high number of industrial establishments and the accompanying benefits including employment opportunities. Dire Dawa has employed 6,397 (7 per cent) in 25 LMSIs while Harreri has employed 1210 persons (1.3 per cent of the national LMSIs employment).

Regarding the regional distribution of cottage/handicrafts employment, it follows the trend that we have seen during the discussion on the regional distribution of all scale industrial establishments. Since they have the highest numbers of cottage/handicraft establishments in succession, Oromia, Amhara and SNNP regions have employed 35.5, 25.5 and 17.4 percent of total cottage/handicrafts employment. The rest 21.6 percent workers have been employed in the same sector of the other seven regions including Addis Ababa. From that Addis Ababa takes 14.4 per cent in share while the other six regions are left only with 7.2 percentage share from the national level employment in cottage/handicrafts manufacturing sub sector (See table 4.4)

Table 4.4 Regional Distribution of Industrial Labor Force, 1995/96

No.	Region	LMSIs	SSIs	Cottage/ Handicraft	Total	Share (%)	Share of the industry from the total active Population
1	Amhara	7922	1291	334124	343337	24.3	4.5
2	Oromia	14964	1967	465194	482125	34.1	4.9
3	SNNP	4257	919	228772	233948	16.5	5.2
4	Hareri	1210	182	1877	3269	0.2	6.0
5	Addis Ababa	55320	3721	189163	248204	17.6	27.5
6	Dire Dawa	6397	203	2042	8642	0.6	7.8
7	Others	1129	646	90573	92348	6.5	2.3
	Total	91199	8929	1311745	1411873	100	5.3

Source: CSA, 1997

4.3. Its contribution to Export and Foreign Exchange Earnings

The existence of reliable and sustainable demand/market for the products is one basic factor for the development of industrial sector. It, by itself, requires conducive economic policy and creation of job opportunities from the government side, establishing industries which have secured market conditions, improving the quality of products, supplying to the market at reasonable price, and market exploration and product advertisement from the producers side, and improving the purchasing power of the consumers.

To begin with the policy framework within which the sector operates, favorable economic policy has been designed and implemented since the onset of the Transitional Government of Ethiopia. This measure is expected to alleviate the constraints related to market and create a level field for vigor competition in the industrial sector. This

condition-adjustment measure has been proceeding through the federal government also. (MEDaC, June 1999)

Based on this intention, the changes in the sale of industrial products can be evaluated by considering LMS industrial group, which accounts above 70 per cent of the sector's production.

Table 3.5 in chapter three presents the total sales and its distribution among local sales and exports for the period 1991/92-1996/97. According to the data, the sales of LMSIs had shown an annual growth of 29.2 per cent within the time period stated above. Specially, the performances in 1992/93 and 1993/94, compared to the past, had been significantly high. The preceding years performance also had shown positive growth but at decelerating pace.

Even though its share is not satisfactory, export sales had grown at apparently big growth rates particularly in the first three years. In average, the sale from export had recorded an annual average rate of about 42 percent over the same period in that the revenue from the export sale increased from the lowest 92,921 thousand birr in 1991/92 to the higher 447,287 thousand birr in 1996/97.

From the total sales revenue, the export share is still at its marginal stage, albeit little improvements. At the beginning of the review period, it accounted for only 5.6 percent of the total sales revenue and grew to its maximum 8.5 percent in 1994/95.As a general

trend the export share of the total sale is fluctuating around its average, 7.7 percent for the years investigated. From this analysis we be able to state that albeit insignificant, the export sector has shown some improvements in terms of the share from the total sales revenue.

In answering the plausible question that could be raised by any reader, which branch of the manufacturing contributes better to the export of the sector, we can take a look at origins of the export in branch wise. Table 4.5 presents this information. The lion' s share of the total export revenue is obtained from the leather and shoe branch at increasing share for the period 1991/92 to 1994/95. In 1991/92, its share was around 69 per cent; however, it increased to 93.3 in 1994/95 and declined to 91.4 per cent in 1995/96. In 1996/97, it further went down to 86.6 per cent. This decline is not due to its deterioration; rather it is due to the faster exportable growth in the other branches.

In value terms, except a little decline in 1995/96, the export of leather and shoe sub-sector is at ever-rising trend while the food manufacturing shown sharp and consistent decline in both percentage share and value terms in the period between 1991/92 to 1995/96. In 1996/97, it recovered back in share as well as value terms. Next to this is textile that received the third weight on the basis of its export contribution.

The ideal curve on the percentage shares or values of food exports for the whole period in consideration seems to have an upward parabola shape. This reveals the deterioration and then after the recovery of the sub-sector as evaluated on its contribution toward

Table 4.5 Value of Manufacturing Export of LMSIs, 1991/92-1996/97, ('000 birr)

Industrial Branch	1991/92	%	1992/3	%	1993/94	%	1994/5	%	1995/6	%	1996/97	%	Av. % share (91/92-96/97)	Annual Averag Growth rate(%)
Food	21874	23.5	36077	17.7	39,623	14	19215	4.9	11715	2.9	31206	7	8.8	7.3
Beverage	257	0.3	240	0.1	79	0.03	93	0.02	199	0.05	67	0.01	0.05	-23.6
Tobacco	-	-	-	-	-	-	-	-	-	-	1075	0.2	0.06	-
Textile	6752	7.3	4762	2.3	4142	1.5	7000	1.8	20680	5.2	27062	6.1	3.9	32
Leather & shoe	63989	68.9	16243	79.8	239402	84.5	367472	93.3	366686	91.4	387492	86.6	87.13	43.3
Wood	49	0.05	49	0.02	-	-	-	-	1456	0.4	341	0.1	0.1	-
Paper & printing	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-metal	-	-	-	-	-	-	-	-	370	0.1	44	0.01	0.02	-
Metal	-	-	-	-	-	-	-	-	7	0.00	-	-	-	-
Total	92921	100	20351	100	283246	100	393781		401116	100	447287	100	100	36.9
% Change	-	-	119		39		39		2		11		42	

Source: MEDaC, Jun 1999, p. 4

manufacturing export originating from LMSIs. In average, about 87, 9 and 4 per cent of the total export earnings from the total LMSIs had been ripen from leather & shoe, food and textile sub-sectors, respectively while each of the rest contributed either less than 1 per cent or nothing. Leather & shoe is the single most important industrial branch accounting for the lion's share of total manufactured export. Its share in total manufactured export increased from about 69 per cent in 1991/92 to 87 per cent in 1996/97.

This low level of export earnings originating from very few sources suggest that the support of the sector in attaining foreign exchange be under not only the potential and the existing capacity but also the simple possibility. The above findings such as the fluctuation in share of export revenue from the total LMSIs manufacturing sales, and beyond that its concentration in leather & shoe production reveal the tortoise move of the sector in injecting to the export promotion.

As a typical agrarian economy, even, most of the export earnings are originating from agricultural products and raw natural resources. In Ethiopia, the contribution of manufactured export to foreign exchange earnings has been confined to not more than 15 per cent, so far. (MEDaC, 1999, P. 221)

Despite its marginal and declining percentage contribution to total export earnings, manufacturing export has been expanding at annual average rate of 37 per cent during the period 1991/92 to 1996/97. This is a signal for the possibility of further expansion of such exports if due attention is paid to it. As suggested focal points of the attention, improving the quality and quantity of commodities associated with the possible cost of production minimization have to be at the top so as to being competent in the fierce international competition. On the other hand, searching market for the products and promoting to that is the other complementary direction to which also due attention shall be given. In the mean time, efforts should be put in diversifying, vertically as well as horizontally, the manufacturing products in general and the exportable in particular.

4.4 Its Linkage with the Other Sectors of the Economy

Economists and policy makers generally vista local linkages as essential for an integrated economic development. Local linkages enhance sectors' growth, technology transfer and creation of job opportunities by boosting the local value added, raising domestic incomes and foreign exchange earnings and thereby contributing towards the strengthening of the national self-reliance. (Andu-Alem, 1997, p. 52)

If various sectors of an economy are strongly interdependent in main aspects like provision of inputs to and creation of market for the products of the other sectors, the economy might not be vulnerable for external shocks such as rise in price of imports (e.g. petroleum), fall in price of exports and deterioration in international relation for any kind of political and economic reasons. The concept 'linkage' embraces bi-directional flows of resources between every two sectors and multilateral flows among different sectors of an economy. This idea can be verified by the forward and backward linkages of the Ethiopian industrial sector to the rest sectors of the economy, in this context.

The forward direction of the industrial sector linkage to the other sectors include mainly the provision of industrial products that can help to improve the productivity of the beneficiary sector. Even though it is almost impossible to explain what is happening between different sectors of the Ethiopian economy, due to unavailability of the relevant data, it is customary to say domestic industries supply agricultural tools, chemicals and other inputs to the backbone sector, agriculture. However, this statement does not mean that what is needed by the agricultural sector could be fully provided by the industrial

sector. There is a large gap in item or quantity, between the demand and supply conditions of the two sectors. For example, huge amount of fertilizer is demanded by the agricultural sector in stable manner, but the industrial sector could not provide it. It has been using, mainly, imported fertilizer. Many other examples can be illustrated but with out supporting data. So, I should quit this explanation here.

Albeit not on destination/sectoral basis, table 3.5 clearly indicates that beyond 90 per cent of the products produced by LMSIs have been sold in the domestic market. This implies that even if the price is unsatisfactory, the domestic economy is creating large demand for the industrial products despite with many constraints such as absence of rural road, for the distribution of commodities to different and remote parts of the country. On the other side, the rural economy releases cheap labor force to the industrial sector. Rather, this is an ideal one. Because the employing capacity of the industrial economy is very limited compared to the rural-urban migrants and job seekers.

Equally important expected role of the industrial sector is the creation of demand for local products. However, the Ethiopian LMS manufacturing sub-sector is well known for its high dependence on imported raw materials. The ratio of the value of imported to total cost of raw materials (import intensity) has been increasing for most parts of the reform period except a modest decline in 1994/95 and 1996/97. According to MEDaC, during the first half of the 1980s the manufacturing sector exhibited nearly 60 per cent import intensity while it dropped to 40 per cent in the second half. This is a solid evidence for the inherent weakness of the manufacturing sector in minimizing the cost by using local

raw materials where there is poor linkage with other sectors and within the manufacturing sector itself for the provision of inputs. (1999, p. 226)

A careful look at table 4.6 might help us in understanding the input utilization trend of the LMS manufacturing industries during the reform period (since 1991/92). Local input intensity is the complementary part of import intensity, which means the intensity in procuring local raw materials while the sum of the two becomes 1 or 100 per cent. On the table are the import intensity figures so that we can easily extract the extent of local raw material utilization by LMSIs.

Import intensity during the reform period increased from 0.33 in 1991/92 to 0.44 in 1996/97 signifying the decline of local raw material utilization/procurement from 0.67 to 0.56 over the same period. The ratio of the value of local raw materials to the total cost of raw materials reached its trough (lowest point) in 1993/94 while import intensity was at its peak. From the total industrial raw materials, about 55 per cent was imported while the rest 45 per cent were locally supplied.

Metallic industries such as basic iron and steel, fabricated metal product, machinery and equipment, and motor vehicles followed by chemical industries including chemicals and chemical products, and rubber and plastic are the specific industrial branches in which very low percentage of local raw materials are recruited. For most of the times, their local raw material intensity varies between 0.01 and 0.10 in the metallic, and between 0.14 and

0.18 in the chemical industries. These are, thus, the most import dependent segments of the Ethiopian manufacturing sector.

In contrary, the industrial branches which account for the lion's share of manufacturing sector production as well as value added such as food, beverage, and leather and shoe show relatively high local raw material utilization/intensity implying that they are less dependent on imported inputs. The food and beverage group meets more than 80 per cent of its need for raw material consumption from local sources. About 75 to 80 per cent of the raw material for leather and shoe branch is also supplied locally. Among the large industrial branches, the textile industry shows relatively lower dependence on local raw materials whose share in one year reached up to 20 per cent of its total raw material costs. Recently, nonetheless, it has been above 60 per cent. The fast growing non-metallic-mineral-manufacturing group also exhibited about 50 per cent of local raw materials intensity during the review period. (See table 4.6)

The weak linkage between the industry and other sectors renders them to develop high import dependence nature of the industrial sector in general and some branches in particular which in turn makes them vulnerable for foreign exchange short falls. This vulnerability affects adversely not only the smooth production of the manufacturing industry but also the development of the economy as a whole.

