INDUSTRIALIZATION AND TARIFF PROTECTION IN ETHIOPIA

A Thesis Presented to
The School of Graduate Studies
Addis Ababa University

In Partial Fulfillment
Of the Requirements for the Degree
of Master of Science in Economics

---

by
Melisachew Mesfin
May 1984

ADDIS ABABA UNIVERSITY
School of Graduate Studies

Industrialization and Tariff Protection in Ethiopia

by

Melisachew Mesfin
College of Social Sciences

Approved by the Examining Board:

Ato. Shiferaw Gurmu
Chairman, Department Graduate Committee

Dr. Teshome Mulat
Advisor

Dr. Assefa Teferri
Examiner

Dr. Fassil G/Kiros
Examiner

Dr. G. Mohai
Examiner

Acknowledgments

I would like to thank my advisor Dr. Teshome Mulat whose advice has contributed to the betterment of this paper. I am also grateful to the staff members of the industry department of the Central Planning Supreme Council (particularly to Bishaw and Yusuf) who assisted in the collection of the necessary data. My thanks extend also to Ato Bacry Yusuf, senior industrial expert in the CPSC, and others who read and commented on the draft of this thesis. I owe a word of thanks to W/t. Tigist Mamo who skillfully typed this paper.

I should also like to express my thanks to W/t. Truework Mesfin for her invaluable and all-round assistance. Ofcourse, my special thanks go to my wife Bitsat who assisted me in the manipulation of data and who shared all the problems related to the writing of this thesis, and whose encouragement was indispensable to its completion.

List of Tables

List of Diagrams

Abbreviations

ACP	= African Caribbean Pacific
B.T.N	= Brussels Tariff Nomenclature
C.i.f	= Cost - freight and insurance
DC	= Developed Countries
DRC	= Domestic Resource Cost
E.C.	= Ethiopian Calendar
E.C.A	= Economic Commission for Africa
E.E.C	= European Economic Community
E.R.P	= Effective rate of Protection
F.o.b	= Free on board
GATT	= General Agreement on Tariff and Trade
GDP	= Gross Domestic Product
ISIC	= International Standard Industrial Classification
LDC	= Less Developed Country
MFN	= Most Favoured Nations
NRDC & CPSC	= National Revolutionary Development Campaign and Central Planning Supreme Council
NRP	= Nominal rate of protection
OECD	= Organization for Economic Co-operation and Development
PC	= Per capita
SCF	= Standard Conversion factor
S.I.T.C. (R)	= Standard International Trade classification (Revised)
STABEX	= Stabilization of export earnings
UN	= United Nations
UNCTAD	= United Nations Conference for Trade and Development
UNIDO	= United Nations Industrial Development Organization

Industrialization and Tariff Protection in Ethiopia

A B S T R A C T

Industrialization in Ethiopia is a recent phenomenon. The contribution of the manufacturing sector in terms of GDP, employment, export earnings, etc. is very small. The manufacturing industries emphasise the production of non-durable consumer goods.

In Ethiopia, tariff protection is an important instrument employed by the government to encourage the domestic industries. The objective of this study is, among other things, (1) to assess the effectiveness of tariff protection, (2) to identify which industries or group of industries the policy favours and the possible consequences of the policy and (3) to estimate the domestic resource cost of saving a unit of foreign exchange.

The findings show that the pattern of protection in Ethiopia favours consumer goods production. These are the oldest group of industries in the history of manufacturing in the country. However, they are still protected highly. This is a sign of inefficiency. The findings also reveal that tariff rate setting in Ethiopia is a case-by-case approach. There is no consistency in the levels of protection even within sub-branches. The Domestic Resource Cost estimation shows that the domestic factor endowments do not suit to the production of some products.

Protection by itself does not necessarily lead to inefficiency. What is important is the dosage and type of industries to be protected.

CONTENT

INTRODUCTION

Agriculture, which is the main economic activity of many developing countries, is characterized in these countries by diminishing returns and low productivity of labour. Despite the fact that about 80% of the active population of developing countries is engaged in agriculture these countries are still not able to provide sufficient food for their population.

After the Second World War one of the main economic development strategies of most developing countries has been the establishment and enlargement of a strong industrial sector. A country's level of economic development is measured by its level and pace of industrialization i.e. the higher the level of industrial development the more developed the country is. Thus developing countries strive to industrialize fast, and if possible, try to capture a substantial portion of the world's industrial production. This desire is, for instance, expressed in the setting up of ambitious targets on an international scale such as the target of producing 25% of total world industrial production in developing countries by the year 2000. The actual contribution by developing countries was 6.8% in 1967 and 9% in 1977.[1]

In the process of industrial development most developing countries initially pursued import - substituting industrialization (i.e. industrialization to replace imports by domestic production) backed up by high tariff barriers. Infant industries after a certain period of protection are expected to grow into maturity and be able to survive without it. The import substituting industrialization (ISI) strategy was first popularized by India and Pakistan and some of the Latin American

countries. It was viewed as an indispensable industrial development strategy irrespective of whether the country has shortage of investible fund, balance of payment problem or not. "The fact that Kuwait has more foreign exchange at her disposal than her present capacity to absorb does not make import substitution as an industrial strategy for Kuwait inappropriate."[2]

Import substitution as a strategy should minimize the import content of the new industries and make use of a high rate of domestic input. However, in most cases it has resulted in a structure that is more dependent on foreign supplies for raw materials, intermediate and capital goods and industrial skill. Thus ISI "... has resulted in a situation where the import cost of capital and materials or parts was greater than the previous cost of the finished product... (these ccunties have) ended up substituting some imports for others."[3]

The industrial development strategy of Ethiopia, like many of the developing countries was import substituting industrialization. Tariff protection is an important instrument employed by the government to encourage domestic infant industries. The tariff schedule of the country has undergone various changes. It has also been revised since 1974. The objective of this thesis is, therefore, to assess the effectiveness of the existing tariff structure in the Ethiopian manufac turing industries, to identify which industries the policy favours and

the possible consequences of the tariff structure. The nominal and effective rates of protection for 50 manufacturing products for the year 1973 E.C. (1980/81) have been calculated using the 'Balassa method'. The extent to which the nominal tariff has also effectively protected the sector is assessed by the use of the rank correlation coefficient. Finally the efficiency of these industries is analysed using Domestic Resource Cost Criteria. On the basis of empirical findings the author has identified some policy issues and has also made some recommendations.

The first chapter gives an overview of industrial development in the country. The theoretical issue of industrialization and tariff protection is discussed in chapter two. The methodology used and the findings of the study are presented in chapters three and four respectively. The last section deals with the conclusions and recommendations.

The paper achieves its goals if readers, researchers and policy designers can gain some benefit from it.

REFERENCES

[1]UNIDO, World Industry Since 1960: Progress and Prospects (New York: Sales No. E.79. II.B.C., July, 1979), pp. 51-58.

[2]J.F. Rweyemamu, "Import Substitution as an Industrial Strategy: the Tanzanizn case," Industrialization and Income Distribution in Africa, ed. J.F. Rweyemamu (CODESRIA Book series, Dakar: November, 1980), P.71.

[3]Ibid., P.13.

Chapter 1

INDUSTRIAL DEVELOPMENT IN ETHIOPIA: AN OVERVIEW

1.1 Historical Background

Industrial development in Ethiopia is believed to have started around the end of the 1860's as a result of contacts made with the rest of the world. The process of development was gradual and history tells us that gunpowder and cartridge factories were among the first to be established in the country. On the other hand some of the basic needs of the people were met by imports. Pankhurst states that "improved communications were resulting meanwhile in greatly increased utilization of imported textiles, ..., in yarn of one kind or another. Imports in the early ninteenth century included material for weaving."[1]

At the beginning of the twenteeth century some consumer goods and construction materials producing factories began to appear in some areas of the country. Two saw mills in Menagesha and Holetta, Printing Presses in Asmara, Addis Ababa and Dire Dawa, two brick factories, two oil presses, some flour mills and bakeries and the Ethiopian Tobacco Monopoly were established in Addis Ababa at about the year 1905.[2] "Menilik, being assured by his French Physicians that the plant (tobacco) was not harmful, agreed to use it as a source of revenue."[3]

Darmar Tannery which has now been renamed the Awash Tannery was established in 1912. "A considerable part of the machinery for the Darmar Tannery was imported from England."[4] Berhanena Selam and St. George Brewery were established in 1921 and 1927 respectively.

In general, for about 60 years after the start of modern industrialization in the country, industrial development was limited to

the production of fire-arms, construction materials and non-durable consumer goods. Sources of energy for the plant were diesel, water power and fire wood.[5]

1.2 Industrial Development upto 1974

This period covers the duration since the Italian invasion up to the revolution. The Italians established some food and construction industries. Of the factories that were established during the invasion period, the Dire Dawa Cement Factory which commenced operations in 1938 was the largest. After the invasion, the absence of developed infrastructure and electric power were the major bottlenecks for reconstructing the economy and starting the industrialization process.

1.2.1 Investment policy

Despite the relative improvements made in the construction of power stations and transport facilities, industrial development was hampered by the shortage of investment. Because of the character of primary exports, the country could not earn the required foreign exchange. Thus The Government issued various investment policies and incentives that encouraged the flow of foreign public and private capital into the country. "Ethiopia will at all times welcome foreign investors who may be willing to employ their money for development works, either in partnership with Ethiopians or as private entrepreneurs."[6]

According to the 1963 Investment Decree:

> A newly established enterprise which invests in Ethiopia, before the commencement of operations, not less than 200,000 birr, shall, upon the recommendation of the investment committee, be exempted by the Ministry of Finance from the payment of income tax for a period of 5 years from the date of commencement of operations.[7]

For the purposes of expansion enterprises with an investment of not less than 200,000 birr, were also exempted from the payment of income tax for a period of 3 years. Other privileges afforded to investors included customs free import of industrial machinery and equipment, repatriation of profit to foreign share holders and permission to buy and own land for industrial use.[8]

The investment climate of Ethiopia was more conducive to foreign investors rather than nationals, because of the minimum investible capital required. The direct or indirect effects of the investment laws on the country's industrial development are reflected in the following discussions.

1.2.2 Development strategy

Import substituting industrialization involves the domestic production of consumer goods that were previously imported. Such goods are produced with relatively simple technology and do not require sophisticated skill. ISI is accompanied by protection of the domestic market. For this purpose tariff protection is the most commonly used trade policy. The concept and issues on ISI are extensively discussed elsewhere.[9]

Like many of the developing countries of the world, the industrial development strategy of Ethiopia was import substituting industrialization behind tariff walls. In the First Five year Plan 'main lines and

targets of development' for the manufacturing sector were geared towards the satisfaction of domestic demand (i.e. import substitution) and a reduction in the import of manufactured commodities.[10] In the Third Five Year Plan, it was explicitly stated that the development policy for the sector was to "continue the present encouragement to import - substituting industries, with the objective of saving substantial foreign exchange."[11] Eshetu and Teshome state that "... we find that industrialization through import substitution is what has been taking place."[12]

Some studies indicate that Ethiopia is completing the first stage of import substitution.[13] For instance in the textile industry Eshetu concluded that:

> The process of import substitution (in the sense of decreasing reliance on imports) in the Ethiopian cotton textile industry over the past decade or so has been quite impressive. ... for all practical purposes, therefore, Ethiopia can be considered to have already achieved self-sufficiency in cotton fabrics.[14]

1.2.3 Main indicators of industrial development

1.2.3.1 Contributions to GDP and value added

The contribution of industry to the gross domestic product (GDP) is relatively small. In 1973/4, for instance, the share of industry was 16.1% of GDP in 1960/61 constant prices. About a quarter of this was due to manufacturing. The contribution of each branch of industry to GDP is presented in table 1.

Table 1

Industry Contribution to GDP

At constant 1960/61 prices (in Percentages)

	1963/4	1968/9	1973/4
Industry:	9.2	17.1	16.1
of which: Building and Construction	1.9	6.4	5.5
: Electricity & water	0.4	1.0	1.1
: Manufacturing	2.5	3.9	4.4
: Handicrafts & Small scale	4.2	5.5	4.9
: Mining and quarrying	0.2	0.3	0.2

Source: Statistical Abstract, various issues

The contribution of the manufacturing sector to value added is also small. The share of value added from gross value of production for the 10 years (from 1963/4 to 1973/4) indicated in Table 2 is below 50 percent. This implies that more than half of the gross value of production is attributed to material inputs and utilities.

Table 2

Gross value of production and value added in establishments employing ten and above workers in THE MANUFACTURING SECTOR

	1963/4	1968/9	1973/4
Value added (in '000 Birr)	---	223,529	380,786
Gross Value of Production (in'000 Birr)	156,894	467,039	890,243
Value added as percent of gross Value of production	---	47.9	42.8

Source: Statistical Abstract, various issues.

1.2.3.2. Contribution to Employment

The contribution of the manufacturing sector to employment is negligible. For instance, in 1973/4 the total number of people employed in the enterprises employing ten and above workers was 57,320 (Table 3). This is only 0.4% of the total labour force of the country. In the Five Year Development Plans, sufficient attention was not given to the choice of labour - intensive technologies, which could absorb the redundant labour of the agricultural sector. This was partly because of the lack of awareness of the problem and partly because of lack of foresight. In the second Five Year Plan it was stated that: " Population pressure does not exist in this country ... consequently the labour intensive scheme does not have to be implemented at any cost by neglecting the technical progress and propulsive sectors."[15]

Table 3 below shows the number of people employed and the share of manufacturing employment in total labour force.

Table 3

Number of people employed in manufacturing establishments employing ten and above workers and its share in total labour force

	1963	1968	1973
Number of people employed	33,555	48,652	57,320
Total labour force (in '000)	---	12,336	13,751
Share of manufacturing employment in total labour force (%)	---	0.39	0.42

Source: Statistical Abstract, Various issues.

1.2.3.3. Domestic resource utilization

The industries did not make effective use of the abundant resources such as livestock, agricultural products, etc. and depended to a large extent on foreign markets for the purchase of raw materials. For the years indicated in table 4, the share of imported inputs from total material inputs for the manufacturing sector was more than 40%. Paper and paper products, chemical and the metalic industries depended more than most, (i.e. greater than 85%) on imported inputs. More details are presented in table 4.

