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QUANTITATIVE ANALYSIS OF INCENTIVES AND DISINCENTIVES FOR EXPANSION
OF INDUSTRIAL OUTPUT AND EMPLOYMENT IN SOMALIA

A report to the United States Agency for International Development
mission to Somalia, pursuant to the Employment and Enterprise Policy
Analysis Project, AID Contract No. DAN-5426-C-00-4098-0, PIO/T No. .

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Harvard Institute for International Development
Cambridge, Massachusetts, U.S.A.

September, 1985
(Revised)

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Linda Bulhart
3/13/86

MEMORANDUM

March 13, 1986

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FROM: AID/S&T/RD/EED, Robert C. Young *RCY*

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QUANTITATIVE ANALYSIS OF INCENTIVES AND DISINCENTIVES FOR EXPANSION OF
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Executive Summary

The present study was designed to provide the Government of the Somali Democratic Republic (GSDR) with a framework for quantitative analysis of the impact of its system of incentives and disincentives, explicit and implicit, for growth of industrial output and employment. The study was conducted by the Harvard Institute for International Development (HIID) under contract to the U.S. Agency for International Development, within the framework of AID/Washington's Employment and Enterprise Policy Analysis project (EEPA) and a Policy Initiatives and Privatization Project executed by the GSDR Ministry of National Planning with support from the USAID mission to Somalia. A three-person team visited Mogadishu from mid-April to late May 1985, subsequently preparing the present report in Cambridge, Mass.

The heart of the study consisted of applying, to a sample of industrial enterprises, an analytical approach known as effective protection which has guided much recent economic work on policies for industrial growth in developing countries, particularly studies supported by the World Bank. The effective rate of protection (ERP) gives a good indication of the impact of incentives and disincentives in an economy. It sums up the effects of governmental measures that impact the allocation of resources among industries and that influence the orientation of economic incentives between exporting and import-substitution. It is called the "effective rate" because it considers the combined effects of output and input protection on the processing activity. This parameter indicates how much more or less net revenue (value of sales less purchase of inputs) an industrial enterprise receives, because of import taxes and all other forms of government intervention in trade, compared to what it would receive if the absence of

intervention allowed world market prices for both inputs and finished products to prevail in the domestic market. For 27 sample enterprises in 11 branches of industry in Somalia, an effective rate of protection (ERP) was computed on the basis of financial operating results for 1983 or 1984. These calculations allowed a much more consistent analysis of the effects of trade policy on output and employment.

Another important index used in this study which takes the effective rate of protection and adds in the impact of exchange rate policy is known as the effective exchange rate (EER). The EER captures the combined incentive effect of the official exchange rate, subsidies, tariffs, and quota premiums, and thus, gives a more complete indication of the response of output to a devaluation. It corrects the official exchange rate to measure the actual amount of local currency paid for a dollar's worth of exports, after tariffs, subsidies, and quotas (as measured by the ERP) are considered. Anything that effects the rate at which importers and exporters convert foreign exchange into domestic currency will affect their competitiveness and potential profitability. The EER is calculated as how many Somali shillings the enterprise receives (in net revenue) per dollar of foreign exchange that its production saves or earns Somalia (by replacing imports of the product or by exporting to the world market). The free market exchange rate forms the basis for comparison for the EER; an enterprise forced to operate at a lower value (e.g. in early 1985, receiving fewer than 85 sh. for each dollar of foreign exchange saved or earned) is being subjected to a disincentive to producing, while EER's above 85 sh. constitute an incentive, referred to as positive effective protection.

The report classifies and analyzes, under eleven policy headings, the major government interventions that interact to determine the ERP/EER:

1. Taxation of international trade, notably the levying of differential import duties on finished products versus industrial inputs and the structure of exemptions from the latter;

2. Foreign exchange management, with particular reference to dual exchange rates (franco valuta versus overvalued official rates) and the January 1985 liberalization;

3. Trade regulation, i.e. the exercise of statutory monopolies by public enterprises;

4. Price control, especially the determination of selling prices of

public enterprises;

5. Credit, i.e. the negative real interest rates (nominal rates minus inflation) prevailing in recent years and consequent rationing of credit;

6. Direct subsidization, manifested primarily through public financing of state enterprise investments;

7. Organization of financial services, reflecting deficiencies in the provision of services to industry by the government's commercial banking monopoly;

8. Organization of infrastructure services, with special reference to shortcomings in electric power supply;

9. Direct taxation, comprising the regime of company taxation and the concessions (tax holidays) enjoyed by a handful of enterprises;

10. Promotion of industrial exports, comprising a set of policies currently distinguished by their absence in Somalia; and

11. General policy environment, defined by the business community's perception of government's attitude towards it and willingness to pursue macroeconomic policies that preserve the competitive position of efficient producers.

The computations of effective rates of protection based on gross value added in the 27 enterprises, i.e. without deducting the foreign exchange component of annual depreciation of capital equipment, show a wide distribution. Four entities were forced to operate with (i) negative effective protection; six each enjoyed ERP's of (ii) less than 50 per cent, (iii) 50 to 100 per cent, and (iv) over 100 per cent; and five were able to operate despite showing (v) negative value added at world prices, i.e. causing a net loss of foreign exchange to the national economy. In such cases the convention is to say that an enterprise received infinite protection.

Assuming a free-market exchange rate of 85 shillings to the dollar, these ranges of ERP's correspond to effective exchange rates (EER's) of (i) less than 85 sh., (ii) 85-127 sh., (iii) 127-170 sh., (iv) over 170 sh., and (v) infinity, i.e. the same convention as with the ERP.

When ERP's are recalculated on the basis of net value added, i.e. after adding the foreign exchange component of annual depreciation to other foreign exchange costs and subtracting the total from gross foreign exchange earnings or savings, the number of cases of negative value added rises to almost half (9 out of 20) of the list of enterprises for which reasonable estimates can be

made of the replacement cost of capital assets. This reflects the gross underutilization of invested capital arising from the stop-go regime which previous government policies have imposed on much of Somalia's industry.

The current capital stock could produce more output and employ more people if it were utilized more fully. For the 6 to 12-month period leading up to May 1985, only three out of 25 enterprises reported making regular use of two shifts, subject to periodic interruptions in power supply. The others defined capacity operation in terms of a single shift, which is an uneconomic approach in a low-income, capital-scarce economy. Two enterprises reported operating between 55 and 100 per cent of a single shift, three claimed to be in the vicinity of 50 per cent, and the other 17 were below that level. Four had suspended production altogether during the past 6 months or longer.

Firms employing 20 or more persons in a modern manufacturing process would be operated for at least two shifts if entrepreneurs received correct price signals and if inputs and spare parts were available. But these conditions have not been fulfilled in recent years in Somalia. An overvalued exchange rate, making imports look expensive, and a negative real interest rate on loans allowed entrepreneurs to run their factories at inefficiently low levels. The ensuing disruption of foreign exchange has obstructed the flow of inputs and spare parts, which, along with power failures, now constitute substantial supply constraints on producers who know that demand for their outputs exists but can not meet it. The outcome has been higher domestic prices for goods and more imports of foreign substitutes.

Recent policy reforms may be expected to increase capacity utilization during the coming year. As the shift to a free foreign exchange market takes effect, firms now supply-constrained should be able to increase output and employment. But estimating the additional labor absorption likely to ensue is a highly speculative exercise. Many enterprises claim to be retaining labor redundant to their current production, either because of government restrictions on dismissals or the high cost of recruiting and training replacements. This retention of labor may well be the result of rational cost-benefit analysis by management. Wage levels are currently quite low given the prices of essential wage goods or by comparison with neighboring Kenya, and the ratio of labor costs to sales is declining. The case study analysis places labor costs, including more expensive management and accounting staff as well as factory labor, at roughly 9 per cent of sales

(domestic value). For 1985, it is estimated that retention of 30 per cent redundant manufacturing manpower should not cost an enterprise over two per cent of the value of sales.

The sample of enterprises reported average factory wages in the range of 1,500-2,500 shillings per month. At a free market rate of 85 sh./\$, the upper limit converts to \$29+; this compares with a 1983 average manufacturing wage on the order of \$126 in neighboring Kenya. For Somali manufacturers thinking in terms of commodity prices at free market c.i.f. levels, labor has become very inexpensive, and as of mid-1985 its cost was still falling in relation to the overall price level. There is thus every reason to expect that efficient producers will hire liberally as they see supply constraints disappearing, as long as they trust that no abrupt reversal of policy will occur. Firms should find themselves in a position to displace the imported consumer goods that have recently been entering Somalia more out of default on the part of local producers than because of inherent lack of competitiveness.

These same tendencies are doubtless reducing ERP's enjoyed by many enterprises, but there is no reason to expect the range of values identified in the study to have narrowed. One or two public enterprises in the sample continue to be burdened by setting of prices below cost, thus very likely still receiving negative effective protection, while other entities, both public and private, burden the economy with negative value added, thus continuing to benefit from infinite protection.

The wider the dispersion of rates of effective protection, the more inefficient is a government's overall policy for promoting industrialization. An enterprise's contribution to social product is properly measured by the amount of foreign exchange that it earns or saves, and its efficiency by the amount of domestic resources—labor, capital and natural resources—that it consumes in earning or saving a unit of foreign exchange. High ERP's/EER's attract resources into industries that consume large amounts of domestic resources per dollar earned or saved, while negative values discourage investment in relatively efficient industries. Reducing dispersion thus shifts resources from inefficient industries into efficient ones, increasing output for a given use of domestic resources.

Recommendations

The study's recommendations fall under three main headings: (A) application of economic efficiency criteria in designing incentives for

industrial development, (B) implementation of appropriate incentives, and (C) directions of further study.

Under (A), the principle of economic policy arising from the application of economic efficiency criteria is that combinations of incentives and disincentives facing different industrial enterprises should be designed to yield roughly equivalent ERP's or EER's, that ERP's should be well below 50 per cent, and that EER's should provide only a modest premium above the equilibrium exchange rate. The report stresses that adoption of efficiency criteria will eventually force negative value added enterprises out of business. Those capable of covering variable though not fixed costs can remain in production, but they will not be able to recoup their investments (figured in constant-price terms). These enterprises are currently too inefficient to benefit from this liberalization of trade policy, and many have little chance of long-term survival without special protection or assistance from the government. However, the Somali government should think seriously about the high costs of providing assistance to such producers, either in the form of direct subsidies out of the government budget or foregone revenue through duty exemptions for imported inputs. Another important consideration must be the negative impact on economic growth of the use of indirect measures such as high protective tariffs or import prohibitions which encourage both inflation and incorrect relative prices.

If the government adopts the efficiency approach, then to a large degree the success of such a policy will depend on industrial entrepreneurs gaining confidence that the government appreciates the importance of safeguarding the competitive position of efficient producers. Thus, considerable effort should be devoted to explaining the policy to the business community and convincing industrialists that it will be applied in a consistent manner.

With respect to (B), a case is made for redesigning the import tax system to reduce the currently excessive disparities between import duties on finished goods and duties actually paid, i.e. net of exemptions, on imported inputs. Disparities that are allowed to persist should be calibrated in accordance with industry cost data so as to generate reasonable ERP's and avoid sustaining activities with negative value added at world prices. Higher taxation of luxury imports should be accompanied by excise taxes on comparable domestic products so as to avoid weighting Somalia's industrial structure towards low-volume, high-cost production of luxuries.

Formation of an inter-agency task force under the leadership of the Ministry of Finance is proposed to conduct the staff investigations required for a solid approach to import tax reform.

Government is urged to take steps to impel manufacturers into exporting. A study tour is recommended to send policy-makers to developing countries with successful export industries to examine policies that have worked and to change the defeatist attitude that now dominates Somalian policy-makers and industrialists. The need for commitment to this strategy at high political levels is emphasized. Export quotas backed by political pressure and monetary rewards are cited as a departure worth exploring. Somalia's industries must acquire a level of efficiency and outward orientation whereby they can take advantage of low labor costs and export enough into the world market to justify additional investment and hiring as well as more intensive use of existing plant. Given Somalia's narrow, low-income market, import substitution and protective measures are unlikely to make a significant dent in unemployment, thus it is export-led industrialization that should be encouraged by the government.

Proposals are also advanced for a more systematic approach to the granting of concessions, notably duty exemptions on imported goods and tax holidays. They should not be granted indiscriminately, but rather should be designed to rectify imbalances in the structure of industrial incentives that would otherwise leave an enterprise with a lower ERP/EER than the mean level considered appropriate for the desired rate of industrial growth. Concessions accorded without due regard for these parameters frequently induce the establishment of highly inefficient, even negative value-added enterprises. Entities requesting concessions should be required to substantiate their applications with data relevant to ERP/EER computations. Also, open reporting of concessions is recommended so that any legitimate enquirer can get information on concessions outstanding.

Other recommended reforms of incentives include improving the commercial banking system by opening the door to foreign competition and focussing public enterprise on physical and service infrastructure that will nurture industry, leaving direct involvement in manufacturing to a minimum.

Finally, in section (C) mention is made of topics for further study by way of follow-up to the quantitative analysis of industry conducted for the present study. A need is cited to update the ERP/EER calculations in the light

of recent changes in the structure of incentives. A related issue is the potential role of small-scale enterprise in export-led industrialization. Small-scale firms may well be characterized by a relatively economical use of capital and management resources which could give them a comparative advantage in certain lines of production and enable them to absorb more labor per unit of investment than medium- and large-scale firms in the same industries. As a first step towards exploring ways of enhancing this role it is suggested that an inventory be prepared of the present share of small-scale manufacturing in the consumer market basket and in the supply of inputs to Somali industry.

PREFACE

The study culminating in the present report was commissioned by the United States Agency for International Development (USAID) Mission to Somalia in consultation with the Minister for Finance of the Government of the Somali Democratic Republic (GSDR), Dr. Mohamed Sheikh Osman. USAID/Somalia financed the study as part of its Policy Initiatives & Privatization Project, No. 649-0132, implemented through a project grant agreement with the GSDR Ministry of National Planning.

The study was conducted within the framework of the global Employment and Enterprise Policy Analysis (EEPA) project coordinated by the Bureau of Science and Technology in AID/Washington. The purpose of this project is to improve the efficiency of nonagricultural development and expand labor absorption in developing countries by fostering a structure of economic incentives which favors an unbiased pattern of enterprise growth in those countries.

To assist in implementing the EEPA project AID has contracted with the Harvard Institute for International Development (HIID) to provide analytical, training, and institutional development services over a period of five years (FY 1985 through FY 1989). Michigan State University and Development Alternatives, Inc. (DAI), participate in the project as sub-contractors.

Plans were laid for the Somalia study in the course of a brief visit by the EEPA Project Manager, Tyler Biggs (HIID), to Mogadishu in March 1985. The following month a three-person team proceeded to Mogadishu to conduct field work during the period April 15-May 26. The members of this team, who are also the authors of the present report, were: Clive S. Gray, Institute Fellow, HIID, senior trade/industry economist and team leader; Patrick St. Pol Maydieu, consultant, DAI, senior trade/industry economist; and Jan Hendrik van Leeuwen, consultant, HIID, field research coordinator for industry data collection. The team reconvened at HIID in June 1985 to prepare the report.

During their 4-5 weeks in Somalia the team members met with officials of the GSDR, USAID, multilateral agencies, other bilateral aid

agencies, and managerial staff of public and private business enterprises. At senior levels of the government they were received by the Minister of Industry and Commerce, Mr. Abdulla Mohamed Fadil, who was particularly helpful in providing introductions to Somali industrialists, and by Mr. Abdulahi Warsame Nur, Vice-Minister of Finance, who convened senior officials of his ministry to provide useful information concerning the Somali tax system.

The team devoted more than half of the time available for field work to collecting data from a sample of 36 industrial firms, as well as other enterprises trading in commodities associated with these industries. Collection of the data proceeded both by interviews with company managers and accountants, and with the help of a questionnaire submitted to most of the firms in the industry sample (see Appendix 1 below). Table 1 describes the sample of industries surveyed by the team

Table 1: Enterprises in industry survey of HIID team

Sector	Number of enterprises interviewed			State-owned enterprises
	State-owned	Private	Total	
Food processing	2	4	6	Wheat Flour & Pasta Factory Somali Marine Products (SMP)
Beverages	0	3	3	
Tobacco	1	0	1	Cigarette & Match Factory
Textiles	2	0	2	Somaltex Multifabric Somalia Ltd.
Wearing apparel	0	1	1	
Leather & footwear	1	2	3	Magdeynta Tannery
Furniture	0	2	2	
Packaging	0	1*	1	
Paper products	0	2	2	
Plastic products	1	3	4	GRP Boat Co.
Other chemical products	0	4	4	
Structural clay products	0	1	1	
Metal products	2	3	5	Aluminium Utensils Factory Foundry & Mechanical Workshop
Other	0	1	1	
Total	9	27	36	

* Packaging enterprise is INCAS, a wholly owned subsidiary of Somal-fruit, a 40%-60% GSDR-private Italian joint venture.

To facilitate its field work the team subcontracted with Somalresearch, a Somali consulting firm directed by Mr. Abdurahman Ahmed Yusuf, who together with two associates, Mr. Habib Simba Habib and Mr. Ahmed Barre Mohamed, provided invaluable assistance in establishing the contacts with both public and private agencies that were necessary to obtain relevant information.

The members of the HIID team take this opportunity to express their appreciation to all officials of the GSDR, USAID, other official agencies, the industries in our sample, and other entities who gave generously of their time to supply us with data for this report. The team hopes that the report may provide fresh insights into the structure of Somali industry as well as the system of incentives and disincentives for industrial development currently operating in Somalia, thus strengthening the basis for formulation of new policies to accelerate this development and the creation of associated employment opportunities.

CHAPTER 1 - PRINCIPLES OF QUANTITATIVE ANALYSIS OF INCENTIVES
AND DISINCENTIVES FOR INDUSTRIAL GROWTH

Any event that alters the profitability of a productive process may be construed as embodying an incentive or disincentive to producers. Such events may occur either through human agency or as a result of Acts of God outside the control of any policymaker. Through devaluation, direct subsidies or other means government can effectuate the same increase in the producer price of an internationally traded agricultural commodity as will occur on account of crop failure in a major foreign producing country. A new tax may reduce the profitability of a given manufacturing process to the same extent as a drop in purchasing power or shift in consumer tastes.

The policy analyst looks at how those responsible for formulating and implementing policy respond to events outside their control, but his advice is directed towards the response, not the events being responded to. Accordingly incentives and disincentives are defined for purposes of this report as stimuli and disstimuli to industrial producers generated by discretionary actions of the government.

Quantitative analysis of incentives and disincentives for industrial growth involves bringing the tools of economic science to bear on the problem of devising a strategy of development that will satisfy a developing nation's aspirations for rapid growth of income and employment. Optimally, a quantitative analysis would yield three key categories of coefficients:

(1) Measures of the impact of various incentive and disincentive policies on returns to capital and entrepreneurship in different lines of production—e.g. a finding that an X per cent increase in the protective tariff on imports competing with a certain domestic product has yielded or will yield increases of a, b, c, etc., per cent in the profitability of production at respective levels of output.

(2) Measures of the actions previously taken by enterprises, and likely to be taken by them in future, in response to the incremental returns identified under (1)—e.g. the foregoing increases in

profitability will induce producers to increase their output to Y, invest Z additional capital, and so on.

(3) Measures of past changes in aggregate output and employment resulting from the entrepreneurial responses under (2), and future projections of the same.

Few such computations have yet been carried out for Somalia, and the data collected during one month of field work for this study do not warrant the presentation of coefficients such as the foregoing as a basis for predicting the outcome of alternative policy measures on the country's income and employment. Nevertheless it is important to recognize that the quantitative relationships estimated by these coefficients do indeed exist. Incentives and disincentives arising out of government policy measures have affected returns to industrial capital and entrepreneurship in the past and will continue to do so in future; entrepreneurs have responded in quantifiable ways and will continue to do so; and their response has had and will continue to have a quantifiable impact on output and employment.

On the assumption that behavioral coefficients such as (1), (2) and (3) above remain relatively stable over time, or that if they change, their direction and rate of change can itself be measured and predicted, one can project the future impact of alternative industrial promotion strategies on Somalia's output and employment. The difficulty of measuring the relevant coefficients, given the present state of knowledge about economic parameters in Somalia, does not mean that one should abandon the attempt and adopt whatever configuration of industrial promotion policies appears intuitively to yield the highest short-run return. On the contrary, work should start as early as possible on building a framework for quantifying the relevant relationships, so as to narrow the margin of error that unavoidably surrounds any predictions of the consequences of alternative policy scenarios.

The industrial promotion strategy that maximizes net present social benefit will be that one, out of a set of alternative strategies, which maximizes some composite measure of income and employment resulting from a given expenditure of Somalia's domestic resources, i.e. her labor,

natural resources and invested capital. In the case of Somalia, given the paucity of mineral resources which in other countries permit the establishment of export enclaves with relatively low coefficients of labor absorption, it is safe to assume that income and employment are highly correlated. We will see in Chapter 7 that the very low wage rates currently prevailing in Somalia, converted at the free market exchange rate, heavily determine the country's comparative advantage in production of tradeable goods and services. This means that the strategy that maximizes value added in Somalia's manufacturing sector will also create the greatest number of viable employment opportunities—i.e. jobs that contribute to output and whose maintenance does not require permanent subsidies.