Table 4.6 Import Intensity of LMSIs by Industrial Branch1991/92-1996/97

No.	Industrial Branch	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
1	Food/Beverage	0.20	0.17	0.18	0.12	0.21	0.17
2	Tobacco	0.42	0.87	0.66	0.82	0.94	0.84
3	Textile	0.80	0.57	0.70	0.56	0.38	0.37
4	Wearing apparel	0.10	0.16	0.33	0.39	0.40	0.31
5	Tanning/dressing	0.27	0.29	0.25	0.15	0.20	0.23
6	Wood	0.27	0.83	0.31	0.44	0.43	0.45
7	Paper, Printing	0.59	0.60	0.75	0.68	0.71	0.70
8	Chemicals	0.81	0.77	0.78	0.75	0.77	0.75
9	Rubber/Plastic	0.92	0.91	0.94	0.94	0.95	0.95
10	Non-Metal	0.55	0.56	0.58	0.54	0.42	0.31
11	Basic Iron/Iron	0.95	0.97	0.99	0.97	0.99	0.99
12	Fabricated Metal	0.93	0.82	0.91	0.85	0.90	0.93
13	Machin/Equipm.	0.87	0.89	0.98	0.90	0.67	0.90
14	Motor Vehicles	0.77	0.69	0.96	0.91	0.92	0.85
15	Furniture	0.3	0.22	0.31	0.30	0.21	0.22
	Total in Average	0.33	0.44	0.55	0.46	0.48	0.44

Source: Calculated from CSA series, 1992-1998.

In generalized evaluation, SSIs are more dependent on domestic inputs. If we compare the raw materials source of SSIs to that of LMS ones based on the 1995/96 data, the former uses about 86 per cent while the latter uses about 52 per cent local raw materials from their respective total needs. Therefore, on the basis of raw material intensity, the small-scale part of the industrial sector has stronger backward linkage to the other commodity producing sectors of the economy rather than LMSIs.

From the branch corner of view, the food sub-sector followed by leather and shoe is highly intensive in local inputs in that it uses about 87 per cent local raw materials in its LMS and 97.5 per cent in its small-scale wings. In sum, the food sub sector, in both LMS and small-scale, utilizes domestic raw materials at about 0.88 intensity. Next to this is leather and shoe consuming local inputs at about 0.80 intensity, in both scales. Even though the size of utilization is small enough not to be reflected in the average intensity measure, it, in fact, uses local raw materials more intensively at the small scale level of production.

Unlike their intensity in the LMS wing, small-scale non-metallic and chemical industries are highly dependent on the domestic sources in that they utilizes above 99 and about 71 per cent local inputs, respectively. From the bottom of the list in order of local input intensity, tobacco and metal producers are extremely import intensive as evaluated on the basis of larger input consumer part, LMS, as well as the average intensity. In their respective, they use merely 5.6 and 6.4 per cent local input from their total consumption justifying their vulnerability for any kind of accident that hinders the import of raw materials. (Refer table 4.7)

Shortly and relatively stating, LMS wing of the manufacturing sector is highly dependent on imported raw materials weakly integrating to the other parts of the economy. Looking at individual trees, tobacco, metal, chemical, and paper and printing are at their most awful stage in that order being almost unrelated to the domestic economy regarding their raw material consumption. This perplexity of the sector creates stress on itself and

Table 4.7 Sources of Raw Materials by Industrial Branch and Technological Level, 1995/96, (in ' 000 birr)

No.	Industrial Branch	Raw material Utilization of LMSIs				Raw material Utilization of SSIs				
		Total	Imported	Local	%share of Local	Total	Imported	Local	% share of Local	Tot
1	Food	595758	79123	516635	86.7	74997	1866	73131	97.5	670
2	Beverage	212672	88326	124346	58.5	-	-	-	-	212
3	Tobacco	113460	107130	6330	5.6	-	-	-	-	113
4	Textile	422216	162362	259854	61.5	4279	2163	2116	49.5	426
5	Leather	417477	83984	333493	79.9	2102	382	1720	81.8	419
6	Wood	49026	14353	34673	70.7	13242	2561	10681	80.7	622
7	Paper, Print	137513	97518	39995	29.1	1610	1414	196	12.2	139
8	Chemicals	306350	255376	50974	16.6	998	290	708	70.9	307
9	Non-Metal	90141	37646	52495	58.2	4072	24	4048	99.4	942
10	Metal	405670	38458	21142	5.2	12989	7462	5527	42.6	418
	Grand Total	2750283	1310346	1439937	52.4	114289	16162	98127	85.9	286
	% Share	100	47.6	52.4		100	14.1	85.9		100

Source: Computed from CSA Survey, 1997

constrains the development and augmentation of other sectors in the economy. Because, had they been utilizing more of domestic raw materials, the saved foreign exchange could be utilized for its optimum purpose by that to import investment and capital goods.

CHAPTER FIVE

COMPARISION AMONG THE INDUSTRIUAL SECTORS OF ETHIOPIA AND THE REPUBLIC OF KOREA

It is customary to hear that Ethiopia and the Republic of Korea were on similar stages of economic development and income levels in the time of four or five decades ago. This could be elaborated by comparing key economic indicators such as the indices of sectoral contribution, per capita income and trend of the manufacturing industries of the two economies. In spite of the fact that thorough comparison among many other variables of these economies has noteworthy importance, the lack and less reliability of the relevant data, and the differences in the corresponding rates of changes of macroeconomic variables specially exchange and inflation rates make the task very complicated, if not impossible. However, for the reason that I am very eager in exploring at least few but important causes of the ever widening gap between the two economic performances, the comparison has been accomplished as follows in various sections of the chapter despite unsatisfactory.

5.1. Structural Composition of the Two Economies Before 1960

As of 1954, about 17 million of the total Ethiopian population were engaged in agriculture, the most important branch of the economy while only about 2 million people were non-agricultural population. Proportionately, 90 per cent of the total active

population was stayed in the agricultural sector. As the account of that year, GNP was at its level of 1734 million Ethiopian dollars. In that agriculture contributed about 75 percent of the total GNP with more than half of the contribution derived from crop farming. On the other hand, the industrial and service sectors shared about 6 and 19 percents of the total GNP respectively. From the share of the industrial part, manufacturing and handicrafts constituted 5 percent. Per capita income, in the same year, was about 89 Ethiopian dollar (US $ 35.7). (FFYP, 1956, p. 5-7)

Comparably, Korea was one of the poorest nations in the world before 1953. At that time South Korean GNP was at the level of 47.9 billion won (the country's currency) at current market prices. Its per capita GNP was also low amounting at $ 67 at current prices (or $ 757 in 1990 constant dollars). (The Korean Economy 1945-1995, 1997, p.11). Regardless of the differences in income, price and purchasing power of the corresponding domestic currencies, it could not be that much a mistake to say the two countries were at the lowest rim of the list of nations around the world in accordance to their national wealth. Despite the differences in share of various sectors, particularly due to the introduction of industrial plants in Korea by the Japanese colonial rule, the structural composition of both economies were dominated by the traditional agricultural sector. The gap in composition was narrower than the prevailing whereabouts. Although the data, on both sides, do not allow to proceed the comparison at longer time before the one which has been taken as a benchmark, the structure of the two economies for the 1950s is presented in table 5.1

Table 5.1 Share of GNP by Industrial Origin for Ethiopia and the Republic of Korea

Sector	Ethiopia		Republic of Korea	
	1954	1961	1953	1961
Agriculture	74.7	68.1	48.9	47.1
Industry	6.2	9.0	5.9	10.0
Service	19.1	22.9	45.2	42.9
Total	100	100	100	100

Source: FFYP, 1956, p. 313 (for Ethiopia), and The Korean Economy 1945-1995, 1997, p. 533

According to the table, even in 1950s, Ethiopia was highly agrarian while Korea was biased towards the service sector. In Ethiopia around 75 percent of the gross national income was derived from the agriculture while it was around 49 percent in Korea in the first half of the 1950s. Until the early 1960s almost half of South Korea's GNP was generated by agriculture employing the overwhelming portion of the population. (Pal Yong Moon and Kwang-Eon Sun, 1997, p. 468). Remarkably, the shares of the industrial wing of the two economies were almost the same for the period until 1960. Even in 1961, the sector's share in both countries was comparably low with a difference of only one percentage point. Rather, great difference was between the corresponding shares of service sectors. This could be mentioned as one difference in the initial conditions of the economies since it includes social overhead capitals (SOC) enabling a country with better level of it to operate better.

Targeting at the identification of the main causes for the widening gap between the performances of the two economies since 1960, the period before that is considered to accompany with negligible differences among the two economies in general and in the industrial sectors in particular. With the idea that their economic performances and consequently the living standard of their people, have been at ever increasing gap, the

trend and the root causes of the gap are tried to be visualized in the following sections of the chapter.

5.2 Transformation of the Two Economies Since 1960s

5.2.1 Transformation by Major Economic Sectors

Contrary to the pre-1960, for the period since then the economic situation has been changing quite rapidly in Korea while the situation in Ethiopia rather worsened particularly during socialism. Resulted from the zealous spiritual move of the people motivated by the military government, Korea has been recognized by its economic success story while Ethiopia had declined from its status as one of the founder of UN Security Council to the typical aid seeker nation.

The tricky and noteworthy rapid economic growth of Korea is attributed to the fast industrialization and structural transformation of the economy. To the contrary, the ever-stagnant nature of the Ethiopian economy is attributable to the disappointing policy framework and government guidance possibly to say disindustrialization move emanating from feudalistic and more severely from socialistic behaviors of the two successive regimes. Before exploring the reasons for the divergence between the two economies thoroughly, we should take a look at table 5.2 indicating the transformation of both economies over time.

Table 5.2 Structural Change of Output in Korea and Ethiopia (% of GDP)

Country	Sector	1953	1961	1966	1972	1981	1987	1993	1998
Korea	Agriculture	48.9	47.1	42.5	26.4	16.3	10.9	7.5	na
	Industry	5.9	10.0	13.4	14.2	24.3	29.9	29.4	na
	Services	45.2	42.9	44.1	59.4	59.4	59.2	63.1	na
	Total	100	100	100	100	100	100	100	
Ethiopia	Agriculture	74.7*	68.1	62.0	51.8	55.7	51.7	51.0	44.8
	Industry	6.28*	9.0	11.8	16.0	11.8	13.6	11.0	11.7
	Services	19.1*	22.9	26.2	32.2	31.1	34.7	38.0	43.5
	Total	100	100	100	100	1001	100	100	100

Source: CSA (1966), Mekonnen Taddesse (1992), and MEDaC (1998), for Ethiopia; and The Korean Economy 1994-1995 (1997) p.533 for Korea.

Note: * shows that the data is that of the 1954.

In the history of Korean economy, agriculture became major source of income up till the first half of 1960s but with declining in share. However, since the second half of 1960s, it has been surpassed by the service sector, and even by the industrial sector for the latter yeas. The trend of the Korean economy could be characterized by the ever-turgiding industrial and service sectors in share of GNP for the whole time in consideration. As of 1993, the share of agriculture fell to 7.5 percent where as that of industrial and service sectors increased from 5.9 in 1953 and 42.9 in 1961 to 29.4 and 63.1 percents in 1993, respectively. This justifies the marvelous transformation of the economy from traditional agriculture to modern industrialization.

Incomparably, agriculture has been dominating the structure of the Ethiopian economy. In the history of Ethiopian economy, its contribution towards GNP as well as employment has never been surpassed by the other sectors. It accounted consistently more than half of the total GNP in the whole economic history except for the end few years. It has been below half of GNP since three years ago. In the mean time, unbalanced expansion has been viewed in the service sector. However, the prosperously productive

sector, from international experience, industry, has been disappointingly stagnant with little fluctuations around 12 per cent for long period. This is an evidence for the unhealthy transformation of the economy towards the service rather than commodity-producing sector. This defective economic trend calls for tight attention for controlled move towards industrialization.

Here, we can deduce that the structural transformations indicate rapid industrialization in the case of Republic of Korea, and abnormal service sector expansion at the cost of industrialization in Ethiopia. This is the other cause for the widening income and welfare gap between the two nations because of the non-tradable nature of services.