Table 4

Share of imported inputs of total material inputs

(in percent)

Manufacturing industry branches	1969/70	1971/72
Food Industry	8.9	13.2
Beverage Industry	39.6	39.8
Textile Industry	36.6	36.8
Tobacco Industry	31.2	81.5
Leather and Shoe Industry	24.9	22.4
Wood Industry	26.0	15.6
Paper and Paper products Industry	94.0	85.4
Printing and publishing Industry	95.7	73.1
Non-metalic Industry	18.5	31.8
Chemical Industry	92.6	91.3
Basic metal Industry	70.1	70.8
Manufacturing total	43.4	41.3

Source: Ministry of Commerce, Industry and Tourism and Central Statistical Office, Annual Survey of Manufacturing Industry 1969/70 and 1971/72.

1.2.3.4. Per Capita Production

The per capita (PC) production of manufactured articles in the country is one of the lowest in the world. For instance, in 1973/74 the PC production of sugar was 4.2 kgs, of shoes 0.16 pairs and of fabrics 2.8 cm^2. (Table 5).

An international comparison of PC production for some selected manufacturing articles are given in Appendix I.

Table 5

Per Capita Production of Major Manufacturing Articles

	Unit of Measure	1963/4	1968/9	1973/4
1. Sugar	Kg.	2.92	2.74	4.19
2. Edible Oil	"	0.21	0.34	0.33
3. Fabrics	Sq.M.	1.00	2.96	2.78
4. Cotton Yarn	Kg.	0.27	0.42	0.43
5. Shoes	Pairs	0.03	0.11	0.16
6. Soap	Kg.	0.16	0.21	0.39
7. Cement	"	1.56	7.19	5.97
8. Wire rods	"	---	0.40	0.33

Source: Computed from Statistical Abstract, Various issues.

1.2.4. Structure of output and employment

1.2.4.1. Output Structure

The manufacturing sector is dominated by the production of non-durable goods. As shown in table 6 below, the share of food, beverages, tobacco and textiles, ranges from 63% to 78% of gross output.

The development of intermediate and capital goods industries such as the chemical, paper, metal and non-metalic industries, is very backward. The retarded growth of these branches of industry has a strong negative impact on the development of the economy in general, and the growth of the sector, in particular. This is because of the expansive linkage effects in these branches and "... because investment in capital goods generally has a higher technical content."[16]

The other obvious effect of the high concentration of consumer goods production for the domestic market is the minimal effort exerted on manufacturing for export. Exports of manufactured products from Ethiopia have always been insignificant in terms of proportions of total export value, employment shares or in terms of investment allocations.[17]

1.2.4.2. Employment Structure

As a country industrializes the proportion of the labour force employed in the manufacturing sector of a country rises. Structural changes in employment within industry also reflect the changes in the structure of the sector. As more and more emphasis is given to the establishment of engineering, metal, chemical, etc. industries, the level of employment in these branches will rise.

However, in Ethiopia as in the case of the output structure, the employment structure is static over the years, and concentrated in the 'low development linkage' sectors. More than 60% of the total number of workers are employed in the food, beverages, tobacco and textiles sub-branches. (Table 6).

The other feature of employment in the manufactruing sector is that it has not been responsive to changes in output, capital stock, or to the level of investment. [18] This characteristic is presented in table 7.

Table 6

Structure of output and employment

Branch of Manufacturing	Share in gross output(%)			Share in employment (%)		
	1964/5	1968/9	1973/4	1964/5	1968/9	1973/4
Food	30.0	24.4	18.6	39.0	17.7	20.3
Beverages	15.6	10.8	9.9	4.5	6.5	5.1
Tobacco	2.7	2.9	3.3	0.9	1.2	0.8
Textiles	29.3	33.7	30.9	33.2	44.6	41.0
Leather & Shoe	4.9	3.9	4.1	4.0	4.1	4.8
Wood	2.5	2.8	2.4	4.7	6.4	7.4
Non-metal	4.7	4.9	2.9	6.5	7.9	7.1
Paper & Printing	2.4	1.9	1.6	2.4	3.3	2.6
Chemical	3.4	8.5	20.7	3.0	5.3	7.5
Metal	4.5	6.2	5.6	1.9	3.3	3.4
Total	100	100	100	100	100	100

Source: Computed from Statistical Abstract, Various issues.

Table 7

Elasticity of Industry Employment (1955-1975)

	Bivariate Linear	Arithmetic Average
Output elasticity of industry employment	0.376 (6.193)	0.525
Investment elasticity of employment	0.448 (5.173)	0.283
Elasticity of employment with respect to changes in capital stock	0.608 (9.219)	0.662
Wage elasticity of employment	0.510 (8.761)	0.592

Source: Teshome Mulat,"Industry Employment in Ethiopia," Ethiopian Journal of Development Research,4(No.1, April, 1980), P.40.

1.2.4.3 Technology Make-up

The machinery used in the manufacturing sector is generally obsolete. The sector suffers from a shortage of spare parts and frequent stoppages. Domestic share in industrial machinery is negligible. On account of the fact that an appropriate domestic technology has not been developed in Ethiopia, there has been a tendency towards the use of capital intensive techniques and dependency on the industrialized countries has been promoted.

A study made on the elasticity of labour substitution in the manufacturing sector[19] reveals that factor substitution possibilities in production are technologically constrained and of limited scope. In the

existing enterprises the substitution of labour for capital in the industries at sufficient scales is unlikely. "Reducing or freezing wage levels and removals of capital subsidy (to make capital relatively more expensive than labour) may not bring about significant changes in the rates of factor use in production."[20]

1.2.5 Ownership pattern and geographic distribution

1.2.5.1 Ownership pattern

In terms of paid-up capital and gross value of production, the bulk of the manufacturing sector was privately owned. According to the 1971/2 manufacturing survey the private share in paid-up capital was 64.7%, with foreign private capital constituting 42.2%. (Table 8). Except for the metal industry (mainly in fabricated metal products) private capital concentrated in the production of non-durable consumer goods. This is an area which has a dependable domestic market and quick returns with relatively less expansive linkage effects in the economy. Thus the government share in paper and printing and the chemical and non-metalic industries was substantial. The Tobacco Monopoly has always been under the full control of Government.

There are of course a number of adverse effects to the foreign domination of ownership. These include the drainage of the country's foreign exchange in the forms of returns on capital invested, repatriation of income, management fees etc. as well as a lack of development in

national capabilities.[21] The following table shows the pattern of ownership interms of paid-up capital in 1971/72.

Table 8

Pattern of ownership in 1971/72

Manufacturing Branch	Share in Paid-up capital(%)					
	Total	Ethiopian			Foreign Private	Total Private
		Total	Gov't.	Private		
1	2=3+6	3=4+5	4	5	6	7=5+6
1. Food	100	38.3	13.2	25.0	61.8	86.9
2. Beverages	100	67.3	6.3	61.0	32.7	93.7
3. Tobacco	100	100	100	-	-	-
4. Textiles	100	45.6	20.5	25.1	54.4	79.5
5. Leather & Shoe	100	27.8	-	27.8	72.2	100
6. Wood	100	39.3	0.9	38.4	60.7	99.1
7. Paper & Printing	100	72.6	63.4	9.2	27.4	36.6
8. Non-metal	100	73.5	53.3	20.2	26.5	46.7
9. Chemical	100	89.6	87.7	1.9	10.4	12.3
10. Metal	100	40.8	9.9	30.9	59.2	90.1
Manufacturing Total	100	57.6	35.3	22.3	42.4	64.7

Source: Ministry of Commerce Industry and Tourism and Central Statistical Office, Annual Survey of Manufacturing Industry for 1971/72, Addis Ababa, June 1974.

1.2.5.2. Geographic Distribution

The geographic distribution of manufacturing industries shows a high concentration in the Addis Ababa - Nazreth region, the Asmara region and the Harar - Dire Dawa region. These three regions account for 97.9% of total manufacturing establishments, 91.6% of total fixed assets and 92.3% of manufacturing employment. (Table 9).

The main reasons for the concentration of the industries in these areas are the availability of major infrastructure (i.e. power, road, railway etc.) banking, insurance and other institutions. The absence of equitable regional development policy is also a factor for the concentration. As a result industrial activities in the other regions are insignificant. This has contributed to widening the gap in the level of development between these areas and the rest of the country.

Table 9

Regional Distribution of Manufacturing Industries in 1969

Region	Establishments		Fixed Asset		Employment	
	No.	%	In '000 Birr	%	No.	%
Shoa	223	51.0	156,410	47.4	35,552	60.2
Eritrea	164	37.5	122,758	37.2	13,901	23.6
Hararghe	41	9.4	19,924	6.0	5,001	8.5
Others	9	2.1	30,973	9.4	4,560	7.7
Total	437	100.0	330,065	100.0	59,014	100.0

Source: Commercial Bank of Ethiopia, The Ethiopian Economy (Addis Ababa: 1970), pp. 11-12.

1.3. Industrial Development Since 1974

As a basic principle of socialism it was found necessary to transfer to government ownership those resources that are crucial for economic development. Thus a proclamation to provide ownership and control by the government of the basic means of production was issued in 1975.[22] In the same year, the Ministry of National Resources Development was established in order to co-ordinate and manage enterprises related to agriculture, industry, commerce, mining and services and in order to promote the economy of the country in general.[23] Later in September 1976 the Ministry of Industry was specifically established in order to manage and control industrial enterprises. Immediately after nationalization, 13 industrial corporations were established to organize, manage and control public enterprises.

The programme of the National Democratic Revolution(NDR) was issued in April 1976 (1968 E.C).[24] In the economic field, the objective of the programme is to establish a strong and independent national economy based on domestic resources. It takes agriculture as the foundation of the country's economy. With regard to industry, the programme emphasises that there should be strong linkages between agriculture and industry and that in the beginning industrial development should start with the establishment of light industry. A Small-Scale Industries Development Agency (HASIDA) was established by proclamation in 1977 in order to promote and co-ordinate the development of handicrafts and small scale industries.[25]

Four years after the revolution it was believed that the country's economic and social problems could be solved by launching co-ordinated development campaign by mobilizing the country's resources through a central authority. Accordingly the National Revolutionary Development Campaign and Central Planning Supreme Council (NRDC & CPSC) was established by proclamation in 1978.[26] The main objective of the campaign was to concentrate on the immediate and pressing problems of the country and later on to formulate short, medium and long-term plans.

In the manufacturing sector the short term objective was the removal of the production bottlenecks and problems in the existing factories, so that industrial production could increase. As a result of nationalization the former foreign owners, managers and technicians had left the country, creating a shortage of skilled manpower. Basic information such as the origin and anticipated life of machinery was missing creating problems in maintenance and the ordering of spare-parts; hence some factories were operating below capacity. In addition some of the establishments had been partially or completely destroyed by the war.

The strategy followed in order to eliminate the shortage of industrial products was to reactivate factories damaged by the war and to increase labour productivity through a greater utilization of capacity. In the first year of the campaign (1978/79), the performance of the manufacturing sector was satisfactory and 93% of the target was fullfilled.[27] Up till now five annual campaign programmes have been completed. In order to build a strong national economy through the participation of foreign capital and for the transfer of foreign technology a proclamation to provide for the establishment of joint venture was recently issued.[28]

Although it may be too early to assess the changes in the structure and distribution of the enterprises, the trend so far shows that there is no major structural change. In 1979/80 the share of food, beverages, tobacco, textiles and leather and shoe industries in gross value of production was 69.4%. (Appendix II). In the same way 86.4% of the establishments, 90.4% (employment and 93.7% of the gross value of production are distributed in shoa, Eritrea and Hararghe) administrative regions of the country. However, it is worth mentioning the change in the pattern of ownershop. Unlike the pre-1974 period, 94% of the gross value of production is generated from the public sector. (Appendix III).

Industrial output was expected to increase by the efficient utilization of installed capacity (i.e. introducing additional production shifts, removing production bottlenecks, etc.). The major share of the additional investment was allocated to the production of non-durable items. Total investments for expansion and replacement in manufacturing for the period from nationalization upto 1981 was estimated to be around 250 million birr of which 195 million birr or 78% was invested in order to produce consumption goods.[29]

In general industrial development after 1974 focused more on the strengthening of public ownership, the control of enterprises and institutional changes. Hence achievements in terms of economic magnitudes and structural changes have been limited.

References to Chapter 1

[1]Ethiopia Observer, Vol. II, No.1, 1967, P.60.

[2]Ibid.

[3]Ibid., Vol. I, No.5, 1967. P.150.

[4]Ibid., P.155.

[5]Ibid.

For instance the Ethiopian Fibre, Diabacco(or Edget) cotton factory used diesel power, Darmar tannery and A.Mihos (Anbessa) flour mill were using water power. Sarris Alcohol (Awash Winery) used fire-wood.

[6]Ibid., Vol III, No.3, 1964, P.173.

[7]Negarit Gazeta, 23rd year, No. 1, 1963, P.3.

[8]Ethiopian Economic Review, No. 2, June 1960. P.16.

[9]Jaleel Ahmed, Import Substitution, Trade and Development (Greenwich: Jai Press 1978). Azizar Rahman Khan, "Notes on the concept of Import substitution", studies in commercial policy and Economic Growth (The Pakistan Institute of Development Economics, No.2, January, 1970). Hollis B. Chenery, Patterns of Development 1950-70 (London: Oxford University Press, 1975).

[10]Imperial Ethiopian Government, Five year Development Plan 1957-1961 (Addis Ababa: A.A.B.S.P.P., October, 1959), pp. 98-115.

[11]Imperial Ethiopian Government, Third Five Year Plan (Addis Ababa: Berhanena Selam H.S.I. Printing Press, 1968), P. 219.

[12]Eshetu Chole and Teshome Mulat, Pattern of Industrialization and Impact on Employment and Incomes in Ethiopia (Addis Ababa: September, 1983), p.47.

[13]Eshetu Chole, Import substitution in Practice: The case of the Ethiopian Textile Industry, unpublished Ph.D dissertation, (syracuse University, 1973). Stephen Guisinger, "Tariffs and Trade Policies for the Ethiopian Manufacturing sector," (Addis Ababa: (n.p.) 1972). (Mimeographed).

[14]Eshetu Chole, OP. cit., P. 211.

[15]Imperial Ethiopian Government, Second Five Year Plan (Addis Ababa: Berhanena Selam Printing Press, 1962), P.81.

[16]Woldu Gebre-Michael, "A Review of Industrial Development Policies in Ethiopia," Ethiopian Journal of Development Research, 4(April, 1980), 4.

[17]It is well treated by Eshetu Chole and Teshome Mulat, OP.cit., P.35.