The first question to ask in seeking an income-maximizing industrialization strategy is: how should incremental social income generated by the strategy be measured? It is customary in modern economic analysis to measure income generated in the production of tradeable commodities, or value added, as the equivalent in local currency, i.e. the Somali shilling value at a rate that equilibrates the foreign exchange market, of the net amount of foreign exchange earned (through exports) or saved (through import substitution) by the output in question. In other words, the amount of foreign exchange earned or saved is regarded as the ultimate measure of the incremental real income generated by an industrial activity.

The logic of this can be seen by considering the implications of assessing an increment of industrial value added at either a lower or higher value:

(i) Suppose the free market exchange rate is 85 sh./\$1, an enterprise earns or saves \$1,000 net, and a policymaker argues that this should be valued at only 40,000 sh. If agencies and individuals throughout the economy are willing to pay, directly or indirectly, 85,000 sh. for the net value added by the enterprise, why should policymakers value it at any lower figure?

(ii) Conversely, suppose the enterprise argues its incremental contribution to the economy should be valued at 120,000 sh. Given the

free exchange market, other economic agents are willing to supply \$1,000, which can then be used to import any desired combination of goods and services up to that c.i.f. value, for a shilling amount of 85,000. Why put any higher value on the income generated by the enterprise in question?

Given this definition of income creation, the optimal strategy for industrial development is the one that returns a maximum net foreign exchange earning or saving for a given quantum of domestic (Somali) resources. These domestic resources are none other than the labor, capital and natural resources employed within the respective enterprises.

Both theory and experience teach that resources tend to move out of activities in which returns are relatively low, into activities where they are relatively high.* If the structure of domestic prices, diverging from price relationships in the world market in response to official measures such as those detailed in Chapter 2, makes financial returns in Activity A higher than those in Activity B even though A earns or saves on net less foreign exchange per quantum of domestic resources used than does B, then resources will move from B to A, and less foreign exchange will be earned or saved overall.

Conversely, the way to maximize foreign exchange earning and saving, hence real income, is to even out discrepancies in the profitability of earning and saving a unit of foreign exchange as among

*There is no better demonstration of this than Somalia's own recent experience. Many knowledgeable Somalis commented to the HIID team that their people are enthusiastic traders but reluctant industrialists. This is precisely what theory would predict, given that the volatile trade and exchange policies of the past have created large margins of profit in trading while establishing an unstable, risky environment for manufacturing. Once supply and demand forces have been allowed free play in the trade sector, with government intervening no more than necessary to break up monopolistic or oligopolistic arrangements, one would expect competition to drive trade margins down while the high exchange rate attracts businessmen into production of tradeables, particularly for export.

different economic sectors and, within each sector, as between import-substituting and exporting. This raises the question: how does one go about measuring the profitability of earning or saving foreign exchange in different activities?

Profitability in the sense of returns to capital and entrepreneurship is, of course, an extremely difficult parameter to measure in the case of privately held companies operating in an environment where accounting standards are not uniform. Business enterprises in Somalia, as elsewhere, tend to suspect that data revealed in the course of officially sanctioned inquiries into their profitability are likely to end up being used against them by the tax authorities.

In many countries it has been found that another parameter, easier to estimate than profitability, is an acceptable proxy for the latter as an index of the attractiveness of a particular industrial activity to risk capital and entrepreneurial effort. This is the real effective exchange rate facing a producer in that activity. The effective exchange rate, which will be described more precisely in Chapter 3, is the number of shillings that an enterprise receives with which to remunerate its productive factors, i.e. labor and capital employed within the enterprise, divided by the net amount of foreign exchange that it earns or saves. The numerator is total receipts from sales less payments the enterprise makes to outsiders for purchased inputs; the denominator is gross foreign exchange earned or saved, less the foreign currency value of purchased inputs.

In general, the higher the effective exchange rate in one activity compared with that in another, the more resources will be attracted into the first activity in preference to the second. Apart from horizontal comparison among economic sectors or subsectors at a given point in time, we are also interested in comparing the attractiveness of a given sector over time; for this the relevant parameter is the real effective exchange rate, which is the effective rate deflated by a coefficient equal to the

domestic consumer price index divided by the weighted average consumer price index of Somalia's trading partners. Thus, if the nominal effective exchange rate in sector A remains constant, the attractiveness of the sector to risk capital and entrepreneurship declines over time insofar as prices rise more rapidly in Somalia than in her trading partners.

The numerator of the effective exchange rate being defined by revenue less purchased inputs, the rate is clearly correlated positively with all factors, including incentive measures taken by government, that enhance revenue and/or reduce production costs, and negatively with other factors, including disincentives arising out of government policies, that reduce revenue and/or raise production costs. One official measure which helps to determine the effective exchange rate is, of course, foreign exchange policy. But other measures, such as tariffs on inputs and competing outputs, indirect subsidies through cheap credit, direct subsidies, tax exemptions, etc., likewise affect revenues and costs of purchased inputs, hence they figure no less than exchange policy in the determination of the effective exchange rate.

Chapter 2 following categorizes and conducts preliminary analysis of the incentives and disincentives for industrial development which the HIID team found to be operative in Somalia. Chapter 3 then focuses on the interaction of nominal exchange rates and tariffs in determining an effective rate of protection (ERP) as the primary determinant of the effective exchange rate (EER). A related parameter, unit domestic resource cost (DRC) of earning or saving foreign exchange, is also described.

CHAPTER 2 - CATEGORIZATION OF INCENTIVES AND DISINCENTIVES OPERATING IN SOMALIA

Interest in policy measures embodying incentives and disincentives for industrial growth in developing countries revolves around the search for measures that will maximize net social benefit over time. This implies developing a set of policies that will ensure expansion of industrial output more or less indefinitely. Another key objective at the outset is to create employment opportunities at a rate well in excess of population growth in order to help absorb the overt and disguised unemployment which afflicts every developing country, including Somalia. As an economy matures and the tertiary (services) sector contributes an increasing share of Gross Domestic Product, industrial policy shifts its focus towards raising the productivity (value added per worker) of a labor force that may grow no faster than the overall population, perhaps less rapidly or, at maturity, even decline in absolute terms.

From this perspective, incentive measures operating in Somalia may be classed in three categories:

(i) measures that enhance producer profitability at a virtually static level of output while conveying no incentives to expand production, or even disincentives that discourage expansion;

(ii) measures that encourage producers to expand output up to quantity X, but convey no incentives for expansion beyond X, or even place obstacles in the way of such expansion. Typically, Quantity X represents domestic demand in a low-income market; the corresponding incentive measures reward import-substituting production that saturates the domestic market, but penalize additional production whose only outlet is the export market;

(iii) measures that reward producers for expanding beyond the confines of domestic demand into export markets.

The foregoing classification implies that policy measures embodying incentives can be distinguished from measures that, with or without so

intending, embody disincentives for expansion of output. This distinction becomes ambiguous in the case of policies which, while having as one direct impact, normally an intentional one, to create incentives for one or more industrial enterprises, do so by raising costs or otherwise impeding the operation of other enterprises, and thus creating disincentives for the latter.

The distinction between incentive and disincentive policies is further blurred by the fact that some incentive policies, while not evidently raising costs or otherwise impeding the operation of enterprises outside the set of intended beneficiaries of the policies, nevertheless create indirect disincentives by causing a net loss of foreign exchange and fueling general price inflation in the economy. In this way the policies indirectly undercut the ability of all enterprises to export and/or find domestic customers for their products.*

The analysis in this section examines incentive/disincentive measures which the HIID team found to be operating in Somalia, classifying them first into broad policy areas. Within each area, the discussion seeks to establish how different measures operate on enterprises' motivation to expand output. Where appropriate, the discussion calls attention to the aforementioned ambiguities in distinguishing incentives from disincentives. Table 3 at the end of the chapter summarizes the discussion, listing policy areas and specific policies within each area, and distinguishing among the latter according to the constellation of incentive and disincentive effects associated with a given policy.

*Explicit and implicit subsidies paid to inefficient producers have this effect on the remaining producers. The most dramatic recent case in point is the appropriation of close to \$5 million of public funds to establish Multifabric Somalia Ltd. See subsection 6 below.

Areas of policy affecting industrial incentives

1. Taxation of international trade
2. Foreign exchange management
3. Trade regulation
4. Price control
5. Credit
6. Direct subsidization
7. Organization of financial services
8. Organization of infrastructure services
9. Direct taxation
10. Promotion of industrial exports
11. General policy environment

1. Taxation of international trade.

Quantitative analysis of incentives and disincentives to industry traditionally begins with examination of customs tariffs and other levies on imports and taxes on exports. The customary "t" coefficients in the effective protection formulae presented in Chapter 3 take their symbol from the word "tariff".

In general, it is evident that levies on competing imports, irrespective of the relative importance of protective versus revenue considerations in their enactment, act as an incentive to industries producing the goods in question, while levies on goods used as inputs by domestic producers act as a disincentive to those producers. Insofar as local enterprises produce goods which are or might subsequently be purchased by other enterprises and used as inputs by the latter, import tariffs on those goods act simultaneously as an incentive to the first category of producers and a disincentive to the second category (the negative impact of which may, of course, be offset by other measures, including protective tariffs on goods competing with the output of the latter category).*

*It is less obvious, but nonetheless substantiated by close observation of many economies, that an import tariff regime characterized by high rates across the board creates a general bias against exports by raising production costs directly and indirectly. Duty exemptions for imported inputs cannot fully counteract this effect; instead, it takes direct subsidies for export production, above and beyond the duty exemptions.

By the same token, total or partial exemptions from import tariffs act as an incentive to enterprises using the relevant goods as inputs, and simultaneously as disincentives to any enterprises seeking to supply those inputs out of local production.

On the export side, it is evident that export taxes act as a disincentive to producers of any good for which Somalia is a "price-taker" in the world market—i.e. where Somalia's share of the market is too small for her to be able to dictate prices to foreign buyers, a situation prevailing for all of Somali's current and potential exports with the possible exception of myrrh, a forest product. Less obvious is the fact that an export tax, by reducing the prices received by domestic producers and exporters, likewise depresses selling prices of the goods in question for local consumption, thus acting as an incentive—albeit on average a modest one given that export taxes in Somalia currently return less than 4 per cent of the f.o.b. value of registered exports—for enterprises using those items as inputs.**

Empirical analysis of incentive systems in many countries has shown that measures other than levies on international trade, some of them included in the foregoing list, may exert as important or more important an impact on industrial incentives. For example, the quantitative restrictions embodied in a strict regime of exchange control or import licensing may raise prices of competing imports and/or inputs in domestic industry to such levels as to swamp the protective or cost-raising impact of import tariffs. On the other hand the recent introduction of a liberal exchange regime in Somalia has brought import tariffs back into their own as important determinants of net incentives to industry.

The renewed importance of tariffs in the incentive calculus and the complexity of the interaction between tariffs on competing imports and

**Central Bank data show 1984 revenue of 37.3 million sh. from export duties, compared with 1,060 million sh. worth of exports.

those on imported inputs make it necessary that a separate chapter (No. 3 following) deal with this topic. The present subsection will confine itself to a cursory review of the place of taxation of international trade in the overall fiscal context of Somalia.

As has been pointed out by many observers, most authoritatively the IMF tax survey mission of 1980 (cf. IMF, Fiscal Affairs Department, Tax Survey of Somalia, 1980), the objective of stimulating local industry has played at most a minor role in the design of Somalia's customs tariff. Instead, the primary objective has long been to generate government revenue, subject to a rough equity principle whereby the tariff rate increases with the presumed income level of the principal consumers of a given item or class of goods (i.e. rates are highest for presumed luxury items—see Chapter 4 for details). The tax survey mission cited "excessive reliance on revenue from import taxes" as "the most striking characteristic of the Somali tax system". (Op. cit., p. 8.)

As of 1978, the most recent year for which data were available to that mission, (i) import duties plus (ii) the so-called administrative and statistical (A&S) duty on imports accounted for 49.3 per cent of central government revenue excluding foreign grants. (Another 1 per cent originated in stamp taxes on imports, and a portion of excises on sugar and spirits, themselves accounting for 7 per cent of total revenue, was likewise properly classified as receipts from import taxes.) Many of the tax survey mission's recommendations aimed at reducing this dependence on import taxes.

In the event, preliminary data for 1984 show the two principal categories of import taxes, (i) and (ii) above, accounting for 49.7 per cent of total revenue, while the government's 1985 budget foresees this share rising still further to 51.9 per cent in the current year.* It

*According to preliminary Central Bank data, import and A&S duties
(Footnote continued)

is thus clear that the revenue role of import taxation has not diminished in the intervening five years, and given the fiscal pressures currently facing Somalia one cannot see the government rushing to implement a restructured import tariff, designed to promote industrial growth on the basis of efficiency criteria, which reduces import tax revenues in the short run. (A particularly dramatic indicator of fiscal stringency in Somalia is the joint Ministry of Finance/IMF staff estimate that civil service salaries declined 72 per cent in real terms during 1980-84, coupled with the government's commitment not to raise nominal salaries by more than an average of 15 per cent in 1985 notwithstanding a considerably higher projected inflation rate. Source: IMF, "Somalia--Request for Stand-By Arrangement", Jan. 2, 1985, p. 58.) On the other hand it is perfectly possible to restructure a tariff system by reducing tariff dispersion while holding the mean revenue-yielding tariff constant. In this way one can move towards equalizing the shilling return to saving a dollar's worth of foreign exchange among different branches of production without altering total revenue from import taxes. This report argues that such a reform would give a significant boost to production and employment in Somalia.

If protective considerations do not appear to have figured significantly in the design of Somalia's current nominal import tariff, they nonetheless play a prominent role in the operation of the system of exemptions from the tariff that applies to importation of raw materials and intermediate goods.

The Somali authorities informed the HIID team that Somalia's system of import tax exemptions has two facets, one described as "objective" and

(continued from page previous page)
yielded 1.870 billion shillings out of total 1984 revenue of 3.766 billion, while the 1985 budget document projects these revenues at 2.696 billion shillings out of a total of 5.191 billion.

the other as "subjective". Exemptions under the first heading focus on specific "objects" (commodities) whose generic characteristics qualify any enterprise in the sectors of manufacturing, agriculture or petroleum exploration for total exemption from import taxes on the items in question. This applies to all capital equipment imported either to establish a new enterprise, to renew an existing facility or to expand it by means of investment equivalent to not less than 20 per cent of the existing investment. An applicant must deposit 120 per cent of the tax that he would otherwise have to pay according to the tariff schedule, this amount being refunded on inspection and verification by Customs that the equipment has been installed according to plan. (The extra 20 per cent corresponds to the fine that would be levied if the applicant were found to have misrepresented his plans for using the equipment.)

The second objective criterion entitles any manufacturing enterprise to total exemption from import and A&S duties on importation of bona fide raw materials, defined as materials in their natural state which have undergone no processing. It turns out, however, that few items imported into Somalia meet this stringent definition of a raw material. The only qualifying input encountered by the HIID team in its survey of industries was baled cotton lint, imported by the state-owned textile firm, Somaltex.* (Were it not to qualify under this criterion, Somaltex would have to pay import and A&S duties of 30 and 20 per cent, respectively, on uncombed cotton.) To the query whether ginning did not constitute processing, the Customs Department replied that it was regarded as merely removal of the seed, and therefore not processing. Conversely, the department stated that all chemical, metal and wood

*In a sense wheat, processed into flour at the Wheat Flour and Pasta Factory, fulfills the definition of a raw material, and it is imported duty-free. However, technically the import is carried out by a state trading corporation, ENC, and not directly by the processor.

products were regarded as having undergone processing, hence nothing in those categories would qualify for total exemption.**

All other import tax exemptions fall into the category of "subjective", meaning that exemptions are specific to the "subjects" conducting the importation. These exemptions are granted under the discretionary authority of the Minister of Finance. In principle, Ministry review proceeds on the basis of whether the applicant's prospects for creating production and employment warrant the concession, and how badly the enterprise needs it in order to be able to operate. Modern economic doctrine would counsel that, if political constraints make it necessary to operate an incentive scheme with discretionary measures responding to ad hoc requests from entrepreneurs (as opposed to most economists' preferred alternative of a semiautomatic system with approximately uniform incentives), then decisions whether to grant exemptions, and at what levels (there is no a priori reason for confining the choice to 0, 50 or 100%), should be made on the basis of quantitative analysis such as that initiated in the present report. Clearly the groundwork for undertaking such analysis is currently lacking; this report will have served a useful purpose if it helps to systematize the methodology used in Somalia to evaluate requests for protection via exemption of taxes on imported inputs.

Clearly no judgment can be made about the overall incentive or disincentive impact of Somalia's current system of taxing international

**Tobacco is an item that might qualify for treatment similar to that of cotton, and indeed the state-owned cigarette and match monopoly pays no import or A&S duties on its tobacco imports. On the other hand neither does it pay taxes on importation of such processed inputs as cigarette paper and packaging materials, reflecting a special tax regime where the state takes its cut downstream in the form of excise, turnover and profits taxes. (See case study in Chapter 5).

trade without an inventory of exemptions. The Customs Department informed the HIID team that no such inventory exists, and could only be compiled by proceeding painstakingly through a large number of enterprise files maintained by the department. (The team was informed that exemptions are not gazetted, hence the alternative of tabulating them from successive volumes of the Official Bulletin is ruled out.) In a session with senior finance officials we recommended that such an exercise get underway as early as possible, and that the inventory be updated with each new exemption. The suggestion received a positive response, but given competing demands on departmental staff time, initiation of such work will almost certainly require a decision by the ministry's top command that a systematic review of the nominal and effective import tariff, taking into account the structure of exemptions, deserves priority.

For the time being, the HIID team's specific knowledge of "subjective" import tax exemptions is therefore limited to information obtained from our sample of enterprises. However the global importance of total exemptions can be estimated, following a procedure used by the IMF tax mission in 1980, by comparing 1983 collections on the A&S duty with the c.i.f. value of commercial imports. This is permissible because, through 1983, a commercial import either paid A&S duty at the flat rate of 20 per cent, or it was exempt from any import taxes at all. (Admittedly this procedure overlooks an unknown quantum of partial or total exemptions from the so-called customs or fiscal duties which did not include exemption from A&S.)

According to the Central Bank's 1983 annual report (p. 33), 1983 imports under letters of credit and foreign exchange accounts were 2.844 billion shillings. This excludes imports classified as grants- or loans-in-kind, totalling 3.726 billion sh., which are exempted from import duties in any case. A&S duty collections were 536 million sh., which is 20 per cent of 2.680 billion sh., equivalent to 94 per cent of commercial imports. In other words, only 6 per cent of the value of 1983 commercial imports was fully exempt from import taxes.

The significance of a similar calculation with 1984 data is unclear because of a Jan. 1984 import tax amendment authorizing 50 per cent

exemption from A&S as well as other import duties for spare parts and "semi-processed" materials for use in manufacturing, fishery, agriculture and animal husbandry.* The comparable figures for 1984 are: commercial imports = 3.8 b.sh., A&S duty collections = 483 m.sh.. These figures are consistent with exemption patterns ranging from 63 per cent taxable at 20 per cent and 37 per cent totally exempt, to 27 per cent taxable at 20 per cent and 73 per cent taxable at ten per cent, i.e. no commercial imports totally exempt.** The figures do show, however, that at least 37 per cent of commercial imports enjoyed some form of exemption from A&S duty, which is six times the proportion exempted in 1983.

Finally, smuggling may be viewed as a de facto "exemption" from import taxes with a substantial impact on producer incentives and disincentives. Being in a favorable position to smuggle one's inputs or buy inputs from traders who have smuggled them constitutes a positive incentive; conversely, being forced to compete against contraband in the market for finished goods often constitutes an insuperable obstacle to profitable production. Over half the producers in the HIID team's sample claimed they were obliged to compete against finished goods brought into Somalia with less than full payment of the import taxes legally due. The validity of this claim could not always be confirmed. Insofar as the government abstains from measures to reinforce Customs administration so as to reduce smuggling of goods in competition with local production, it can be accused of an "act of omission" which creates disincentives for Somali industry.

2. Foreign Exchange Management

Analysis of movements in Somalia's nominal exchange rate, trade patterns and consumer price index shows that a Somali producer earning or

*Law No. 8 of January 9, 1984.

**Proof: $483 \text{ m.sh.} = .20 \times .63 \times 3,800 \text{ m.sh.} = .10 \times 2,770 \text{ m.sh.} + .20 \times 1,030 \text{ m.sh.}, 2,770 + 1,030 = 3,800.$

saving enough dollars at the end of 1978 to yield him 100 shillings to help cover his capital costs and compensate his labor, would have received the following constant price amounts at various subsequent points in time for earning or saving the same amount of dollars, assuming that any export proceeds repatriated during the existence of the dual exchange market in 1981-82 benefited from the most profitable of the two rates:*

End 1979		87 Shillings
End 1980		53 Shillings
mid-1981	Immediately before devaluation	42 Shillings
	Immediately following devaluation	66 Shillings
End 1981		70 Shillings
End 1982	(following mid-year devaluation)	75 Shillings
End 1983		50 Shillings
September 1984		33 Shillings
End 1984	(following September devaluation)	47 Shillings

In other words, the tendency of foreign exchange management during this period (and indeed starting well before it) was to create a downward spiral in profitability, albeit with partially compensating reverses following devaluations in 1981, 1982 and 1984.