5.2.2. Transformation within the Industrial Sector

The structure of manufacturing industry is characterized by light and consumer goods production in Ethiopia. As it has been investigated in the above chapter, food, beverage, and textile production, in that order have dominated the Ethiopian manufacturing industry. High numbers of establishments are in the small scale and cottage/handicrafts. The number of LMS establishments is surprisingly very low verified by the 741 establishments even in 1996/97. Those industrial branches, which are expected to play critical role for the development of the manufacturing sector as well as the whole economy such as metallic, non-metallic and chemical industries are still at their lower stage despite an inauguration of improvements since few years ago. In general the Ethiopian industry is at its fragile infant stage with underdeveloped capacity and

experience for vigor competition in the domestic as well as international markets. Despite the unavailability of the relevant data, the market share of the Ethiopian industry is presumed to be very thin.

In opposite, the industrial structure of the Republic of Korea at the beginning incorporates both heavy and light manufacturing with expanding in share of both heavy and light industries particularly after the HCI derive of 1970s. As depicted in the following table, in 1953, it was 8.82 and 1.86 percent that contributed to the total national output by the light and heavy industries respectively. In 1961, it increased to 16.09 percent from the light and 4.26 per cent from heavy industries. For the period next to that, the share in total national income further increased from 24.4 in 1973 to 25.95 percent in 1987 contributed by the light, and from 10 in 1973 to 15.54 percent in 1987 by the heavy industry.

Table 5.3 Share of Output Contribution by Korean Manufacturing (%)

	Manufacturing Industry		
	Light	Heavy	Total
1953	8.82	1.86	10.68
1961	16.09	4.26	20.35
1973	24.41	10.00	34.41
1987	25.95	15.54	41.49
1994	21.18	15.51	36.69

Source: The Korean Economy 1945-1995, 1997, p. 110

Looking on the other way round, the structural transformation within the industrial sector itself has been vigorous in Korea diverting from the production of clothing and textiles towards metal products. The manufacturing share of clothing and textile industry shrank

from 35.6 percent in 1975 to 22.1 per cent in 1990 while that of metal manufacturing went up from 28.4 to about 46 percent over the same period.

Secondly, the manufacturing share of petrochemicals and plastics had increased from 12.9 in 1975 to 14.4 per cent in 1990. This turgidity of some industrial branches looks to be compensated by the flaccidity of other branches like food and beverage, and clothing and textile producers. The flaccidity of food, beverage, clothing and textile producers accompanied with the turgidity of metal, petrochemicals and plastic producers are among the evidences for the industrial transformation of Korea from the simple light and consumer goods production to the sophisticated heavy and chemical industrial complexes.

On the other hand, the structure of the Ethiopian industry is irony for internal transformation, too. Still, food and beverage followed by clothing and textile producers are superpowers sanctioned by simple techniques of production while chemical and metal producers are lagging behind the others. This industrial composition justifies that the Ethiopian industry is at its infancy being transformed insignificantly over long period. (See table 5.4)

Table 5.4 Structural Transformation of Industries (% of the manufacturing)

Industrial Branch	Ethiopia				Korea			
	1975	1980	1985	1990	1975	1980	1985	1990
Food & Beverage	38.4	42.7	42.9	41.4	10.6	9.0	8.1	7.1
Clothing & Textile	32.6	24.9	20.1	18.7	35.6	30.9	28.1	22.1
Wood & Furniture	1.8	1.6	0.6	0.8	3.7	3.3	2.7	2.9
Paper & Printing	3.7	4.5	5.3	5.8	4.9	4.5	4.4	4.5
Chemicals & Plastics	5.7	7.0	7.2	4.0	12.9	13.2	13.2	14.4
Metal	5.5	7.1	6.6	3.9	28.4	35.8	39.7	45.9
Non-Metallic	2.6	2.3	3.7	5.3	na	na	na	na
Others	9.7	9.9	13.6	20.0	4	3.5	3.9	3.1
Total	100	100	100	100	100.	100	100	100

Source: The Korean Economy 1945-1995, 1997 (for Korea) and Table 3.8 of this paper for Ethiopia.

5.3. Comparing and Contrasting the Two Economies by Main Economic Indicators

5.3.1. Comparison by Gross output, Per capita Income and their Growth Rates

For the purpose of comparison, we can apply two main macroeconomic indicators, GNP and per capita GNP. Since these are the ultimate measures for overall economic performance and living standard of the recipient society, I used to examine the economic status of the two nations based on the corresponding figures of GNP and per capita GNP. In doing so, I used calculated indices for the two economic variables. This is because, for one thing the corresponding values are given in different currency units; for the other thing, even though the gap between the respective values of the two economies had been narrower in the pre-1960 period, there had not been exact intersection point of these indicators.

These two reasons hindered me from using the value figures, as they are, for comparison purposes. Consequently, I preferred to employ the relative levels of the given variables

by making 100 the 1953 figures as a point of equality and benchmark assuming that the two countries were on similar level of economic measures. This application of index as an instrument of comparison is not intended to ignore the differences in the pre-1953 period but merely to create appropriate point of reference for the clear investigation of the trend beyond that point of time.

Having the above scheme in our mind, looking at table 5.5 enables to draw the image of the disparity trend between the two economies over four decades since 1953. If we see the corresponding GNP indices, they were presumed to be equal at 100 in 1953. Both GNP indices look increasing over the given time period incorporating both real output and price effects, as the figures are not indicating real values. For any reason the difference had not been on the direction but on the intensity of the upward variation. Within eight years from 1953, GNP of Korea increased by half while that of Ethiopia increased by 35.6 per cent. In the same year, 1961, the gap between the indices was 14.4. In 1971, it further increased to 425.6. The difference itself became more than four fold of the initial mark. More severely, the gap became as high as 4324.8 in 1981. This widening trend of the gap had been continued until 1994. Even if the data do not allow us to go further, it is hardly a mistake to prompt that the gap has been widening for the rest of the years also. (See table 5.5)

Table 5.5. Indices for the Trend in GNP and Per Capita GNP of Ethiopia and Korea

Country	Indicators	1953	1961	1971	1981	1991	1994
o r e	GNP(in100mill.US$)	14	21	95	671	2920	3769

	Index	100	150	678.6	4,792.9	20,857.1	26,921.4
	Per capita GNP(US$)	67	82	289	1741	6757	8483
	Index	100	122.4	431.3	2,598.5	10,085.1	12,661.2
Ethiopia	GNP(in million Birr)	1,734	2,351.8	4,387.5	8,117.2	10,471.57	12,644.8
	Index	100	135.6	253	468.1	603.9	729.2
	Per capita GNP(Birr)	89	117.5	186.8	210	206.3	231.38
	Index	100	132.	209.9	236	231.8	260

Source: 1. Values are taken from K.E., 1945-1995,1997, p. 326(for Korea), and from CSA abstracts of each year and NBE (for Ethiopia)
2.Indices are calculated from the values.

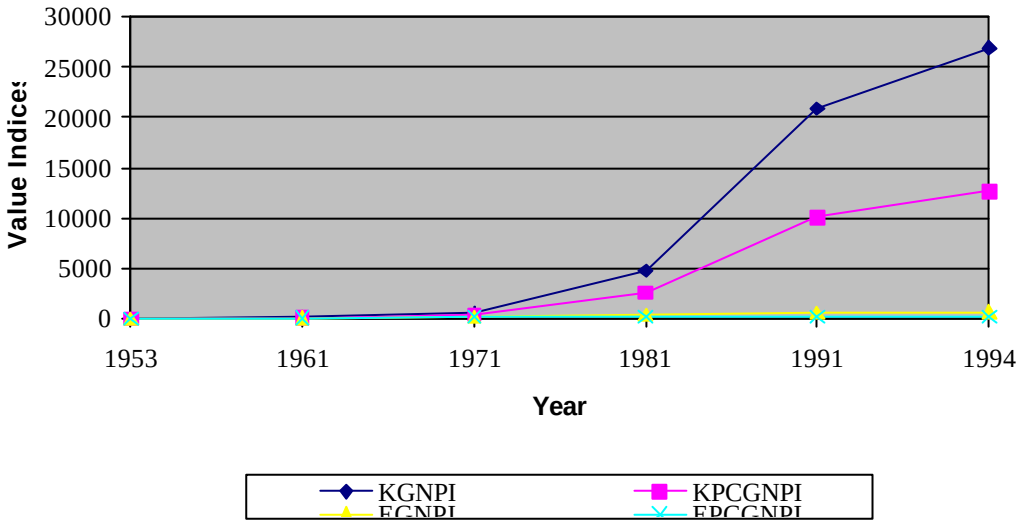
The trend of the per capita GNP gap is also the mirror image of that of GNP. It has been envisaged over the same period of time. Per capita GNP of both nations is assumed to be the same in 1953. However, they increased at different rates in that the Korean GNP per capita grew very rapidly but that of Ethiopia grew at a rate in that it might not be far more than the inflation rates. The per capita GNPs of the two countries are supposed to be equal in1953. However, resulted from the rapid economic growth of the former and the unsatisfactory performance of the latter, the per capita GNP of Korea became about 50 fold of the Ethiopian in 1994. Surprisingly, the widening of the gap has been fast since 1970, Korean turning point in the process of transformation from the light to the HCI stage.

As a general perception the gap between the achievements of the two economies performances was relatively narrow in the pre-1970 period. Nevertheless, for the latter three decades, the Korean economy has been growing astonishingly driven by the promotion of heavy and chemical industrial move at the forefront. Where as Ethiopian economic growth was confined to the willingness of the socialist government that came to power in 1974 and killed the country as well as the people for successive 17 years

under its war-oriented principle of conflict resolution and nationalization-based state owned industrial enterprises. These and other reasons has made the economy to lag behind not only the fast growing East Asian NICs but also the poorly performing African and South Asian countries. The noteworthy rapid economic growth of Korea and the dragging Ethiopian economy performance are further illustrated in the following figure.

Anne Krueger, 1997, states

Fig. 5.1Trends of GNP and Per capita GNP Indices of Ethiopia and Korea



> Despite some bumps along the way, Korean growth has remained phenomenally rapid, and by 1995, Korea was classified as an upper middle income country by the World Bank (1995, p.163), with a per capita income of US$ 7,660 in 1993 dollars. That compared with an average for all low and middle-income countries of $1,090, and all East Asian and Pacific developing countries of $820. (P.294)

The other economic performance measures are growth rates of GDP, it had never been negative except 1980 (due to oil shock and fell in rice production) for the period between

1961 and 1994. Further more, the growth rates became very high for the period between 1965 and 1973, the miracle years (Ibid. p. 308) and between 1983 and 1988.

In the three decades performance, the lowest GDP growth (2.5 per cent) other than the 1980, was registered in 1962. But for the other years the economy grew at a rate above 5 per cent. This finding is consistent to the conclusion drawn by Sang-Woo Nam and Jun-Il Kim, 1997. According to them, after wadding through the economic disarray of the 1940s and the 1950s, the Korean economy embarked on a path of aggressive development in the early 1960s and has, since then, achieved rapid growth during a relatively short period of time. The real GNP grew at an average rate of 7.5 per cent from 1953 to 1994 and recorded an even higher rate of 8.2 per cent if the time period starts from the 1960s. However, average growth of real GDP for each decade showed substantial variations from less than 4 percent in the 1950s to more than 9 per cent in the 1980s. Albeit considerable year-to-year fluctuations in annual real GNP growth, it has shown a rising trend from the 1950s to the 1960s, and only negative rates in 1956 and 1980. More over, neither a decreasing trend in real GNP nor a systematic decline in its variation can be detected since 1970. (P. 175)

The per capita GNP growth follows the same trend. Though the unavailability of the relevant data, for the period from 1971 to 1980 impeded us to have complete conception, the per capita GNP growth rate has never been below 2.5 per cent in the years for which the data are provided. This conclusion is consistent to the findings of one prominent economist, Danni Roderic. He found that the Korean economy grew at an average of

9.95 percent for the period 1960-85 and the per capita GDP growth rate had been an annual average of 6.82 for the period 1960-89 (1994). The growth rates of GNP per capita look superior to the growth rates of GNP figures. This might be attributable to the accompanying decline in population growth. Table 5.6 holds the detail data regarding growth rates of the variables considered so as to have better understanding about the phenomena.

Unlike the Korean growth rates of GDP and per capita GNP, the Ethiopian growth rates of those variables had been suffered from negative growths for considerable number of years. More over, the other growth rates were low albeit positive.