[18]Teshome Mulat, "Industry Employment in Ethiopia," Ethiopian Journal of Development Research, 4(April, 1980) P.40.

[19]Teshome Mulat, "Capital-Labour Substitution in the Ethiopian Manufacturing Industries," The Developing Economies, XVIII(September, 1980). For small-scale industries refer to Fassil Nebebe, "Impirical study of Capital - Labour substitution on Ethiopian small-scale Industries," Ethiopian Journal of Development Research, 4(October 1980).

[20]Eshetu Chole and Teshome Mulat, OP.cit., P.63.

[21]"A Note on Recent Development in the Manufacturing Sector," (Addis Ababa: Planning Commission Industry Department, February, 1977), P.3. (Mimeographed) Woldu Gebre Michael , OP., cit., P.7.

[22]Negarit Gazeta, No.26, 1975.

[23]Ibid., No. 20, 1975.

[24]PMAC, Programme of the National Democratic Revolution of Ethiopia (Addis Ababa: (n.p.), 1976).

[25]Negarit Gazeta, No. 124, 1977.

[26]Negarit Gazeta, No. 158, 1978.

[27]የኅብረተሰብአዊት ኢትዮጵያ ጊዜያዊ ወታደራዊ መንግሥት፣ የብሔራዊ አብዮታዊ የምርትና የባሕል ዕድገት ዘመቻ የሁለተኛው ዓመት /1974 ዓ.ም./ ዕቅድ /አዲስ አበባ፣ 1972 ዓ.ም./፣ ገጽ 99።

[28] Negarit Gazeta, No. 235, 1983.

[29] የምርት ዘመቻ ጠቅላይ መምሪያ፣ የፕሮጀክት የሥራ አመራርና የፖሊሲ ጉዳዮች፣ /አዲስ አበባ፣ መስከረም 1975/፣ ገጽ ፱። /ያልታተመ/።

Chapter 2

Industrialization and Tariff Protection

2.1 Free trade

Free trade is a trade policy which places no restriction on the movement of goods between countries. Free trade policy was first put forward by Adam Smith. According to him, free trade between nations enables each nation to increase its wealth by making use of a division of labour and specialization.[1] Ricardo also supported the idea of free trade with his principle of comparative advantage. Free trade is assumed to increase the real national product of all countries and hence enhance the welfare of the world community.

Although a policy of free trade may be advantageous for the world as a whole it may not always be in the interest of developing countries to adopt such a policy. A free trade policy is only likely to be appropriate if the national resources of a country are effectively utilized. "The government of an underdeveloped country is faced not with the problem of contributing the maximum to world welfare, even at a cost to its own citizens, but with contributing as much as it can to the welfare, income and employment of its own citizens."[2]

Free trade may be considered as a trade policy whereby a dominant country exploits a poor country. For instance the free trade policy adopted by the British Government in India, effectively wiped out a one-time flourishing handicrafts industry in that country and "... it inhibited internal development."[3] In international trade, developing countries face severe competition with the advanced countries and an industry in a developing country finds it difficult to get established with the policy of free

trade. "Any industry, (which can be) eliminated under free trade, can be established through the simple application of a duty on the imports of its products."[4]

In addition after the First World War the changes in the nature of international trade and the great depression of the thirties, resulted in imbalances in the balance of payments of many countries, necessitating a modification to the theory of free trade.

2.2 Protection

Protection refers to such measures as tariffs on imports, quotas, exchange controls, etc., that raise the price received by domestic producers of an importable commodity above the c.i.f. price of similar commodity. The tariff system is the most commonly used method of protection and it is one of the earliest methods of restricting imports.

There are different types of classification of import tariffs.[5] In the single column tariff system a single rate of tariff is imposed on imports from every country, thus a country treats all like commodities uniformly regardless of the country of origin. In the general tariff system the country applies a column of duties applicable to all countries except to those for which specific tariff treaties have been made.

The specific tariff treaties include the most favoured nations treatment and the preferential tariff systems. In the 'most favoured nations' treatment, minimum duty rates are levied upon the commodities that are imported from those countries with which special treaties have been entered. Maximum rates are levied on imports from other countries. The preferential tariff system gives exclusive trade privileges to countries

related to it by regional, economic, political, or other ties.

Custom duties can be specific or ad-valorem.[6] Specific duty is levied on the basis of physical units (i.e. a fixed sum of money per physical unit of commodity), while ad-valorem duty is levied on the basis of the value of goods (i.e. a fixed percentage of the value of goods). In some cases, specific or ad-valorem duty which-ever is greater (or smaller) is levied on imports. A type of duty which is rarely used, is the compound duty, which is a combination of both specific and ad-valorem duties. In this case, a duty is levied on the basis of physical units as well as on the value of the good.

The ad-valorem tax being a fixed percentage to value, is more equitable, and provides a more constant level of protection to domestic industry. The protection afforded to domestic industries by a specific duty declines as the price of imported commodities rises as a result of inflation or other factors.

2.2.1 Tariff Protection

The main argument for tariff protection as an important means of trade restrictive policy rests upon the theory of the infant industry, introduced by Sidney S. Alexander.[7] An infant industry during its initial years incurs high costs, which as a result of the 'learning-by-doing' process could fall to the level of landed price of imports. Hence it should be protected against foreign products.

Friederich List argued that "A nation cannot develop its own manufacturing without protective duties. The reason for this is the same

as that why a child or a boy in wrestling with a strong man can scarcely be victorious or even offer steady resistance."[8] In the same way Mill, Bastable, Kemp and Meade argued for infant industry protection and set the criteria for such protection.

According to J.S.Mill "... Protection should be confined to cases in which there is ground of assurance that the industry which it fosters will after a time be able to dispense with it."[9] The infant industry is expected to grow up and be able to compete with foreign producers in domestic and world markets. C.F. Bastable adds to Mills criterion that "... it is necessary further that the ultimate saving in costs should compensate the community for the high cost of the protected learning period."[10] A. Hamilton also agrued "... a temporary enhancement of price (as a result of protection) must always be well compensated by a permanent reduction of it..."[11] Thus the infant industry should be able to cover the costs of subsidizing its infancy.

Analysing the above criteria M.C. Kemp notes that "If the "Mill test" and "Bastable test" are passed, the industry therefore should be established."[12] But he says "Circumstances could be imagined in which no protection at all would be required."[13] So, he adds what may be called "necessity" or "need" criterion." According to Meade the case where the infant firm may need protection is when "... its own acquisation of the necessary skills, etc., indirectly helps other firms to learn as well."[14]

The argument that an industry will grow up from infancy to effective manhood and should generate external economies in order to be protected was criticized by Taussig, Haberler and others. In criticizing List's argument Taussig says "that a tariff may help an industry to survive the

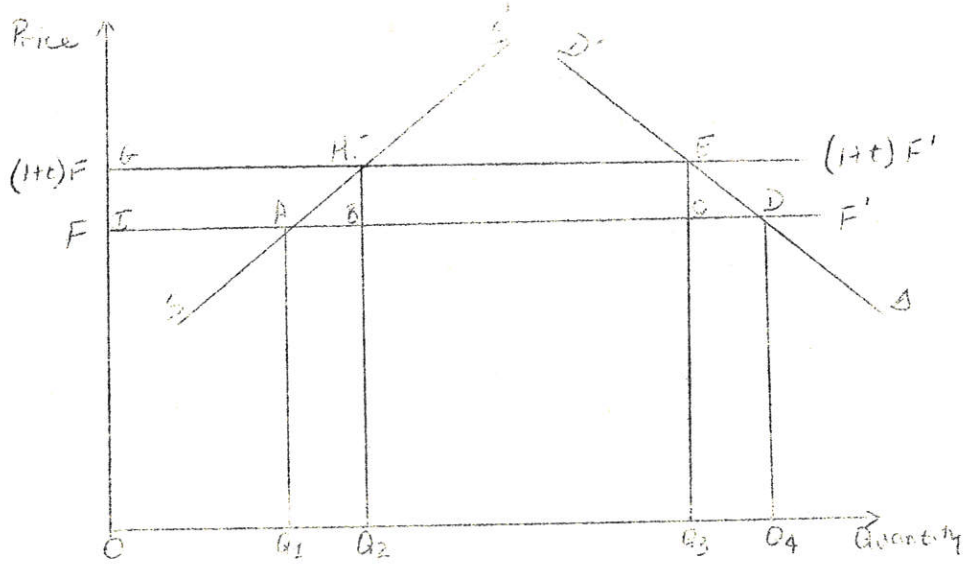
weaknesses of infancy is not to be disputed. But it is very difficult to lay down general rules for ascertaining when such a possibility is in fact present."[15] Haberler commenting on the time the tariff will be removed states that "... in fact this moment never arrives. Thus temporary infant industry duties are transformed into permanent duties to preserve the industries they protect."[16]

Inspite of the criticisms to the arguments for infant industry protection, (for instance, with regard to the time required for an infant industry to reach maturity), many developed and developing countries employ this theory as an important policy instrument for the protection of the domestic market.

The effects of tariff protection can be illustrated using the following diagram.

Diagram 1

Effects of a tariff in a partial equilibrium framework.



Source: Mordochai E. Kreinin, International Economics: a policy approach (New York: Harcourt Brace Jovanovich, 1980).

Under free trade total consumption is OQ_4 and domestic production is OQ_1, the remaining Q_1Q_4 is imported at a price equal to F.

Now assume that a tariff equal to t is levied on imports. The tariff raises the price of the domestic product from F to (1±t)F. The production effect is the increase in domestic output from OQ_1 to OQ_2 as production moves along SS' from A to H. Producers surplus rises by the area GIAH. The amount Q_1Q_2 equals the volume of the resources that the protected industry takes away from the other industries as the result of the tariff. The production cost of protection thus equals APH (the amount equal to the resource misallocated as a result of protection).

The consumption effect is the decline in consumption from OQ_4 to OQ_3, as the quantity demanded moves up the curve from D to E. As the result of the tariff, consumers surplus declines by area GIDE and the area CDE equals the consumption cost of protection. The net welfare loss from the tariff is therefore equal to the sum of the production cost of protection (i.e. CDE). It is known as the deadweight loss.[17] Apart from this loss the tariff results in income distribution away from the consumers to the government (BCEH) and the producers of the protected commodity (GIAH).

Imports are reduced by $Q_1Q_2 + Q_3Q_4$. Total imports after protection is Q_2Q_3. This is the balance of payments or terms of trade effect of protection.

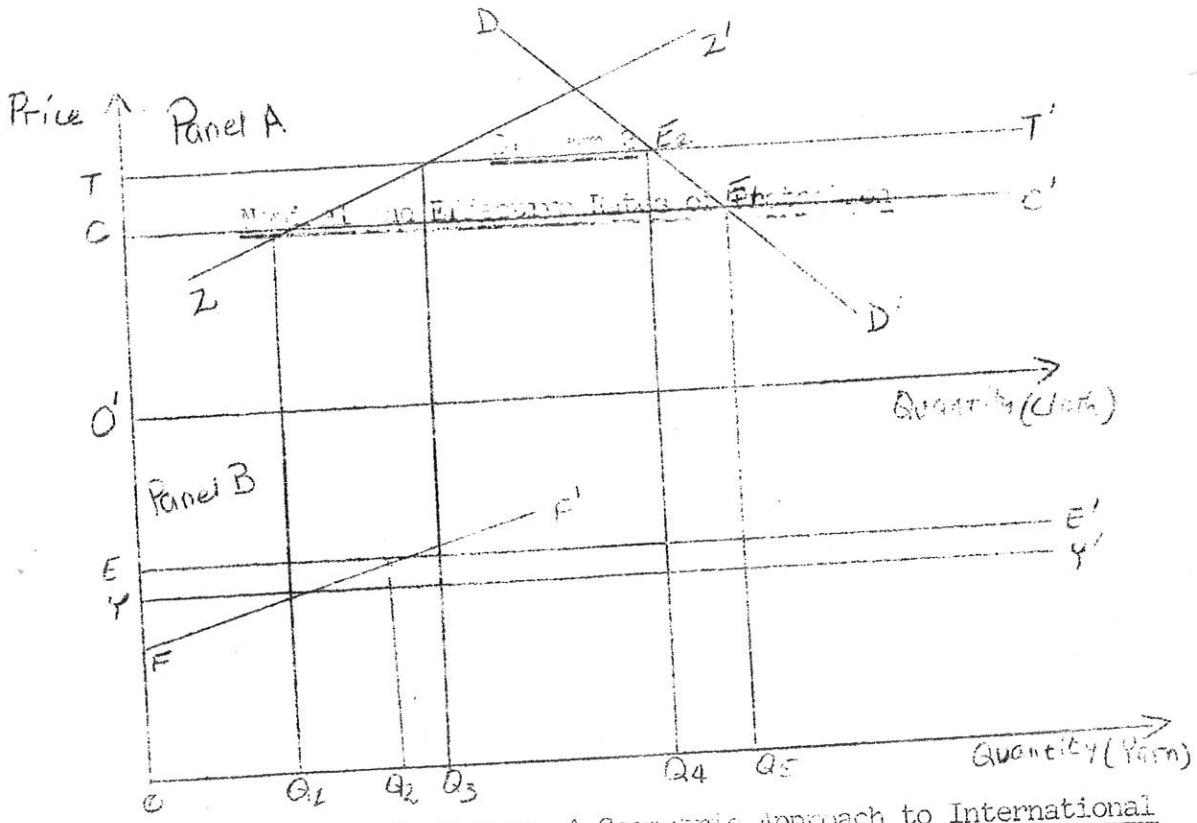
2.2.2. Nominal and Effective Rates of Protection.

To assess the degree of protection afforded to a given industry the nominal rate of protection (i.e. the protection of the final product alone) was used for a long time as the only measure of protection. However, the analysis of tariff protection should take into consideration not only the protection provided to the output but also the protection of material inputs. Thus the concept of effective rate of protection (ERP) came into the front.

ERP estimates the amount by which value added in a particular activity is raised by protection. In other words it is the percentage change in value added per unit made possible by the imposition of a protective tariff relative to a 'no tariff' situation. If the objective is to measure the incentive provided to the manufacturing process, some suggest that "The percentage by which net profits would be raised, would be the right measure"[18] rather than the percentage increase in value added. However, because of the difficulty involved in measuring the variables of net profits, most economists resort to the latter measure.

The concepts of nominal and effective protection are illustrated using diagram 2.