The liberalization measures of January 1985 have now reversed the depressant impact of exchange management on profitability. As of January 1 the hypothetical producer above would have received about 120 shillings for earning the given amount of foreign exchange, or about 20 percent more, in constant price terms, than in 1978.**

*Computed from IMF, "Somalia: Request for Stand-By Arrangement", Jan. 2, 1985, p.2, Chart 1, "Index of Real Effective Exchange Rate, Jan. 1978 - Oct. 1984".

**Calculated as follows: 65% of export proceeds could be sold at a market rate of, say, 82 shillings; 35% had to be repatriated at the official rate of 36 sh. giving a weighted average rate of 66 sh. This is 2.535 times the December official rate of 26 sh.; 2.535 times the 47 sh. for end-1984 in the foregoing list gives 119 sh.

In fact, the volatility of exchange management in recent years was much greater than is indicated by the foregoing data, based on nominal exchange rates. This is because, on the import side, affecting every industrial enterprise through its need for imported quotas, the system was enforced through import licenses and exchange controls. Thus, whether or not a manufacturer could obtain inputs at the nominal exchange rate (subject, of course, to the levies reviewed in the preceding subsection) was a matter for discretionary action by the authorities. Their decision was heavily influenced by the vagaries of Somalia's balance of payments.

The stated policy was to give intermediate priority to the input requirements of domestic industry, after providing for the top priorities of food, drugs, petroleum, and certain needs of the government itself. Within the industrial sector priority was given to applications from state-owned enterprises. Of the public enterprises included in the HIID team's sample, all those seeking to import directly at least a portion of their foreign-source inputs (as opposed to buying them through local traders) had been allowed to purchase foreign exchange through the banking system, i.e. at the official exchange rate, into 1984. On the other hand a number of the enterprises complained of lengthy delays in obtaining their foreign exchange, and said they had been allotted less than they requested and less than would be required to enable them to operate anywhere near their productive capacity. The position worsened pari passu with the deepening foreign exchange crisis of 1983-84.

Clearly, the volatility and hence unreliability of the pre-1985 exchange system acted as a disincentive to enterprises dependant for their imported inputs on obtaining letters of credit through the banking system, forcing them into a stop-go production routine. Data supplied by all but one of the public enterprises included in the sample, namely the Wheat Flour and Pasta Factory, showed them to be producing below 50 percent of single-shift capacity in recent years; in some cases the proportion appears to have been as low as a third or even a quarter of single-shift capacity. To be sure, the exchange system does not carry the entire blame for this situation.

The opposite side of the coin vis-a-vis the disincentive effect is that enterprises obtaining their foreign exchange at official rates were

most of the time paying less than half as many shillings per unit of foreign exchange as traders or competing producers not favored by the administrators of the exchange system.*

Although government policy dictated that public enterprises should satisfy their foreign exchange requirements through official channels, given the many loopholes in the system it is not unlikely that an enterprise manager, had he felt the disadvantages of stop-go, low capacity production to outweigh the benefit of cheap inputs, could have bought foreign exchange on the free market. Yet none of the public enterprises in the sample acknowledged doing so. Only one enterprise, the Foundry & Mechanical Workshop, indicated that, in lieu of importing its inputs directly, it had (for the past five years) bought them from traders who had obtained their foreign exchange on the free market.

The picture has, of course, changed with the January, 1985 exchange reform. The HIID team was informed of only one state-owned industry that continues to receive foreign exchange for its raw material imports at the official rate (currently around 36 sh.), namely the petroleum refinery. This accords with the Central Bank of Somalia's announcement of the adjustment program agreed to with the IMF, limiting application of the official exchange rate to "external public debt service, import payments by the central government, operational costs of the Central Bank, official travel, expenses of embassies abroad, and imports of crude petroleum and petroleum products".**

*The exchange rate in the parallel market is reported to have been above 15 shillings when the long-standing official rate of 6.3 was raised to about 12.6 in mid-1981; by mid-1982, when a further devaluation raised the official rate to 15.5, the parallel rate had reached 30 shillings; by the end of 1984, when the official rate was raised from 26 to 36, the free-market rate exceeded 80 shillings.

**CBS Circular FDR-51/84, "Implementation of the Measures Contained in Somalia's Adjustment Program for 1985", December 30, 1984.

In addition, the Wheat Flour and Pasta Factory implicitly buys its wheat at the official exchange rate, but the wheat is imported by the National Trading Agency (ENC) and thus treated as a government import. On the other hand, from the viewpoint of the refinery and the Wheat Flour and Pasta Factory, the incentive effect of the below-market input prices is offset by government-imposed marketing arrangements which control the two enterprises' selling prices (see subsections 3 and 4 below). These arrangements prevent the enterprises from sharing in the scarcity margins that indeed exist in both trades, but whose benefit accrues to privileged parties in the respective distribution chains.

Turning for a moment to the private industrial sector, the sample included, on the one hand, enterprises that had long been accustomed to buying their inputs from traders who secured their foreign exchange on the free market, and on the other hand, enterprises that, up to 1983 or even 1984, were still obtaining foreign exchange from the banking system and importing under letters of credit. As a group, the latter reported considerably more difficulty in obtaining their foreign exchange during the past two years than did the public enterprises. In several cases the latest import had arrived a year or two ago, and the enterprise had either shut down after exhausting its raw materials, or was limping along at a low level of capacity utilization while it pursued avenues for obtaining foreign exchange below the market rate.

The first two USAID Commodity Import Programs (CIPs), instituted in 1983 and 1984, brought limited relief to six of the private industries in the sample, out of the total of 27 that were interviewed. In these cases, along with a number of others whose CIP applications were rejected, the industrialists judged that the benefit of obtaining foreign exchange at the official rates—mainly 15 sh. in the case of CIP No. 1, plus a few allotments at 17 sh., and 26 sh. in the case of CIP No. 2—outweighed the additional extra costs associated with CIP: sourcing restricted to the U.S. and developing countries, usually implying extra costs in placing orders, delayed shipments and extra costs of transshipment; also more paperwork; and perhaps in some cases, higher customs duties arising from loss of flexibility to underinvoice.

One of the six firms had applied in May 1984 for a CIP allotment to import chemicals; in August it was authorized one third of the requested amount, and arrival of the shipment was awaited for end-May 1985. Obtaining a major input at an exchange rate of 17+ at a time when competing finished products are being imported at a rate of 90 sh. is, of course, a significant windfall, but in the meantime the facility has exhausted its inventory of raw materials and has been out of production for a whole year. There is an implication in this and similar experiences that the ad hoc measures undertaken during the previous exchange regime to relieve its burden on Somali industries sometimes did less to stabilize production, employment and foreign exchange earning or saving than they did to create occasional opportunities for windfall profits.

USAID's CIP No. 3 was under negotiation during the field work for the present report. Out of a total allotment of \$27 million, USAID reserved \$15.3 million for imports by private traders and producers, who it further insisted should pay the Commercial and Savings Bank's prevailing rate for its limited volume of exchange transactions with the private sector (about 83 sh. as of May, 1985, close to a free market rate reported to vary between 85 and 95 sh. according to volume). Only one of the private firms in the HIID team's sample expressed interest in participating in the new CIP under these conditions. All others questioned about it said any saving that might arise from use of a C&SB rate a few points below the true free market rate would be swamped by the extra costs of buying and transporting U.S. or developing country products subject to AID procurement regulations. To sweeten the pot USAID had suggested allowing importers to pay only 50 per cent of c.i.f. value (in shillings) down on order, remitting the other half on arrival of the goods. However this was unacceptable to the Ministry of Finance, which wanted the entire shilling amount to be deposited as quickly as possible into the special joint accounts most of whose proceeds end up as government budget support.

It was agreed that another \$2.7 million of CIP No. 3 should be available to state-owned industries at the official exchange rate, i.e. about 36 sh. as of mid-1985, for purchase of equipment spares and a

limited range of raw materials. (At USAID's insistence, state trading companies were excluded from this program.) In addition, any portion of the \$15.3 million allotted to the private sector that is not taken up within three months after the program gets underway would be available to public enterprises, again at the official exchange rate (which may be considerably closer to the free market rate by that time, depending on the outcome of forthcoming negotiations with the IMF.) If the traders' and industrialists' comments to the HIID team are indicative, this arrangement may result in making most of the \$18 million subtotal* available to state-owned industries, implying a considerable incentive or windfall, whichever one chooses to call it.

Whatever the positive incentive for some enterprises arising out of the opportunity to satisfy a portion of their demand for foreign exchange at cheap rates, it is clear from several examples reviewed above that the expectations aroused by the operation of the dual market have had a severely negative impact on production. This effect is a function of the unpredictability of the administration of exchange control. An enterprise that has received allotments at official rates in the past, upon seeing its current application rejected, postponed or scaled down, will attach a certain probability, if only implicit, to its receiving additional allocations in the future. The greater the perceived probability of future allocations at cheap official rates, the greater the expected loss from purchasing foreign exchange now at the free market rate.*

*The total CIP allotment is \$27 million, including \$9 million to import petroleum products for use in agricultural sector development projects, preferentially those supported by USAID.

*The expected loss can be quantified by subtracting the return foregone by suspending production from the excess cost of market-priced dollars
(Footnote continued)

Moreover, the more readily management can justify postponing the administrative and psychological burden of shifting over to a new foreign exchange regime embodying an unfamiliar element of bargaining.

Expectations of some producers have been further confused as a result of the introduction of commodity import programs such as those of USAID and West Germany. Hearing that the Ministry of Finance argued for the application of below-market exchange rates to the 1985 versions of these programs, consistent with the official rates that applied to the first two USAID CIPs, several managers indicated they would hold off buying foreign exchange, even at the cost of further delaying a return to production, while seeking allotments at cheap rates.

Apart from its effects on availability and prices of inputs, an exchange control regime creates incentives and disincentives for producers by affecting the availability and prices of competing finished products. A major criterion for allocation of import licences and foreign exchange under the system maintained in Somalia prior to 1985 was whether a commodity proposed for importation was being produced in-country in sufficient quantity to meet reasonable demand. If it was, then the import license and foreign exchange allotment were to be denied. Just as a high tariff on goods competing with a local producer's output combined with a low tariff on his imported inputs magnifies the nominal protective effect, so also denial of licenses or foreign exchange for the importation of competing goods combined with absence of restrictions on importation of inputs (see Chapter 3, following.)

Very few manufacturers in the HIID team's sample complained about issuance of licenses or sale of foreign exchange at official rates to importers of competing products. Notable exceptions to this were

(Footnote continued from previous page)
over cheap official dollars, and multiplying the difference by the probability of a future foreign exchange allotment.

furniture makers, who attributed sizable loss of business to imports of furniture by government agencies benefitting from official exchange rates.

Conversely many producers complained about competition from goods imported at free market exchange rates, i.e. under franco valuta until this system was banned with effect from Nov. 15, 1981, and via foreign currency accounts beginning in mid-1981. Whether an exchange regime that allows traders to import goods for which they pay a full market rate, on top of this remitting any import taxes due, should be described as embodying a disincentive to local producers, depends on where one draws the baseline for characterizing a neutral policy, embodying neither incentives nor disincentives.

3. Trade regulation.

This heading encompasses measures by which the government prohibits a set of enterprises from producing or trading in, at designated stages of the distribution process, a given commodity or set of commodities. Most often this takes the form of measures by which various aspects of production and/or trade in specified commodities or commodity groups are restricted to one or a few enterprises, normally state-owned. The extreme form of such measures constitutes the vesting in a single enterprise of monopoly rights to produce or distribute a given commodity or commodity group.

Clearly such a measure creates a limited incentive for the enterprise or enterprises enjoying the exclusive rights, and an absolute disincentive for all other enterprises excluded from them. Where one or more enterprises that have been accorded exclusive production rights are the sole users of certain inputs entering into the production process, the measure in question has the effect of turning a single enterprise into a monopsonist (or a group of enterprises into oligopsonists), which creates a disincentive for any domestic producers of those inputs, since their selling prices are now subject to the exercise of downward pressure by other than market forces.

The following list indicates industries in the HIID team's sample that are affected directly by measures of trade regulation as described above, and describes briefly how they are affected:

Tannery and leather processing. A government trading organization, the Hides and Skins Agency (HASA), enjoys a monopoly in the procurement and sale of hides and skins for domestic processing and export. Its intervention affects the quantities available for purchase by domestic processors and the prices they pay for them; it also affects their ability to export processed and semi-processed hides and skins in the form of wet blues, suede, and cattle and camel leather.

On the side of procurement, HASA's policy is to hold producer prices for hides and skins below f.o.b. export levels, so as to keep the production cost of footwear below what it would otherwise be. (In this respect the functions of trade regulation and price control, No. 4 below, frequently overlap.) This is an obvious incentive to processors, although it is offset to an unknown degree by a reduction in the national supply as hides and skins produced in border areas are smuggled into neighboring countries and producers in more remote areas substitute hides and skins for alternative materials in household use or reportedly even discard them when the HASA price fails to cover marketing costs. Noting that hides and skins are a by-product of meat, HASA officials argue that their pricing policy does not have a major impact on supply. (One estimate put the negative effect at 15 per cent; some non-HASA industry observers described this as being on the low side.)

On the side of export regulation, a private tannery indicated that wet blue hides were a highly profitable export at current exchange rates, and said it was building up an inventory in the hope HASA would authorize its sale outside Somalia. At the time of the field work for this study the required permission was not yet forthcoming.

Seafood. A public enterprise in the processed seafood industry, Somali Marine Products (SMP), enjoys a quasi-monopoly position by virtue of a provision in its enabling statute requiring fisheries cooperatives to offer their fish for sale to SMP "provided the prices offered by (it) are at least as attractive as those available elsewhere." The Ministry of Fisheries is charged with enforcing the provision. The HIID team was unable to establish how rigorously it proceeds in this respect. Clearly the concept of an equally "attractive" price is an ambiguous one; how

does one factor in convenience of procurement procedures, timeliness of payment, etc.?

It is interesting to note a trading policy recently adopted by SMP which tends in the opposite direction from HASA's policy of favoring local consumption. A May 2, 1985, management circular directs the immediate cessation of local sale ex-factory of "export-quality fish", including lobster and Spanish mackerel. An obvious rationale for the difference in treatment of lobster and leather is that the former is seen as a luxury which domestic consumers can go without for the sake of maximizing foreign exchange earnings, whereas footwear represents a basic necessity of the population.*

Flour and pasta. The state-owned Wheat Flour and Pasta Factory enjoys a privileged position in the distribution of wheat imported under food aid arrangements, whose official price to processors is based on the official exchange rate. This is an obvious incentive to the factory. On the other hand, as noted previously government price control policy limits the profits which the factory can realize from its position. Another facet of trade regulation, allocation of factory output to selected intermediaries, determines the beneficiaries of the scarcity rents arising in this industry due to the fact that the quantity of wheat imported does not satisfy demand at authorized prices.

These arrangements create a substantial disincentive for private processing units, i.e. other pasta producers and bakeries, by presenting them with a volatile supply situation. Enterprises must devote long hours of staff time to seeking allotments at the Wheat Flour and Pasta Factory. Despite their best efforts to secure supplies, they encounter frequent shutdowns and periods of output below capacity and demand.

Cigarettes. The Cigarette and Match Factory is the only enterprise legally entitled to import or produce cigarettes and matches in Somalia.

*It should be noted that the May 1985 circular exempts the Waamo tourist hotel from the export ban.

This creates an obvious incentive for the company, although ease of smuggling and the lucrative return available from it (i.e. the wide margin between c.i.f. cost and retail prices) reduce the value of this monopoly position. Thus, for example, the C & M Factory estimates that it is currently supplying no more than 30 per cent of total cigarette consumption, the remainder being smuggled.

A further issue under the heading of incentives is that of the performance of the C & M Factory as a state-owned monopoly, compared with alternative modes of industrial organization. The company believes itself to be favored by Somali consumer preference, arising from a perception that its cigarettes are fresher than imports, and considers that, given the output, it could easily expand sales to satisfy, say, up to 90 per cent of demand. However there is no indication that the company sought in 1984 to expand its production beyond the low level permitted by its official foreign exchange allocation, notably by buying additional foreign exchange on the open market. As of May 1985 C & M had not yet seriously researched mechanisms for obtaining foreign exchange under the new regime. Although its 1985 production plan called for output about 15 per cent above single-shift capacity, performance during the first four months was only 35 per cent of that capacity.*

The question arises: given a different mode of organization of C & M, or a possibility for private firms to compete with the state monopoly, would the industry have been characterized by such underutilization of capacity?

Packaging. Somalfruit, a joint venture between the GSDR (40%) and private Italian interests (60%), enjoys a legal monopoly for the export of bananas. Its packing materials are produced by INCAS, one of the

*January-April production of 97,400 kg. of cigarettes times 3 gives an annual rate of 292,200 kg., or 35 per cent of single-shift capacity estimated by the company at 840,000 kg.

enterprises in the HIID team's sample and a wholly-owned subsidiary of Somalfruit. As sole supplier to its parent, which gives it a derived monopoly status, INCAS has an assured market along with the incentives and disincentives implied by that status.

Petroleum users. All enterprises in the sample consume petroleum, and are thus affected to a greater or lesser degree, depending on their volume of use, by the outcome of the regulatory regime applied to the petroleum industry. This regime accords a monopoly position in the procurement and distribution of petroleum and its products to the National Petroleum Agency, and a similar status in the refining of petroleum to the Petroleum Refinery. Authorized prices for sale of petroleum products have always been based on the official exchange rate or the lower of two official rates, if relevant, meaning well below real opportunity cost given the shilling's overvaluation.

When petroleum products have been freely available at the authorized prices, their pricing below opportunity cost has, of course, constituted an incentive for domestic manufacturers. On the other hand with the aggravation of the balance of payments crisis in 1983-84 the importation of petroleum has fallen below the level demanded at authorized prices, and chronic shortages have developed. At the time of the field work for this report, most motor vehicle operators were obliged every other day to spend significant amounts of time and money waiting in line or moving around to search for sources of fuel and lubricants. Operators putting a high opportunity cost on their time resorted to a parallel market where, during the period in question, a price of 50 shillings per litre was collected as compared with an official price of 15 sh. The HIID team was informed that the parallel market price had risen as high as 200 sh. in a period of severe scarcity during the last days of 1984 and first days of 1985.

Quantifying the additional production costs generated by this situation would require detailed study of operations of individual enterprises going beyond the scope of the present report, but there is no question that the positive incentive conferred by authorized prices well below opportunity cost has been significantly undercut for a number of enterprises.

4. Price control.

Insofar as control of prices by government authority limits the prices enterprises can charge for their output, it acts as a disincentive; to the extent it applies to inputs, its overt impact is to hold production costs below levels that would otherwise prevail, which acts as an incentive to the producers concerned. On the other hand by interfering with market supply functions price control frequently induces periodic or even chronic shortages of inputs, thereby disrupting production and ultimately raising costs. Frequently this happens by obliging producers to procure inputs on a parallel market where prices are higher than those that would prevail if price control were absent altogether.

At various times in the past decade the GSDR has sought to apply price controls over a wide range of commodities, including both consumer and intermediate goods. By 1982 it was becoming clear that, to the limited extent they could be enforced, these measures were having little effect other than to compound shortages and divert goods to the parallel market. Implementation of price controls therefore effectively ceased, apart from continued government intervention in setting the selling prices of public enterprises. In January 1985 the government committed itself to "the dismantling of all price controls".*

The HIID team's observations on the 36 enterprises in its sample provide several illustrations of past price control measures operating on producer incentives, although available data do not enable us to quantify the net impact on profitability. Mention was made in the previous subsection of the ambiguous impact of price control in the cases of hides

*Somali Democratic Republic, "Somalia: 1985 Adjustment Programme—Memorandum on the background to the 1985 balance of payments financing gap", page 3.

& skins and flour as inputs in the leather and pasta/bakery industries, respectively, and the case of petroleum as an input used by all industries. The application of price control also clearly bears some responsibility for low capacity utilization of the Cigarette and Match Factory. Here the government has set ex-factory, net-of-tax prices well below c.i.f. levels, failed to enforce authorized retail prices, and allocated quotas for distribution to selected traders. This has certainly helped to limit the C & M management's motivation to capture a larger share of the domestic market at the expense of imports.

To be sure, once a government has established a producing and trading monopoly, it must worry about the monopoly's selling prices. However, the manner in which price control has been applied in the C & M case has tended to depress output and employment.

The government's November 1984 letter to the IMF requesting a stand-by arrangement states that "prices charged by public enterprises (including fuel prices and utility prices) are now set so as to cover costs and provide for a suitable rate of return on investment. In 1984 there were some delays in adjusting these prices in line with increases in costs. The Government has recently established procedures to ensure that increases in costs as well as exchange rate adjustments are immediately and fully passed through."