Concretely, from the 37 years (almost four decades) observation seven years were suffered from negative GDP growth rates. Surprisingly, six of those years are in the 17 years military government (Dergue) era while the other year is 1997. During the period between 1962 to 1973 (part of the imperial regime), the GDP growth rates were low around 4 per cent varying between its minimum of 1.4 per cent in 1973 to its maximum 6.8 in 1965. Since 1992, the economy seems to revive again except drought-born low achievements of 1993 and 1997. As a reflection of the growth of the national income coupled with uncontrolled population growth, the situation in growth rates of per capita GNP have been much worse than GDP figures. From the same number of years, the growth rates of per capita GNP were negative for about one third of them. In similar Table 5.6 Comparison of growth rates of GDP and per capita GNP of the Republic of Korea and Ethiopia, 1961-1997

	Korea, growth rates	Ethiopia, growth rates

year	Korea, growth rates		Ethiopia, growth rates	
	GDP	PCGNP	GDP	PCGNP
1961	6.0		6.0	
1962	2.1	6.1	2.9	1.9
1963	9.1	14.93	3.2	2.8
1964	9.7	1.9	5.0	12.5
1965	5.7	19.0	6.8	12.2
1966	12.2	13.6	4.2	1.4
1967	5.9	19.0	3.0	-1.9
1968	11.3	24.3	4.1	4.4
1969	13.8	20.5	4.2	4.6
1970	8.8	na	5.7	3.1
1971	8.5	na	4.5	-1.8
1972	4.8	na	2.5	2.9
1973	12.8	na	1.4	na
1974	8.1	na	-0.73	-2.9
1975	6.1	na	1.3	7.4
1976	11.8	na	1.3	11.4
1977	10.3	na	-0.9	3.3
1978	9.4	na	5.2	7.8
1979	7.1	na	5.5	3.6
1980	-2.7	na	3	1.2
1981	6.2	na	0.51	-3.4
1982	7.2	5.3	10.1	6.9
1983	11.5	9.8	-6.3	-9
1984	8.7	8.6	-9.7	-12.4
1985	6.5	2.5	9.9	6.4
1986	11.6	14.5	14	10.4
1987	11.5	25.3	-0.1	-3
1988	11.3	33.5	0.3	-2.7
1989	6.4	21.3	4.1	0.9
1990	9.5	12.9	-4.2	-7.2
1991	9.1	14.9	-3.7	-6.7
1992	5.1	3.7	12.0	8.5
1993	5.8	7.2	1.7	-0.5
1994	8.4	12.9	5.4	3.9
1995	na	na	10.6	7.3
1996	na	na	5.2	2.0
1997	na	na	-0.5	-3.4
1998	na	na	6.3	3.2

Source: The Korean Economy 1945-1995, 1997, p. 153 and 161 (for Korea), and table 3.2 of this paper, (CSA Abstracts and Befekadu Degefe for Ethiopia).

Note: Per capita figures of both nations are calculated from the data in the corresponding sources.

fashion, from the total of 12 years in which per capita GNP growth rates are negative, eight years are in the military government era. The Imperial and the prevailing governments equally share the other four years of negative per capita income growths. The concentrated/disproportionate distribution of negative growth rates, regarding both

indicators, in the period between 1974 and 1991 discloses the grievousness of the economic chaos during the socialist ruling. (Refer table 5.6)

5.3.2 Comparison by Export Performances

5.3.2.1. Total export Performances

In the case of Korea, before the early 1960s, the industrial development strategy was import substitution. According to Choong Yong Ahn, Korean economic growth under the import substitution regime was ineffective despite massive foreign aid. Hence, with the collapse of the Syngman Rhee regime in 1960 and the installation of the military government headed by General Park Chung Hee in 1961, the economic development strategy shifted to that of rapid export-led out-ward looking industrialization. (1997, p.334 & 335). Simultaneous occurrences of export-promotion strategy and the accompanied quite rapid economic growth characterize the period since 1961. This justifies that the policy switch from import-substitution (in-ward looking) towards export promotion (out-ward looking) industrialization was the right choice enabling them to hit the target; and thereby their dream of prosperity became successful.

The Ethiopian development strategy was export led for the period between the second WW II and 1960. Up to 1960, the Ethiopian economy may be said to have opened its doors to foreign trade. However, this did not continue for long. Since the early 1960s, restrictions against foreign trade were erected. Gradually, the export-led economy deteriorated due to the excessive preoccupation of import substituting industries which

led to the fundamental changes in the direction of economic growth strategy; and ultimately the development strategy became import-substituting for the course until the end of 1980s. Since the first half of 1990s, the new development strategy for the economy as a whole has been Agricultural Development Led Industrialization (ADLI), while export promotion (outward-orientation) has been the strategy for industrial development. (MOPED, Sep. 1993, p. 9-18). This double facet strategy is based on the sectoral distribution of the population, and intended to benefit the mass through the integration of different sectors of the economy. This implies that for three decades since the early 1960s, the Ethiopian industrial development direction had been import-substituting. Before and after this long period, it was/has been export promotion. According to MODEP, the import-substitution strategy, which replaced the earlier development strategy, was not particularly noted for bringing about meaningful economic expansion or benefits. This may be observed from the growth of GDP which was considerably higher than the rate of population growth in the 1960s but which dropped below the rate of population expansion in the 1980s. (Ibid. p. 9)

Having said this much on the policy framework of both economies, we can visualize the achievements of the implementation. Being a forefront source for fast economic growth, Korean export has been the pillar and the engine of the miracle. It contributed huge portion of the GDP. Possibly to observe on table 5.7, at the end of the import-substituting strategy, 1962, the share of export in GDP was low at only 5 percent.

Since the change of the strategy towards the export-promotion and implementation of it, the percentage share of the export in the GDP had shown significant progress. It increased from its low share, 5 per cent, in1962 to 9 per cent in 1965 and 14 per cent in 1970. It further increased to 27 per cent in 1974 and reached its peak, 34 per cent in 1980 and persisted up to 1985. More over, for the period since 1985 its share became stable at about 30 per cent.

The other salient feature of the strategy could be realized by the extraordinary annual growth rates of export especially in the first two decades since its implementation. It grew at about 40 per cent annually for the period between 1962 and 1974. That is why the period between 1965 and 1973 are said to be 'years of the miracle'. For the years after that also, export had grown at positive rates but seemingly low. This is because of the reason analogous to the principle of convergence theory, that says, it is possible to grow fast starting from low level but difficult to do so from high level. However, it does not mean that marginal export is small. In any case, the export performance in Korea has been extraordinarily massive being the engine of the growth. (See table 5.7)

Table 5.7 Export Performance of the Republic of Korea and Ethiopia for Selected Years

Year	Korea's Export			Ethiopia's Export		
	Value Index	Growth from the previous year (%)	% of GDP	Value Index	Growth from the previous year (%)	% of GDP

1953	100	-	-	100	-	8.8
1962	138.0	37	5	106.4	-	8.0
1965	442.3	47	9	153.7	9.2	8.5
1970	2222.2	34	14	160.6	1.0	6.7
1974	11373.0	39	27	297.3	10.9	11.2
1980	43360.2	16	34	477.2	0.6	10.9
1985	66606.3	4	34	512.1	26.6	11.4
1990	159001.5	4	30	310.8	-24.4	5.2
1991	175268.5	11	28	172.9	-44.4	3.0
1992	189343.6	7	29	515.6	198.1	8.1
1993	203904.0	7	29	770.9	49.5	11.9
1994	235960.5	17	30	1539.8	99.8	22.4
1995	na	na	na	1416.2	-8.0	18.6
1996	na	na	na	2113.8	49.3	26.4
1997	na	na	na	2249.6	6.4	27.9

Source: Indices are calculated from the values given in book ' The Korean Economy 1945-1995,' 1997 (for Korea), and from CSA statistical abstracts and NBE (for Ethiopia). The Ethiopian Export a percentage of GDP is also calculated from the data in the same source.

On the other hand, the Ethiopian export performance had been disrupted by the policy shift from the export-led to the import substitution. Until the first half of 1969, the share of export in the GDP was about 8.5 per cent. Right after the practice of the policy shift in favor of import substituting industries, the GDP share of export started to decline and reached 6.7 per cent in 1970. According to the table, its share in1974 and 1980 seems relatively high. However, it was brought about not only by the expansion of export but also by the recession of the whole economy particularly in 1974. We can verify this inference by diagnosing the growth rates of GDP in the two corresponding years. As indicated in table 5.6, the whole economy grew negatively in 1974 (the year of political instability due to abrupt government change) and at moderately lower rate in 1980 also. So, the figures representing GDP shares of export for these years seem high, as a cumulative effect of little expansion of it and recession of the other part of the economy. This trend of inconsiderable actual export expansion had continued until the end of 1980s.

Over the same period, its percentage changes from that of the previous years look declining with exceptions of 1974 and 1985.

Since the late 1980s, the country was plunged in a pervasive civil war followed by the early 1990s government change. During those rainy years, not only the export but also other economic performances had shown caustic deterioration followed by the fast recovery. This is also reflected by the data on table 5.7, by all performance indicators including export share of GDP, percentage change of export values from the previous year and even the value indices.

After the agreement on the general national situation, since 1992 the exporting practice has been proceeding based on export-led industrialization strategy. As we can comprehend from its values, percentage growths and shares of GDP, the export performance has been prosperous despite no radical improvement has been achieved.

Based on the above separate explanations about Korea and Ethiopia, it might not be a mistake to say that comparing the export performances of the two countries could be analogous to do so between rat and elephant. This metaphor is supported by the following diagrammatic illustration of the export value indices of the two countries.

5.3.2.1. Manufacturing Export

The manufacturing commodities through out the course of export driven economic growth have dominated Korean export. Particularly, the policy switch from import-substitution to the president Park-born-outward-orientation, manufacturing export has become the lion's share from the total export. As the last a achievement of import-substitution strategy, in 1961, it accounted about 15 per cent of the total export. Beginning from 1961, the starting point of export-promotion, the share of manufacturing export has been inclined up steeply and dramatically. It increased from its bwest 15.2 in 1961 to 93.6 per cent in 1993. The increment has been consistent for all of the years in consideration. Likewise, its share in GDP has been increasing consistently. It accounted only 0.3 per cent of GDP in 1961; however, since President Park on the chair, its GDP share had increased to 2.4 per cent in 1965 and reached about 29 per cent in 1980, the end of his presidency. Thanks for the past experiences; the Korean economy continued its momentous upward swing being dominated by the manufacturing export next to the service sector contribution.

It is in such away that the export particularly from the manufacturing side has been the pillar and the engine of the Korean success story. The Korean transition from one of the poorest nations in the world in the pre-1960 period to the status in that it becomes a candidate for OECD membership has been engineered by the manufacturing export.

In a total sort of contrast, the manufacturing export performance in Ethiopia has been weak for long. The unavailability of the relevant data for the pre-1991 period disables us to examine the contribution of manufacturing to the total export being under the impediments of import-substituting strategy. However, it might not be that much a problem to envisage the stage where the Ethiopian manufacturing export could be positioned. Looking at the performance measures of the sub-sector after the implementation of export-promotion industrial development/external sector strategy could do it.

Table 5.8 clearly presents the export contribution of the manufacturing industry since 1991. According to the available data, both the GDP as well as the total export share of the manufacturing export has been incomparably low at about less than 2 and less than 30 per cent respectively. As of 1991, its share in the export was about 29 per cent while its share in GDP was as low as 0.45 per cent. The respective shares became 18.15 and 1.52 per cent in 1994. The former further declined to 11.2 while the latter also decreased to about 1 per cent in 1997. For the 1991-93 period, export share of manufacturing looks relatively high. However, this does not imply that the volume or the value of the manufacturing export was superior to that of the other years. Rather, it tells that, the lowest total export performance of that year. This conclusion is further verified by the lowest manufacturing export contributions towards GDP for those years. (See table 5.8)

Table 5.8 Relative Export Performance of Korea and Ethiopia

Year	% share of Korean Manufacture export		Year	% share of Ethiopian Manufacture export	
	in total export	in GDP		in total export	In GDP
1961	15.2	0.3	1991	29.2	0.45
1965	61.0	2.4	1992	21.4	0.76
1970	77.4	8.6			
1975	81.6	17.5	1993	20.0	1.00
1980	90.2	28.9	1994	18.15	1.52
1985	91.7	31.7			
1990	93.8	34.4	1995	25.14	1.73
1992	93.1	36.3	1996	14.8	1.39
1993	93.4	38.5			
1994	93.6	-	1997	11.20	1.03

Source: MEDaC for 1991-93, Berhanu Nega for 1994-97 and NBE (for Ethiopia), and the Korean Economy 1945-1995, 1997, p.61 (for Korea)

On the other hand, the declining of both shares for the latter years manifest not the decline in volume or value of manufactured export but the expansion of primary exports more than proportionately to (more rapidly than) that of the manufactured export. Further more, MEDaC of Ethiopia despite its marginal and declining contribution total export earnings, manufacturing export has been expanding at an average rate of 37 per cent per annum in absolute terms during the period 1991/92 to 1996/97. This is a signal for the possibility of further expansion of exports, as compared to 2 per cent annual decline of the 1980s. The decline during the pre-reform (pre-1991) period has been attributed to the unfavorable policy environment that prevailed in the military regime in addition to the inherent weaknesses of the manufacturing sector itself. (1997, p. 221).