Diagram 2
Nominal and Effective Rates of Protection



Source: Melvyn B. Krauss, A Geometric Approach to International Trade (Oxford: Basil Blackwell, 1979), P.

Assume: 1. The input coefficients for domestic production are fixed and 2. the elasticities of foreign supply of imports of the output and input (cloth and yarn) are both equal to infinity.

Panel A shows the supply and demand relationship for cloth and panel B shows the supply curve for yarn.

YY' = Perfectly elastic foreign supply curve for yarn

CC' = " " " " " " cloth

OY = Free trade import price of Yarn

OC = " " " " " cloth

FF' = Domestic supply of yarn

ZZ' = " " " Cloth

DD' = Domestic demand for cloth

YC = The price for a unit of value added in the cloth industry.

If a nominal tariff equal to CT/OC is imposed on cloth and there is no tariff on yarn, the effective price of cloth increases from O'C to O'T. Thus ERP for the product = CT/O'C.

If a tariff equal to YE/OY is imposed on yarn without a tariff on cloth, ERP for cloth decreases by the amount YE, and thus ERP = $-\frac{EY}{CY}$.

If the tariff on the input is combined with the tariff on the output, then ERP for cloth = $-\frac{CT - EY}{O'C}$. (Note that if CT$\lessgtr$EY then ERP$\lessgtr$ 0).

With free trade, domestic consumption of cloth is OQ_5, equilibium is E_1 and free trade domestic production of yarn is OQ_1. The tariff on cloth increased domestic supply by Q_1Q_3 and decreased domestic demand by Q_4Q_5. Import after the tariff is Q_3Q_4. Tariff on yarn raised domestic supply by Q_1Q_2.

2.3. Protectionism on an international forum

If the developing counties are to industrialize rapidly it is important that they have access to the markets of the developed countries.

The developing countries express their desire for freer access to these markets through the United Nations Conference on Trade and Development (UNCTAD). UNCTAD serves as a platform for developing countries as a group, to forward their demands. The two main demands of these countries are tariff preferences and the stabilization of international prices for exports from developing countries.

Primary commodities constitute more than three-fourths of the foreign exchange earnings of the non-petroleum exporting developing countries. The prices of these commodities fluctuate widely in the world market and thus the terms of trade for these commodities have been detriorating for a long time. The volume of agricultural exports is also declining because of the greater self-sufficiency in food in many industrialized countries."... Significant import substitution has occurred for food products, reflecting essentially the policies of agricultural protectionism applied in a number of developed market-economy countries."[19]

For developing countries to be able to produce and market manufactured products in the world market the solution seems to be the concept of tariff preferences which was developed by Raul Prebish. If developed countries through UNCTAD grant unilateral tariff preferences to developing countries then it is hoped that these countries after a limited time of preferences would be able to stand on their own feet. Otherwise "... the strict adherence to the doctrine of comparative cost theory would imply specialization in the production of primary goods by the LDC, and this would eventually lead to a transfer of the gains of technical progress from the LDC to the DC's."[20]

The General Agreement on Tariff and Trade(GATT) was set up to serve multi-lateral tariff negotiation. The two principles of GATT are the principle of non discrimination embodied in the most favoured nations (MFN) clause, and prohibition of non-tariff means of protection. In the initial years of GATT it was proposed that tariff and non-tariff

barriers should be removed both from developed and develping countries on a reciprocal basis. This scheme is rather unfavourable to developing countries.

The first tangible result for developing countries emerged from the Tokyo Round of negotiations,[21] whereby they were able to get reductions from tariffs on manufactured products and from non-tariff barriers. Non-reciprocal agreements were reached whereby developed countries alone remove or lower trade barriers. Even then, since the tariff structure of developed countries increases with the degree of fabrication, it acts as a brake for developing countries to export manufactured goods and encourages these countries to export in their raw form.

The African Caribbean and Pacific vs European Economic Community (ACP-EEC) conventions signed in Lome in 1975 and 1979 incorporate two aspects of trade agreements.[22] The first is that about 95% of ACP products would enter the community market custom free. All manufactured imports from ACP enter the community duty free while for agricultural products there is a duty free quota (i.e. a fixed amount of a product is imported duty free). The second aspect refers to the stabilization of export earnings (STABEX). According to this system compensation will be given by the EEC to ACP countries if they suffer a loss of export earning, through price fluctuation. This is if current earnings are less than the average for the preceeding four years. For least developed countries compensation is given for exports to all destinations.

The World Bank in its report entitled "Accelerated Development in Sub-Sahara Africa"[23] argues that for self-reliant development[24]

African governments must emphasise export oriented growth on the principle of comparative advantage. Thus countries producing primary commodities should seek greater integration in the world market on the basis of short run comparative advantage, unhampered by government restriction. The Bank's suggestion, however, does not lead these countries into self-reliance and self-sufficiency. Even the industrialized countries such as USA and Japan have protective tariffs on many of their industrial products.

> Given the poor export prospect, the historic record of new export basis especially in manufacturing being build up behind protective barriers; and the present global level of excess capacity, which suggests that deprotection would release resources to unemployment, ... is at best risky and at worst a recipe for mass starvation.[25]

The free trade policy presented by the Bank does not "reverse the fact that import liberalization and attempts to shift industry and agriculture toward global competitiveness ... tripled Mexico's ratio of imports to GDP, sharply increased food deficits, and played a central role in precipitating the present crisis."[26]

References to Chapter 2

[1]Adam Smith, The Wealth of Nations (part two; New York: P.F. Collier Sons, (n.d.),), pp.169-172.

[2]R.B. Sutcliffe, Industry and Development (London: Addison Wesley, 1971), P.302.

[3]R.J.Moore, "Imperialism and free trade policy in India, 1953-1954," Great Britain and the colonies 1815-1865, ed.A.G.L. Shaw (London: Methuen & Co. Ltd., 1970), P.189.

[4]William Penfield Travis, The theory of trade and protection, (Harvard Economic Studies, Volume 71, Cabridge, Massachusetts: Harvard University Press, 1964), P.113.

[5]Mordechai E. Kreinin, International Economics: A Policy Approach (Third edition, New York: Harcourt Brace Jovanovich, 1979) pp.270-312.

[6]Ibid.

[7]Ibid.

[8]Friederich List, quoted by Goffried Von Haberler, The theory of international trade (London: W.Dodge & Company Limited, 1936), P.279.

[9]William Ashley, Priniples of Political Economy by John Stewart Mill (Fairfield: Augustus M. Kelly Publishers, 1976), P.922.

[10]M.C.Kemp, "The Mill; Bastable Infant Industry Dogma," Journal of Political Economy, 68 (Chicago: The University of Chicago Press, February, 1960), P.90.

[11]Richard B. Morris, (ed.), The Basic Idea of AlexanderHamilton (New York: Pocket books, 1957), P.276.

[12]M.C. Kemp, OP.cit., P.67

[13]Ibid.

[14]J.E. Meade, Trade and Welfare (Volume 2, London: Oxford University Press, Ely House, 1972), PP. 270-271.

[15] Goffried Von Haberler, OP. cit., P. 281.

[16] Ibid.

[17] Mordechai E. Kreinin, Loc.cit.

[18] I. Little, T. Scitovsky, and M. Scott, Industry and Trade in some Developing countries (OECD, London:Oxford University Press, 1966), p. 170.

[19] UNCTAD, Commodity Issues: A review and Proposals for Further Action (To/273, 11 January 1983), P.4.

> The imports of food, beverages and tobacco by developed countries from developing countries ... had fallen from a rate of 2.8 percent per annum in the period from the mid 1960's to the early 1970's to zero in the period from the early 1970's to the end of the decade. For industrial materials the drop was even sharper:- from 4.1 percent to 0.1 percent per annum.

[20] Sabrata Ghatak, Development Economics (London: Longman Group Ltd., 1978), P.169.

[21] GATT, "The Tokyo Declaration," Activities (of GATT) in 1973 (Geneva: Sales No. GATT 1974/3, 1974), pp. 11-16.

[22] The Second ACP-EEC Convention(ACP-EEC Council of Ministers, Lome: 31 October, 1979).

[23] The World Bank, Accelarated Development in Sub-Sahara Africa: An Agenda for Action(Washington D.C.: 1981).

[24] This strategy of development for African countries is clearly stated in the: Lagos Plan of Action for the Economic Development of Africa 1980-2000 (Report to the Organization of AfricanUnity, Geneva: International Institute of Labour Studies, 1981).

[25] Caroline Allison and Roginald Green, "Stagnation and decay in Sub-Saharan Africa:Dialogues, Dialects and Doubts," Accelerated Development in Sub-Saharan Africa (IDS, Vol.14, Sussex: January, 1983), P.6.

[26] Ibid.

Chapter 3

Import Tariffs in Ethiopia and Method of Analysis

3.1 Tariff Setting

The history of tariff setting in Ethiopia dates back to the early 1840's. There were various treaties made with many foreign countries, particularly, European. For instance, "the treaty entered into with the French on June 7, 1843 ... fixed the import tax on French goods at only 3% and added that this tax should be paid in kind."[1] After six years of this treaty, the agreement made with Britain raised the import tax to 5%. The same duty rate was levied on Italian goods. "The treaties made by Menilik with Italy on May 21, 1883 declared a 5% import and export tax."[2] Later the duty rate was raised to 10% ad valorem and this was taken to be the basic tax imposed on imports. For instance "In the Franco-Ethiopian Treaty of January 10, 1908 (it was agreed that) most imports from France would be charged at 10% of their value."[3]

At about the time of the Italian invasion, customs duty was levied on some 70 categories of imports. The rate differed from commodity to commodity depending on the group of people it served and its end use. "The tax was higher on luxuries, especially those consumed by the foreign community, than on necessities, required mainly by the native population. Cigarettes and cigars, for example, were subjected to a 30% ad valorem tax while abujadid only 6 cents and khaki 15 cents a kilo."[4]

The first proclamation on customs duties with detailed coverage of goods, was issued in 1943 (1935 E.C.) and came into force on the 1st of April 1944.[5] This tariff sechedule encompassed 520 commodities (or groups of commodities) classified into 14 sections. Since then a number of major

amendments and changes in the rates of import duties have been made. The 1947, 1951, 1969 and 1976 revisions are worthy of mention. There were also frequent changes in the rates of excise taxes on products such as alcohol and alcoholic liquors, sugar, tobacco and fabrics. Transaction taxes on imported goods have been revised partly or wholly 12 times.

One of the reasons for the tariff schedule under-going various changes is the fact that enterprises request protection prior to their establishment. Even already-established enterprises request protection if they fail to be competitive.[6] In one iron and steel factory which was soon to be established:

> "... a prospective foreign investor made it clear that its home government would require a letter of intent from the Ethiopian Government promising to give protection and encouragement to the industry as soon as production started. The Ethiopian Government agreed, and evidently interpreted this promise as an undertaking to grant a substantial increase in the nominal tariff.[6]

In addition " ... in the determination of tariff rates the government tended to rely heavily on data provided by the foreign firm itself, which was thus in an advantegous postion to influence the outcome."[8] From this case-by-case approach of tariff setting, it can be inferred that the policy makers assumed that tariff levied on a particular commodity will only have an impact on that commodity or enterprise alone.

The tariff system of the country is a single column tariff i.e. it has the same duty rate for similar products, irrespective of their

country of origin. The tariff schedule which is in force today was issued in September 1976. The schedule is classified according to the Prussels Tariff Nomenclature (B.T.N.) of the Customs Corporation Council. Commodities are classified according to the Standard International Trade Classification (Revised) (S.I.T.C.(R)) of the United Nations Statistical Office. The schedule is composed of 21 sections, 99 chapters and 970 groups referred as B.T.N. headings.

The ad valorem tariff is the most frequently used type of customs duty in the Ethiopian tariff schedule of 1976. Out of the 1672 commodities (or groups of commodities) listed in the tariff schedule, 1062 of them have ad valorem duties. Specific duty is levied on 150 items and 79 commodities have an ad valorem, or specific duty, whichever is the greater. Methylated or denatured alcohol is prohibited. The remaining commodities are imported duty free. Goods that are imported duty free include most of semi-processed goods or chemicals to be processed in the manufacturing industry, agricultural and industrial machinery and appliances, and Diplomatic and Consular goods.

In addition to customs duties, imported goods are liable to a transaction tax of 18%, based on the value of the import. All imported goods which are subject to transaction tax are also liable to the payment of a 1% Municipality tax. Excise tax is payable in addition to other taxes and duty on certain imported commodities. The schedule also includes a Tobacco Monopoly Tax which is levied in addition to other duties and taxes on imported tobacco products, matches, cigarettes, etc.

Since the issuance of the 1976 customs schedule, duties and excise tax rates of some commodities have been changed. This study incorporates the revisions made upto 1980/81.

3.2. Objectives of Customs duties in Ethiopia

The Ethiopian tariff system plays a dual role of revenue generation and domestic industry protection. Although it is difficult to differentiate between tariff levied for revenue and protection objectives, there exist clear evidence that the tariff policy in the manufacturing sector plays a protective role.

3.2.1. Capital goods consititute the major import items in the Ethiopian import structure. However, such imports as agricultural and industrial machinery, implements and parts thereof are exempted from paying customs duty. Although the exemption reduces government revenue, it is a deliberate policy by the government intended to enhance economic development. This is an incentive provided by the tariff structure to overall development in general and industrialization in particular.

3.2.2. One of the criterea for identifying whether domestic industry is protected or not, is to look into the amount and extent of taxes levied on similar imported and domestic products. The higher the taxes on imports in relation to domestic goods, the more protective the role the tariff plays.[9] In addition to customs duties, imported goods are liable to 18% transaction tax and 1% municipality tax as opposed to 7% transaction tax imposed on domestic manufactured goods. Municipality tax is not payable

on domestic products. Thus the high indirect taxes on imported goods give additional protection to home industries. The tax rate on imported and domestic goods for 25 commodities covered in the study are presented in table 18.

3.2.3. Another approach is to look into the types of goods the duty is levied upon. Generally if the duty levied on an item is only for revenue, the goods on which the duty is imposed should be those which are not produced locally.[10] If the duty is levied on items which are similar to locally produced commodities, then the duty is protective.[11] The Ethiopian tariff structure differentiates between commodities whose competing products are produced at home and those which are not produced domestically. The rate levied on imports whose similar products are not manufactured locally is substantially lower than the others.[12] Customs duties for 25 commodities are given in table 18.