During the field work for the present report, it appeared that the concerns propelling the government towards economic liberalization were partially offset by worry over the short-run inflationary consequences of devaluation. Consequently the determination of public enterprise selling prices has proceeded under an imperative to hold increases to a minimum, involving, among other things, use of the official exchange rate to price petroleum products serving as inputs into such enterprises as the urea fertilizer factory and the electric power company, ENEE. Moreover, in measuring production costs of such entities as a basis for price determination, no steps are yet reported to have been taken to revalue depreciation charges in accordance with devaluation and/or inflation. Price control policy as applied to public enterprises thus still constitutes a disincentive by virtue of depriving the enterprises of resources needed to maintain and replace their fixed assets.

5. Credit

Roughly 50 per cent of the enterprises in the HIID team's sample reported loans outstanding with either the Somali Development Bank (SDB) or the Commercial and Savings Bank of Somalia (C&SB). One enterprise, Somaltex, reported a loan outstanding with the Central Bank of Somalia. The latest available estimate for total credit outstanding to industry from the domestic banking system, excluding the SDB, pertains to September 1983, showing a balance of 726 million shillings.*

In recent years the interest rates charged by all three institutions have been negative in real terms. The following comparison of nominal lending rates and the annual percentage increase in the consumer price index gives some idea of the implicit annual subsidy—rate of inflation less the nominal lending rate—provided to the enterprises favored with loans from these public institutions:

Table 2: Comparison of interest rates on Somali domestic bank credit with annual price inflation, 1979-85*

(all figures are percentages)

Agency	1979#	1980#	1981		1982		1983	1984	1985
			Jan.- June	July- Dec.	Jan.- June	July- Dec.			
Central Bank	2.5	4.0	4.0	6.0	6.0	8.0	8.0	8.0	12.0
Commercial & Savings Bank	7.0-12.0	7.5-12.5	7.5-12.5	10.0-12.5	10.0-12.5	12.0-14.5	12.0-14.5	12.0-14.5	15.0-20.0
Somali Development Bank	6.0-7.5	6.0-7.5	6.0-7.5	11.0-14.0	11.0-14.0	11.0-14.0	11.0-14.0	11.0-14.0	15.0-17.0
Annual % increase, Mogadishu consumer price index	24	59	45		23		36	82	(1st 4 mos. = 18%)

*IMF, Somalia - Recent Economic Developments, April 4, 1984, page 114. Source entitles the sector "industry and crafts". Information is not available from SDB on a comparable basis; SDB accounts show gross lending of 300 million sh. to industry through December 1983, an unstated portion of this having been repaid.

Notes

* Where concessional rates for agriculture, cooperatives, small-scale farmers and/or handicrafts are identified separately, lower end of indicated ranges for C&SB and SDB excludes these.

Interest rates given for 1980 were introduced with effect from Dec. 1, 1979.

Sources

Interest rates: Values through mid-1982 given in IMF, Somalia - Recent Economic Developments (RED), April 4, 1984, page 115. Values for subsequent years from IMF, Somalia - Request for Stand-By Arrangement, Jan. 2, 1985, page 69.

Increase of consumer price index: Values for 1979-80 from IMF, RED, page 26; 1981-83, IMF, Somalia - Request for Stand-By Arrangement, page 5; 1984 and 1985 calculated from indices given in Central Statistical Dept., "Index Number of Cost of Living for Mogadishu", April 1985. If compounded during the remaining 8 months of 1985 the observed Jan.-April inflation rate would yield an annual rate of 64 per cent, however following the end-1984 devaluation and accompanying liberalization measures one would expect a burst of inflation early in 1985 followed by substantial deceleration in the second half of the year.

A negative real interest rate constitutes an implicit subsidy and thus an incentive to those firms benefitting from institutional credit. On the other hand the availability of loans at such a rate to selected enterprises reduces the total supply of credit as compared with a baseline situation in which financial institutions charge positive interest in real terms. This is because, firstly, the existence of a negative return on deposits (not depicted in Table 2, but needless to say average C&SB deposit rates during the respective periods have always been several points below average lending rates) encourages potential depositors to export their cash balances or convert them into real assets that appreciate with inflation. Secondly, the availability of credit at negative real cost encourages those enterprises favored with loans to borrow more heavily than would otherwise be profitable, whether to invest the proceeds in fixed assets, support operating losses, or maintain relatively large working balances. The net result is that less credit is available to all other enterprises, who thereby face a disincentive.

Given a competitively organized financial market one would have expected the large majority of the enterprises in the sample to be availing themselves of commercial bank overdrafts to finance at least part of their working capital requirements. The fact that only a minority were doing so points to the presence of implicit obstacles to obtaining bank credit in Somalia. A major factor underlying these obstacles is, of course, the pursuance in the past of macroeconomic policies whereby, as of mid-1984, 65 per cent of domestic credit had been appropriated for the public sector, 47 per cent directly by the government.*

6. Direct subsidies

During the wave of establishment of public enterprises in the 1970's the normal procedure was for the government to fund capital costs out of its development budget, often supported by foreign government loans and grants. The government treated these contributions as grants,

*Calculated from IMF, "Somalia: Request for Stand-By Arrangement," Jan. 2, 1985, Table VI, Monetary Survey, p. 38.

and no machinery was established to effectuate payment of either principal or interest on them. In some cases the procedure was adopted, based on Soviet practice, of requiring public enterprises to pay half of their annual depreciation allowances into the national treasury; were this procedure to continue throughout the economic lifetime of an entity's capital equipment, it could be viewed as diminishing the implicit subsidy in the initial funding arrangement. However, failure to charge interest, combined with the inflation-induced loss of value of depreciation allowances based on historical cost, has rendered the true "grant element" in the capital subventions in question well in excess of 50 per cent, probably over 90 per cent in most cases.

The present tendency of GSDR policy toward public enterprises is to cut its sizable losses in this sector via a three-pronged approach of (1) closing down enterprises found to have little prospect of viability, (2) privatizing or converting into joint ventures potentially viable operations where no imperative exists for retaining government control, and (3) rehabilitating enterprises where such an imperative exists.* Thus, the former policy of massive subsidization of capital costs of public enterprises is no longer extant, although certain of the rehabilitation measures envisaged in connection with category (3) will eventually require development budget funding.

The case history of one public enterprise included in the HIID team's sample indicates that at least one agency of government, the Ministry of Defense (MoD), was moving in a different direction during the period that government's new policy towards the parastatal sector was crystalizing. This period may be dated from the establishment of an Inter-Ministerial Commission on Public Enterprises in 1982. Just at that

*Cf. the GSDR's Nov. 8, 1984, letter to the IMF requesting a stand-by arrangement. Reproduced in IMF, Somalia - Request for Stand-By Arrangement, Jan. 2, 1985, page 61.

time the Ministry was establishing a new canvas factory which ultimately acquired the name of Multifabric Somalia Ltd.

The Ministry paid a total of not less than \$5 million in cash, most of it foreign exchange, for (1) second hand spinning, weaving, and sewing machinery imported from Singapore, (2) an inventory of pre-finished goods, (3) factory construction, and (4) working capital. The project was planned as a 50-50 joint venture with a Singapore businessman, who turned out to be a confidence trickster. At present the Ministry is saddled with an incomplete installation which appears to be working at less than ten per cent of capacity, and whose management believes it cannot compete with imports if it must import raw material at the market exchange rate once the pre-finished inventory included in the MoD capital grant is exhausted.

Just as the provision of subsidized credit to favored enterprises generates disincentives for those not so favored, so also the provision of direct budget subsidies to public enterprises, by enlarging the government deficit and its inflationary financing, and simultaneously creating further strains on the balance of payments. Thus, MoD's expenditure of several million dollars on Multifabric has reduced the foreign exchange available to the rest of the Somali economy by an equivalent amount and thereby measurably widened the gap between the official and free market exchange rates.

7. Organization of financial services

Economic history offers countless demonstrations of the key role of a progressive banking sector in promoting industrial growth. Many indicators suggest that Somalia's sole commercial bank, the state-owned C&SB, is not now playing such a role. The minority of enterprises in the HIID team's sample that use C&SB credit is one indicator.

One of the most important roles played by commercial banks in small economies with large foreign trade sectors is to operate a market in foreign exchange. In the absence of banks or other financial institutions to perform this function, enterprises face high transaction costs in buying or selling significant amounts of foreign currency. Several enterprises in the HIID team's sample that had not yet adapted to the

post-1984 exchange regime gave the impression of being intimidated by the thought of having to go onto the open market and assemble enough foreign currency to finance their inputs by picking up \$1,000 from one source, a second thousand from another, and so on. The C&SB is of limited help to them at the moment, since it contents itself with serving as an information exchange facilitating contact between would-be buyers and sellers of foreign currency. Nevertheless the government is unwilling to license foreign exchange dealers to serve as intermediaries in this market.

On the other hand the government has acknowledged shortcomings in the current organization of the Somali financial system by commissioning a foreign consulting group, Samuel Montagu & Co., to make recommendations pointing towards a "flexible and responsive financial system". Consideration is being given to licensing new banks with foreign participation. The EEC has been asked to finance a consultant study of how to "streamline and modernise" C&SB activities.*

8. Organization of infrastructure services

The question of what allocation of the government's fiscal resources to building and maintaining transport facilities and other components of infrastructure defines the borderline between a policy of incentives and one of disincentives in this area is a complex one that cannot be addressed in the scope of this report. What can be observed on the basis of our research, however, is that the present state of electric power service in Somalia constitutes a severe disincentive to producers. A combination of shortcomings in (i) system maintenance, (ii) anticipation of load growth and (iii) preparation of new installations (Gezira) has brought about a situation where repeated outages in the

*Somali Democratic Republic, "Somalia: 1985 Adjustment Programme—Memorandum on the background to the 1985 balance of payments financing gap", page 5.

course of one day are commonplace. Enterprises complained that variations in voltage over a range of 30 per cent were damaging their electrical equipment. One public enterprise had estimated at 30 per cent the proportion of scheduled 1984 production time lost on account of power failures. Several enterprises in the sample were in the process of installing generators, thereby subjecting themselves to a significant increment in production costs compared with buying power from a reliable outside supply source.*

9. Domestic taxation

To the extent the burden of domestic taxation on an enterprise is less than or exceeds some baseline level, the enterprise is subjected to an incentive or disincentive. An ideal measure of the baseline is the tax an enterprise would pay if subjected to a value-added tax assessed uniformly on all producers at a rate sufficient to achieve the current level of government revenue (cf. Balassa volume cited in Chapter 8 below). The scope of the present study does not permit such an estimation, nor has our survey of enterprises provided enough detail to compare actual tax payments with the outcome of such a baseline computation. In the absence of such data, the regime of company tax exemptions may be viewed as a proxy for the true pattern of domestic tax incentives and disincentives. This discussion will therefore content itself with summarizing Somalia's current system of domestic taxes on companies and examining the regime of exemptions from those taxes.

*Some years ago, with a view to promoting an efficient power infrastructure, the GSDR prohibited the installation of private generators in areas with access to the ENEE network. The current power crisis has now led to de facto suspension of this regulation.

Somalia taxes companies, corporations, and enterprises other than those legally classified as public* at 35 per cent of their net income. The tax law entitles the Minister of Finance to exempt from tax, for a period not exceeding ten years, that portion of the net income of a "new" industrial or agricultural enterprise not exceeding ten per cent of invested capital, provided that "the enterpriser concerned proves that he will run an extraordinary risk". Likewise eligible are "enterprisers who enlarge or radically renovate existing enterprises". Exemptions are to be granted only for the number of years required, in the Minister's opinion, for "amortization of the invested capital".** Since in practice nearly all new industry investments involve some assets, notably structures, whose amortization (i.e. depreciation) periods exceed ten years, it is not clear what basis exists for granting an exemption for any period other than ten years.

The Foreign Investment Law, No. 7 of 1977, similarly authorizes the Minister of Finance, where he considers it "necessary in the national interest" and with the approval of the President and other Ministers, to grant tax exemptions to foreign investors for periods not exceeding five years.

Only two of the private companies in the HIID team's sample and the joint enterprise INCAS acknowledged benefitting, currently or in the

*The law governing public enterprises in Somalia (Law No. 58 of 1972) considers an entity to be such only if it is under 100 per cent government ownership. Multifabric Somalia Ltd. (see subsection 6 above) is not classified as a public enterprise even though it is fully owned by the Ministry of Defense, because nominally it is a 50-50 joint venture with a Singapore businessman. Neither is INCAS, wholly owned by the 40-60 joint venture Somalfruit.

**Somali Republic, Body of Laws on Direct Taxation, Income Tax, Law No. 5 of 1966, page 73.

past, from a direct tax holiday. The Ministry of Finance informed the team that no list of the exemptions currently in force was available. No quantitative estimate of the value of this exemption to Somali industry can therefore be attempted in the present report.

Arising out of recommendations of the 1980 IMF tax advisory mission the GSDR introduced a 5 per cent general sales tax in June 1984. All the private companies in the sample appear to be subject to this tax, and no exemptions are known to have been granted in the private sector (public enterprises remain subject to a different indirect tax regime).

Turning to public enterprises, Law No. 58 of 1972 subjects these entities to three different taxes, (i) a profits tax of 60 per cent, (ii) 50 per cent of annual depreciation, and (iii) a turnover tax on gross sales. Enforcement of these taxes appears to be subject to considerable discretion on the part of the Minister of Finance. Ministry officials informed the HIID team that new public enterprises are considered to be in "project" status during the initial years after establishment, and are normally exempted from profits and depreciation tax during that period. Again, the team was informed that no list of such exemptions exists.

The GSDR budget breaks down its estimate of turnover tax revenue (but not profits or depreciation tax) by individual public enterprises. By perusing recent budgets one can identify those enterprises that are evidently exempt from turnover tax. An authoritative publication of the Ministry of Industry classifies the following 21 industrial entities as public enterprises:*

*Warbixinta Guud ee Warshadaha Dawladda 1983 (Public Report on Government Industry 1983), 1984, page V.

Somaltex	Jowhar Sugar Factory
Kismayo Meat Factory	**Snai-Biasa (sugar by-products)
***Sopral Meat Factory	Cigarette & Match Factory
Aluminium Utensils Factory	*Oil Refinery
Foundry & Mechanical Workshop	Berbera Asbestos Sheet Factory
Milk Factory	*Berbera Cement Factory
*Kismayo Leather Factory	*Berbera Chalk Factory
*Hargeisa Leather Factory	*Balad Irrigation Dev. Authority
*Burao Leather Factory	*Juba Sugar Authority
*Km. 7 Shoe & Leather Factory (Magdeynta)	*Urea Factory
**Edible Oil Factory	

A single * denotes enterprises not mentioned in either budget; ** denotes two enterprises included in 1984 but omitted from the 1985 document; and *** denotes an enterprise omitted in 1984 but included in 1985. The four leather factories are subsidiaries of the Somali Leather Agency which appears in both budgets as paying turnover tax, hence they may be regarded as subject to the tax. The Berbera Cement Factory and the Urea Factory have not yet entered into production, which would explain their omission from the budget.

10. Promotion of industrial exports

A comprehensive review of policy measures that create incentives and disincentives for industrial growth must make room for a varied set of official interventions, not mentioned in the preceding discussion, by which many governments seek to promote nontraditional exports. These include such measures as: rebates of taxes on inputs incorporated in goods destined for export (properly classified under subsection 1 above); preferential allotments of import licences and foreign exchange for such inputs, and/or application of differential exchange rates for purchase of inputs (fewer shillings per dollar) and export of output (more shillings per dollar) (subsection 2); preferential allocation of credit and/or concessional interest rates for the producers involved (subsection 5); outright subsidies in the form of export bonuses (subsection 6); and organization of services designed to help a potential exporter meet the substantial transaction costs of entering the export market.

The HIID team encountered none of these measures in operation in Somalia. The root cause of this appears to be a profoundly pessimistic

attitude of the authorities vis-a-vis export of industrial products as a viable strategy in the foreseeable future. The latest available trade report, that for 1982, values exports and re-exports at 2.14 billion shillings, of which 96.4 per cent represents SITC category 0, food and live animals chiefly for food, with live animals accounting for 93.9 per cent of the 2.14 billion sh. Only five domestic manufactures appear worthy of mention in the 1982 export list:

- Seafood—22.8 m.sh.; 58 per cent comprises salted, dried or smoked fish, 42 per cent fresh, chilled or frozen shellfish; the proportion that may legitimately be regarded as manufactured is unclear.
- Meat—1.2 m.sh.; meat packing plant closed in 1982, no further exports have taken place.
- Molasses—2.6 m.sh.; a by-product of sugar processing.
- Petroleum products—23.8 m.sh.; by-products of the oil refinery.
- Leather—20.8 m.sh.

The GSDR Stand-By application letter refers to an expectation that new external sector policies will "contribute to a recovery and renewed expansion of exports (and) the stimulation of domestic import substitution industries", but there is no indication that the first reference covers any but Somalia's traditional export products. Neither does the letter refer to any specific measures, such as those listed in the first paragraph of this subsection, to be taken with a view to promoting nontraditional, particularly industrial, exports.

Only a small minority of the enterprises in the HIID sample were conscious of export prospects, but these firms saw the new exchange regime and the correspondingly low cost of Somali labor as offering highly profitable opportunities in the world market. Chapter 8 below mentions a few steps the government might consider to help Somali manufacturers take advantage of these openings.

11. General policy environment

A discussion of incentive and disincentive measures would be incomplete without this final heading, which refers to the overall business climate generated by government acts of commission as well as

omission. It is obvious that no businessman will invest risk capital if he feels there is a good chance that the government will seize the resulting assets without prompt and generous compensation. But of scarcely less importance to the prospective investor is a feeling of confidence in government's attitude on two fundamental issues.

The first of these is whether a "capitalist" who assembles a handsome fortune (by Somali standards) through manipulation of market forces and the means of production is to be regarded as an enemy of the people who is fair game to be cut down to size by a variety of measures apart from outright confiscation. One category of measures that appears to have had a particularly strong disincentive effect in the past comprises the awarding of special privileges to public enterprises to strengthen their hand in competing with private business.

The second issue is the question of whether government, once it has put in place an adequate set of incentives, accepts responsibility for monitoring and safeguarding the profitability of efficient industries into the foreseeable future, by adjusting its macroeconomic policies as and when necessary. Do the authorities appreciate the need to constantly compare Somalia's price inflation with that of her trading partners, and to allow the exchange rate to adjust as often as necessary to prevent producers of tradeable goods and services from losing ground? Will the government refrain from actions that in the past have inflicted a stop-go regime on industrial enterprises by depriving them periodically of access to inputs at stable prices?

The experience of newly industrializing economies (see Balassa volume cited in Chapter 8) has shown that a stable business climate must prevail for a few years before industrialists become confident that the government appreciates its importance and is capable of taking the necessary actions to maintain it. Somalia is now in transition out of a volatile trade environment in which the returns to arbitraging greatly exceeded those obtainable from investing in industry, especially on a scale generating exportable surpluses. With the institution of the new exchange regime in January 1985, steps have been taken that will, if maintained, quickly eliminate the scarcity rents available from trading

per se, increase the relative profitability of Somali industry and open up the possibility of manufactured exports. The prospects for expansion of income and employment in Somalia depend on a continuation of this trend.

Table 3: Summary of incentives and disincentives for expansion of industry in Somalia

<u>Policy area/incentive or disincentive measure</u>	Level of impact (positive incentive)*	<u>Inherent disincentive impact:</u>		Unqualified disincentive to industrial development	<u>Comments</u>
		<u>Direct cost-raising/other obstacles to operation of non-benefiting industries</u>	<u>Indirect disincentive impact via inflation, net loss of foreign exchange, etc.</u>		
1. <u>Taxation of international trade</u>					
A. Tariffs on:					
a. Imported inputs not produced domestically				X	Positive incentive perceived by domestic producer of input.
b. Imported inputs also produced domestically	B	X			
c. Other imports competing w. domestic production	B				
B. Exemptions from:					
a. Tariffs on A(a) above		X			Offsets incentive provided by A(b). Offsets incentive provided by A(c).
b. Tariffs on A(b) above			X		
c. Tariffs on A(c) above				X	
C. Tax enforcement of customs regulations (impacts as given in B above for three import categories)					
D. Taxes on export of:					
a. Unprocessed inputs		X			Incentive effect may be offset by reduced supply of inputs.
b. Processed goods				X	
2. <u>Foreign exchange management</u>					
A. Import licensing/exchange controls on:					
a. Imported inputs not produced domestically				X	
b. Imported inputs also produced domestically			X		
c. Dual exchange rates (low for imported inputs, high for exports & competing imports)	C				
3. <u>Domestic trade regulation</u>					
Vesting in public enterprises of monopoly rights in:					
a. Production	A		X		X
b. Trade					
4. <u>Price control</u>					
a. Unprocessed inputs		X			
b. Processed inputs			X		
c. Finished goods				X	

Table 3: Summary of incentives and disincentives for expansion of industry in Somalia (continued)

9. <u>Credit--Allocation (rationing) of credit at low or negative real interest rate</u>			X	
10. <u>Direct subsidization</u>				
a. Capital aid to efficient enterprises		X		
b. Capital & operating grants to inefficient ents.			X	Given fiscal imbalance, any subsidy creates indirect disincentives.
11. <u>Organization of financial services--Commercial banking a state monopoly, bank unable to manage foreign exchange market, other services deficient</u>				X
12. <u>Organization of infrastructure services--Inability to maintain power system causes outages, widely fluctuating voltage</u>				X
13. <u>Domestic taxation--Tax holidays, other exemptions</u>	X			X
				Limited transparency in administering tax exemptions confuses expectations, delays investment execution.
0. <u>[Promotion of industrial exports--Measures not yet applied in Somalia]</u>				
A. Lowering cost of inputs incorporated in exports				
a. Rebate of indirect taxes	C		X	
b. Preferential allotment of import licenses & foreign exchange	C		X	
B. Preferential allocation of credit	C		X	
C. Export bonuses	C		X	
D. Organization of services to share exporters' transaction costs	C		X	
1. <u>General policy environment</u>				
A. Assurances against:				
a. Confiscation of property			X	
b. Less overt harassment, including favoritism toward public sector competitors			X	
B. Assurance that government appreciates need to support competitive position of efficient producers and will employ necessary macro policy tools			X	

Note
 * Level of impact of positive incentives. See following definitions of A, B & C. Where no level is indicated, the measure is neutral with respect to this classification or the level of impact depends on specific characteristics of the measure.
 A: Increased profitability of benefiting enterprise at static level of output, no incentive (possibly even outright disincentive) to expand output.
 B: Enterprise motivated to expand output up to limits of domestic market.
 C: Enterprise motivated to expand into export markets.