The Ministry further explains

> Though there exists a better macroeconomic and sectoral policy environment since the reform program, the road to increased and competitive manufacturing export in Ethiopia is believed to be long and

> fraught with tough competition in the global market. The fact that the chemical group has come out of manufacturing export since the reform program while the contribution of food, beverage and textile groups declined in recent years reminds us that challenges of expanding the manufacturing sector in general and its exports in particular are formidable and need special attention.

In summary, the Korean and Ethiopian economic performances measured by the main macroeconomic indicators in general and export, more precisely manufacturing export in particular are incomparably in different zones of classification. In that, Korea is going towards the top from 101st in 1962 to 14th exporter in 1986 (Robert Wade, 1990, p.231) while Ethiopia is left around the bottom persistently for long time. In the history of development experience, Korea has attained the role of leadership in demonstrating export-led rapid economic growth more critically in the manufacturing boom while Ethiopia has been insisting to agriculture but lagging behind many developing countries in the performances of other economic sectors. The next issue to which due attention should be paid is the identification of the main reasons for the ever-widening gap between the two economies. The following section is made to be devoted for this purpose.

5.4 Main Reasons for the Widening Gap between the Performances of the Two Economies

To highlight some of the causes of the divergence that we assured above through thorough investigation of the main economic indicators of both nations, it is advisable to notice, at least, the situations under which the respective economies were functioning. Regarding the first-best condition to be fulfilled for a country to operate full heatedly,

Ethiopia was in a devastating prolonged civil war for 17 years while Korea was mainly, if not totally, free from that since the armistice of 1953. The other factor that has some thing to do with economic performance is the economo-political system followed by the respective counties. Long time ago, both countries were governed by feudal systems in that land resources were unfairly owned by the landlords while others were ignored to be tenants. This feudal ownership with no land reform lasts until 1950 in Korea, and 1978 in Ethiopia. After the abolition of the feudal system, Korea has been following capitalist system with varying degree of market mechanism (government involvement) under it while Ethiopia switched to socialistic rules for 17 years and in the later years to market economy. Albeit the mismatches in time on the power, the two countries shared one common historical occasion, i.e. both were governed by military governments. However, the systematic frameworks, the performances and the achievements had been quite different. The Korean military government (1961-1980) transformed the economy from backward agrarian to modern industrialized, and the people from impoverished to the gratified one with improved living standard through a zealous 'We-can-do-it' spiritual motivation for development. In contrary, the Ethiopian military government (1974-1991) devastated the economy through a series of measures such as nationalization of private enterprises, resource mobilization towards the prolonged internal war and rampant corruption resulted in worse social, political and economic turmoil.

The other differences on the basement rely on what happened in relation to the other world. Regarding Korea, it is sharpened to mention the unilateral contribution of US aid and the Japanese colonial legacy. According to Kwang Suk Kim and Joon-Kyung Kim,

the Korean economy achieved substantial industrial growth and structural change in quantitative terms during the Japanese colonial rule even though the destruction by the Korean war (1997, p. 7). Far more than this is the inducement of the know-how about manufacturing and entrepreneurship during the 36 years colonial period. The inherent importance of their geographical proximity is also the other factor enabling them to ease technological and experience diffusion among them, more probably that makes Korean net beneficiary.

Unlike Korea, such opportunities have never attained by Ethiopia for a reason that it has neither been under colony nor advanced neighbor. However, this way of reasoning should not lead us to the idea that being colonized by advanced countries is resultantly advantageous. This could be backed by many laggard African and Asian countries that were under the aggressive colonization of the west. But, at multidimensional socio-economic costs, the colonizer had induced manufacturing establishments and other infrastructural facilities that Korea did not lose.

The other initial difference is lied on the degree of being a recipient of foreign aid. South Korea, after the liberation from the colonial rule, was endowed with huge aid from UN and US. Suk Kim states

> …even during the war period of 1950-1952 south Korea received grant-aid, totaling $330million, from various organizations of the US and the United Nations Korea Reconstruction Agency (UNKRA). The receipt of grant aid actually peaked in the post war reconstruction period (1953-1960). The assistance provided by UNKRA during the construction period amounted to approximately $120million, while the US official aid reached $1745million, including Public Law (PL) 480 funds for food assistance. (Ibid, p.13)

But at that time Ethiopia was not that much the client of external assistance in spite of the fact that it has been a recipient of donors irregularly at the time of starvation. However, the donation for reconstruction was insignificant, if not nil.

Having conceived this much about the initial differences between the two countries, the next paragraphs are intended to be devoted on the main causes of the widening gap i.e. development policies, strategies and practices of the respective nations. The performances and achievements' widening gap between these nations is mainly due to these critical differences.

For the period up to1991, since the history of economic planing of both countries, the two countries had followed quite opposite industrial development strategies, at large. Before the early 1960s Korea had followed import substituting while Ethiopia did exported strategy. Since the early 1960s, the two nations seem they had exchanged their development strategies for the period up to the early 1990s in that Ethiopia has shifted its industrial development strategy from the export-led to the import-substituting one. Since the presidency of General Park, the Korean development strategy has been outward looking export promotion. In contrary for the period between the early 1960s and the early 1990s, the Ethiopian development strategy had been rendered unwisely import-substitution based on the idea to secure domestic demand for domestic industrial products. Recently, soon after the over thrown of the socialistic military government, the

Ethiopian industrial development strategy has been geared towards out-ward looking export promotion.

In my opinion, the performance gap/divergence has been resulted mainly from these frameworks and other policy contents of the strategies. The policy evaluation in this paper is not intended to be comprehensive rather a partial one. This partial appraisal is due to the narrower scope of the paper targeted at only the related industrial policy measures.

Actually, the larger portion of Korean development is explained by the industrialization as a primary consequence of export promotion. In the 1950s even trade optimists were export pessimists and did not anticipate that Korea's exports would grow four folds as fast as world trade during the next three decades and then after well above international norms (World Bank, 1993, p.37). This efficiency of export performance occurred at the time that they were under going the most "compressed" transformation from light to heavy industries that the non-communist world has ever seen. Its ratio of value added in light industries to heavy industries fell from 4 to 1 in fifteen years. South Korea may become the first new producer in two decades to break in to the oligopolized world car industry, and it is also one of the world's three main fabricators of large capacity memory chips. (Wade, 1990, p.231)

Here, the great question is how this happened in a country that looked unpromising in 1955. According to Robert Wade, one popular interpretation of East Asia economic

success holds the vigor private entrepreneurship at the core operating in relatively open economies that in turn enabled to overcome the limitations of small markets by exporting manufactures at competitive prices. In contrast, countries like Ethiopia, which adopted more inward-looking strategies based on the domestic market have stagnated because of limited economies of scale and the regulations needed to support the strategy choked the initiative of private business people, depriving their stimulus of rivalry and misdirecting their remaining energies in to rent seeking activities. (Ibid. p.233). Moreover, the complicated regulations and measures of nationalization frustrated the private sector hindering the establishment of new industrial plants and the capacity expansion of the existing ones.

The government role, in South Korea, has been active in the market able to influence the use of public and private resources in line with a vision of how the industrial structure of the country should be evolved. This was done through incentive mechanisms such as subsidy, tax incentives and others in a manner that it cooperated with the market forces. Every thing was directed to the export promotion. For example, there was a monthly conference in which the President, respective Ministers and private exporters got together and discussed on the over all export performance and the impediments keenly aimed at avoiding the obstacles to make the way smoother than that would had been otherwise. Proceeding on the road of export promotion by itself solved many constraints like shortage of foreign exchange and lack of market for the products. Further more, it was the way to create competitive entrepreneurs and accumulate tough experiences in the field in addition to its importance for technological diffusion. The Korean government

was conscious enough in promoting the investment also. It focused on the infrastructural expansion so as to encourage private investment. A series of incentives including tariff reduction, investment credit, preferential interest rates, easy borrowing, tariff and tax exemption and others were instruments for the importation of raw materials related to export and investment/capital equipment. This government involvement was intended not to substitute but to compliment the market forces in order to direct the economy to the desired direction. Over time, as the market matures, the degree of intervention has been declining to allow the economy to be self-adjusted and competitive.

While this is what was happening in Korean industrialization process, the Ethiopian government was following a direction in that public enterprises were dominant players and government was the dictating force in resource allocation through price control mechanism. Price ceiling and floor were the main forms of direct government intervention inherently creating shortage and excess supply resulted from the respective price controls. The government, to the extent that it engaged in retail trading and hotel service provision, monopolized many promising enterprises. The general move of the command economic system was miserably the bottleneck of the expansion of private entrepreneurship and invention. The available scarce resources were rationed for public enterprises followed by cooperatives at preferential interest rates neglecting the private sector.

The economy was almost in the state of autarky in that prices were manipulated manually coupled with rationing of the goods that their supply fell short of the demand. In the

mean time, the country was neglected from the international trade and cooperation arena except with the socialist bloc. This caused shortage of foreign exchange that in turn disabled the country from importing investment goods. Even that small amount of foreign exchange earnings was fired for the importation of heavy and light weapons and artilleries. For this and other socialistic policy evils the economy plunged in to the worsened complication.

The export-led industrialization of Korea did not occurred with a total ignorance of the agricultural sector, rather rendered to grow at high productivity. The decline in the relative importance of agriculture during the process of industrialization was not because agriculture had lacked dynamism.

> In fact Koreas agricultural performance in the past four decades exceeded the world average. In terms of land productivity, Korea probably is one of the highest-ranking countries. Slow growth is basically attributable to the sub marginal farming scale resulting from poor land endowments. (Pal Yong Moon, 1997, p. 468)

Many factors contributed to the success of agriculture in Korea. Land reform of the 1950, agricultural extension services, and reasonably good infrastructural capital spending. In the 1960s, most of the public investment was concentrated on small scale irrigation schemes, reforestation, rural electrification, while private investment went to the betterment of the land productivity and livestock raising. Entering the 1970s, the emphasis of public investment shifted toward large-scale irrigation, reclamation, farm mechanization, and development of markets and related facilities. Increased emphasis was also given to rural infrastructure development particularly roads, village restructuring and water supply under the Saemaul movement initiated in 1972.

These efforts all suggest that the Korean industrialization was supported by the dynamic agricultural productivity resulted from the deliberate focus on the sector so as to link the agriculture to the other sectors in supplying food, labor force and using industrial products like fertilizer and farm tools-forward and backward linkages.

In Ethiopia, but, agriculture did not show significant decline in share and improvement in productivity during the import substituting era despite limited efforts to introduce agricultural extension services, state farm mechanization, agricultural research and provision of inputs. However, these services were confined only to few areas due to shortages and infrastructural particularly rural road problems. On the other hand, the sector is susceptible to the changes in natural calamities in that it has been seriously affected by successive drought. In addition, the forward and backward linkages have been weak among different sectors of the economy. The industrial sector did not expand enough to absorb surplus labor from the agriculture. For that reason, the limited agricultural land becomes over saturated leading to further fragmentation and degradation. This problem was intensified by the low level reforestation practices due to that the country has been exposed for expanding desertification and further loses of productivity. According to Mekonnen Taddesse, studies show that cropped areas lose on average nearly 100 tones of soil per hectare per year and grain production reduced by about 2 per cent per annum. (1992, p.31)

The other reasons for the widening gap between the economic performances of the two countries include the differences in population growth rates in that it fell from 2.6 per cent per annum in 1960-70 to 1.1 per cent in 1980-90 in Republic of Korea (World Bank, 1993, p. 39) while that of Ethiopian population growth rate risen from 1.6 per cent in 1962 to 2.6 in 1978 and to 2.95 in 1990 (CSA, 1964 and Berhanu Nega 1999/2000), human capital and cultural values.