3.2.4. To test whether an industry is protected or not, the formula developed by J.H. Henderson is applied below.[13] If one considers tariff rates, denoted by α, as proportions of import values, and assume that excise taxes are remitted on exports and that the full burden of excise taxes fall on domestic sales, then

$$\alpha_i = di/mi \qquad \ldots.(1)$$

$$\tau_i = ti/(X_i - e_i) \qquad \ldots.(2)$$

$$(i=1,\ldots,n)$$

Where:

α_i = tariff rate on import of commodity i

Types and Rates of Taxes of Imported and Domestic Goods

	Tariffs and Taxes on Imports				Taxes on Domestic Products	
	Customs Duty	Excise Tax	Transaction Tax(%)	Municipality Tax(%)	Excise Tax	Transaction Tax(%)
1 Canned & Preserved fruits	75%	-	18	1	-	7
2 Edible Oil	40%	-	18	1	-	7
3 Flour	75%	-	18	1	-	-
4 Salt	Br5/100 Kg	Br 8/100 Kg	18	1	Br 8/100 Kg	7
5 Macaroni & Spaghetti	50%	-	18	1	-	7
6 Sugar	Br20/100 Kg	Br15/100 Kg	18	1	Br21/Kg	7
7 Alcoholic Liquors	Br18/bottle	Br0.25/bottle	18	1	Br4/bottle	7
8 Wine	Br5/litre	Br0.25/bottle	18	1	Br1/litre	7
9 Beer	Br0.6/bottle	Br0.03/bottle	18	1	Br0.45/bottle	7
0 Soft Drinks	50%	Br0.03/bottle	18	1	Br0.03/bottle	7
1 Carbonated Water	30%	Br0.02/bottle	18	1	Br0.02/bottle	7
2 Tobacco	Br20/Kg	57%	18	1	57%	7
3 Cotton Yarn	70%	Br0.5/Kg	18	1	Br0.25/Kg	7
4 Knitted apparel	75%	-	18	1	-	7
5 Cotton Fabrics	100%	Br0.5/Kg	18	1	Br0.49/Kg	7
6 Nylon Fabrics	100%	Br2/Kg	18	1	Br2.82/Kg	7
7 Soap	Br20/100 Kg	-	18	1	-	7
8 Tyres & Tubes for automobiles	Br0.5/Kg	-	18	1	-	7
Sickle	Br1.5/Piece	-	18	1	-	7
Picks, axes	Br2.5/Unit	-	18	1	-	7
Metal Cans (Cork)	20%	-	18	1	-	7
Corrugated iron sheets	Br20/100 Kg	-	18	1	-	7
Cement	20%	-	18	1	-	7
Marble	100%	-	18	-	-	7
Matches	Br1.5/gross	Br0.06/box	18	1	0.06/box	7

ource: Compiled from Provisional Military Government of Socialist Ethiopia, Ministry of Finance Customs & Excise Tax Administration, Customs Tariff, 1976, and NRDC & CPSC, Taxes, (August, 1982). (unpublished).

d_i = includes all duties and taxes charged against commodity i.

m_i = total value of import of commodity i.

τ_i = excise tax rate on commodity i.

t_i = excise tax levied (collected) on i.

X_i = gross value of domestic output of i.

E_i = value of exports of i.

If $d_i > E_i$ then the tariff on i provides protection to domestic industry beyond an excise tax offset.

The results of this test on the commodities that pay excise taxes show that in all the cases considered, tariff rates(d_i) are by far greater than excise tax rates (τ_i),. Details are presented in table 11.

Table 11

Comparison of tariff rates (d_i) and Excise tax rates (τ_i) for selected commodities for 1980/81

Commodity	Tariff Rates (d_i) as %	Excise Tax Rates (τ_i) as %
Sugar	52	30
Alcoholic liquors	250	80
Tobacco	130	48
Fabrics and Yarn	23	6
Leather and Shoe	100	6

Source: computed from Ministry of Finance, Annual External Trade Statistics, 1981; NRDC & CPSC, Import-Export data,(unpublished), and NRDC & CPSC Annual Report 1980/81(unpublished).

3.2.5. The tariff structure of the country explicitly protects the manufacturing sector by providing duty free or very low tariff rates on goods imported for further processing in local industries as opposed to higher duty rates levied on the same products but imported for retail sale. (see Appendix IV).

3.2.6. In addition to the above criteria the intention of the legislators or tariff rate designers is important. In Ethiopia the protective role of tariffs has been given due attention by the authorities and experts concerned when designing customs duty rates.[14] At the same time, a proclamation has been issued recently by The Government to provide joint ventures with foreign public or private capital.[15] According to the proclamation, a joint venture is exempted from the payment of customs duties and other taxes levied on investment goods and first round spare parts. Furthermore the venture is granted total or partial exemption (if found necessary) from the payment of customs duties and other taxes levied on imports of raw materials and other materials necessary for the production of goods.

In developing oountries the revenue objective of tariffs seems to over-ride the protective objective. However, tariffs levied for one objective could satisfy other objectives as well. To assess the overall effects of the tariff structure requires a complete input-output table for the economy. This is not available in Ethiopia.

3.3. Choice of the Model for ERP analysis

Initially, the concept of an effective rate of protection was used to measure in each industry "the direction in which resources have been pulled (away from free-trade allocation) as a result of tariff structure."[16] It was also used to "give expression to the restrictive effects of duties on trade flows."[17] By measuring the national tariff levels, it served as a method of analysis on the implications of custom-union theory.[18]

Some empirical studies on effective rates of protection indicating the restrictive and the resource pull effects of the tariff structure of some developing countries have been made.[19] Other empirical works had also been conducted for industrial countries.[20] The concept of 'negative value added, what is the same thing as the net effect of the tariff structure is to tax the output of the protected industries is the discovery of Soligo and Stern as a result of their research on Pakistan.[21] In addition, Corden introduced the notion of 'non-traded goods' into the theory.[22]

Empirical studies of effective rates of protection for developing countries are carried out mainly within a partial equilibrium framework. Such models fail to incorporate factors such as the effect of tariffs on the balance of trade, the role tariffs play in generating government revenue, the impact of tariffs on demand etc. Recently an attempt has been made to analyse the effect of tariff protection in a general equilibrium framework.[23] Attia tested the effect of tariff protection on the growth performance of developing economies on the Peruvian

economy with a multi-sectoral general equilibrium framework.[24] The ECA conducted an emperical study on Tanzania and Morocco using "an overall social accounting matrix."[25]

Under the partial equilibrium analysis the two basic methods used for the determination of the effectiveness of protection are the 'Balassa method' and 'Corden method'. The basic difference between the two appraches is the treatment of non-traded goods. Balassa treats them as any other traded good, with a zero effective rate of protection. The logic behind this treatment is that non-traded goods are supplied to the processing industry at constant costs and the protection on value added in processing alone is measured.[26] The second method is to treat them as part of value added, or to consider them as primary inputs which are themselves not traded,so that the extent of protection is measured with respect to the sum of value added in the production of non-traded goods and value in processing.[27] The empirical findings using both methods revealed that the effective rate of protection estimated on the basis of the Blassa method is higher than Corden's method.[28] And,"A frequent finding is that although the absolute level of effective protection changes for most industries the ranking remains unchanged."[29]

Which of the two models is the more appropriate for Ethiopia depends among other factors on the availability of aggregated and disaggregated data required. The Corden method entails dividing the non-traded inputs into direct and indirect material inputs and value added. But such an approach to price determination does not seem to be realistic in a developing country like Ethiopia. In fact Corden himself states

"the difficulty of separating traded from non-traded inputs may compel the use of the Balassa method."[30] Thus the writer of this paper feels that the Balassa method is more appropriate to the Ethiopian case.

3.4. Methodology

3.4.1. Objective

The objective of this paper, among other things, is to answer the following questions.

3.4.1.1 How effective is tariff protection to the Ethiopian manufacturing industries?

3.4.1.2. Which industries or branches of the manufacturing sector does the policy favour and what are the possible consequences on the pattern of development?

3.4.1.3 Under the existing protection policy and pattern of industrial development, what is the domestic resource cost to save or earn a unit of foreign exchange?

Based on the empirical findings, possible policy issues and recommendations will be discussed.

3.4.2 The Model

The nominal and effective rates of protection for 50 major products of the Ethiopian manufacturing industries are estimated for the year 1980/81 (1973 E.C). The scarcity of data limits cross sectional analysis of the tariff structure. The products are grouped into 10 sub-branches of manufacturing industry according to the International

Standard Industrial Classification (ISIC). Ideally, the rates of protection should be estimated using input-output tables. The absence of such a table for Ethiopia is a major handicap. To solve this problem an attempt has been made to construct technical coefficients for each product under study.

In a parital equilibrium framework assuming customs duties to be the only protective measures, nominal rates of protection for comestic products equals c.i.f. import price of similar products plus the tariff rates. Or it is the tariff rate published in the country's tariff schedule expressed as a percent of price. The ERP, on the other hand, is the percentage increase in domestic value added made possible by the tariff structure (i.e. tariffs on both the final product and on imported inputs) compared to a situation under free trade. The formula for nominal rate of protection, effective rate of protection and effective rates including indirect taxes as developed by Balassa are given below.[31]

$$N_j = Pd_j - Pw_j \qquad \ldots\ldots(3)$$

$$Z_j = \frac{W_j - V_j}{V_j} \qquad \ldots\ldots(4)$$

$$\Rightarrow Z_j = \frac{T_j - \sum A_{ij} T_i}{1 - \sum A_{ij}} \qquad \ldots\ldots(5)$$

$$\Rightarrow Z_j = \frac{\dfrac{P_j}{1 + Td_j} - \sum A_{ij}^{1}}{\dfrac{P_j}{(1 - T_j)(1+Tw_j)} - \sum \dfrac{A_{ij}^{1}}{(1+T_j)(1+Tw_i)}} \qquad \ldots\ldots(6)$$

Where:

N_j = Nominal rate of protection of product j.

Pd_j= Domestic price of product j.

Pw_j= World market price of product j.

Z_j = effective rate of protection for activity j.

W_j = Domestic value added per unit of j.

V_j = World market value added per unit of j.

T_j = Tariff rate on product j.

T_i = Tariff rate on material input i.

A_{ij}= Share of input i in product j

P_j = Domestic ex-factory price of product j

Tw_j= indirect taxes on imported product j

Tw_i= indirect taxes on imported input i

Td_j= Domestic indirect taxes on product j.

The implication of the above formula on Z_j are the following.

If $T_j = T_i$, then $Z_j = T_j = T_i$

$T_j > T_i$, then $Z_j > T_j > T_i$

$T_j < T_i$, then $Z_j < T_j < T_i$

$T_j < A_{ij}T_i$, then $Z_j < 0$

$T_j = 0$, then $Z_j = -T_j \dfrac{\sum A_{ij}}{1 - \sum A_{ij}}$

$T_i = 0$, then $Z_j = \dfrac{-T_j}{1 - \sum A_{ij}}$

The efficiency of the enterprises in terms of domestic resource utilization is assessed by the use of Domestic Resource Cost Criterion (DRC). Conceptual problems concerning the measurement and interpretation of the DRC criterion are discussed elsewhere.[32] The formula is given by:

$$DRC = \frac{D_j}{W_j} \qquad .....(7)$$

Where:

DRC = Domestic Resource Cost

D_j = the value of domestic resources used in the production of product j measured in terms of shadow prices.

W_j = The net foreign exchange saved from producing product j.

Using the OECD method of evaluation, unitary DRC ratio is a cut-off point between economically efficient and inefficient industries. The higher the DRC from the cut-off point, the more inefficient is the domestic industry interms of domestic resource use. Net DRC(i.e. treating the opportunity cost of capital as sunk costs) has also been calculated.

Rank correlation coefficients have been calculated between nominal and effective rates of protection. The coefficient assumes value of 0 to 1 in the case of positive correlation and 0 to-1 in the case of negative correlation.[33] "The greater are the interindustry differences in output and input tariffs and in the share of value added, the more will the ranking of industries by effective rates of protection differ from ranking by nominal rates."[34]

3.4.3 Variables and data

In this study ex-factory prices are taken as relevant domestic prices and c.i.f prices represent prices of imported commodities. For certain inputs and products which are not imported to the country the domestic ex-factory prices of these goods is converted to their c.i.f equivalents by shadowing the domestic prices using the Standard Conversion Factor (SCF) developed by the Ethiopian Development Projects Study Agency.[35] The SCF for Ethiopia is 0.75. The limitations and problems of using international prices are discussed elsewhere.[36] International prices are by and large manipulated by transnational corporations through intra-company sales at intra-company accounting prices.[37] The problem of price determination has not been solved even in socialist countries. To ease this problem Polish economists proposed "accessibility of the world market for different commodity groups as the criterios for price formulation."[38] So far instance, "... for 1971-74 the mutual trade of the socialist countries was based on the average world market prices of 1966 - 1970."[39]

Value added in this study is defined in gross terms (i.e. it includes the depreciation of building, machinery and equipment used in the production process). With the assumption of non-substitutability of inputs the free trade value added is found by deducting the c.i.f. value of material inputs and non-traded goods to be used in the production process from c.i.f. value of the product.

3.4.4 Data Sources

The data basis for domestic value of output, value and source of material inputs, wages and salaries for workers, profit, depreciation etc., are the actual plan implementation reports of the enterprises, collected from the Ministry of Industry and NRDC & CPSC. The data for imported products and inputs are taken from the Annual External Trade Statistics of the Ministry of Finance and the annual and bi-annual reports of Customs and Excise Tax Administration. The averaging of tariffs and unquantifiable factors such as quantitative restrictions, non-tariff barriers (sanitary regulations), dumping etc. that affect the prices of products contribute to the imprecision of the data.

References to Chapter 3

[1]Richard Pankhurst, Economic History of Ethiopia 1800-1935(Addis Ababa: Haile Selassie I University Press, 1968), P.527.

[2]Ibid.

[3]Ibid.

[4]Ibid., P. 529.

[5]Legal Notice No. 48 of 1944, The Customs and Export Duties Proclamation 1943 (Addis Ababa, 1944).

[6]Requests for tariff protection were made, for instance, by the Ministry of Commerce and Industry, Augusta's Request for Protection (5 August 1968), (unpublished). Request for duty free import of iron scrap by Ethiopian iron and steel company (12 May, 1970), (unpublished). Tariff Protection for Oil and Soap Industry (18 June 1970),(unpublished). Industry and Domestic Trade Department: Memorandum, Report on theAddis Tyre Company's Request for Tariff Protection (October 19, 1973), (unpublished). የንግድ፣ ኢንዱስትሪና ቱሪዝም ሚኒስቴር፣ ስለልብስ ፋብሪካ ያቸ "ፕሮቴክሽን" ጉዳይ /ግንቦት 25 ቀን 1961ዓ.ም./፣ /ያለታመ/::

[7]F.Yachir, Technology and Industrialization in Africa (CODESRIA Book Series, (n.p.), (n.d.),) , P.170.