CHAPTER 3 - EFFECTIVE PROTECTION AND UNIT DOMESTIC
RESOURCE COST—SIGNIFICANCE AND METHODOLOGY

Nominal protection of industry

Modern analysis of the impact of government incentives for industrial development distinguishes between nominal and effective protection of domestic industry against competing imports. In its simplest form, nominal protection is the ad valorem rate of import duties, plus any other indirect taxes levied discriminatorily against imports and not against comparable local products, payable by imports that are comparable, and thus directly competitive, with a given local product. Where an import duty is specific rather than ad valorem, i.e., collected as Z amount of local currency units per physical unit of an imported commodity rather than as Y percent of the c.i.f. value of the import expressed in local currency, nominal protection is expressed as X divided by the c.i.f. value of the unit in question.

A more sophisticated concept of nominal protection takes account of the fact that governments employ instruments other than customs tariffs and other discriminatory indirect taxes to protect local industry against imports. The most common measures in this vein are quantitative restrictions and exchange controls. With the former, a government fixes a ceiling on the amount of a given commodity that one or more parties can import during a certain period of time, irrespective of any movement in the commodity's c.i.f. price. To have effect as a protective measure, the ceiling must, of course, be less than the amount that the domestic market would demand at prevailing prices, inclusive of import duties, in the absence of the measure.

Exchange controls operate somewhat differently, but have a similar effect. Here, importers are allotted given amounts of foreign exchange at an officially determined rate (price of a unit of foreign currency, say dollars, in local currency), with which to purchase given commodities, and can then bring in any amount of the goods which the

foreign exchange allotment suffices to buy at prevailing world market prices. Again, for the measure to fulfill its intended object of releasing less foreign exchange at the official rate than would otherwise be demanded by the market, the quantities of most commodities imported under such a regime will be less than market demand at c.i.f. prices plus duty and local distribution costs.

Failure of the officially limited supplies to satisfy demand at such prices creates scarcity rents, which drive prices up until supply and demand are equated. In such situations, the concept of nominal protection is expanded to include the additional, scarcity-induced margin in the local selling price of an import competing with local production.

Absolute prohibition of an import, or a zero allotment of foreign exchange for its purchase, represents one extreme in the application of quantitative restrictions and exchange controls. In this case the rate of nominal protection equals the proportional difference between (i) the c.i.f. price plus normal distribution costs, and (ii) the price which the market is willing to pay for the available supply of the locally produced versions, plus the value of any quality premium expressing market preference for the import over the former. For example, if the c.i.f. price is 100 sh., a local version is selling for 150 and the market would pay an extra 50 to buy the imported good, a quota or exchange allotment of zero confers 100 percent nominal protection ($= [150 + 50 - 100] / 100$) on the local production.

Effective protection — focus on value added

The concept of effective protection makes use of the foregoing measures of nominal protection, but focuses on the protection an enterprise receives for its value added rather than for the gross value of its output, to which end it takes into account the impact of taxes and other official measures on the prices an enterprise pays for its inputs. Two measures of value added figure in the formula for the effective rate of protection (ERP), one based on domestic prices and the other on world prices.

Value added at domestic prices equals gross value of sales less the enterprise's purchases, at domestic (tax-inclusive) prices, of tradeable inputs, either goods or services, from outside parties. (A good or service is considered "tradeable" to the extent that its selling price incorporates the c.i.f. cost of an import, or the c.i.f. equivalent value of an import substitute, or the f.o.b. price of a good or service that would have been exported had it not been used in local production.) The difference between gross sales and tradeable inputs, both valued at domestic prices, comprises the net revenue available to remunerate domestic factors of production, i.e., labor, management and capital. It may be measured gross, without deducting annual depreciation of capital assets purchased from outside parties, or net, i.e., with depreciation subtracted.

Value added at world prices is a particularly important concept in the analysis of effective protection. Its measurement differs according to whether the local product in question is consumed domestically as an import substitute, or sold on the world market as an export.

In the former case, value added at world prices equals the c.i.f. (import) value of a close substitute to the local product brought in from outside, less the value at world prices of tradeable inputs consumed by the enterprise in producing the good. These inputs may in turn be imported or locally produced; if locally produced they either substitute for imports, or would have been exported if not purchased by the enterprise in question. Inputs figuring as import substitutes are valued at the c.i.f. cost of the imported alternative, those that would otherwise have been exported, and thus brought in foreign exchange for the country, are valued at the corresponding f.o.b. prices.

Conversely, if the product in question is exported, value added at world prices equals the f.o.b. (export) price, less, as in the previous case, the value at world prices of tradeable inputs consumed in production of the good.

Valuation of these inputs and outputs at world prices presumes the use of an exchange rate; the appropriate rate is one that would equate

demand and supply of foreign exchange in a free market, taking into account non-market sources of foreign exchange such as external aid. Ambiguity attaches to choice of the exchange rate because the rate that will equilibrate the market in the short run may well differ from the long run equilibrium value. Somalia's franco valuta rate is used in the industry case studies analyzed in Chapter 5 below.

It is useful to look at an example of how measurement of a local product's value added may differ according to whether one uses domestic or world market prices. We will consider the case of iron nails. Based on information supplied by a Somali producer of this commodity, whose enterprise was included in the HIID team's sample, an efficient Italian nail manufacturer can take a kilogram of wire costing him 1,000 lira, run it through his factory, sell the resulting kilogram of nails for 1,100 lira, and make a profit.

Shipment of wire or nails from Italy to Somalia adds approximately 15 per cent to the foreign exchange cost incurred by a Somali businessman in importing Italian wire or nails. The c.i.f. cost of a kg. of wire delivered in Mogadishu is thus 1.15 (1,000 lira) = 1,150 lira, that of a kg. of nails is 1.15 (1,100 lira) = 1,265 lira. Ignoring all other tradeable inputs used by the Somali manufacturer of nails, such as depreciation of his imported machinery, fuel and electricity, the difference between 1,265 and 1,150 lire (= 115 lira) represents a ceiling on the lira equivalent of his value added at world market prices per kg. of nails. Translated into Somali shillings at a mid-1985 free-market exchange rate of 23.3 lira to the shilling (equivalent to 85 sh./\$1.00), this gives a maximum local value added, again in world market prices, of 4.9 sh. per kg. of nails.

It is apparent that the level of this ceiling on the Somali manufacturer's unit value added at world market prices — the difference in c.i.f. cost between importing the final product and importing the principal input — is determined by a factor over which neither the local manufacturer nor his government has any control, namely by supply and demand in foreign wire and nail markets. Regardless of how the Somali manufacturer's efficiency compares with that of his foreign counterparts

-- whether it is higher or lower -- his unit value added at world market prices cannot exceed the c.i.f. value of that difference. Nor can any combination of government trade, tax and subsidy policies achieve this result.

Conversely, unit value added at domestic prices can be pushed well in excess of value added at world prices, or depressed below it, by alternative combinations of government measures operating on imports of competing products and of inputs. We look first at the tariff rates currently levied by Somalia on wire and nails. As shown by Table 5 in Chapter 4, the import tariffs on the two commodities, in effect already in the 1970's, are 10 per cent (wire) and 30 per cent (nails), respectively. Taking into account harbor dues, administrative and statistical (A & S) tax, and stamp tax, the formula presented in Chapter 4 shows official charges totalling 34.6 per cent of the c.i.f. cost of wire and 55.6 per cent of the c.i.f. cost of nails. This latter figure is the nominal rate of protection of nails.

The current shilling counterpart of the c.i.f. cost of a kg. of wire is 1,150 lira divided by 23.3 lira = 49.4 sh. Taking into account taxes, this rises to 1.346 (49.4) sh. = 66.5 sh. The calculation for nails is 1,265 lira/23.3 lira = 54.3 sh., times 1.556 = 84.5 sh.

Thus, the higher tax regime in effect for nails as opposed to wire means that the Somali nail manufacturer competes against imported nails obtained by local distributors for 84.5 sh. per kg., while paying only 66.5 sh. for a kg. of wire. The tax regime thus allows him a margin of 18 sh. (= 84.5 - 66.5) over a kg. of imported wire,* compared with the 4.9 sh., calculated previously, which represents his maximum value added at world market prices, ignoring all tradeable inputs other than wire.

*The manufacturer claims that importers of nails under-invoice their shipments so as to avoid paying the full charges due, thus depriving him of the full degree of protection implied by these calculations. The following discussion ignores this phenomenon of partial smuggling.

The effective rate of protection (ERP) accorded to the Somali nail manufacturer on the foregoing assumptions is defined as the excess over 1.0 of the ratio of value added at domestic prices to that value at world prices. In other words, $ERP = 18.0/4.9 \text{ sh.} - 1.0 = 3.67 - 1.0 = 2.67$. In percentage terms, ERP in this example is 267 per cent, or 4.8 times the 55.6 per cent rate of nominal protection.

Recalling the Chapter I discussion on measuring incremental social income generated by a strategy of industrialization, it is the figure of 4.9 shillings per kg. of nails, not the 18.0 sh. at domestic prices, that measures the shilling equivalent of foreign exchange saved by manufacturing nails locally rather than importing them. Thus, 4.9 sh. is also the relevant measure of social income generated in the process, and the correct way to interpret the preceding calculus is: Somalia provides a nail manufacturer with a margin of 18 shillings to remunerate domestic factors of production so that he can generate 4.9 shillings worth of real income in producing a kg. of nails.

Reinterpreting the analysis in terms of the effective exchange rate, the Somali manufacturer will save a dollar's worth of foreign exchange, or 85 sh. equivalent, by producing 17.3 kgs. of nails ($17.3 = 85/4.9$). For that contribution to social income he will receive 312 sh. ($=17.3 \text{ kg.} \times 18 \text{ sh. per kg.}$) to remunerate domestic labor, management and capital engaged in this industry. In other words, for the nail manufacturer the effective exchange rate is 312, not 85, because that is the amount of shillings he receives for saving a dollar's worth of foreign exchange.

Moving from the nail example to a general formula, we define t_p as the rate of nominal protection on a given final product; t_n (n representing numbers, 1, 2, 3, . . .) as the rate of indirect taxation of tradeable input No. n ; p^{cif} as the value at world market prices of a Somali producer's sales of the final product, whether sold as an import substitute or exported; and i_n^{cif} as the value at world market prices of the quantum of input No. n incorporated in those sales of the final product. Clearly, $p^{cif} - i_1^{cif} - i_2^{cif} - i_3^{cif}$ etc. represents value added at world market prices.

The value of sales of the final product at domestic prices is then equal to $p^{cif} + t_p p^{cif}$, i.e., the value at world market prices plus the protective impact of the relevant tariff. This in turn equals $(1 + t_p)p^{cif}$. Similarly, the cost to the producer, in domestic prices, of each tradeable input used in the production of p is $(1 + t_n)i_n^{cif}$, and value added at domestic prices is $(1 + t_p)p^{cif} - (1 + t_1)i_1^{cif} - (1 + t_2)i_2^{cif}$, etc., etc. The different inputs may be conveniently expressed as a summation, thus:

$$\sum_n (1 + t_n)i_n^{cif}.$$

The effective rate of protection is then given by the formula:

$$ERP = \frac{(1 + t_p)p^{cif} - \sum_n (1 + t_n)i_n^{cif}}{p^{cif} - \sum_n i_n^{cif}} - 1.0.$$

In the nail example, where we assume initially only one tradeable input, wire, the relevant values are the following:

$$\begin{aligned} t_p &= 0.346 \\ t_1 &= 0.556 \text{ (wire)} \\ p^{cif} &= 54.3 \text{ sh.} \\ i_1^{cif} &= 49.4 \text{ sh. (wire)} \end{aligned}$$

$$ERP = \frac{1.556(54.3 \text{ sh.}) - 1.346(49.4 \text{ sh.})}{54.3 - 49.4} - 1.0 = 3.67 - 1.0 = 2.67$$

Representing the equilibrium exchange rate used in the calculation by r , the effective exchange rate (EER) equals $(1 + ERP)r$. In the nail example, $EER = (1 + 2.67)85 = 3.67(85) = 312 \text{ sh./\$1.00}$.

Various permutations of the ERP analysis can be illustrated by adjusting figures in the nail example:

1. Equal nominal protection of output and inputs. A frequent question posed by newcomers to the doctrine of effective protection concerns the impact of equal nominal protection of output and inputs (or, to phrase it more correctly from the producer's viewpoint, where a levy on inputs is seen as a burden on production rather than a measure of protection, the impact of indirect taxation of tradeable inputs at a level equal to the nominal protection of output). If $t_p = t_n$, let us say at the foregoing level of 0.346 for wire, the ERP formula for nails reduces to:

$$1.36 \frac{54.3 - 49.4}{54.3 - 49.4} - 1.0 = 0.346(1) - 1.0 = 0.346 \text{ or } 34.6 \text{ per cent.}$$

In terms of the earlier general formula:

$$ERP = (1 + t_p) \frac{p^{cif} - \sum_n i_n^{cif}}{p^{cif} - \sum_n i_n^{cif}} - 1.0 = (1 + t_p)(1) - 1.0 = t_p.$$

In other words, whenever the rates of nominal protection applicable to a product and its tradeable inputs are equal, the ERP becomes equal to that single rate. The policy implication of this is that the simplest way of ensuring a level of effective protection equal to X for a given product is to establish X as the nominal protection rate for both the product and all its tradeable inputs. In the extreme case, if a given nominal rate applies to all domestically manufactured goods and their tradeable inputs, effective protection is equalized throughout industry.

To be sure, if nominal protection varies among inputs, an ERP equal to the nominal protection of the final product can be arranged by ensuring that the effect of inputs with lower rates is offset by that of inputs with higher rates. However, this is a relatively complex exercise, and as industries use given inputs in different proportions, it

would be virtually impossible to equalize ERP's among different industries in this way.

2. Nominal protection of output below that of inputs. In introducing the example of nail manufacture it was shown that the effective protection conferred on that industry by Somalia's present regime of import tariffs is nearly five times as high as its nominal protection of 55.6 per cent. In general, wherever nominal protection of output exceeds the weighted average of nominal protection of inputs, which in the the nail example is 34.6 per cent (for the time being wire is taken to be the only tradeable input), effective protection of a product exceeds its nominal protection.

The converse is likewise true, i.e., if weighted average nominal protection of inputs is superior to that of output, a product's ERP is less than its nominal protection rate. This can be seen in the general ERP formula by writing t_n as $t_p + x$, where x represents the positive excess of the weighted average of t_n over t_p . The ERP can then be represented by the formula in (1) above for the case where $t_p = t_n$, by adding to both sides of the equation the negative value

$$\frac{-x \sum_n i_n^{cif}}{p^{cif} - \sum_n i_n^{cif}},$$

thereby reducing the ERP below t_p .

Intuitively, it is logical that if government makes the manufacturer pay higher taxes on his inputs than it imposes on imported goods competing with his product, the effective protection of that product will be less than the tax on the competing import.

3. Zero effective protection. Another frequent question concerns the circumstances under which an ERP would become equal to zero. Drawing again on the nail example, one may set t_p at its existing level of 0.556 and ask what value of t_1 would reduce ERP to zero, or alternatively leave t_1 where it is, at 0.346, and ask what level of t_p would have the same effect. The solutions are $t_1 = 0.611$ or t_p

= 0.315. In other words, supposing that nominal protection is conferred exclusively via import duties, a tariff (all inclusive) of 55.6 per cent on nails and 61.1 per cent on wire, or 31.5 per cent on nails and 34.6 per cent on wire, would reduce effective protection of nail manufacture to zero.

In general, for any given positive rate of nominal protection of a final product, there are various combinations of rates for inputs, with weighted averages exceeding the former rate, that drive the product's ERP down to zero.

Zero effective protection does not mean that an industry is denied any revenue with which to cover costs of domestic factors, or any possibility of profit. It merely means that the margin available to remunerate domestic factors, including equity capital as the factor to which profit accrues, is confined to the shilling equivalent, at the free-market exchange rate, of value added at world market prices. In the nail example, an ERP of zero would require the Somali manufacturer to cover his domestic production costs out of a margin of 4.9 sh. per kg. of nails. If the technology of nail manufacture is such that no Somali manufacturer could hope to do this, then the supposition arises that nail manufacture is not an economic industry for Somalia.

4. Negative effective protection. It is a simple extension of the foregoing analysis to establish the conditions under which a product's ERP can fall below zero, i.e., become negative. In the nail example, with the nominal rate for the product fixed at 55.6 per cent, any nominal rate exceeding 61.1 per cent for wire will have this effect; likewise, with the nominal rate for wire fixed at 34.6 per cent, any nominal rate below 31.5 per cent for nails will generate a negative ERP.

Again, negative effective protection does not necessarily deprive a domestic producer of any opportunity for profit. It does, however, compel him to cover his domestic factor costs out of a margin inferior to value added at world market prices. In the nail example, negative effective protection would leave the local manufacturer with less than 4.9 shillings per kg. to cover his labor and capital costs (not to mention costs of inputs other than wire).

A further extension of the numerical analysis enable us to establish conditions under which a perverse protection policy reduces the margin available to cover domestic factor costs to zero and below. Looking at the general ERP formula, this happens when value added at domestic prices becomes zero or negative, i.e.,

$$(1 + t_p)p^{cif} \leq \sum_n (1 + t_n)i_n^{cif}, \text{ or}$$

$$t_p \leq \sum_n (1 + t_n) \frac{i_n^{cif}}{p^{cif}} - 1.0.$$

In other words, the weighted average of nominal protection rates for tradeable inputs (i.e. indirect taxation of inputs) is sufficiently higher than the nominal protection of the final product to absorb all revenue remaining after payment of the c.i.f. cost of the inputs. It is apparent that a zero value for the main term in the ERP formula yields an ERP of -1.0, i.e., -100 per cent.

Turning again to the nail case, with nominal protection of nails fixed at 55.6 per cent, a tariff of 71.0 per cent (all-inclusive) on wire, or nominal protection of 22.5 per cent for nails with the wire tariff fixed at 34.6 per cent, eliminates all value added at domestic prices.

A few of the case studies in Chapter 5 identify industries where the GSDR was providing, during the year covered by the data supplied to the HIID team, negative effective protection. The policies yielding this result were not differential import tariffs that discriminated against local industries in favor of domestic consumers of the products in question, but rather official price controls on the local output. Given an import costing 100 sh. c.i.f., and an import tariff plus associated charges totalling 80 per cent, such protection is inoperative if government directs a local producer of the good (it is state enterprises that have been particularly subject to such measures hitherto) to charge only 90 sh.

5. Infinite effective protection. It is now time to consider the nail factory's use of tradeable inputs other than wire. State enterprises, namely the oil refinery and the power company, ENEE, supply the nail factory with fuel and electric power produced with the help of imported or other tradeable inputs which they have purchased, by government directive, at sub-market exchange rates. The value of those inputs at world market prices is thus greater than the price paid by the nail factory and other Somali consumers of fuel and electric power. Accordingly, the term t_n which translates world market values into values at domestic prices is negative in the case of fuel and power (figures of -0.49 and -0.5 have been estimated and are used in the case study analysis in Chapter 5).

The factory's final significant tradeable inputs comprise its machinery, all imported, and the tradeable goods and services incorporated in its buildings, which the HIID team has estimated on a sector-wide basis at 50 per cent of total construction cost. The tradeable component of capital assets enters into the annual flows figuring in the ERP calculus via depreciation, which is computed by revaluing the assets to compensate for price inflation since their purchase and dividing the resultant values by the economic lives of the respective assets.