In general, the gap between the economic credentials of Korea and Ethiopia has been widening because of a spectrum of reasons including the economic development strategies, policies, and the politico-economic systems under which the countries were functioning, at the top.

5.5 Detected Problems of Industrialization Process and Suggested Solutions in Ethiopia

The Ethiopian manufacturing industry is still constrained by several kinds of problems. These problems in sum render the establishments to operate under capacity. Farther more, blaming by the same reasoning, a considerable number of establishments are not being fully operational. They are forced to operate below the possible working time.

These under capacity and ‘stop-go' type of operation coupled with the smallness in number of manufacturing establishments have a disastrous effect on the economy. They would lead the plants to operate at around the shutdown/break-even point in that the enterprises might work for a return even that could not cover the variable cost. Principally, for any profit-oriented enterprise, the loss should not be more than the fixed cost if it continues to function. There fore in our country, Ethiopia, in which the business art is under developed, problems that are blamed in hindering manufacturing establishments to not being fully operational and not working at full capacity could result serious bankruptcies. Not to be the victim of this pessimism, firstly the problems have to be identified; secondly by any possible means, they have to be minimized, if not possible to eradicate totally. Hence at this stage, identification of the problems with their accompanying weight of hazard, be comes crucial.

The problems, in one way or another, are intertwined to the supply and demand circumstances. Although they scratch the sector at varying degree, the constraining problems include shortages of the supply of raw materials, spare parts & utilities; lack of foreign exchange & working capital; absence of market demand; frequent machinery breakage; obstacles from government rules and regulations; and others.

According to the two successive recent surveys of CSA, the degree of the hazard of the problems is summarized in table 5.9. As the survey of 1995/96, the first and second reasons for the LMS industrial establishments not being fully operational were absence of market demand for the products and shortage of the supply of raw materials. On the table,

it can be observed that among the total 208 establishments working less than 12 months during the reference period, (excluding other reasons), 65 (about 31per cent) and 54 (26 per cent) of them blamed absence of market demand and shortage of supply of raw materials respectively as the first major reason for not being fully operational. Similarly, the same problems with the same ranks in the same period described the reasoning for not working at full capacity. The next year, 1996/97, survey also reinforce exactly the same record in both operational problems.

Hence as discovered by the two negative effects of under capacity operation for two successive years, the first two major constraining problems of the country's industrialization are absence of market demand for the products and shortage of supply of raw materials. This reinforces the above proposition disclosing its weak linkage, within the sector itself and across other sectors of the domestic economy. Next to these are shortages in the supply of spare parts, utilities including electricity and water; machinery breakage; lack of working capital (credit availability) and other problems.

Table 5.9 Percentage Distribution of LMS Industrial Establishments byFfirst Major reason for not being Fully operational and not Working at Full capacity by industrial group-Public & Private, 1995/96(A) and 1996/97(B)

			Reasons for not being fully Operational, 1995/96 & 1996/97; Shortage or lack of																		Reasons for not working at full capacity, 1995/96 & 1996/97; Shortage of															
NO	Industrial Group	raw materials		spare parts		FX		Markt dd		working K		electricity & water		Machinery breakage		Gov't obstacle		others		Total		raw materials		spare parts		Markt dd		credit facility		FX		adequal skill		others		Not stated		Total	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1	Food & Beverage	9	16		2			12	15	4	1	3	2	7	5		2	20	15	55	58	39	37	9	17	72	88	2	2	1		1		27	23	21	14	172	181
2	Tobacco																																		1				1
3	Textile	4	4	2	1			2	1									2	1	10	7	11	10		3	17	20	1				1		1	1	1		32	34
4	Wearing apparel except fur		2					2	1				1				1	2	3	4	8	7	8		1	11	10		2				1	3	2	1	2	22	26
5	Leather & shoe	9	4					18	20	1	2				2	1		2	4	31	32	20	18	1	2	34	29	1	2	1				3	3	3	3	63	57
6	wood & cork	7	7	1				1					2		1		1	2	1	12	12	12	14	3		4	2							2	2	5	5	26	23
7	paper & Prin.	1			1			1	1				2					4	1	6	5	11	10	1	4	15	22	1	1					9	2	6	4	43	43
8	chemical	3	8					6	10	1	1								4	12	23	7	13			16	23	1	4					7		4	3	35	43
9	Rubber & plast	1	2					1	3		1	1	2						1	3	9	5	6		1	3	9			1				2	4	3		14	20
10	Non-Metallic	14	18					14	15	2	3	1	8	2	4		1	13	7	46	56	14	12	10	10	36	37	3	4				1	16	27	6	5	85	96
1	Iron & Steel	1	1															1	1	2	2	1	1			2	1		1				1				1	3	5
2	Fabricated Metal	2						3	5			2	3						3	7	11	5	6	1		19	25	1						7	9	6	4	39	44
3	Machinery & equip.								1	1	1							1	1	2	3	2	1			10	10							2	2		1	14	14
4	Vehicle, Trailers		2					2										1		3	2	2	4			7	4							2	1		1	11	10
5	Furniture	3	1					3	2	1	2	3	11		1	1	5	3	5	14	27	27	25	2	1	23	52	5	3				2	10	15	4	12	71	110
	Total	54	65	3	4			65	74	10	11	10	31	12	13	2	10	51	47	##	##	163	165	27	39	269	332	15	19	3		2	5	91	92	60	55	630	707

Source: CSA (1997 &19 98) p. 31-32 & 30-32.

The most victim sectors of first major problem, absence of market demand for the products, are leather & shoe, chemical and non-metallic industries. These industries especially the latter two are among those that have high import intensity and weak domestic linkages.

Still the indicators point to the major weakness of the economy, i.e. the weak intra- and inter-sectional linkages in supplying raw materials to and demanding products of one industry or sector by others. Hence, the solution is one but a vital and wider one. That is the creation of strong intra-and inter-sectoral linkages with in the economy itself along with the vigor practice of export promotion through a series of market exploration endeavors. In creating demand for the products, adjusting and diversifying products according to the taste of the consumers (domestic as well as foreign), augmenting the purchasing power (income) of the citizens and developing patriotism in that the people tend to consume domestic products are among the top possible measures.

Secondly, special incentives for the importation of spare parts and machinery, it could be in terms of taxation and tariffication, and developing the countries capital market in a way that can alleviate the shortage of credit availability are also among the possible policy instruments. The other vital instrument is increasing the power and water supply of the nation not only for the eradication of their impediments for the manufacturing but also for the improvement of the people' s well being.

5.6 Lessons from the Korean Industrialization Experience

The situation under which Korea went up a hill has been altering from that of favorable international market situation for the export promotion strategy to the tightening rules and regulations of WTO in that retaliation has been the impediment for the export promotion of developing nations. Furthermore, the culprits of globalization that is intended to lie on the way towards industrialization starting from the low-level infant industry. Any way, there are a number of substantial lessons from those Ethiopia benefits. Although the assertion is a partial one, the main lessons can include the following:

1. The industrialization process should not be done at the deterioration of agriculture rather it should be based on the productivity improvement of this pillar sector, in the case of Ethiopia. Like Koreans, this could be succeeded through capital spending on rural infrastructure development, provision of extension services, agricultural research and farm land intensification with productive inputs. In the meantime, the agricultural prices should be maintained at reasonable and encouraging level like the Korean 'rice-price' policy not through subsidy or price floor but through cooperative mechanisms and strengthening the local input utilization of domestic manufacturing industries.
2. The industrialization strategy, without any doubt, should be outward-oriented export-promotion. Because by this strategy, as Koreans did, the small domestic market problem can be shattered, the shortage of foreign exchange for the importation of raw materials and investment goods can be minimized, if not avoided, skill of

entrepreneurship capability & experience can be evolved through the competitive spirit of the international market. In addition, it is the main mode of technological diffusion, and learning from others and our own experiences can be enhanced. Export-promotion strategy plays also a noteworthy role in attracting investors. It was also the engine for the Korean investment boom, and will be so in Ethiopia by avoiding "stop-go" policies associated with balance of payments difficulties that has been plaguing the country.

3. When we look at the process of Korean economic transformation, the decline in importance of agriculture was compensated by the rise in that of both industrial and service sectors. But, in Ethiopia for one thing the decline in the agricultural sector has been going on tortoisely. For another thing, its decline does not seem to be compensated by the industrial sector rather attained almost fully by the service sector in that trade, hotel and restaurants have controlled the significant portion. In my opinion, this unbalanced expansion in the service particularly in those mentioned above and stagnation of the industry need due attention that can promote the industrial sector. The direction in doing so may include simplifying the procedures and regulations for both domestic and foreign investors plus special incentive provision to direct the flow of the capital towards the interest of the economy.
4. The Korean economic take-off was initiated by labor intensive light industries in that textile and clothing followed by metal production were dominants. But food and beverage were in the middle stage at the beginning but have been around the last in contribution. The fastest growth has been registered after the 1970 HCI promotion. Hence we can learn from this that the dominance nature of food and beverage

production and still low contribution of metallic, non-metallic and chemical industries should be controlled by policy instruments that can divert the investment from retail trading, hotel & restaurant services to the industry along with the measure of investment diversion from food and beverage toward the declining clothing and textile, metallic and chemical manufactures even within the sector. This is not forgetting the backward linkages with the agriculture and the service rendering role of food and beverage manufacturing branches but seeking for the production of investment goods by shifting the flow of capital from the relatively saturated part towards the more promising and underdeveloped areas of investment.

5. The input intensity of the Ethiopian industry as explained by Dr. Berhanu, (1999/2000) tends to be capital intensive. This is absolutely the opposite of what should happen in Ethiopia as it has cheap labor force & thereby comparative advantage to be specialized on labor intensive manufacturing. The reliance up on outer oriented trade strategy allows the realization of economies of scale and exhaustion of every opportunity. Meanwhile, it renders to specialize on the types of production at which the country has comparative advantage on the basis of resource endowments; e.g labor-intensive manufacturing should be one area of specialization. Next, those manufacturers mainly consuming agricultural and other primary products should be the typical areas of specialization.
6. The Korean industrialization was first initiated by light particularly textile followed by metallic and chemical industries and then enhanced by the heavy and chemical industries derive of 1970s. The expedition to the Ethiopian industrialization can follow this direction. In that, the importance of food and beverage to decline and

industries that can be transformed to heavy stage such as metallic, non metallic mineral and chemical industries in a way that does not create economic power concentration in few companies and few regions.

7. Government, in addition to its role in complimenting the market, it should focus on the improvement of health and educational attainment, both coverage & quality, transportation and communications for their expansion and reasonable efficacy. Even, it should prepare it self for the reaction against external shocks.
8. The government intervention should be targeted at filling the gaps of market failures and it should pull out its hands gradually from the market depending on the extent of market maturity. Otherwise, leaving the market totally free in a situation that problems are persisting in market-based resource allocation might be jeopardous for the economy in terms of imbalances, shortfall in the provision of public goods and at the presence of externalities. Hence, the degree of market freedom should go parallel to its perfection in resource allotment. However, it does not mean that the economy should suffer from heavy handed direct controls. Let the private sector to be the role player, and the government to create favorable policy environment and level field through infrastructral expansion and public goods provision.
9. The other important experience of South Korean economic growth is the resulted regional imbalances. The Ethiopian industrialization is also suspicious in this regard starting at unfairly uneven distribution of industrial establishments and value added. So, government should play a leading role in directing and motivating investment to the relatively backward regions. The economic power concentration tendency around the capital, Addis Ababa and the region around that looks similar to what has

happened around the South Korean capital, Seoul. So, our government should be careful in controlling the economic power concentration in and around Addis Ababa.