[8]Ibid., P.172.

[9]Charles P. Kindelberger, International Economics (4th edition, Illinois: Richard D. Irwin Inc., 1968), P.112.

[10]Ibid.

[11]Ibid.

[12]Such differentiation is made more than 60 times in the tariff schedule of the country.

[13]James H. Henderson, "Taxes, Tariffs, Comparative Costs and the Analysis of Multi-Country Trade," Applications of Input-output Analysis, eds. A.P. Carter and A. Broody (Amsterdam: North-Holland Publishing Company 1972), pp. 119-138.

[14]Tariff Protection of domestic industries as one of the main objectives of the Ethiopian tariff system was stressed at an interview with Ato Mohammed Yahye, Deputy Commissioner of Customs and Excise Tax Administration; W/o Azeb Negussie, Acting head of the department of planning and programming in the Ministry of Finance and Dr. Gebeyehou Alamneh former (untilApril 1983) Planningand Programming head of the Ministry of Finance.

[15]Negarit Gazeta, No. 235 of 1983.

[16]W.M. Corden, "The structure of Tariff System and the Effective Rates". Journal of Political Economy 74(Chicogo: The University of Chicago Press. June, 1966).

[17]Bela Balassa, "Tariff Protection in Industrial countries: An Evaluation," Journal of Political Economy 73 (Chicago: The University of Chicago Press, December, 1965).

[18]H.G. Johnson, "The theory of Protection and Preferences," Economica, XXXVI (London: Houghton Street, Aldwych, May, 1969).

[19]Bela Balassa and Associate, The Structure of Protection in Developing countries (Baltimore: The John Hopkins University Press, 1971). ECA, Analysis and Evaluation of the Impact of Tariff and non-Tariff Protection on Industrialization in Africa (Addis Ababa: ST/ECA/PSD 2/12, 30 December, 1981). (unpublished). Stephen R. Lewis and Stephen E. Guisinger, " Measuring Protectionism in the Growth Rate, and on the need for External Assistance," Discussion Paper (No. 140, Nairobi: University of Nairobi, May, 1972). John H. Power, "The Rate of Protection in Industrial Policy with Particular Reference to Kenya," The East African Economic Review 4 (No.4, Nairobi: Oxford University Press, June, 1972). R.Reimer, "Effective Rates ofProtection in East Affica," The East African Economic Review 3(No.2, Nairobi: Oxford University Press, December, 1971). R.Soligo and J. Stern, "Tariff Protection, Import Substitution and Investment Efficiency," Pakistan Development Review 5 (Karachi: Summer, 1965).

[20]Georgio Basevi, "The Restictive Effect of the US Tariff and the Welfare value, " The American Economic Review, 58 No.4, 1968.

[21]R. Soligo and J. Stern, Op.cit., P.224.

[22]W.M. Corden, The Theory of Protection (Oxford: Clarendon Press, 1971).

[23]Ibid.

[24]Mona Fouad Attia, Tariff Protection and Growth in Developing Countries (Rotterdam: Rotterdam University Press, 1976).

[25]ECA, Loc. cit.

[26]Bela Balassa (1971), Op. cit., P.17.

[27]Corden (1971), Op.cit., P.159.

[28]UN, International Trade Projections, Effective Protection and Income Distribution (Volume 2, Bankok: Series No.9, 1972).

[29]Ibid.

[30]Corden (1971), Op.cit., P.161.

[31]Bela Balassa (1971), Op.cit., pp. 315-320.

[32]Michael Bruno, "The Optimal Selection of Export Promoting and Import Substituting Projects," Planning the External Sector: Techniques, Problems and Policies (United Nations Publications NewYork: 1967). Stephen Guisinger and Donald Meade, (The Domestic Resource Cost and Foreign Exchange as a measure of Economic Efficiency, " (/n.p./, /n.d./,), (mimeographed).

[33]A. Kacutsoyianois, Theory of Econometrics (Second edition, Londdon: The Mc Millan Press Ltd., 1979), P.40.

[34]Bela Balassa (1971), Op.cit., P.50.

[35]Development Projects Study Agency, Guidelines to Project Planning in Ethiopia (Addis Ababa: February, 1981).

[36]Stephen Guisinger and Donald Meade, Loc.cit.

[37]Frederick F. Clairmonte and John H. Cavanagh, "Transnational Corporations and Global Markets Changing Power Relations," Trade and Development (An UNCTAD Review, No.4, Winter, 1982).

[38]The CMEA - Integration of Planned Economies,33(Central School of Planning and Statistics in Warsaw, Warsaw: Research Institute for Developing Countires, 1983), P.98.

[39]Ibid., P. 95.

Chapter 4

The Structure of Protection in Ethiopia

4.1 Findings of the study

Nominal rates of protection for the manufacturing enterprises range from 0 to 305%. The highest average nominal rate is afforded to the consumer goods producing branches of the sector (i.e. beverages 120%, tobacco 73% and textiles 65%). On the other hand the metalic and printing and publishing branches of industry receive the lowest nominal rates 34% and 15% respectively. (Table 12).

The effective rates of protection for the sector range from (4.5%) for printing to 612% for macaroni and spaghetti. On the average the highest effective rate of protection is afforded to the production of consumer goods, of which food manufacturing receives 216%, leather and footwear 163%, and beverages 160%. The lowest effective rate of protection is for wood and the non-metalic branch.

Differences between nominal and effective rates of protection are the highest for some products in the food and metalic industries. For these products the average tariffs on inputs are proportionately lower than tariffs on the products. Differences between nominal and effective rates are narrower for most products in beverages, tobacco, metal and non-metalic branches. For instance, in the tobacco branch

TABLE - 12

Nominal Rates of Protection (NRP), Effective Rates of Protection (ERP), Domestic Resource Cost (DRC), Share of Imported Material Inputs from Total Material Inputs, & Value Added in 1980/81

INDUSTRIAL BRANCH AND PRODUCT	ISIC CODE	NRP	NRP INCLUDING INDIRECT TAKES	ERP	ERP WITH INDIRECT TAXES	DRC	DRC' (NET)	% SHARE OF IMPORTED INPUTS	VALUE ADDED (WORLD MARKET)
1	2	3	4	5	6	7	8	9	10
I. Food Industry	311								
1. Canned meat	3111	75	94	298	136	0.97	0.91	43	0.14
2. Canning of fruits and vegetables	3113	58	88	75	171	0.80	0.78	13	0.37
3. Edible oil	3115	40	59	24	145	1.05	1.02	10	0.13
4. Flour	3116	75	94	90	209	0.25	1.24	...	...
5. Bakery Products (bread)	3117	10	31	486	129	0.87	0.85	6	...
6. Sugar	3118	33	114	56	193	0.85	0.71	3	...
7. Macoroni & Spaghetti	3117	50	69	612	166	0.47	0.43	-	-
8. Caramel	3118	80	115	101	115	0.36	0.30	61	0.62
9. Salt	3121	85	414	206	334	4.32	4.19	-	-
AVERAGE		56	120	216	177				

.../

INDUSTRIAL BRANCH AND PRODUCT	ISIC CODE	NRP	NRP INCLUDING INDIRECT TAXES	ERP	ERP WITH INDIRECT TAXES	DRC	DRC' (NET)	% SHARE OF IMPORTED INPUTS	VALUE ADDED (WORLD MARKET)
1	2	3	4	5	6	7	8	9	10
II. Beverages Industry	313								
10. Alcohol & Liquors	3131	184	404	212	313	0.16	0.12	34	0.85
11. Wine	3132	305	444	439	507	0.54	0.49	42	0.68
12. Beer	3133	30	95	40	72	0.44	0.23	75	0.67
13. Soft drinks	3134	50	108	77	136	0.46	0.40	44	0.57
14. Carbonated water	3134	30	70	34	145	0.47	0.02	46	0.89
AVERAGE		120	224	160	235				
III. Tobacco Industry	314								
15. Cigarettes	3140	73	224	86	231	0.2	0.19	72	
IV. Textiles Industry	321								
16. Cotton yarn	3211	39	75	93	140	0.89	0.84	8	0.37
17. Cotton fabrics	3211	100	154	123	190	0.16	0.13	43	0.80
18. Nylon fabrics	3211	100	182	137	237	0.37	0.32	100	0.65
19. Sacks	3211	41	68	219	177	4.26	3.50	95	0.16
20. Jute mill products	3211	41	68	177	189	1.53	1.32	75	0.20
21. Made-up textiles	3212	75	109	117	197	0.70	0.67	52	0.45
22. Knitted apparel	3213	88	94	145	214	0.58	0.51	98	0.16
23. Thread	...	35	61	36	149	1.27	1.23	16	0.60
24. Blanket	...	65	97	117	185	0.37	0.31	...	...
AVERAGE		65	102	129	186				

.../

INDUSTRIAL BRANCH AND PRODUCT	ISIC CODE	NRP	NRP INCLUDING INDIRECT TAXES	ERP	ERP WITH INDIRECT TAXES	DRC	DRC' (NET)	% SHARE OF IMPORTED INPUTS	VALUE ADDED (WORLD MARKET)
1	2	3	4	5	6	7	8	9	10
V. Leather & Footwear Industry	323/4								
25. Tanned leather	3231	30	55	142	153	0.97	0.72	12	0.17
26. Leather footwear	3240	80	200	188	199	0.60	0.59	19	0.34
27. Canvas footwear	3240	75	109	158	200	0.46	0.45	49	0.44
AVERAGE		62	121	163	184				
VI. Wood Industry	331/2								
28. Ply-wood	331	60	91	83	179	0.70	0.66	37	0.59
29. Wood furniture	3320	40	67	42	156	2.18	2.14	24	...
AVERAGE		50	79	63	168				
VII. Paper and Paper Products Industry	341								
30. Pulp and paper	3411	30	55	295	173	1.80	1.23	100	0.09
31. Printing & publishing	3420	-	19	(4.5)	141	0.45	0.38	90	0.58
AVERAGE		15	37	145	157				

.../

INDUSTRIAL BRANCH AND PRODUCT	ISIC CODE	NRP	NRP INCLUDING INDIRECT TAXES	ERP	ERP WITH INDIRECT TAXES	DRC	DRC' (NET)	% SHARE OF IMPORTED INPUTS	VALUE ADDED (WORLD MARKET
1	2	3	4	5	6	7	8	9	10
VIII. Chemical Industry	351-6								
32. Paints, varnishes and laquors	3521	30	55	48	144	0.57	0.54	74	0.31
33. Soap	3523	37	63	234	156	1.38	1.08	86	0.09
34. Plastic products	3560	15	37	116	128	3.91	3.57	97	0.07
35. Tyres and tubes	3551	...	...	...	...	...	...	98	0.31
36. Car batteries	...	50	79	196	167	0.19	0.18	85	0.62
37. Matches & candle	...	177	296	257	138	0.18	0.17	93	0.67
38. Dry cell & umbrella	...	66	98	129	189	0.43	0.39	89	0.41
AVERAGE		63	105	163	154				
IX. Non-metalic Industry	361-9								
39. Glass products	3620	40	67	90	159	0.74	0.59	35	0.44
40. Structural clay	3691	50	79	11	192	0.90	0.76	2	...
41. Cement	3692	36	62	55	151	0.41	0.31	73	0.62
42. Lime	3692	10	31	10	119	0.04	0.03	78	0.97
43. Asbestos	...	20	43	148	133	...	...	72	0.24
44. Marble	...	100	138	230	234	0.42	0.39	-	0.77
AVERAGE		43	70	77	165				

.../

INDUSTRIAL BRANCH AND PRODUCT	ISIC CODE	NRP	NRP INCLUDING INDIRECT TAXES	ERP	ERP WITH INDIRECT TAXES	DRC	DRC' (NET)	% SHARE OF IMPORTED INPUTS	VALUE ADDED (WORLD MARKET)
1	2	3	4	5	6	7	8	9	10
X. Metal Industry	371								
45. Iron and steel	3710	14	36	141	129	1.00	0.90	79	0.10
46. Hand tools	3811	77	111	156	218	0.55	0.47	95	0.44
47. Structural metal products	3813	15	37	21	129	0.05	0.03	100	0.71
48. Sickle	3811	56	86	74	179	0.29	0.27	76	0.72
49. Corrugated iron sheets	...	15	37	166	...	...	...	100	(0.35)
50. Cork	...	25	49	303	329	2.91	2.11	94	0.07
AVERAGE		34	59	144	197				
MANUFACTURING AVERAGE		59	109	148	183				

of industry, a high nominal rate of protection is offset by high protection of the main material input, tobacco leaf. Thus the difference between the nominal and effective rates is small. Customs duty on imported cigarettes is birr 30/kg net. The ad-valorem equivalent of this specific duty, in 1980/81 prices, was 125 percent. The specific duty on tobacco leaf is birr 15/kg net, which brings the ad-valorem equivalent to 343 percent.

In four out of the fifty cases we observe 'reverse escalation', with nominal tariffs exceeding effective rates. These are edible oil, beer, printing and structural clay products. In all of the four cases customs duties on inputs are proportionately higher than on the products.

The industries that have value added below 10% per unit of a products include cork, soap, plastic products, pulp & paper and iron and steel. Corrugated iron sheets depict negative value added at world market prices. For this product the foreign exchange cost of the imported inputs is greater than the foreign exchange value of the final product.

The effective rates of protection with indirect taxes exceed the effective rates of protection without indirect taxes in 38 out of the 50 cases. This implies that indirect taxes, over and above customs tariffs, play a great role in protecting domestic industries.

Spearmans rank correlation coefficient (r) between the nominal and effective rates of protection is 0.4 with value (Z) = 2.7. Thus the association between the two rates is significant at 5%. In the same

way the rank correlation coefficient between the nominal and effective rates of protection including indirect taxes is 0.94 with z=6.3. Thus there is a relationship between nominal rates and effective rates in protecting the sector.