The factors discussed in Chapter II which have induced or even forced Somali manufacturing enterprises to operate on a stop-go basis in recent years, limiting their utilization of capacity to pitifully low levels, have afflicted the nail factory in equal measure. The manufacturer informed the HIID team that an Italian factory operating the same machinery would normally produce at a level 80 to 100 times higher than the Somali facility. This means that the tradeable depreciation component of unit production cost in Somalia is likewise 80 to 100 times higher than in Italy.

When the additional tradeable components of cost are added to the cost of wire, it turns out the total exceeds the gross value of the factory's nail sales valued at world prices. In other words, if all

values are converted back to dollars at the applicable exchange rate, dollar costs of manufacturing nails in Somalia exceed the dollar cost of importing them already manufactured. This situation, which arises all too frequently in developing countries in general and Somalia in particular, is referred to as negative value added at world prices. It means that a country is giving up more foreign exchange to produce a good locally than it would to import the good as a finished product.

In terms of the general ERP formula, this state of affairs translates into a zero or negative value for the denominator, $p^{cif} - \sum_n i_n^{cif}$. As the value of a denominator approaches zero, the expression of which it is a part tends towards infinity. If tradeable costs exactly equal the world value of output, ERP equals infinity. If they exceed the value of output, the denominator becomes negative and, mathematically speaking, ERP becomes a negative magnitude. However, from a policy viewpoint this condition has nothing to do with the situation of negative effective protection defined in (4) above. Therefore, by convention the concept of infinite effective protection is applied to any situation of negative value added at world prices. In intuitive terms, one can say that, since no real income is being generated to protect, any protection given to such an industry is infinite by comparison.

ERP and EER — Conclusion

Table 4 summarizes the foregoing calculations with respect to effective protection of nail manufacturing in Somalia, and the effective exchange rate (EER) corresponding to each ERP. ERP's illustrated in the table range from -100 per cent to +267 per cent, thence up to infinity. The first entry in the table is based on import duties currently in force for nails and wire, although it overlooks the possible occurrence of under-invoicing of nail imports, which depresses the relevant nominal protection rate for nails. However, given the tradeable inputs additional to wire that are used in nail manufacture, it turns out that the industry has negative value added at world prices, meaning that its ERP is conventionally defined as infinite. Thus, the actual situation of nail manufacture in Somalia is reflected in entry No. 7.

Table 4: Illustrating Benchmark Values of Effective Rate of Protection (ERP)
with Case Study of Nail Manufacturing in Somalia

<u>Status of tariff protection</u>	<u>Rates of im- port duty, all inclusive</u>		<u>Value of ERP</u>	<u>Value of effective exchange rate (EER)-- shillings per dollar</u>
	<u>Nails</u>	<u>Wire</u>		
1. Rates presently in force-- nominal protection of output exceeds that of inputs	55.6%	34.6%	267% (ERP greater than nominal protection of output)	312 sh.
2. Equal nominal protection of output & inputs--e.g.:	55.6%	55.6%	55.6% (ERP = nominal pro- tection rate)	132 sh.
3. Nominal protection of out- put below that of inputs, e.g.:	34.6%	34.6%	<34.6% (ERP less than nom- inal protection of output)	<114 sh.
4. Zero effective protection, e.g.:	55.6%	61.1%	0	85 sh.
	31.5%	34.6%	0	85 sh.
5. Negative effective protec- tion, e.g.:	<55.6%	>61.1%	<0	<85 sh.
	<31.5%	>34.6%	<0	<85 sh.
6. Official measures depress value added at domestic prices to zero, e.g.:	55.6%	71.0%	-100%	0
	22.5%	34.6%	-100%	0
7. Infinite effective protec- tion--value added at world prices \leq 0	(duty rates are irrel- evant)		∞	∞

Effective exchange rates corresponding to these ERP's, given in the final column of Table 4, range from zero to 312 shillings per dollar, an ERP of infinity being associated with an EER of like magnitude.

As shown earlier, ERP's and EER's are mathematically related through the equilibrium exchange rate, r ($EER = [1 + ERP]r$). The ERP enjoys more currency in the professional literature, but the significance of the EER may be more readily grasped in policy discussions. Any Somali with a modicum of commercial awareness knows how many shillings it costs to buy a dollar's worth of foreign currency, and anyone producing or dealing in export commodities is fully aware of how many shillings the trader who makes the foreign sale receives for a dollar's worth of goods. To characterize the tariff regime in effect for a particular industry as according the manufacturer 312 shillings for each dollar he saves through import substitution, or, say, only 40 shillings for a dollar earned through exporting, thus rings a familiar bell.

Unit domestic resource cost

A useful variant of effective protection analysis involves taking fuller account of the cost of capital invested in manufacturing enterprises than merely depreciation of the tradeable component of plant and equipment. The so-called domestic resource cost (DRC) approach estimates the opportunity cost of invested capital by revaluing assets to compensate for inflation and then applying an implicit annual rental coefficient that provides for recovery of capital over its economic life at an assumed opportunity cost (accounting rate of interest) of 15 per cent per annum.

This implicit rental cost is then divided into tradeable and nontradeable components; the tradeable component is converted to c.i.f. equivalent by deducting an assumed tax element; this net tradeable rental cost is then subtracted from the value added at world prices, gross of depreciation, derived in the ERP calculus; the remainder becomes the denominator of a new parameter known as unit domestic resource cost per shilling's worth of foreign exchange earned or saved (shortened to unit DRC); and the nontradeable component of rental cost is added to the

enterprise's annual employment bill to derive the numerator of the term. The resulting parameter indicates how many shillings it cost an enterprise in domestic resources, i.e. labor and rental of nontradeable capital, to earn or save Somalia one shilling's worth of foreign exchange, net of the c.i.f. cost of renting the tradeable component of the enterprise's capital assets.

In a situation of equilibrium one would look for unit DRC's in the vicinity of 1.0, i.e., it would be wasteful to spend more than a shilling in domestic resources to earn or save a shilling's worth of foreign exchange (the latter being valued at an equilibrium exchange rate). If a country's industries showed a high variance around a unit DRC of 1.0, with some yielding values well below 1.0 (within a range of 0 to 1.0) and others displaying very high values — the limit is infinity, where value added at world prices is negative as with the ERP — the indicated strategy for raising income and employment would be to establish incentives attracting resources into the low-DRC range, meanwhile forcing industries in the high range either to become more efficient, meaning to reduce their DRC's, or else close down and allow consumers and/or other producers to purchase the goods and services in question from more efficient, i.e., foreign, sources.

Illustration of the application of the DRC calculus to Somalia will be left to Chapter 5. It will suffice here to note that, given the misuse of industrial capital resulting from past policies in Somalia, out of 15 enterprises in the HIID team's sample which supplied sufficient information on their capital to permit a unit DRC calculation, eleven showed negative value added (i.e., infinite unit DRC) and three of the remaining four yielded DRC values of close to 3.0 or above.

CHAPTER 4 - STRUCTURE OF SOMALIA'S IMPORT TARIFF

It was noted in Chapter 2 that Somalia's import tariff serves the primary objective of generating government revenue — currently, about half of total central government revenue — subject to a rough equity principle whereby rates are correlated with the income level of the class of persons presumed to be the principal consumers of a given item or commodity category. This is illustrated by Table 5's summary of the import tariff introduced with effect from January 1985.

In effect, Table 5 is a condensation and reorganization of the 100-page list of import tariffs and assumed dollar prices (the "Blue Book") issued to Customs Department staff with the Minister of Finance's circular of December 30, 1984. Commodities/commodity categories are grouped according to the level of the import duty given in the book, ranging from 4 to 700 percent. Within each group items are listed according to their SITC (Standard International Trade Classification) category. Import duty is defined as the sum of a Fiscal duty and a Customs duty. The Fiscal duty accounts for the bulk of the tax on each item; Customs duty comprises values of zero, 3, 5, 10, or 20 percent except on alcoholic beverages and certain cosmetics, where it rises to 40 or 60 percent.*

Apart from import duty all goods imported by other than Government, diplomatic agencies, and other traditionally exempt bodies, are also subject to harbor dues of 3 percent of c.i.f. value, an Administrative and Statistical (A&S) duty of 20 percent of c.i.f. value, and a stamp tax levied at a rate of

*Under the Yaounde Convention, which expired in 1975, imports from the European Economic Community were subject to Fiscal duty only. At present the distinction between Fiscal and Customs duties appears to have no economic significance.

Table 5: Structure of Somalia's Import Tariff (partial)

(All figures except SITC categories are percentages, comprising the sum of Fiscal duty and Customs duty (denoted here "Import duty"), excluding harbor dues, Administrative and Statistical duty, and stamp tax)

Import duty effective Jan. 1985 ("Blue book")	SITC category*	Summary description of commodities	Earlier import duties, if different from Jan. 1985	
			Feb. 1982- Dec. 1984	Acc. to IMF Tax Survey 1980
0		(to be supplied)		
4	0	Wheat flour	64.15	specific
	4	Edible oils	30	30
5	0	Rice	3.2-4.0-5.7 (dep. on source)	10
9.15	0	Maize (grain)		10
10	0	Coffee husks, wheat, sorghum (grain),		
	2	Vegetable seeds, cement, soda ash, lumber		
	5	Pharmaceuticals, drugs, pesticides		
	6	Cotton yarn	15	15
	6	Exercise books, lamp & candle wicks, steel sheet, iron wire, pipes & fittings, angles, furniture tubing, hand tools		
	7	Foot & hand pumps, sewing machines, power saws, typewriters, calculators,		
	7	Pick-up trucks, tippers, tankers		
	8	Inks; hurricane lamps etc. other than from Europe		
15	0	Dates		
	6	Cotton thread		
18.9	6	Matches	0	0
20	0	Tea, infant foods		
25	2	Aromatic woods, cotton lint (combed or uncombed)		
28	6	Rope & twine of natural fibers, jute sacking		
30	0	Baking powder	126	
	0	Maize meal, edible starch, margarine		
	4	Inedible coconut oil		
	5	Inedible starch, paints & related products, polishes, glue, explosives, PVC pipe		

Table 5: Structure of Somalia's Import Tariff (continued)

Import duty effective Jan. 1985 ("Blue book")	SITC category*	Summary description of commodities	Earlier import duties, if different from Jan. 1985	
			Feb. 1982- Dec. 1984	Acc. to IMF Tax Survey 1980
30	6	Iron bars	10	10
(cont.)	6	Iron trunks, praying mats, printing & typing paper, nylon rope, netting & nets, gunny sacks, tarpaulins, shoe heels, grinding & polishing stones, asbestos cement pipes, inners of thermos flasks, watch glass, iron & steel fixtures & fittings, tanks, drums, wire, screening, fencing, nails, bolts & nuts, needles, non-electrical stoves, enamelware, aluminium ware, hand-operated domestic appliances, razor blades, scissors, cutlery, locks, safes, cash boxes, non-electrical bells, bottle caps, iron & steel articles n.e.s., solder		
	7	Welding electrodes, refrigerator compressors, refrigerators up to 500 litres capacity, domestic washing machines, mimeograph machines, pencil sharpeners, perforating machines, staplers		
	7	Buses, Land Rovers, station wagons, bicycles		
	8	Spectacle frames		20
	8	Non-electrical lamps from European sources, flashlights, electrical apparatus (bells, lighting fixtures, bulbs, wire, tape), measuring tapes, brooms & brushes, erasers, zip fasteners, pens & pencils, chalk, candles, plastic hose pipe, rubber & plastic footwear, typewriter ribbons, stamp pads, cigarette lighters, sunglasses, combs, hair fasteners		
35	6	Tires & tubes, wheelbarrows		
40	6	Rubber teats for infants		
	7	Motor cars with one driving axle, up to 800 cc.		35
41	6	Cotton greycloth	35	30
50	0	Pasta	30	
	0	Dairy products, fresh vegetables, spices, breakfast cereals		
	5	Large plastic sheets, roofing material, polyethylene mats	30	
	6	Rubber tubes, misc. articles of wood, carbon paper, mimeo stencils, writing pads, other stationery articles of paper, register books, photo & stamp albums, napkins, wallpaper		

Table 5: Structure of Somalia's Import Tariff (continued)

Import duty effect- ive Jan. 1985 ("Blue book")	SITC cate- gory*	Summary description of commodities	Earlier import duties, if differ- ent from Jan. 1985	
			Feb.1982- Dec.1984	Acc. to IMF Tax Survey 1980
50 (continued)	6	Toilet paper, metalized fibers, wool fabrics, floor & wall tiles, sanitary fixtures, mirrors, window glass		
	7	Batteries (flashlight & radio)		
	8	Post- & greeting cards, calendars, printed pictures for commercial use, walking sticks, outdoor sport articles, jerricans, baby bath tubs, plastic containers		
53	7	Motor cars with one driving axle, 801-1000 cc.		50
60	0	Chewing gum, sweets, syrup & powder for beverages, refined sugar, vinegar		
	2	Used clothing		
	6	Linoleum & other floor covering material, knitted & crocheted fabrics, bed sheets, towels, cloth napkins, china table ware, glassware, glass for lamps		
	8	Photographic films, suitcases, briefcases, handbags, wallets		
63	7	Motor cars with one driving axle, 1001-1400 cc.		60
67	5	Tooth paste	66	
70	0	Artificial honey	382.05	
	6	Wool suiting material, wool for saris	60	
	6	Cotton twill, curtain cloth, poplin, veil cloth, cotton drill, bed sheeting; fabrics, suiting, & shirting of synthetic fiber	60	35
	6	Printed spun rayon, black cotton or nylon netting	60	
	8	New clothing of all types	60	70
	8	Belts, blankets, traveling rugs	60	50
	8	Shoes & sandals of leather or imitation leather, umbrellas		
	77	8	Imitation jewelry, bangles, watches, clocks	66
8		Buttons, thermos flasks, water cooler jugs	66	
8		Smoking pipes, cigarette holders	30	
83	7	Motor cars with one driving axle, 1401-2000 cc.		80
100	2	Salt		

Table 5: Structure of Somalia's Import Tariff (continued)

Import duty effect- ive Jan. 1985 ("Blue book")	SITC cate- gory*	Summary description of commodities	Earlier import duties, if differ- ent from Jan. 1985	
			Feb.1982- Dec.1984	Acc. to IMF Tax Survey 1980
123	0	Natural honey, fruits (other than dates), preserved fruits & vegetables, jams & jellies, nuts, fruit juices	106	
	5	Synthetic essential oils, talcum powder	106	50
	7	Electric fans	106	146
	7	Air conditioners, refrigerators up to 500 liters capacity, small domestic appliances	106	106
	7	Motor cars with one driving axle, 2001-3000 cc.		120
	8	Tricycles, children's cars, toys, indoor sport articles, playing cards	106	106
147	0	Coffee (processed)	126	106
	0	Tinned meat	30	126
	0	Tinned fish, chocolate, biscuits, soups, other prepared foods	126	126
	5	Bleach (liquid & powder)	146	70
	6	Silk yarn	146	106
	6	Carpets	126	146
	7	Microphones, loudspeakers, tape recorders, television sets, video recorders, gramophones	126	126
	7	Radios	66	66
	8	Audio & video cassette tapes, whistles, pillows, mattresses, chairs	126	126
	8	Furniture other than chairs	126	146
171	5	Soaps	146	146
	5	Washing powders	146	70
	6	Silk fabrics	146	146
	8	Artificial flowers & hair		146
195	1	Soft drinks	166	166
287	5	Nonalcoholic perfumes	246	246
380	1	Beer		
480	1	Wine		
700	1	Spirits		

Notes to Table 5

* The eight Standard International Trade Classification categories appearing in the table are:

- 0 Food and live animals chiefly for food
- 1 Beverages and tobacco
- 2 Crude materials, inedible, excluding fuels
- 4 Animal and vegetable oils, fats and waxes
- 5 Chemicals and related products, not elsewhere specified
- 6 Manufactured goods classified chiefly by material
- 7 Machinery and transport equipment
- 8 Miscellaneous manufactured articles

Sources and observations

1985 tariffs: The "Blue Book", list of import tariffs and dollar prices accompanying Minister of Finance's letter of Jan. 10, 1985, to Regional & District Customs staff.

1982-84 tariffs: List of import tariffs and Somali shilling prices accompanying Minister's letter of Feb. 1, 1982.

Previous tariffs according to IMF Tax Survey: IMF, op. cit., August 19, 1980, pp. 33-34.

Classification of commodities by SITC category: Central Statistical Dept., Foreign Trade Returns, 1982.

Inasmuch as the IMF document uses summary headings from the printed 1968 Customs Tariff it is not always subject to comparison with the two more recent and more detailed Customs Dept. lists. Accordingly a blank in the table's final column does not necessarily mean that the 1980 and 1985 tariffs for the commodities in question are the same. Conversely the two Customs Dept. lists follow identical formats and are closely comparable.

The two tariff/price lists give information only for commodities which are sufficiently homogeneous as to give some meaning to a standard unit price. Tariffs are therefore missing from the table for certain items, e.g. complex types of machinery, where a standard unit price would be meaningless.

two percent on the sum of all other taxes plus harbor dues (but not on c.i.f. value). All taxes are levied on c.i.f. value inclusive of harbor dues. Thus, the total burden of official charges on a commodity valued c.i.f. at 100 and carrying an import duty of, for example, 50 percent (left-hand column of Table 5) amounts to 76.6, computed as follows:

C.i.f. cost	100
Harbor dues	3
Subtotal	<u>103</u>
Import duty (Fiscal & Customs), 50% x 103	51.5
A&S duty, 20% x 103	20.6
Subtotal, harbor dues + duties	<u>75.1</u>
Stamp tax, 2% x 75.1	<u>1.5</u>
Total official charges	76.6
(of which duties + stamp tax	73.6)

(The subtotal of duties and stamp tax is shown separately on the ground that harbor dues are considered a charge for port services rendered, and therefore not a tax per se.)

General formulae for each of the foregoing totals are as follows, with Cif representing c.i.f. value and D being the import duty, i.e., the value in the lefthand column of Table 5 divided by 100:

$$\begin{aligned} \text{Total official charges:} & \quad 1.02[\text{Cif}(.03) + (D + 0.2)(1.03)\text{Cif}] \\ & \quad = [(1.0506)D + 0.2407]\text{Cif} \end{aligned}$$

$$\begin{aligned} \text{Duties \& stamp tax:} & \quad \text{Total official charges less } (.03)\text{Cif (i.e.,} \\ & \quad \text{less harbor dues) = } [(1.0506)D + 0.2107]\text{Cif} \end{aligned}$$

It is evident that the weight of the supplemental charges (additional to Import duty) as a proportion of c.i.f. value varies moderately with the level of Import duty. In the example above, with Import duty equal to 50 percent, the supplemental charges amount to 26.6 percent of c.i.f. value. At the extreme Import duty values of zero and 700 percent, the supplemental charges add 24.1 and 59.6 percent, respectively, to c.i.f. value.

A related magnitude is the percentage of total official charges accounted for by the Import duty and supplemental charges, respectively. The share of supplemental charges varies from 100% when the Import duty is zero, down to 7.8% with the Import duty at a maximum of 700%.

One approach to drawing a line between "basic necessities" and "luxury" items would be to allocate to the former category goods that would either be consumed by the households of a majority of urban employees, or used by the employees in their jobs. Applying this test to Table 5, one would probably draw the line between the 30 and 50 percent Import duty rates. It is also in this range (i.e., at 40 percent) that the Import duty on the least expensive passenger cars falls.

This is not to say that the median urban employee does not consume goods carrying Import duties of 50 percent plus (always keeping in mind that an Import duty of 50 percent implies total import taxation of 77 percent). One's attention is immediately drawn to pasta and light batteries in the 50 percent category; new clothing in the 70 percent bracket; soaps and washing powder at 171 percent; and soft drinks at 195 percent. On the other hand, of these six items only batteries are not produced in Somalia, so that the 50 percent Import tariff presumably carries both an element of protection of domestic industry, and the principle that consumers preferring imports to the local product can well afford to pay a surcharge for their preference. With respect to batteries, this item, like tobacco (and beer in non-Islamic countries), is considered by many governments to be among the "luxuries" of the common man that are subject to excise taxation if produced locally; otherwise, a hefty import duty applies.

Examination of the trend of Import duty rates as illustrated by the table points to (i) a response to Somalia's mounting fiscal imbalance by increased taxation of luxuries, and (ii) a move towards increased protection of some local industries. Under (i), the 1985 tariff reveals the following changes: pasta and plastic sheeting went from 30 to 50 percent; finished textiles and new clothing from 60 to 70 percent; and there were wholesale shifts in the 66, 106, 126, and 146 percent categories, rising generally to 77, 123, 147, and 171 percent, respectively. In addition, soft drinks went from 166 to 195 percent, and nonalcoholic perfumes from 246 to 287 percent.

Insofar as pasta, textiles, clothing, furniture, soap, detergents, and soft drinks are concerned, these increases would also be expected to have some protective effect on the respective local industries. The same could be said of the introduction of an 18.9 percent Import tariff in respect of matches, previously duty-free, and the rise of the tariff on greycloth from 35 to 41

percent. Other protective moves revealed by the table concern the lowering of tariffs on certain inputs used by local industries; thus, the tariff on cotton yarn has fallen from 15 to 10 percent, while baking powder has dropped from 126 to 30 percent.