10. The Saemaul Undong new community movement of the early 1970s and the values of Confucian culture have a considerable experience. Saemaul Undong was a new community movement in that the rural people fought against backwardness and poverty of the rural villages. Intrinsically, Confucian culture of South East Asia with its amenities particularly the filial piety embracing diligence, thriftiness, emphasizing on education and saving from whatever some one has could be important experiences. The patriotism and egalitarianism of the Ethiopian people should be maintained and geared towards the consumption of local products despite marching against the preach for globalization and MFN agreement of WTO in that Ethiopia has not been a member. Robert Wade, argues that the three propositions that economies can learn from the industrial success of South East Asia are:-
    a) capital accumulation matters
    b) protection can help rather than hinder the emergence of internationally competitive industries.
    c) Sectoral industrial policies that lead the market can improve up on the growth out comes of self-adjusting markets (1989,p.69).
11. Along with the tightening of our belts for the massive struggle against poverty, the Ethiopian population growth has to be controlled and forced to grow at declining rates. Otherwise, even though GDP increases over time, the living standard may not be changed due to the cancellation of the GDP growth rate by the population growth rate.

CHAPTER SIX: SUMMARY & CONCLUSION

6.1 SUMMARY

Ethiopia, as one of the poorest African Countries, has a population of above 60 million. Among these, the agricultural population is estimated to be around 85 percent. While the rest 15 percent is employed in the private industrial & service sectors and in government offices. The people are living under the extreme poverty with a real per capital income of US $100 as of 1998 while the average income for low-income countries in the same year was 520.

As a typical agrarian economy, large portion of the national income is originated from the agriculture particularly the small holder farming. For the whole time before four years, the sector had been contributing more than half of the total GDP in that its share ascended as we go back to the past years. Even for the years after 1996/97 in which its share becomes below half, its contribution is still considerably high. This agrarian nature of the economy makes it very sensitive and vulnerable to natural shocks particularly rain.

On the other hand, the service sector looks expanding over time abnormally. Because the industrial share in GDP has been stagnant at less than 12 percent. This depicts the gradual and unhealthy transformation of the economy from the agriculture towards the service sector in which trade hotel and restaurants are dominant parts.

Industry comprises of manufacturing, mining, quarrying, electricity and water, and building and construction. However, its larger portion is manufacturing including all levels. Hence, intentionally, the manufacturing sector performances become the center of the study. The Ethiopian manufacturing is characterized by light consumer goods production. Mainly the manufacturing production consists of food, beverage, textile and wearing apparel, leather and shoe, wood and furniture, paper, printing and publishing, chemical and rubber, metal and non-metallic minerals. Up to the present, food, beverage and textile in terms of number of establishments, value added & employment trends dominate it. In fact, for the latter years, leather and shoe, chemical, non-metallic mineral & metal manufacturers have shown a reviving trend.

From regime wise evaluation, the industrial output was growing at positive rates in the pre-1974 in which first export-promotion and since the early 1960 import-substitution were the development strategies. For most of the period between 1974 and 1991/92 (Socialist era), it grew by negative rates. Since the regimes change from socialism to capitalism and strategy changes from import-substitution to export-promotion industrial development, the sector has been growing at about 8 percent in an annual average. This justifies to say the middle policy regime was disastrous for the sector while the present favors it albeit many problems to be addressed.

Further more, the industrial sector could be explained as it is at its infant stage in that many of the establishments are cottage/handicrafts and small scale industries while the

number of LMSIs is insignificantly small compared to the total. However, high portion of the production is ripening from the LMSIs.

The ownership pattern has varying style in the three regimes in which public ownership became the dominant one for the middle socialistic military government ruling. This has been curved by the inducement of market-based capitalist system and diverted to the private ownership intensified by favorable policy instruments and a series of privatization and decentralization measures against public owned enterprises.

These policy and practical measures seems to initiate the industrial sector to recover from its war-damaged declining to the promising and flourishing trend as evaluated by its number of establishments; & contribution to GDP, employment, foreign exchange earnings and employment. However, it is incomparably at low stage in every respect if viewed from the eye of the Republic of Korea industrialization.

Korea and Ethiopia were on a similar economic situation with very narrow differences for the period prior to 1960. During that period Korea was following in-ward looking import-substituting while Ethiopia did export-led development strategy. However, after the adoption of in-ward looking import-substitution in Ethiopia, the situation started to differ quickly through that Korea become the successor while Ethiopia become foot-dragger and plunged in to socio-political chaos and economic down turns.

The Korean export-led rapid economic development experience has enormous importance for Ethiopia. Particularly, the way to transform the economy and within the industrial sector itself from the light to the heavy and chemical industry; the Saemaul Undong community movement; the incentive mechanism towards export promotion and importation of capital and investment goods; their patriotism and egalitarian behavior; and others have a noteworthy importance for the Ethiopian economic transformation and industrialization process.

The Ethiopian industry is weakly integrated/linked to the other sectors; mean while the intra-sectoral linkage is also weak. This is mainly magnified by the supply and demand conditions. The absence of market demand for the products and the shortages of raw materials are the forefront impediments against the full time and full capacity operation of the establishments. The other problems including shortage of working capital, utilities, spare parts and breakage of machinery are secondary problems. This by itself is reinforced by their high import intensity characteristic.

This sheds light that these problems could be minimized by tuning the manufacturing industry to be strongly linked with domestic economy and consumers preference coupled with robust market search for exportable commodities. These directions, meshed together, would avoid the 'stop-go' movement of the economy. Following this direction will make the economy self-reliant in major attributes after the economy is tuned fully. For this idea to be implemented the promising and unbounded productivity and expanding possibility of the industrial sector should be recognized fully.

6.2 CONCLUSION

From the study, a number of findings have been dr awn. The over all economic performance have been disappointing for long time in that agriculture becomes the backbone of the economy employing the overwhelming portion of the people and taking the lion' s share in the total national income account. Industry, as a promising part of the economy, has not shown adequate evolutionary progress except for the last few years. This was attributable for many reasons in that the unfavorable policy switches and political instability became at the core. More seriously, the sector had been damaged by the socialist principles of communal ownership in that the nationalization and expansion of public ownership were main policy instruments. Through this process, the private sector was frustrated to expand and establish new manufacturing plants. Consequently, the number of manufacturing establishments was not only low but also declining over time particularly in the 17 years military government era.

From technological level point of view, cottage/handcrafts & informal producers dominated the manufacturing sector, at distant, followed by small scale ones. This was because of the fact that these parts of the sector were not that much vulnerable for nationalization. But, those, which were the victim of the communal policy measure, LMS establishments, had been oppressed to proceed descending fashion.

Disclosing the policy evil of the middle regime, the number of LMS establishments has started to incline upward soon after the policy switch towards free market system in

1991/92. In that, the private sector is intentionally rendered to be the role player in the economic development particularly the industrialization move.

The trend in capacity expansion as measured by the new capital expenditure and net book value of fixed assets in the manufacturing sub-sector, had been declining if viewed in real terms. Both new capital expenditure and net book value of fixed assets were declining in total despite almost constant amount of investment in the public enterprises. This was mainly due to the fast decline of the private investment up till the overthrow of the socialist and the replacement of the market system. Since 1991/92 the capacity expansion have shown a dramatic swing in that the private part assured its dynamism.

The trend in sales of manufacturing products witness that it has been increasing at decreasing rate; and the percentage share of total sales from that of total production has never been under 90 percent. However, over 90 percent of the total sales revenue is obtained from local sales. This in turn informs us the extremely low level of exporting practice. Hence, the Ethiopian manufacturing industry is weak in promoting exports and utilizing opportunities.

The Ethiopian industry is dominated by light manufacturing in that food, beverage and textile have been the main sources of production. This is happening with no visible trend of intra -sectoral transformation except a hint in the deterioration of textile industry and little improvements in the leather & shoe, non-metal and metal production since few years ago. Meanwhile, the pattern of the public ownership have gotten an upward

parabola shape; meaning that, it had attained increasing portion up to the eve of the market system and declining share then after. On the other way round, the Ethiopian light industry is dominated by cottage/handcrafts followed by small scale in number of establishments. However, large portion of the value added is ripening from the LMSIs. This in turn points us the importance of capacity expansion in squeezing the advantages of economies of scale.

The other astonishing feature of the Ethiopian manufacturing is its concentration around the regions that have relatively better infrastractual facilities. In this regard the capital and the region around it have retained larger portions of LMSIs and SSIs while some other regions have almost no LMS manufacturing establishment. This skewed distribution of LMS manufacturers has a strong adverse effect against the move towards balanced regional and inter-sectoral growth. This continued trend of unfair concentration of manufacturers in and around Addis Ababa reassures the critical importance of infrastractural expansion in and there by the diversion of industrial investments toward the lagging regions particularly Benshangule/Gumz, Somalie, Gambella and Afar.

Since the policy switch encouraging industrial expansion is visible in Tigray followed by SNNP regions from the previously neglected parts of the county next to the capital and the region around it. The future prospect also follows this trend in that domestic investors are trying to play the leading role in both investment capital expenditure as well as employment creation. However, the biased regional distribution looks to follow the same direction in that Addis Ababa, Oromia, Tigray and SNNP retain the highest portion while

the Amhara region followed them moderately. The critic lies on the trend of the distribution in that the backward areas are continuing poor as signified by either the low or total absence of industrial investment projects except visible improvements in few regions mentioned above.

Foreign direct investment on the other hand is at its encouraging inauguration despite the investment capital and the expected employment creation is low compared to that of domestic investment. Along its merits, it has two unpalatable features. Those are its concentration in and around the capital region neglecting the remote areas and its high capital to labor ratio of input utilization. Because, Ethiopia as a labor abundant nation, labor intensive producers are more important than that of capital intensive so as to enable the country to specialize in production according to its intrinsic comparative advantage.

The role of the industrial sector in Ethiopia has been at its marginal stage. Despite its contribution to GDP, employment creation, export and foreign exchange earnings, it is still unsatisfactory. Very large portions of the above amenities are derived from the agricultural sector. However, it is almost impossible to continue being dependent on the saturated and limited farming land exacerbating by the ever-rising population with its nature of ecology-sensitive and bounded productivity. Further more, agricultural products are known by their inelastic demand in that the market for them is not encouraging.

Hence, the economy should be geared towards industrialization not at the cost of agriculture but through its dynamic super performance. However, compared to its expected rapidly growing unbounded contribution and the world experience, the industrial sector in Ethiopia is contributing very little being constrained by inward policy orientation and its weak linkage within the sector itself and with other sectors of the economy.

Compared to the economic performance of the Republic of Korea, the Ethiopian economy is at its extreme poverty. Its growth has been sluggish for long time. The two nations were at a comparable stage in the pre-1960 period. However, after the seemingly policy exchange of the early 1960s in that Korea followed out-ward looking export-led while Ethiopia diverted to in-ward looking import substitution development strategies, the economic performances gap has been at ever-widening trend. This ever-widening gap is attributed to so many historical, political and economic reasons in that Korea was relatively in a favorable condition while Ethiopia was in chaotic situations. Among these, the policy, strategy and economo-political differences are at the top of the list of reasons.

The Korean miraculous rapid industrialization experience has a noteworthy importance if the tactics are well identified and harmonized to the prevailing Ethiopian economic situation. Since seven or eight years ago, Ethiopia has been launching in a vigorous economic rehabilitation program with a double facet strategy of ADLI for the whole economy and export-promotion strategy for the industrial development.

Resultantly, the Ethiopian economy as well as the manufacturing sub-sector have been recovering from their war-damaged declining state towards self-sufficiency constrained by its sensitivity to natural and external shocks. Because, the whole economy is dominated by agriculture; and the manufacturing sub-sector is highly import dependent.

Hence, the Ethiopian economic development strategy should be enhanced in such a way that strong intra-and inter-sectoral domestic linkages are created, balanced regional and sectoral developments are realized from that all the people could benefit.