The Domestic Resource Cost (DRC) calculations show that 10 products have a DRC greater than unity. These are edible oil, salt, sacks, jute mill products, thread, furniture, pulp and paper, soap, plastic products and corrugated iron sheets.[1] This implies that for these factories to save one unit of foreign exchange it costs them more than one unit of domestic currency. Most of these products have a negative or less than 10% world market value added and a high percentage share of imported material inputs. Thus these factories are inefficient in terms of domestic resource utilization. Domestic Resource Cost excluding sunk costs (DRC'), does not differ much from Domestic Resource Cost with sunk costs(DRC). This could imply that most of the machinery and equipment in the enterprises have depreciated to a great extent.

The findings reveal that tariff setting in Ethiopia is done on an individual product basis. There is no consistency in the levels of protection even within sub-branches of industry. Industries exist with diverse rates of protection within the same branch. This inconsistent and case-by-case approach in tariff rate setting assumes that a tariff levied on a commodity or enterprise will have an impact on that commodity or enterprise alone.

The pattern of protection favours consumer goods production. Food, beverages, textiles and leather industries are the oldest group of

industries in the history of manufacturing in Ethiopia. However, after decades of operation they are still highly protected. From the findings of this study it implies that the high protection leads to inefficiency. Moreover, such high levels of tariff protection are disincentives to export. Because of the high protection, the exchange value of the currency is over-valued and hence the prices of inputs are raised, this in turn raises the cost of production and reduces the competitive ability of domestic exports in the world market.

Many countries of the world protect their infant industries and grant effective protection rates of twenty to thirty percent.[2] According to an OECD study, economies of scale and external economies can hardly justify effective protection exceeding twenty percent for infant industries.[3] Balassa argues that effective rates of protection should be "... no more than ten to fifteen percent for all manufacturing activities other than infant industries"[4] and "it does not appear likely ... that a rate of effective protection more than double that for mature industries could be

warranted."[5] Considering the high cost involved in the establishment and development of infant industries and the external economies they generate, Westphal suggests "... effective protection at rates of close to one hundred percent, in order initially to insure adequate infant industry incentive."[6] In any case "the closer is the policy regime to free trade, the better is the industrial performance."[7]

In Ethiopia if one considers the maximum recommendable effective rate of protection for infant industries to be one hundred percent and one applies this percentage to the established enterprises as a cut-off point, 28 industries are found to have rates greater than this amount. Most of the industries that are highly protected are those that have been established in the country for a relatively longer time. Even with such a high cut-off point, these industries are still 'infants' in terms of efficiency while they should have been 'mature' in terms of time. This seems to contradict the infant industry argument for protection. After such a long time, one would have expected that these industries would either have been running efficiently without protection or that they would have only required a minimum level of protection. Although Ethiopia, as a developing country, needs to protect her industries, the high rates observed in many of the older industries are symptoms of inefficiency and could imply protection has been costly to the country.

References to Chapter 4

[1]It is surprising that the DRC for products such as salt, edible oil and furniture is greater than unity. Although the major share of the material inputs are available at home, the result is either because of relatively lower c.i.f. prices of similar importable products or because of the relatively high value of foreign exchange spent for the purchase of very few intermediate inputs. For these products the latter factor is stronger than the former. For other items such as pulp and paper & plastic products, the high DRC implies that the country's resource endowment is not suitable for the production of these items.

[2]Larry E. Westpal, "Empirical Justification for Infant Industry Protection" The World Bank Staff Working Paper, No. 445, (Washington D.C., March 1981), P.17.

[3]Quoted by Bela Balassa and Associates, The Sturucture of Protection in some Developing countries (Baltimore: The John Hopkins Press, 1971) P.98.

[4]Bela Balassa, quoted by Larry E. Westpal, Op.cit., P.14

[5]Bela Balassa, Loc; cit.

[6]Larry E. Westpal, Op.cit., P.17.

[7]Ibid. P.2

[illegible] The per[illegible] required by [illegible] in the initial [illegible]

[illegible] instance, [illegible] requirement [illegible] was [illegible] and the planned va[illegible] exports was [illegible] birr. [illegible] cove[illegible] about 2[illegible] of its [illegible] year.

[illegible] Policy [illegible] York: Harcourt [illegible]

[illegible] export incenti[illegible]

[illegible]

Chapter 5

Recommendations and Conclusion

Industrial development in Ethiopia is a recent phenomenon. The contribution of the manufacturing sector to the national economy, in terms of GDP, employment, export earnings, etc. is very small compared to agriculture. The manufacturing industries generally emphasise the production of non-durable consumer goods.

In Ethiopia, tariff protection is an important instrument employed by the government to encourage the domestic infant industries. To this end industrial machinery, foreign material and intermediate inputs are imported either duty free or at a very low rate of duty. In the same way high duty rates are levied on imported manufactured products if the same products are produced domestically.

The structure of protection in the Ethiopian manufacturing industry is such that the highest protection is provided to non-durable consumer goods, and the lowest effective rate of protection is given to the non-metalic branches of industry. The consumer goods branch of industry includes, to a large extent, those factories that have been established in the country for a relatively longer time. Although they have been in operation for a considerable number of years, tariff protection and other restrictive measures on the imports of similar products have become an indispensable requirement for the existence of these enterprises.

For certain products such as tobacco, the high nominal rate of protection on the product is offset by the high rate of tariff and other taxes on the input. For some other products where customs tariffs on inputs exceed duty on the output, one observes reverse escalation. But in general a high nominal rate of protection is correlated to a high effective rate of protection. Such products as pulp and paper, plastics, sacks, etc. have a DRC which is greater than unity. This is explained to a large extent by the non suitability of the country's resource endowment for the production of these items.

To encourage the establishment of industries, developing countries in general and Ethiopia in particular, need to protect the domestic market against foreign competition. But care should be taken on the dosage and types of commodities or enterprises to be protected and the duration of protection.

Industrial branches such as food, textiles and leather & footwear, among others, should not be content with their existing position, but should push forward to stand on their own feet and compete both in price and quality in international markets. These branches cannot be protected indefinitely. The government should look for possible means whereby these tariff rates could be reduced gradually. At the same time ways and means of increasing efficiency should be developed. Permanent protection is a sign of inefficiency and misallocation of resources.

Reduction of customs tariffs may not be the only factor for the reduction of costs. A host of other cost and cost-related items such as technical progress, improved skills, maintenance, etc. are also included. Better production and organization methods should be identified to make these branches really mature. In addition, efficiency of existing industries could be improved by consolidating (in order to reduce overhead costs) whenever it is possible. Future efficiencies must be planned today.

On the other hand the production of intermediate and capital goods industries should be encouraged. The share of intermediate and capital goods imports in total imports, in terms of volume and value, is increasing. In many cases capital goods produced in developed countries are not appropriate for the conditions that exist in developing countries. Seen from the availability of human and material resources, Ethiopia is not in a position to construct huge capital goods industries in the short run. But with future development in mind, the country should encourage, through tariffs and other incentives, the domestic production of intermediate and capital goods which are suitable to the country's level of socio-economic development. However, the duration of infant industry protection and the duty rates should be set in advance and for a temporary period so that the enterprises can prepare themselves for competi-

ion. The tariff rates could be differentiated into permanent and temporary rates. The permanent rates are the minimum required by the industry (say 10-20%) and the temporary rates are those tariffs levied in the initial years of operation and can be eliminated gradually.

The existing enterprises, even those which use primary agricultural inputs, import a substantial share of the inputs from abroad. These include, for instance, barley for beer, grapes for wine, tobacco leaf for cigarettes, kenaf for jute mills etc. With appropriate policies the country can exploit its natural resource endowment for the production of agricultural inputs and the foreign exchange spent for the purchase of these agricultural inputs could be diverted to the establishment of other industries.

Industrial development should be compatible with the broad development goals of a country. The long run objectives of developing countries should be to satisfy the basic needs of the population and to attain sustained growth and self-reliance. So industrial development needs to be directed towards correcting the structural distortions in the economy by shrinking the gap between domestic production and consumption and by internalizing or adapting the technology transferred. However small the resources of the country may be, industrial projects must be based on local resources and should have high inter-industry linkages.

The economic development of a country depends to a large extent on the growth of its exports. The contribution of manufacturing to total foreign exchange earnings is very small, while its con-

sumption in terms of investment and for the purchase of materials inputs is strikingly high. For instance, in 1980/81 the sector covered only 28.8% of its foreign exchange requirements in that year. In order to make a breakthrough in economic development in general and industrialization in particular the government should encourage and strengthen industrialization for exports.

The infant industry protection argument for import substituting industrialization should be extended to export - oriented industries as well. The 'late comers' are at a disadvantage in marketing their export goods in the world market, and export promotion involves the cost of marketing, data and information gathering, etc. Export industries must be low-cost competitive industries and hence may need to be provided with appropriate incentives such as subsidies and the elimination of import duties on inputs. In addition domestic raw material and intermediate input prices are in most cases higher than imported prices because of the high protection at home. So, the infant industry protection argument should be provided to the export oriented manufacturing industries until they capture the market and mature to a position where they can be able to compete in the international market both in quality and price.

So, the establishment and strengthening of agricultural materials processing export industries, backed-up by the necessary export promotion incentives, is a sine-qua-non to Ethiopia's economic development.

Seclected Bibliography

A. Books

Ahmed, Jaleel. Import Substitution, Trade and Development. Greenwich: Jai Press, 1978.

Attia, Mona Fouad. Tariff Protection and Growth in Developing Countries. Rotterdam: Rotterdam University Press, 1976.

Ashley, William. Principles of Political Economy by John Stewart Mill. Fairfield: Augustus M. Kelly Publishers, 1976.

Balassa, Bela, and Associates. The Structure of Protection in Developing Countries. Baltimore: The John Hopkins University Press, 1971.

Chenery, Hollis B. Patterns of Development 1950-70. London: Oxford University Press, 1975.

Corden, W.M. The Theory of Protection. Oxford: Clarendon Press, 1971.

Eshetu Chole. Import Substitution in Practice: The case of Ethiopian Textile Industry. Ph.D. Dissertation, Syracuse: Syracuse University, 1973.

Eshetu Chole and Teshome Mulat. Pattern of Industrialization and Impact on Employment and Incomes in Ethiopia. Addis Ababa: September, 1983.

Ghatak, Sabrata. Development Economics. London: Longman Group Ltd., 1978.

Haberler, Goffried Von. The Theory of International Trade. London: W. Dodge & Company limited, 1936.

Kindelberger, Charles P. International Economics. 4th edition, Illinois: Richard D. Irwin Inc., 1968.

Koutsoyiannis, A. Theory of Econometrics. Second edition, London: The Mc Millan Ltd., 1979.

Krauss, Melvyn B. A Geometric Approach to International Trade. Oxford: Basil Blackwell, 1979.

Kreinin, Mordechai E. International Economics: A Policy Approach. Third edition, New York: Harcourt Brace Jovanovich, 1979.

Little, I., T. Scitovsky, and M. Scott. Industry and Trade In Some Developing countries. OECD, London: Oxfor University Press, 1966.

Meade, J.E. Trade and Welfare Volume 2, London: Oxford University Press, Ely House, 1972.

Moore, R.J. "Imperialism and Free Trade Policy in India," 1953-1954," Great Britain and the Colonies 1815-1865, ed. A.G.L. Shaw, London: Methuen & Co. Ltd., 1970.

Morris, Richard B. (ed.) The Basic Ideas of Alexander Hamilton New York: Pocket Books, 1957.

Pankhurst, Richard. Economic History of Ethiopia 1800 - 1935. Addis Ababa: Haile Selassie I University Press, 1968.

Smith, Adam. The Wealth of Nations. Part two, New York: P.F. Collier Sons, (n.d.).

Sutcliffe, R.B. Industry and Development. London: Addison Wesley, 1971.

B. BOOKS: PARTS OF SERIES

Allison, Caroline, and Reginald Green. "Stagnation and Decay in Sub-Saharan Africa: Dialogues, Dialects and Doubts," Accelerated Development in Sub-Saharan Africa. IDS, Vol. 14, No. 1, Sussex: January 1983.

Bruno, Michael. "The Optimal Selection of Export Promoting and Import Substituting Projects," Planning the External Sector: Tehniques, Problems and Policies. New York: United Nations Publications, 1967.

The CMEA - Integration of Planned Economies. Central School of Planning and Statistics in Warsaw, Warsaw: Research Institute for Developing Countries, 1983.

GATT "The Tokyo Declaration," Activities (of GATT) in 1973. Geneva: Sales No. GATT 1974/3, 1974.

Henderson, James H. "Taxes, Tariffs, Comparative costs and the Analysis of Multi-country Trade," Applications of input-output Analysis. eds. A.P. Carter and A. Broddy, Amsterdam: North-Holland Publishing Company, 1972.

Joshi, Vijay. "India's Export Incentive System," Industry and Development. UNIDO, No.2, New York: January, 1979.

Rweyemamu, J.F. "Import Substitution as an Industrial Strategy: The Tanzanian case," Industrialization and Income Distribution in Africa. ed. Rweyemamu, J.F., CODESRIA Book Series, Dakar: November, 1980.

The Second ACP-EEC Convention. ACP-EEC Council of Ministers, Lome: 31 October, 1979.

Travis, William Penfield. The Theory of Trade and Protection. Harvard Economic Studies, Volume 71, Massachusetts: Harvard University Press, 1964.

Yachir, F. Technology and Industrialization in Africa. CODESRIA Book Series, /n.p./, /n.d./.

C. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS.

Central Statistical Office. Statistical Abstract. various issues.

_____. Results of the Survey of Manufacturing Industries 1979/80. Addis Ababa: 1981.

Commercial Bank of Ethiopia. The Ethiopian Economy. Addis Ababa: April, 1970.

Development Projects Study Agency. Guidelines to Project Planning in Ethiopia. Addis Ababa: February, 1981.

ECA. Analysis and Evaluation of the Impact of Tariff and Non-Tariff Protection on Industrialization in Africa. ST/ECA/PSD. 2/13, Addis Ababa: 30 December, 1981.

Imperial Ethiopian Government. Five Year Development Plan 1957-1961. Addis Ababa: Berhanena Selam Printing Press, October, 1959.

_____. Second Five Year Plan. Addis Ababa: Berhanena Selam Printing Press, 1962.

_____. Third Five Year Plan. Addis Ababa: Berhanena Selam Printing Press, 1968.

Lagos Plan of Action for the Economic Development of Africa 1980-2000. Organization of African Unity, Geneva: International Institute of Labour Studies, 1981.

Legal Notice No.48 of 1944, The Customs and Export Duties Proclamation 1943. Addis Ababa: 1944.