Two categories of official measures apart from the customs tariff affect the shilling prices at which imported goods competing with Somali manufactures are offered on the local market, and which local industrialists must pay for imported inputs. The first is the Customs Department's own assessment of the c.i.f. value of imports, the second comprises official and unofficial charges supplemental to customs duties.

Customs assessment of c.i.f. value. Customs assessment of c.i.f. value itself comprises two steps: firstly, assessment of the cost in dollar equivalents, secondly, assumption of an exchange rate at which to convert that cost into shillings.

Currently the Somali Customs Department proceeds on the assumption that Somali importers, with a view to minimizing their tax liability and aided and abetted by their foreign suppliers, tend to present documentation understating the true foreign exchange cost of their purchases. In order to counteract this phenomenon, and on the advice of the IMF's 1980 tax report, the department has, since issuance of its February 1982 list, operated with a minimum price list for nearly all import items of sufficient homogeneity to permit such an assessment.

The price list in effect for the first three years, up to issuance of the Blue Book in January 1985, was expressed in Somali shillings. The initial version, based on an official exchange rate of 6.295 shillings, was, needless to say, unrealistic from the outset, and domestic inflation rapidly made it more so. Accordingly, this version was revised more than once until its replacement with the Blue Book, whose values are stated in U.S. dollars.

A divergence of, say, 25 percent in Customs' c.i.f. valuation from the foreign exchange actually paid by an importer modifies the effective customs tariff commensurately. Referring to the previous example of charges based on a 50 percent Import tariff, a 25 percent under-assessment reduces the total official charge to $0.75 (76.6) = 57.45$ over the importer's c.i.f. payment of 100, while an equivalent overassessment raises it to 95.75.

Scattered evidence suggests that Customs valuation procedures as applied during 1983-84 assumed c.i.f. values in shillings that approximate on average two-thirds of importers' actual shilling payments for goods competing with manufactures in the HIID team's sample and imported inputs in those manufactures. As will be shown in Chapter 5, rates of nominal protection are therefore multiplied by 0.67 in that chapter's computations of effective protection and domestic resource cost. The approximate character of this adjustment must be stressed; divergences of assumed from actual values were highly variable.

Moreover, where smuggling was important as a supply channel, which was alleged by numerous industrialists in the sample, the relevant margin between c.i.f. and local distributors' prices equalled a combination of smuggling costs and scarcity rents adding up to less than the nominal taxes.

Conversion of the minimum price list to dollar values as of January 1985 introduces for the first time an assumed exchange rate as an explicit variable in Customs valuation. The Finance Minister's circular accompanying the Blue Book instructs Customs officials to assume a 60 shilling exchange rate for all goods imported under franco valuta or letters of credit. At the circular's date of issue, the free market rate was already in the 80's; use of the 60-shilling rate thus again reduces official levies on goods purchased in 1985 to 70-75 percent of their nominal values.

Conversely, use of this rate to value goods purchased at official rates in 1984 but only delivered in the new year raises official charges as a percentage of the importer's payment. Several industrialists in the sample complained about this; a good imported under L/C at the late-1984 official rate of 26 sh. and subject to total charges of 76.6 percent of c.i.f. value thus pays charges of $(60/26)0.7666 = 1.77$ percent of actual c.i.f. cost. The government's response to this complaint is to point out that the importer is still ahead by virtue of his previous access to cheap foreign exchange. Thus, in lieu of having to pay $1.766(60) = 106$ sh. total for a dollar's worth of imports, assuming a market rate of 60 sh. at the time of purchase, the importer has paid only $26 + 0.766(60) = 72$ sh., or 68 percent of market value, taxes included.

Supplemental charges on imports. Apart from the taxes and other official levies listed earlier in this chapter, imports are subject to a variety of additional charges that form part of the importer's cost base and thus enter into the price comparison between imports and competing domestic products. Some of these charges represent payments for economic services rendered, such as unloading goods from vessels and moving them through the port to a point of sale.

A second category of supplemental charges involves payments to state enterprises in the freight forwarding and insurance fields to which the government has accorded a monopoly position in Somalia's external trade. Many firms in the HIID team's sample, including state enterprises, complained that services rendered by the Somali Shipping and Forwarding Agency and the State Insurance Company of Somalia, if any, did not measure up to the obligatory commissions payable to those entities.

A third category of charges comprises rents collected by persons in a position to accelerate or delay customs clearance or influence the level of charges collected. The existence of these rents may be regarded as reflecting an act of omission on the part of the authorities in allowing the individuals in question, whether or not government officials, to acquire such power.

In an effort to verify the delivery and end-use of goods supplied under its 1983 and 1984 Commodity Import Programs (CIP) USAID/Somalia audited a nonrandom sample of benefitting importers. Respondents were asked to indicate amounts paid for all categories of charges intervening between payment of c.i.f. cost and re-sale of the goods on the domestic market. The difference between the resale price and c.i.f. plus handling charges was taken to be the transaction's contribution to the importer's overhead plus profit.

Respondents were asked to document supplemental charges paid, but in a number of cases the auditor had to rely on the importer's undocumented assertion regarding a particular payment. The information can therefore be regarded as indicative, but not proven.

Usable information was gathered with respect to 14 shipments, comprising Portland cement (four shipments), vehicle tires (three shipments), GMC pick-ups and tractor trailers, jeeps, Fiat truck spares, vehicle batteries, sugar-cane crushers, water pumps, and aluminum pots. The information is summarized in Parts I and II of Table 6, following.

Table 6. Price structure of sample of imports under AID Commodity Import Program (CIP), 1983-84

Part I -- Cost components/markups as percentages of c.i.f. import price

	MOTOR VEHICLES AND ACCESSORIES																	
	Portland cement--shipment #				Tires--shipment #			GMC pick-ups & tractor trailers		Jeeps		Fiat truck spares		Batteries		Agric. & agroindustrial machinery		Aluminum pots
	1	2	3	4	1	2	3							Sugar-cane crushers	Water pumps			
1. C.i.f. cost Mogadishu or Berbera	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
2. Taxes																		
a. Customs/Fiscal/Stat. & Admin./Stamp Duties	33.2(a)	39.0	34.4(a)	35.0(a)	n.a.	60.0(a)	60.0	50.3(a)	n.a.	65.0	64.1(a)	(b)	34.3	27.1				
b. Sales tax	-	14.3	8.5	8.0	n.a.	20.4	7.1	-	n.a.	20.0	18.4	-	-	-	-	-		
c. Local Government levies	1.7	6.0	-	3.0	n.a.	1.2	0.3	-	n.a.	4.0	12.6	2.1	1.1	0.5				
d. Subtotal, taxes	34.9	59.2	42.9	45.9	n.a.	82.4	68.2	50.3		89.0	95.1	2.1	35.4	27.5				
3. Port-related charges																		
a. Harbor dues	3.0(a)	13.8	3.0(a)	3.0(a)	n.a.	3.0(a)	0.4	3.0(a)	n.a.	-	3.0(a)	3.0	4.6	6.9				
b. Somali Shipping Agency/Forwarding Agency	5.4	2.3	2.2	2.2	n.a.	0.6	0.1	-	n.a.	1.0	8.0	-	0.2	0.2				
c. State Insurance Co. of Somalia	1.4	-	-	-	n.a.	0.8	1.7	-	n.a.	-	-	-	-	-				
d. Stowage/porterage	8.5	25.8	12.9	19.0	n.a.	1.8	0.2	4.2	n.a.	10.0	3.9	4.0	1.9	1.5				
e. "Self-help"	-	-	2.0	2.0	n.a.	2.2	-	-	n.a.	-	-	-	-	-				
f. Kickbacks & other unreceipted charges	-	3.0	11.9	10.0	n.a.	-	1.0	5.8	n.a.	-	28.0	20.4	-	-				
g. Other port-related costs	8.7	-	1.1	4.2	n.a.	1.8	0.4	2.6(c)	n.a.	-	-	-	0.3	0.4				
h. Subtotal, port related charges	27.0	44.8	33.1	40.4	n.a.	10.1	3.7	15.6	n.a.	11.0	43.0	27.4	6.9	9.0				
4. Extra-port direct costs of importer																		
a. Bank charges including telex	0.5	1.8	4.7	4.7	n.a.	1.2	0.4	-	n.a.	1.0	-	1.0	-	-				
b. Transfer to /storage at point of sale	-	3.0	10.2	12.2	n.a.	3.2	6.2	3.4	n.a.	5.5	10.2	10.8	3.2	2.1				
c. Other	-	-	-	-	n.a.	2.5	-	-	n.a.	-	-	-	-	-				
d. Subtotal, importer's extra-port direct costs	0.5	4.7	14.9	16.9	n.a.	7.0	6.6	3.4	n.a.	6.5	10.2	11.8	3.2	2.1				
5. Subtotal, port-related and extra-port direct costs (-3h + 4d)	27.5	49.5	48.0	57.3	n.a.	17.1	10.3	19.0	n.a.	17.5	53.2	39.2	10.1	11.1				
6. Importer's total direct costs, excl. c.i.f. (-2d+3h+4d)	62.4	108.7	90.9	103.2	158.3	99.4	78.5	69.3	n.a.	106.5	148.3	41.2	45.5	38.8				
7. Importer's overhead and profit	28.1	29.1	44.6	57.2	n.a.	91.6	22.0	50.8	n.a.	72.3	74.8	45.8	180.5	82.2				
8. Importer's selling price (-1+5+6)	190.4	237.8	235.5	260.4	n.a.	291.1	200.4	220.1	242.5	278.8	323.1	187.0	326.0	220.8				
9. Wholesaler's markup	5.1		n.a.		n.a.	37.1		(d)			(d)	(d)						
10. Wholesaler's selling price (-7+8)	195.5		n.a.		n.a.	237.6												
11. Retailer's markup			n.a.		n.a.	50.3												
12. Gross markup over importer's selling price (e)		260.2								86-117(f)			137-311(g)					
13. Retail price/price to final user (-9+10 or 7+11)		495.7		633.6		287.8				365-396			358-532					

(See footnotes a-f on following page)

Notes to Table 6, Parts I and II.

- (a) In these cases the enumerator lumped harbor dues together with import taxes. According to the Customs Department a standard charge for harbor dues is 3 per cent of c.i.f. value. We have accordingly subtracted this figure from item 2(a) and inserted it in 3(a).
- (b) This importation was exempted from customs duty by virtue of being sold to the Ministry of Agriculture.
- (c) May also include some extra-port costs.
- (d) Importer sold directly to final user(s), hence wholesale and retail stages not relevant.
- (e) Cases where breakdown of wholesale and retail markups not recorded, or distributor combined both functions.
- (f) Incomplete data obtained by enumerator do not permit computation of weighted average distributor margins, but show indicated ranges of markups.

Table 6: Price structure of sample of imports under AID Commodity Import Program (CIP), 1983-84

Part II -- Cost components/markups as percentages of importer's selling price

	MOTOR VEHICLES AND ACCESSORIES																		
	Portland cement--shipment #				Tires -- shipment #			GMS pick-ups & tractor trailers		Jeeps		Fiat truck spares		Batteries		Agric. & agroindustrial machinery		Water pumps	Aluminum pots
	1	2	3	4	1	2	3												
1. <u>C.i.f. cost, Mogadishu or Berbera</u>	52.5	42.1	42.5	38.4		34.4	49.9	45.4	41.2	35.9	31.0			53.5	30.7	45.3			
2. <u>Taxes</u>																			
a. Customs/Fiscal/Stat. & Admin./Stamp Duties	17.4(a)	16.4	14.6(a)	13.4(a)	20.9(a)	30.3	22.8(a)	n.a.	23.3	19.8(a)			(b)	10.5	12.3				
b. Sales tax	-	6.0	3.6	3.1	7.0	3.6	-	n.a.	7.2	5.7			-	-	-				
c. Local Government levies	0.9	2.5	-	1.2	0.4	0.1	-	n.a.	1.4	3.9			1.1	0.3	0.2				
d. Subtotal, taxes	18.4	24.9	18.2	17.6	28.3	34.0	22.8	n.a.	31.9	29.4			1.1	10.9	12.5				
3. <u>Port-related charges</u>																			
a. Harbor dues	1.6(a)	5.0	1.3(a)	1.2(a)	1.0(a)	0.2	1.4(a)	n.a.	-	0.9(a)			1.6	1.4	3.1				
b. Somali Shipping Agency/Forwarding Agency	2.8	1.0	1.0	0.8	0.2	-	-	n.a.	0.4	2.5			-	0.1	0.1				
c. State Insurance Co. of Somalia	0.7	-	-	-	0.3	0.9	-	n.a.	-	-			-	-	-				
d. Stevedoring/porterage	4.5	10.8	5.5	7.3	0.6	0.1	1.9	n.a.	3.6	1.2			2.1	0.6	0.7				
e. "Self-help"	-	-	0.9	0.8	0.8	-	-	n.a.	-	-			-	-	-				
f. Kickbacks & other unreceipted charges	-	1.2	5.1	3.8	-	0.5	2.6	n.a.	-	8.7			10.9	-	-				
g. Other port-related costs	4.6	-	0.4	1.6	0.6	0.2	1.2(c)	n.a.	-	-			-	0.1	0.2				
h. Subtotal, port related charges	14.2	18.9	14.1	15.5	3.5	1.8	7.1	n.a.	4.0	13.3			14.6	2.1	4.1				
4. <u>Extra-port direct costs of importer</u>																			
a. Bank charges including telex	0.2	0.7	2.0	1.8	0.4	0.2	-	n.a.	0.4	-			0.5	-	-				
b. Transfer to /storage at point of sale	-	1.2	4.3	4.7	1.1	3.1	1.6	n.a.	2.0	3.2			5.8	1.0	0.9				
c. Other	-	-	-	-	0.9	-	-	n.a.	-	-			-	-	-				
d. Subtotal, importer's extra-port direct costs	0.2	2.0	6.3	6.5	2.4	3.3	1.6	n.a.	2.3	2.0			6.3	1.0	0.9				
5. <u>Subtotal, port-related and extra-port direct costs (=3h + 4d)</u>	14.4	20.9	20.4	22.0	5.9	5.1	8.7	n.a.	6.3	15.3			20.7	3.1	5.0				
6. <u>Importer's total direct costs, excl. c.i.f. (=2d+3h+4d)</u>	32.8	45.7	38.6	39.6	34.2	39.2	31.5	n.a.	38.2	35.9			22.1	14.0	17.5				
7. <u>Importer's overhead and profit</u>	14.7	12.2	18.9	22.0	8.5	11.0	28.1	n.a.	25.9	23.2			24.5	55.4	37.2				
8. <u>Importer's selling price (=1+5+6)</u>	100.0	160.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0	100.0	100.0				
9. <u>Wholesaler's markup</u>	2.7		n.a.		18.5		(d)			(d)			(d)						
10. <u>Wholesaler's selling price (=7+8)</u>	102.7		n.a.		118.5														
11. <u>Retailer's markup</u>			n.a.		25.1														
12. <u>Gross markup over importer's selling price (=)</u>			110.5																
13. <u>Retail price/price to final user (=9+10 or 7+11)</u>			210.5		143.6					31-42 (f)						62-141-(f)			
										131-142						162-141			

(Footnotes a-f, same as for Part I of the table, are given on preceding page.)

In each case, to express the charges as percentages of a meaningful base and facilitate comparisons between different commodities, the recorded charges have been normalized, i.e., taken as proportions alternatively of c.i.f. cost (Part I) and the importer's selling price (Part II). Accordingly, Row 1 of Part I, c.i.f. cost, gives values of 100 for all commodities, while the same holds for Row 8, Importer's selling price, in Part II.

For the twelve shipments on which adequate data is available, Row 6 of Part I shows the importers indicating total direct costs (taxes included) which range from 39 to 158 percent of c.i.f. cost. Excluding taxes, Row 5 shows the range to be 10 to 57 percent of c.i.f. cost, with the values of 19.0 and 27.5 percent bracketing the median. In other words, half the observations show the sum of port-related and extra-port direct costs falling between 10 and 20 percent of c.i.f. cost, while the other 50 percent put them between a quarter and over half of the c.i.f. value.

Looking at the issue from the viewpoint of percentage elements in the importer's final selling price, Row 6 of Part II shows that direct costs, post-c.i.f., tax-inclusive, contribute from 14 to 46 percent of the selling price, while Row 5 shows exclusion of taxes reducing the range to 3.1-22.0 percent. The median value in this latter range is 14.4 percent.

Discrepancies among identical commodities with respect to a given category of charges raise doubts about the precision of the exercise. For example, why should stevedoring and portage charges for cement vary between 8.5 and 25.8 percent of c.i.f. value? Why do shipments Nos. 3 and 4 incur kickbacks and other unreceipted charges of 10-12 percent of c.i.f. value, while these are absent with shipment No. 1 and only 3 percent with No. 2? (On the other hand, it is possible that the importer involved with No. 1 was reluctant to admit to kickbacks, and classified these as "other port-related costs," where his 8.7 percent of c.i.f. value is over twice the next highest figure.)

Of the 14 commodity categories listed in Table 6, only one, aluminum pots, is currently produced in Somalia. We thus view the charges listed for aluminum pots as components of the price of an import delivered to a point of sale at which it competes with a domestic manufacture. Most aluminum pots are sold as consumer goods, although part of the shipment figuring in the table.

was sold to a restaurant, which makes the recorded charges enter directly into the cost structure of a domestic service industry.

Conversely, over half the remaining commodities in the list count exclusively as producer goods, while the others — tires, batteries, and cement — may enter either directly into consumption of high-income households, or into production of goods and services for sale. Supplemental charges applied to the importation of these commodities are thus viewed as pushing up the cost structure of domestic consumption and production, hence as disincentives to production, rather than as elements of protection for domestic producers.

The importer's markup, labelled overhead and profit in Row 7 of the table, is likewise a cost-enhancing item from the viewpoint of local users of imported goods, although only part of it — how much cannot be estimated without detailed analysis of an importer's operations — may be considered cost from the viewpoint of determining the price to local distributors at which an imported good competes with domestic production. The relatively high level of markups illustrated in the table, ranging from 22 to 180 percent as a proportion of c.i.f. cost — the median is bracketed by the 51-57 percent values — and 11 to 55 percent as a proportion of the importer's selling price (median: 23 percent), reflects the monopoly/oligopoly rents accruing to importers favored with allocations of USAID CIP dollars at the 1983-84 official rates of about 15 and 17 shillings.

The upshot of this analysis is that it is not sufficient to look only at the official charges listed at the outset of this chapter in order to assess either (1) the protective margin available to Somali producers — i.e., the percentage difference between a competing import's c.i.f. price and the price at which a Somali distributor can obtain it for resale on the local market, or (2) the proportion of the cost of using imported inputs in local manufacture which is attributable to official measures. The partial evidence generated by the USAID audit indicates that the weight of supplemental charges has varied widely between different commodities, moreover one would expect that on average it is declining with the liberalization of the foreign exchange market and external trade.

CHAPTER 5 - CASE STUDIES OF 27 SOMALI INDUSTRIAL ENTERPRISES

The Preface, above, noted that the HIID team collected data from a sample of 36 industrial enterprises in Somalia. The nature of the data sought is indicated in the questionnaire reproduced as Appendix 1, following Chapter 8 below. In general, the team sought information relating to the enterprises' perception of the operation of incentives and disincentives for industrial development in Somalia, to their capital structures, and to their financial operations in the latest year for which data could be supplied. In order to facilitate computation of effective rates of protection (ERP's) and unit domestic resource costs (DRC's) according to the methodologies outlined in Chapter 3, the team needed data on c.i.f. import prices of inputs used by the enterprises and of imported commodities comparable with their final products. In some cases this information was provided by enterprises in the sample, in other cases it had to be sought from enterprises not included in the sample, through enquiries in Mogadishu markets, from official sources, and from observations on prices in markets other than Somalia.

After reviewing the data collected during the field research, the team concluded that information obtained from and about 27 enterprises was sufficiently comprehensive to provide a basis for estimating ERP's based on gross value added, i.e., without including the tradeable component of depreciation in deductions from sales; that ERP's based on net value added could be estimated for 20 enterprises out of the 27; and that unit DRC's could be estimated for fifteen.