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ANNEXES

Table 1. Sectoral Contribution to GDP and the Corresponding Growth Rates

Year	Growth Rate of Real GDP	Agriculture		Industry		Distributive Service		Other Service		Growth Rate of Per Capita GDP
		As % of GDP	Growth Rate	As % of GDP	Growth Rate	As % of GDP	Growth Rate	As % of GDP	Growth Rate	
1980/1	-	58.1	-	10.9	-	14	-	17	-	-
1981/2	0.51	55.7	-3.6	11.8	8.5	14.5	4.3	18	6.3	-2.4
1982/3	10.1	57.5	13.6	11.3	5.9	13.5	2.8	17.6	7.8	6.9
1983/4	-6.3	53.7	-12.5	12.8	5.7	14.5	0.3	19	1.1	-9
1984/5	-9.7	47.0	-20.9	14.8	4.5	16.2	0.9	22	4.4	-12.4
1985/6	9.9	49.6	16.0	13.3	-1.2	15.2	3.5	20.8	3.8	6.4
1986/7	14.0	51.7	18.8	13.6	16.5	15.4	15.1	19.3	6.2	10.4
1987/8	-0.1	50.3	-2.8	13.1	-3.8	15.9	3.4	20.7	7.1	-3
1988/9	0.3	50.6	1.0	12.2	-6.6	15	-5.5	22.2	7.5	-2.7
1989/0	4.1	51.2	5.3	11.2	-4.7	15	4.4	22.6	5.8	0.9
1990/1	-4.2	56.3	5.2	9.4	-19.1	12	-23.5	22.3	-5.5	-7.2
1991/2	-3.7	56.5	-2.7	9.0	-7.1	12.1	-2.5	22.4	-5.2	-6.7
1992/3	12.0	53.5	6.1	10.4	28.5	13.2	22.2	23.0	14.2	9.0
1993/4	1.7	50.7	-3.7	10.9	7.0	13.8	6.2	24.7	9.2	-1.5
1994/5	5.4	49.7	3.4	11.2	8.1	13.9	6.4	25.2	7.7	2.3
1995/6	10.6	51.5	14.7	10.6	5.4	13.7	9.0	24.1	5.9	7.5
1996/7	5.2	50.7	3.4	10.8	6.8	14.0	7.7	24.5	6.7	2.1
1997/8	-0.5	45.7	-10.3	11.6	6.3	14.8	5.3	27.9	13.3	-3.5

Source: The Ethiopian Economic Association (Vol. I. 1999/2000)

Table 2. Gross Value of Production of Large and Medium Scale Manufacturing by Industrial Branch,1969/70-1996/97 (in ' 000 BIRR)

Year	Industrial Branch										Total
	Food	Beverage	Tobacco	Textile	Leather & Shoe	Wood & wood Prod.	Paper,Printig Publishing	Chemical	Non-metallic Mineral prod	Metal Products	

1969/70	187,401	101,524	30,590	245,917	42,297	13,188	28,144	43,120	19,842	41,320	753,343
1975/76	197,696	106,639	29,508	231,996	51,472	14,059	30,680	43,629	22,545	45,344	773,568
1976/77	247,826	109,162	28,442	195,102	50,015	13,326	30,341	42,453	17,258	54,009	787,934
1977/78	331,038	135,929	38,543	262,360	68,936	17,121	43,573	71,929	19,217	78,649	1,067,295
1978/79	363,456	146,795	41,118	302,953	88,144	17,898	53,864	83,195	28,027	87,278	1,212,728
1979/80	391,810	164,423	41,811	324,133	87,591	20,246	58,570	90,922	29,243	92,671	1,301,420
1980/81	400,494	176,130	49,498	331,484	91,332	20,617	65,470	101,133	36,382	95,718	1,368,121
1981/82	400,686	248,687	74,922	359,702	119,349	8,898	75,694	144,476	38,205	120,113	1,590,632
1982/83	437,634	264,032	79,777	366,308	136,576	11,906	87,732	157,868	34,882	128,980	1,705,695
1983/84	444,263	314,051	89,356	353,315	131,372	11,309	92,074	145,123	56,782	126,034	1,763,679
1984/85	472,441	323,461	107,843	371,591	144,407	11,828	97,711	133,361	69,255	121,603	1,853,501
1985/86	454,013	346,913	107,292	407,891	161,377	12,047	103,011	174,626	74,281	132,265	1,973,716
1986/87	448,917	344,720	119,399	424,759	188,140	12,497	97,331	170,872	89,792	133,979	2,030,406
1987/88	474,452	324,048	109,694	354,841	208,173	12,798	95,525	140,438	94,479	105,809	1,920,257
1988/89	461,114	287,027	100,331	401,900	185,606	12,122	89,748	135,470	74,837	94,237	1,842,392
1989/90	347,600	208,100	106,700	251,400	161,900	11,400	77,700	53,500	71,600	52.800	1,342,700
1990/91	414,939	357,125	146,335	268,068	181,594	38,643	90,733	111,798	68,344	84,758	1,762,337
1991/92	521,597	474,909	188,537	454,095	288,032	53,001	141,835	248,555	127,838	175,769	2,674,168
1992/93	674,858	607,596	191,227	722,132	376,970	104,689	208,497	441,360	204,938	441,500	3,923,767
1993/94	948,127	792,465	199,936	651,181	601,359	120,028	200,807	443,633	336,653	636,301	4,930,490
1994/95	1316745	863,945	244,180	770,968	634,500	132,621	291,564	503,785	419,673	621,113	5,799,104
1995/96	1351224	876,408	240,371	727,477	648,357	148,072	263,419	645,666	544,208	550,997	5,996,199

Source: NBE, Survey of the Ethiopian Economy (MEDaC) and MOTI Statistical Bulletin I IV and VIII

Table 3. Number of Permanent Employees all Medium and Large Scale Manufacturing Establishments (10^{+} employees) by Social Sector and Industrial Branch for 1969/70-1996/97

No.	Industrial branch	1969/70			1979/80			1983/84			1987/88		
		public Sector	Private Sector	Total	public Sector	Private Sector	Total	public Sector	Private Sector	Total	public Sector	Private Sector	Total
1	Food	n.a	n.a	8226	n.a	2331	n.a	n.a	2083	n.a	19323	1562	20885
2	Beverage	n.a	n.a	3008	n.a	251	n.a	n.a	242	n.a	7707	256	7963
3	Tobacco	n.a	n.a	432	n.a	0	n.a	n.a	-	n.a	1467	0	1467
4	Textile	n.a	n.a	21610	n.a	985	n.a	n.a	1182	n.a	33684	861	34545
5	Leather and Shoe	n.a	n.a	2165	n.a	244	n.a	n.a	362	n.a	5293	671	5964
6	Wood and Wood Products	n.a	n.a	3282	n.a	2132	n.a	n.a	626	n.a	2158	821	2979
7	Paper, Printing, and Publishing	n.a	n.a	1835	n.a	637	n.a	n.a	531	n.a	4051	566	4617
8	Chemical	n.a	n.a	2462	n.a	432	n.a	n.a	417	n.a	6590	426	7016
9	None-Metallic Mineral Products	n.a	n.a	4102	n.a	432	n.a	n.a	370	n.a	3657	517	4174
10	Metal	n.a	n.a	1781	n.a	442	n.a	n.a	448	n.a	3310	439	3749
	Grand Total			48903	69604	7886	77490		6261		87240	6119	93359
	As % of Total			100	89.8	10.2	100				93.4	6.6	100

No.	1995/96			1996/97		
	public Sector	Private Sector	Total	public Sector	Private Sector	Total

1	13297	2451	15748	12725	3510	16235
2	7267	183	7450	5043	2552	7595
3	982	-	982	953	-	953
4	31444	997	32441	29939	1858	31797
5	5924	1824	7748	6016	2128	8144
6	2783	1987	4770	1945	3513	5458
7	4526	1024	5550	3800	1303	5103
8	3889	1155	5044	3840	2259	6099
9	4779	1259	6038	4645	2009	6654
10	27778	1490	4268	2751	858	4327
	77669	12370	90039	71657	20708	92365
	86.3	13.7	100	77.6	22.4	100

Source: Gill (1974), MOTI Statistical Bulletin Vol. I, IV and VIII, MEDaC (1999)

Table 4. Gross Value of Production for Manufacturing Establishments, 1969/70-1996/97

No.	Industrial branch	1979/80			1983/84		
		public Sector	Private Sector	Total	public Sector	Private Sector	Total
1	Food	490347	32742	523089	599151	34693	633844
2	Beverage	242889	6635	249524	314394	7037	321431
3	Tobacco	105722	-	105722	93046	-	93046
4	Textile	431865	9043	440908	424580	12707	437287
5	Leather and Shoe	128689	3559	132248	125213	6313	131526
6	Wood and Wood Products	23245	13691	36936	33349	5859	39208
7	Paper, Printing, and Publishing	69452	6303	75755	87322	7170	94492
8	Chemical	368520	13550	382070	715884	15197	731081
9	None-Metallic Mineral Products	35896	2485	38381	54163	4242	58405
10	Metal	99702	8221	107923	132103	8022	140125
	Grand Total	1996327	96229	2092556	2579205	101240	2680445
	As % of Total	95.4	4.6	100	96.2	3.8	100

No.	1987/88			1991/92			1996/97			Annual Average Growth Rates,% (1991/92-1996/97)
	public Sector	Private Sector	Total	public Sector	Private Sector	Total	public Sector	Private Sector	Total	
1	611338	29833	641171	3932113	21726	414939	1073299	277925	1351224	26.6
2	468577	7027	475604	351171	5954	357125	630490	245918	876408	19.7
3	160349	-	160349	146335	-	146335	240371	-	240371	10.4
4	518857	9721	528578	263583	4485	268068	685517	41960	727477	22.1
5	219161	17522	236683	167434	14160	181594	452133	196224	648357	29.0
6	39982	7714	47696	29378	9265	38643	58863	89209	148072	30.8
7	99953	7730	107683	86311	4422	90733	205184	58236	263419	23.7
8	785044	12890	797934	105677	6121	111798	465784	179903	645666	42.0
9	89366	4277	93643	66454	1980	68344	444066	100142	544208	51.4
10	146248	8753	155001	54229	30529	84758	484899	66099	550997	45.4
	3138875	105467	3244342	1663785	98552	1762337	4740586	1255614	5996199	27.7
	96.7	3.3	100	94.4	5.6	100	79.1	20.9	100	

Source: Gill (1974), MOTI Statistical Bulletin Vol. I, IV and VIII, MEDaC (1999)

Table 5. Export of Manufactured Products by Value and Industrial branch for 1979/80-1996/97, (' 000Birr)

No.		1964	1979/80	1983/84

	Industrial branch	public Sector	Private Sector	Total	%	public Sector	Private Sector	Total	%	public Sector	Private Sector	Total	%
1	Food	n.a.	n.a.	15120	91.3	32473	2164	34637	20.2	37175	393	37568	21.2
2	Beverage	n.a.	n.a.	3	0.0	-	-	-	-	622	-	622	0.00
3	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
4	Textile	n.a.	n.a.	32	0.02	26098	-	26098	15.3	2909	-	2909	1.6
5	Leather and Shoe	n.a.	n.a.	309	2.0	53645	-	53645	31.3	62465	-	62465	35.2
6	Wood and Wood Products	n.a.	n.a.	38	0.03	-	-	-	-	-	-	-	-
7	Paper, Printing, and Publishing	-	-	7	0.00	-	249	249	0.00	-	-	-	-
8	Chemical	n.a.	n.a.	325	2.0	56828	-	56828	33.2	74536	-	74536	41.9
9	None-Metallic Mineral Products	n.a.	n.a.	752	4.6	-	-	-	-	-	-	-	-
10	Metal	n.a.	n.a.	1	0.0	-	-	-	-	-	-	-	-
	Grand Total	n.a.	n.a.	16587	100	169044	2413	171457	100	177707	393	178100	100
	As % of Total					98.6	1.4	100		99.8	0.2	100	

No.	1987/88				1991/92				1996/97				Annual Average Growth Rates, % (1991/92-1996/97
	public Sector	Private Sector	Total	%	public Sector	Private Sector	Total	%	public Sector	Private Sector	Total	%	
1	40584	-	40584	18.5	n.a.	n.a.	21874	23.5	n.a.	n.a.	31206	6.9	7.3
2	942	-	942	0.0	n.a.	n.a.	257	0.0	n.a.	n.a.	67	0.0	-23.6
3	-	-	-	-	-	-	-	-	n.a.	n.a.	1075	0.0	-
4	12903	-	12903	6.0	n.a.	n.a.	6752	7.3	n.a.	n.a.	27062	6.1	32.0
5	124371	8346	132717	60.6	n.a.	n.a.	63989	68.9	n.a.	n.a.	387492	87.0	43.3
6	-	-	-	-	n.a.	n.a.	49	0.0	n.a.	n.a.	341	0.0	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-
8	3179 0	-	31790	14.5	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	n.a.	n.a.	44	0.0	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-
	210590	8346	218936	100	n.a.	n.a	92921	100	n.a.	n.a.	447287	100	36.9
	96.2	3.8	100										

Source: Gill (1974), MOTI Statistical Bulletin Vol. I, IV and VIII, MEDaC (1999)