Ministry of Commerce, Industry and Tourism and Central Statistical Office. Annual Survey of Manufacturing Industry for 1969/70. Addis Ababa: June, 1972.

_____. Annual Survey of Manufacturing Industry for 1971/72. Addis Ababa: June, 1974.

Ministry of Finance. Annual External Trade Statistics. 1981.

Negarit Gazeta, Various issues.

Planning Commission Industry Department. A Note on the Recent Development in the Manufacturing Sector. Addis Ababa: February, 1977.

PMAC: Ministry of Finance, Customs and Excise Tax Administration. Customs Tariff. Addis Ababa: 1969.

PMAC: Programme of the National Democratic Revolution of Ethiopia. 1976.

UN. Industrial Statistics. 1976.

_____. International Trade Projections, Effective Protection and Income Distribution. Vol. 2. Bankok: series No.9, 1972.

UNCTAD. Commodity Issues: A Review and Proposals for Further Action, TD/273, 11 January, 1983.

UNIDO. World Industry Since 1960: Progress and Prospects. Sales No. E.79 ii B.3, New York: 1979.

Westphal, Larry E. Empirical Justification for Infant Industry Protection. The World Bank Staff working paper, No. 445, Washington D.C. : March, 1981.

World Bank. Accelerated Development in Sub-Saharan Africa: An Agenda for Action. Washington D.C. : 1981.

የምርት ዘመቻ ጠቅላይ መምሪያ፣ የዱር ጅ-ት ሥራ አመራርና የፖሊሲ ጉዳዮች:: አዲስ አበባ፣ መስከረም 1975ዓ.ም.

የኅብረተሰብአዊት ኢት ዩጵያ ጊዜያዊ ወታደራዊ መንግሥት፣ የብሔራዊ አብዮታዊ የምርትና የቢሕሰ ዕድገት ዘመቻ የሁለተኛው ዓመት 1972ዓ.ም. ዕቀዱ አዲስ አበባ፣ 1972ዓ.ም.

የንግድ፣ ኢንዱስትሪና ቱሪዝም ሚኒስቴር፣ ስለ ለበስ ፋብሪካዎች "ፕሮቴክሽን" ጉዳይ ግንቦት 25 ቀን 1961ዓ.ም.:: /ያለታተመ/

D. PERIODICALS

Balassa, Bela. "Tariff Protection in Industrial Countries An Evaluation," Journal of Political Economy, 73(December, 1965).

Basevi, Georgio. "The Restictive Effect of the US Tariff and the Welfare Value," The American Economic Review, Vol. 58, No.4, 1968.

Clairmonte, Frederick F. and John H. Cavanagh. "Transnational Corporations and Global Markets: Changing Power Relations," Trade and Development, An UNCTAD Review, No.4, Winter, 1982.

Corden, W.M. "The Structure of Tariff System and the Effective Rates," Journal of Political Economy, 74 (June, 1966).

Ethiopia Observer, Vol. I, No.5, 1957.

_____. Vo. II, No.1, 1967.

_____. Vol. III, No.3, 1964.

Ethiopian Economic Review, No. 2 (June, 1960).

Fassil Nebebe "Empirical Study of Capital - Labour Substitution in Ethiopian Small Scale Industries," Ethiopian Journal of Development Research, Vol. 4, No. 2 (October, 1980).

Johnson, H.G. "The Theory of Protection and Preferences," Economica, XXXVI (May, 1969).

Kemp, M.C. "The Mill - Bastable Infnant Industry Dogma," Journal of Political Economy, 68(February, 1960).

Khan, Azizur Rahman. "Notes on the concept of Import Substitution," Studies in Commercial Policy and Economic Growth, No.2, (January, 1970).

Lewis, Stephen, R. and Stephen E. Guisinger. "Measuring Protection in the Growth Rate and on the Need for External Assistance," Discussion Paper, No. 140(University of Nairobi (May, 1972).

Power, John H. "The Rate of Protection in Industrial Policy with Particular Reference to Kenya," The East African Economic Review, Volume 4, No.4 (June, 1972).

Reimer R. "Effective Rates of Protection in East Africa," The East African Economic Review. Vol.3, No.2 (December, 1971).

Soligo R. and J. Stern. "Tariff Protection, Import Substitution and Investment Efficency, " Pakistan Development Review, 5(summer, 1965).

Thshome Mulat. "Capital - Labour Substitution in Ethiopian Manufacturing Industries," The Developing Economies, XVIII, No.3 (September, 1980).

_____. "Indusry Employment in Ethiopia," Ethiopian Journal of Development Research, 4, No.1 (April, 1980).

Woldu Gebre Michael. "A Review of Industrial Development Policies in Ethiopia," Ethiopian Journal of Development Research, 4, No.1 (APril, 1980.)

APPENDIX I

Table 13

Per Capita Production of Some industrial Commodities in different countries in 1974

	Unit of measure	Per Capita Production						
		Ethiopia	Egypt	Kenya	Brazil	Japan	U.S.A.	USSR
Sugar	Kg.	4.8	162	-	-	15.4	-	58.8
Edible oil	"	0.4	4.2	-	18	9.7	42	[illegible]
Fabrics	Sq.m.	2.8	24	1.7	9.4	19 ..	24	28.5
Leather footwear	Pairs	0.09	1.0	-	0.12	0.45	2.1	2.7
Soap	Kg.	0.4	5.0	2.3	2.7	1.4	-	5.8
Cement	"	6.7	89	66.3	144	663	346.4	456
Wire rods	"	0.04	7.2	-	7.8	63.1	21.5	32

Source: Computed from UN Industrial Statistics, 1976

APPENDIX II

Table 14

Paid-up capital and gross value of production

by Source of ownership and industrial group

Industrial Group	paid up capital in percent						Gross value of production in percent			
	1971/72			1979/80			1969*	1979/80		
	private	public	Total	private	Pub-lic	Total	Total	Private	Pub-lic	Total
Food	22	3.3	25.3	0.9	24.7	25.6	24.4	1.6	23.4	25.0
Beverages	7.2	0.5	7.7	0.3	5.8	6.1	10.8	0.3	11.6	11.9
Tobacco	-	1.3	1.3	-	0.8	0.8	2.9	-	5.1	5.1
Textiles	19.1	4.9	24.0	0.4	26.5	26.9	33.7	0.4	20.6	21.0
Leather &Shoe	2.0	-	2.0	0.1	3.6	3.7	3.9	0.2	6.2	6.4
Wood	2.1	-	2.1	0.5	1.1	1.6	2.8	0.7	1.1	1.8
Paper&Printing	1.9	3.3	5.2	0.4	3.3	3.7	1.9	0.3	3.3	3.6
Non-metal	3.5	3.9	7.4	0.5	6.1	6.6	4.9	0.1	1.7	1.8
Chemical	2.4	17.6	20.0	0.5	19.4	19.9	8.5	0.6	17.6	18.2
Metal	4.5	0.5	5.0	1.2	3.9	5.1	6.2	0.4	4.8	5.2
Total	64.7	35.3	100.0	4.8	95.2	100	100	4.6	95.4	100

Sorce: The 1979/80 figures are computed from, Central Statistical Office, Results of the Survey of Manufacturing Industries (1979/80), Addis Ababa: April, 1982.

The 1969 figures for gross value of production are from Statistical Abstract, 1971 * The break-down is not available.

1971/72 figures for paidup capital are from Ministry of Commerce Industry and Tourism and Central Statistical office, Annual Survey of manufacturing industries 1971/72

APPENDIX III

Table 15

Regional distribution of manufacturing industries before and after 1974. (in percent)

Regions	Number of establishments		Employment		Fixed Assets		Gross Value of production [1]
	1969	1979/80	1969	1979/80	1969	1979/80	1979/80
Shoa	51.0	58.7	60.2	63.5	47.4	79.0	61.8
Eriterea	37.5	22.0	23.6	16.9	37.2	12.0	23.9
Hararghe	9.4	5.7	8.5	10.2	6.0	5.0	8.0
Others	2.1	13.6	7.7	9.6	9.4	4.0	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Data for 1969 on regional basis is not available.

Source: 1969 data is from: Commercial Bank of Ethiopia, The Ethiopian Economy, Addis Ababa April 1970.

1979/80 data is from: Central Statistical Office, Results of the Survey of Manufacturing Industries 1972 E.C.(1979/80) Addis Ababa, April 1982.

APPENDIX IV

Table 16

Excerpts from the Customs Tariff Book, to show that different rates are levied on identical goods for the purpose of protecting domestic industries.

B.T.N. Heading	Tariff Item No.	Description	Duty Rate
11.08	-	Starches	
	110810	In bulk for use in the production of textile yarns or fabrics.	Free
	110890	Other	40%
32.05	-	synthetic Organic dyestuffs	
	320510	Imported for processing and finishing by local tanneries and textile industries	Free
	320590	Other	10%
35.05	-	Dextrins and dextrin glues	
	350511	For the manufacture of matches	Free
	350519	Other	20%
40.05	-	Plates, sheets and strip of unvolcanized natural or synthetic rubber	
	400510	For further processing in tyre and footwear industry	Free
	400590	Other	50%
47.02	-	Waste paper and paper board	
	470210	Imported by paper mill	Free
	470290	Other	60%
56.07	-	Woven fabrics of man-made fibres	
	560791	Not being locally manufactured	65%
	560792	For manufacture of umbrellas	25%
	560793	Imported for use in the tyre industry	Free
	560799	Other	100%

[illegible]

B.T.N. Heading	Tariff Item No.	Description	Duty Rate
60.01	-	Knitted or Crocheted fabrics	
	600191	Not being manufactured locally	65%
	600192	Others	100%
73.08	-	Iron or steel coils	
	73.0810	Imported for the Production of tools	Free*
	73.0820	of all kinds and dimensions for further processing in Ethiopia	Br.3.00/100kg.
	73.0890	Other	Br.20.00/100kg.
74.03	-	Wrought bars rods	
	74.0310	Imported for further processing	Free
	74.0390	Other	10%
76.04	-	Aluminium foil	
	760410	when imported by local manufacturers for further processing	10%
	760490	Other	15%

*Free of Transaction and Municipality Taxes.

F1

(Form MM - 1)

DATA COLLLECTION FORMAT

MASTER TABLE

1980/81 (1973 E.C)

PRODUCT NAME _____

QUANTITY PRODUCED _____

FACTORY NAME _____

List of inputs	BTN Code	Quantity Consumed			Factory Gate Value In Birr				
		Unit of Measure	Local	Imported	Unit Price		Value		
					Local	Imported	Local	Imported	Total
1	2	3	4	5	6	7	8	9	10=8+9
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

F2

MM - 1 (Contd.)

Tariff on c.i.f		I N D I R E C T T A X E S											
		Transaction Tax				Excise Tax				Municipality Tax		Total Value	
		L o c a l		Imported		L o c a l		Imported					
Rate	Value	Rate	Value	Rate	Value	Rate	Value	Rate	Value	Rate	Value	Local	Imported
11	12	13	14	15	16	17	18	19	20	21	22	23	24

F3

MM - 1 (Contd.)

INLAND COSTS ON IMPORTS													Factory Gate (Birr)	
Maritime		Import-Export		Insurance		Transportation		Financial Allowance		Other fees		Total Value		
Rate	Value	Rate	Value	Rate	Value	Rate	Value	Rate	Value	Rate	Value		Unit Price	Value
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39

F4

(Form MM - 2)

DATA COLLECTION FORMAT
FOR MANUFACTURING PRODUCTS

Product	ISIC Code	BTN Code	PRODUCTION				Tariff On C.I.F Value	
			Quantity		Value (Birr)			
			Unit of Measure	Amount	Unit Price	Value	Rate	Value
1	2	3	4	5	6	7	8	9
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

F5

MM - 2 (Contd.)

I N D I R E C T T A X E S												Ex-factory unit price	C.I.F Unit Price
Transaction Tax				Excise Tax				Municipality Tax		Total Taxes			
Local		Imported		Local		Imported							
Rate	Value	Rate	Value	Rate	Value	Rate	Value	Rate	Value	Local	Imported		
10	11	12	13	14	15	16	17	18	19	20	21	22	23

(Form MM - 3

F6

DATA FOR THE CALCULATION OF TECHNICAL COEFFICIENTS

Input	BTN Code	QUANTITY				FACTORY GATE VALUE (BIRR)					Tariff on c.i.f value (Br.)	
		Unit of Meas.	Local	Imp.	Total	Unit Price		Value				
						Local	Imp.	Local	Imp .	Total	Rate	Value
1	2	3	4	5	6	7	8	9	10	11	12	13
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												

Product

Name _____

ISIC code _____

Indirect taxes on the Product: Birr _____

Ex-factory prices less indirect taxes: Birr _____

Tariff rate on c.i.f value of similar imports: _____

Value Added

(MM - 4)

Product _____

ITEMS	VALUE
1	2
Domestic	
A. Quantity produced	
B. Ex-factory value of the product	
C. Total value of the product	
D. Domestic value added at factor cost	
1. wages and salaries + benefits	
2. depreciation (gross)	
3. operating surplus before tax (26)	
4. interest	
5. capital charge	
E. Value added per unit of output	
Total	
Foreign	
A. c.i.f value of product	
B. c.i.f value of inputs	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
C. Value added	
D. Value added per unit of product	
Total	

Domestic Resource Cost

(MM - 5)

Product _____

Items	Money Costs (Br.)	Conver factor	Social cost	Foreign share %	Total Local (Birr)	Total Foreign (Birr)
1	2	3	4	5	6	7
1. Materials c.i.f						
1.						
2.						
3.						
4.						
2. Local materials						
1.						
2.						
3.						
4.						
3. Duty taxes						
4. Transportation & hand.						
5. Labour						
6. Depreciation						
7. Electricity						
8. Water						
9. Insurance						
10. Interest						
11. Transportation						
12. Taxes (Exaise + tran. +inc)						
13. Profit						
14. Maintenance						
15. Fuel and lubricants						
16. Others						
Total						

F9

MM - 5
(Continued)

Product _____

Items	Money costs	Conv. fact.	Social cost	Foreign share %	Total	
					Local	Foreign
1	2	3	4	5	6	7
If the product was to be imported						
1. c.i.f value						
2. c.i.f price						
3. Duty taxes						
. Customs						
. Transaction						
. Excise						
. Municipality						
4. Transport & bank charges						
5. Clearance and handling						
.....	.....	.....	.....	.....	.....	.....
Total						