These estimates, and derivations of the measures of value added at world and domestic prices from which they are computed, are presented in Tables 7-10 following. The full set of 27 enterprises is identified by sector and code number in Table 8. To disguise enterprise parameters, all money figures have been normalized, i.e., converted to percentages of

TABLE 7: COMPUTATION OF TRADEABLE COMPONENT OF ANNUAL DEPRECIATION FOR SAMPLE OF INDUSTRIAL ENTERPRISES IN SOMALIA

Item	Enter- price No. 1, 1981	Enter- price No. 4, 1983	Enter- price No. 5, 1984	Enter- price No. 7, 1986	Enter- price No. 8, 1986	Enter- price No. 11, 1988	Enter- price No. 12, 1988	Enter- price No. 13, 1985	Enter- price No. 14, 1984	Enter- price No. 19, 1984	Enter- price No. 21, 1983	Enter- price No. 22, 1983	Enter- price No. 23, 1984	Enter- price No. 24, 1984	Enter- price No. 25, 1984
BUILDINGS															
A. Enterprise's original purchase cost (So.sh.) ¹⁰⁰	6.3	10.4	35.0	8.6	17.9		179.9	862.3	75.3	3.3	72.3	60.9	73.0		10.1
B. Conversion factor (= 1.0 + cumulative inflation rate from yr. of purchase to given year)	5.0	3.0	1.2	9.0	2.0		2.0	1.2	3.0	9.0	6.0	3.0	2.0		1.0
C. Estimated current value at domestic prices (So.sh.)	31.5	31.0	44.0	77.5	35.8	263.1	279.9	962.8	376.7	47.8	433.9	122.6	147.5	610.3	10.1
D. % of (C) assumed tradeable	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
E. Est. current value of tradeable component at dom. prices (So.sh.)	15.7	15.5	22.0	38.7	17.9	132.6	139.9	481.4	188.4	23.9	217.0	61.3	73.8	305.2	5.0
F. Rate of nominal protection (approx.)	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
G. Current value of tradeable component at c.i.f. import prices (E/(1+F)) (So.sh.)	12.6	11.2	16.4	31.0	14.3	106.0	111.9	362.1	150.7	19.1	173.6	49.0	59.0	244.1	4.0
H. Assumed economic life (years)	33	29	20	20	30	20	33	20	29	30	30	60	20	20	25
I. Depreciation (tradeable component) at:															
1. Domestic prices (E/H) (So.sh.)	.48	.41	1.45	1.94	.48	6.63	6.00	21.07	8.49	.60	7.23	1.53	3.49	15.26	.16
2. C.i.f. import prices (G/H) (So.sh.)	.30	.27	1.32	1.25	.48	5.30	3.20	19.26	3.20	.44	3.79	1.23	2.95	12.21	.12
MACHINERY															
K. Enterprise's original purchase cost (So.sh.) ¹⁰⁰	17.1	23.8	40.2	22.4	175.0		77.1	131.0	22.7	421.0	76.0	33.0	108.3		16.2
L. Conversion factor (market exchange rate of given year/rate at which purchased)	6.5	2.0	3.0	3.0	2.0		2.0	3.0	2.0		7.0	7.0	2.0		1.0
M. Estimated current value at domestic prices (So.sh.)	111.0	47.5	120.7	111.0	350.0	133.9	154.2	393.0	45.4	421.0	517.0	376.3	297.0	203.7	16.2
N. % of (M) assumed tradeable	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
O. Est. current value of tradeable component at dom. prices (So.sh.)	111.0	47.5	120.7	111.0	350.0	133.9	154.2	393.0	45.4	421.0	517.0	376.3	297.0	203.7	16.2
P. Rate of nominal protection (approx.)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Q. Current value of tradeable component at c.i.f. import prices (O/(1+P)) (So.sh.)	96.6	41.3	103.0	97.2	300.0	116.2	134.1	341.7	39.5	366.8	447.0	327.3	258.3	178.9	12.4
R. Assumed economic life (years)	13	10	10	7	11	10	10	10	10	10	10	10	10	10	10
S. Depreciation (tradeable component) at:															
1. Domestic prices (O/R) (So.sh.)	8.54	6.75	12.07	15.97	31.82	13.39	15.42	39.30	4.54	42.10	51.70	37.63	29.70	20.37	1.42
2. C.i.f. import prices (Q/R) (So.sh.)	7.43	6.13	10.30	13.89	31.82	11.82	13.41	34.17	3.95	36.68	44.70	32.73	25.83	17.89	1.24
VEHICLES, FURNITURE & MISCELLANEOUS EQUIPMENT															
T. Enterprise's original purchase cost (So.sh.) ¹⁰⁰	2.7	10.6	6.2	3.4	5.3		45.9		12.2		19.7	12.9			
U. Conversion factor (market exchange rate of given year/rate at which purchased)	3.0	2.0	3.0	4.0	2.0		2.0		2.0		6.0	7.0			
V. Estimated current value at domestic prices (So.sh.)	8.1	21.2	18.6	13.5	10.6		91.9		24.4		78.9	96.3		7.8	
W. % of (V) assumed tradeable	100%	100%	100%	100%	100%		100%		100%		100%	100%		100%	
X. Est. current value of tradeable component at dom. prices (So.sh.)	8.1	21.2	18.6	13.5	10.6		91.9		24.4		78.9	96.3		7.8	
Y. Rate of nominal protection (approx.)	15%	15%	15%	15%	15%		15%		15%		15%	15%		15%	
Z. Current value of tradeable component at c.i.f. import prices (X/(1+Y)) (So.sh.)	7.0	18.3	16.2	11.7	9.1		79.9		21.2		68.4	83.3		6.8	
AA. Assumed economic life (years)	6	5	5	4	10		5		5		5	7		5	
AB. Depreciation (tradeable component) at:															
1. Domestic prices (X/AA) (So.sh.)	1.35	6.25	3.73	3.37	1.06		18.37		4.87		15.78	12.90		1.56	
2. C.i.f. import prices (Z/AA) (So.sh.)	1.17	3.70	3.24	2.93	1.06		15.98		4.25		13.72	11.22		1.36	

* All money figures in this table are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Table 8, Row A) during the indicated year.

** In some cases original purchase cost has been replaced by the result of an intervening revaluation of assets, in which case the year of purchase has been replaced by the year of revaluation in computing the conversion factor in the following row.

TABLE B: COMPUTATION OF EFFECTIVE RATES OF PROTECTION (ERP's) FOR SAMPLE OF INDUSTRIAL ENTERPRISES IN ZAMBIA

Item	Sector: Food products Enterprise No. 1 (Year 1981)			Sector: Food products Enterprise No. 2 (Year 1981)			Sector: Food products Enterprise No. 3 (Year 1983)			Sector: Beverages (soft drinks) Enterprise No. 4 (Year 1984)			Sector: Beverages (soft drinks) Enterprise No. 5 (Year 1984)		
	Rate of Value at domestic (C.I.F. only) prices effective (So.sh.) ¹ protection (So.sh.) ²	Value at import prices (So.sh.) ¹	c.i.f. import prices (So.sh.) ²	Rate of Value at domestic (C.I.F. only) prices effective (So.sh.) ¹ protection (So.sh.) ²	Value at import prices (So.sh.) ¹	c.i.f. import prices (So.sh.) ²	Rate of Value at domestic (C.I.F. only) prices effective (So.sh.) ¹ protection (So.sh.) ²	Value at import prices (So.sh.) ¹	c.i.f. import prices (So.sh.) ²	Rate of Value at domestic (C.I.F. only) prices effective (So.sh.) ¹ protection (So.sh.) ²	Value at import prices (So.sh.) ¹	c.i.f. import prices (So.sh.) ²	Rate of Value at domestic (C.I.F. only) prices effective (So.sh.) ¹ protection (So.sh.) ²	Value at import prices (So.sh.) ¹	c.i.f. import prices (So.sh.) ²
SALES															
Domestic	67.3	-33%	100.0	128.4	29%	100.0	100.0	100.0	128.6	29%	100.0	128.6	29%	100.0	
Export															
A. Total sales	67.3		100.0	128.4		100.0	100.0		128.6		100.0	128.6		100.0	
TRADEABLE INPUTS															
Direct imports															
a.	44.2	-34%	67.3				34.4	-30%	68.8	22.4	67%	13.4	39.0	34%	32.5
b.	.6	-25%	.8							6.3	34%	4.9	3.9	20%	4.9
c.										12.9	20%	16.0	2.6	30%	2.0
d.										9.2	44%	6.4	11.9	34%	8.9
e.										6.0	47%	4.1	3.0	44%	3.7
f.															
B. Subtotal, direct imports	44.8		68.1				34.4		68.8	38.6		38.7	75.7		31.9
Locally purchased tradeable inputs															
a.	1.8	-47%	3.3	1.3	-47%	2.9				4.1	-47%	8.0	3.1	-47%	6.0
b.	1.6	-30%	3.2	1.9	-30%	3.0				1.8	-30%	3.3	3.1	-30%	6.1
c.	2.2	44%	1.6	78.9	30%	32.4	32.0	29%	29.0	32.2	30%	29.0	29.0	30%	22.3
d.				3.7	47%	3.9				1.0	47%	.7			
e.				.9	32%	.7									
C. Subtotal, locally purchased tradeable inputs	3.6		8.3	80.9		63.7	32.0		29.0	39.1		37.0	35.1		34.4
D. Subtotal, dir. imports + loc. purch. trad. inputs (B+C)	50.3		76.4	80.9		63.7	66.4		97.8	77.7		75.7	110.8		66.3
Depreciation (tradeable component, from Table D)															
Buildings (Rows 1 & 2)	.3	23%	.4							.9	23%	.7	1.7	23%	1.3
Machinery (Rows 3 & 4)	8.3	13%	7.4							4.8	13%	4.5	12.1	13%	10.3
Vehicles (Rows 5 & 6)	1.3	13%	1.2							4.2	13%	3.7	3.7	13%	3.2
E. Subtotal, depreciation	10.0		9.0	21.4		21.4				9.9		8.6	17.5		15.1
F. Grand total, tradeable inputs (D+E)	60.3		85.4	102.3		85.1	n.a.		n.a.	107.6		84.3	128.3		101.4
VALUE ADDED															
Gross of depreciation (G-D):															
1. At domestic prices	16.0			39.5			33.6			33.3			17.0		
2. At c.i.f. import prices			21.6			36.3			6.4			24.3			13.7
Net of depreciation (G-F):															
1. At domestic prices	6.3			19.0			n.a.		n.a.	23.6			.4		
2. At c.i.f. import prices			14.6			14.9			n.a.			13.0			-1.4
EFFECTIVE RATE OF PROTECTION (ERP), based on:															
K. Gross value added (G/F - 1.0)		-27%			9%			42%			30%			31%	
L. Net value added (L/F - 1.0)		-36%			21%			n.a.			30%			infinite	

* All money figures in this table are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Row A above) during the indicated year.

Table B: Computation of Effective Rates of Protection (ERP's) for Sample of Industrial Enterprises in Somalia (continued)

Item	Sector: Beverages (soft drinks) Enterprise No. 6 (Years 1963)			Sector: Tobacco products Enterprise No. 7 (Years 1964)			Sector: Textiles & apparel Enterprise No. 8 (Years 1964)			Sector: Textiles & apparel Enterprise No. 9 (Years 1963)			Sector: Textiles & apparel Enterprise No. 10 (Years 1963)			Sector: Furniture Enterprise No. 11 (Years 1964)			
	Rate of Value at domestic (KSh only) prices effective protection (So.sh.)	Rate of Value at nominal or c.i.f. import prices (So.sh.)	Value at c.i.f. import prices (So.sh.)	Rate of Value at domestic (KSh only) prices effective protection (So.sh.)	Rate of Value at nominal or c.i.f. import prices (So.sh.)	Value at c.i.f. import prices (So.sh.)	Rate of Value at domestic (KSh only) prices effective protection (So.sh.)	Rate of Value at nominal or c.i.f. import prices (So.sh.)	Value at c.i.f. import prices (So.sh.)	Rate of Value at domestic (KSh only) prices effective protection (So.sh.)	Rate of Value at nominal or c.i.f. import prices (So.sh.)	Value at c.i.f. import prices (So.sh.)	Rate of Value at domestic (KSh only) prices effective protection (So.sh.)	Rate of Value at nominal or c.i.f. import prices (So.sh.)	Value at c.i.f. import prices (So.sh.)	Rate of Value at domestic (KSh only) prices effective protection (So.sh.)	Rate of Value at nominal or c.i.f. import prices (So.sh.)	Value at c.i.f. import prices (So.sh.)	
A.	128.6	291	100.0	137.6	381	100.0	30.6	-492	100.0	109.0	91	100.0	100.0	100.0	100.0	100.0	402	100.0	
	128.6		100.0	137.6		100.0	30.6		100.0	109.0		100.0	100.0	100.0	100.0			100.0	
B.	7.3	342	3.1	20.3	-732	73.3	11.1	-692	33.9	81.3	-812	437.3					23.0	291	20.0
	23.6	672	17.3				.4	-462	.7								3.3	372	3.9
	7.9	342	3.9				1.7	-132	2.0								11.7	982	3.9
	7.9	482	3.0				1.7	-332	2.6								3.7	292	3.1
	6.3	432	4.4				.8	-232	1.1								4.3	342	3.2
	3.0	372	2.2														2.1	192	1.0
	38.4		44.4	28.3		73.3	13.7		62.2	81.3		437.3					32.1		38.7
	1.7	-492	3.0	.1	-492	.2	9.3	-312	16.0				1.3	-302	2.3				
	2.3	-382	4.7	.2	1082	.1							4.0	-342	6.2				
	38.9	292	23.7	2.1	382	3.9	.4	-492	1.9				2.0	-212	2.3				
				.2	82	.2							1.1		1.1				
				.1	382	.1							29.3	-392	38.9				
C.	34.9		31.7	3.8		4.6	9.8		20.7				37.8		73.3				
D.	93.3		74.1	26.0		80.1	23.3		62.9	81.3		437.3	37.8		73.3		32.1		38.7
				1.9	232	1.3	.4	232	.3								6.6	232	3.3
				16.0	132	13.9	34.8		31.0								13.6	132	11.0
				1.4	132	2.9	1.1		1.1										
E.	1.6	282	2.3	21.3		18.4	33.3		33.0								26.2		17.1
F.	75.3		76.6	47.6		98.4	39.0		96.3	n.a.		n.a.	n.a.		n.a.		72.4		33.8
G.	33.0			111.2			23.0			27.8			62.2				87.9		
H.			23.9			19.9			37.1			-337.3			26.7				61.3
I.	32.1			89.9			-8.3			n.a.			n.a.				67.7		
J.			23.4			1.6			1.7			n.a.	n.a.		n.a.				44.2
K.		132																	
L.		372			4381		-332		-3282		infinite		1332				432		332

* All money figures in this table are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Row A above) during the indicated year.

Table 8: Computation of Effective Rates of Protection (ERP's) for Sample of Industrial Enterprises in Somalia (continued)

Item	Sector: Furniture Enterprise No. 12 (Years 1980)			Sector: Paper products Enterprise No. 13 (Years 1983)			Sector: Chemical products Enterprise No. 14 (Years 1984)			Sector: Chemical products Enterprise No. 15 (Years 1983)			Sector: Chemical products Enterprise No. 16 (Years 1983)			Sector: Chemical products Enterprise No. 17 (Years 1981)		
	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰	Rate of Value at domestic (S.S.) prices effective (S.S.) ¹⁰ protection	Value at c.i.f. import prices (S.S.) ¹⁰		
A.	132.5	321	100.0	147.0	472	100.0	134.0	342	100.0	113.0	142	100.0	134.4	342	100.0	78.0	-212	100.0
	132.5		100.0	147.0		100.0	134.0		100.0	113.0		100.0	134.4		100.0	78.0		100.0
	9.9	291	8.3	38.7	332	43.3	74.8	202	62.3	38.0	-312	72.7	10.0	-332	22.2	31.3	-542	67.3
	4.1	291	3.4	.3	212	.2	26.3	342	19.4				30.0	-332	64.6			
	27.2	291	22.6	3.9	302	2.6	2.3	342	1.8				28.0	-332	62.2			
	.8	642	.6	3.1	472	3.3	6.1	342	6.3				23.0	-332	33.6			
	.4	302	.3															
B.	42.4		33.2	48.0		47.8	109.3		88.2	38.0		72.7	93.0		206.6	31.3		67.3
	18.3	-472	20.2							2.0	-472	3.0	18.0	-472	19.4	2.0	-482	3.9
	.9	-302	1.8				.3	-472	1.0	1.2	-302	2.3	18.9	-302	21.8	1.8	-302	3.3
	6.1	342	1.3							.3	272	.4	8.2	262	6.3	8.3	322	6.3
										9.1	332	6.8						
C.	17.3		27.0				.3		1.0	12.7		13.4	29.1		67.9	12.0		13.6
D.	39.9		61.1	48.0		47.8	110.1		89.3	62.7		86.1	122.1		234.3	63.3		88.9
	6.0	232	3.2	28.1	232	17.3	6.3	232	3.2									
	13.4	132	13.4	37.3	132	34.2	4.3	132	3.9									
	18.4	132	18.0				4.9	132	6.2									
E.	37.8		32.6	63.0		53.4	13.9		13.4	23.0	291	28.8				33.8	202	28.1
F.	97.7		94.7	131.0		103.2	128.0		102.7	87.7		106.9	8.0		8.0	77.0		109.0
G.	72.6			81.0			24.0			31.1			12.3			32.3		
H.			37.9			38.2			18.7						-134.3			19.1
I.	34.8			17.6			8.0			28.1						1.8		
J.			3.3			-3.2			-2.7			-6.9			8.0			-9.0
K.		922																
L.		3372			612			1232			2672			infinite			862	
					infinite			infinite			infinite			n.a.			infinite	

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* All money values in this table are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Row A above) during the indicated year.

Table 8: Computation of Effective Rates of Protection (ERP's) for Sample of Industrial Enterprises in Somalia (continued)

Item	Sector: Tanning & leather goods Enterprise No. 18 (Year: 1984)		Sector: Tanning & leather goods Enterprise No. 19 (Year: 1983)		Sector: Tanning & leather goods Enterprise No. 20 (Year: 1983)		Sector: Metal fabricating Enterprise No. 21 (Year: 1983)		Sector: Metal fabricating Enterprise No. 22 (Year: 1983)		Sector: Metal fabricating Enterprise No. 23 (Year: 1984)						
	Value at nominal or domestic (KSh only) prices (Sh.sh.) ¹⁰	Rate of Value at c.i.f. import prices effective protection (Sh.sh.) ¹¹	Value at nominal or domestic (KSh only) prices (Sh.sh.) ¹⁰	Rate of Value at c.i.f. import prices effective protection (Sh.sh.) ¹¹	Value at nominal or domestic (KSh only) prices (Sh.sh.) ¹⁰	Rate of Value at c.i.f. import prices effective protection (Sh.sh.) ¹¹	Value at nominal or domestic (KSh only) prices (Sh.sh.) ¹⁰	Rate of Value at c.i.f. import prices effective protection (Sh.sh.) ¹¹	Value at nominal or domestic (KSh only) prices (Sh.sh.) ¹⁰	Rate of Value at c.i.f. import prices effective protection (Sh.sh.) ¹¹	Value at nominal or domestic (KSh only) prices (Sh.sh.) ¹⁰	Rate of Value at c.i.f. import prices effective protection (Sh.sh.) ¹¹					
A.	100.0	100.0	120.0	201	100.0	120.0	201	100.0	133.3	331	100.0	130.0	301	100.0	119.0	191	100.0
	100.0	100.0	120.0		100.0	120.0		100.0	133.3		100.0	130.0		100.0	119.0		100.0
	33.3	-371	49.3	6.2	131	3.4	17.9	-41	19.1			56.0	301	43.0	60.0	-341	90.9
	13.2	-201	18.9	2.2	201	1.0	0.6	-41	9.2								
				3.5	-31	3.6											
				3.4	-331	6.0											
B.	60.7	68.2	13.2	13.2	26.3	20.3						36.0		43.0	60.0		90.9
	2.4	-491	6.7	1.1	-491	2.2	.3	-491	.0			4.0	-491	9.3			
	.3	-301	.6	1.1	-301	2.2	.1	-301	.1	6.3	-491	0.3	4.0	-501	9.3		
	11.1	-301	16.0	11.2	-301	16.1	43.0	43.0	44.0	201	36.7	3.4	-501	6.0	.7	-301	1.4
	13.0	311	11.5	43.7	791	21.3	.9	261	.7	1.1	201	.0	1.2	341	.0	6.9	291
				6.7	301	3.2	7.0	301	3.4	0.4	01	0.1	26.9	321	20.4	10.0	331
C.	28.0	32.7	63.0	30.0	31.3	49.0	37.0	34.1	34.2		37.4	13.6		12.7			
D.	77.1	100.9	79.0	63.1	77.0	70.1	37.0	34.1	42.2		00.6	73.6		103.6			
	.0	231	.4				7.7	231	3.0			1.3	231	1.2	3.7	231	1.0
	62.2	131	36.7				31.0	131	31.0	37.4	131	32.7	29.7	131	25.0		
E.	43.0	37.3	3.5	201	6.6		13.0	131	13.7	12.9	131	11.2					
F.	120.4	130.3	04.3	69.7	n.a.	n.a.	132.4	123.0	144.3		123.6	100.9		132.3			
G.	22.6		61.0		62.2		73.0		37.0			43.5					
H.		-9		34.9		21.9			43.9		19.6						-3.6
I.	-20.4		33.5		n.a.		.7		-14.3			10.1					
J.		-30.3		30.3		n.a.			-23.4		-23.6						-32.3
K.	infinite		101		921		641		931		infinite						
L.	infinite		171		n.a.		infinite		infinite		infinite						

* All money figures in this table are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Row A above) during the indicated year.

Table 8: Computation of Effective Rates of Protection (ERP's) for Sample of Industrial Enterprises in Somalia (concluded)

Item	Sector: Construction materials Enterprise No. 24 (Years 1984)			Sector: Construction materials Enterprise No. 25 (Years 1984)			Sector: Construction materials Enterprise No. 26 (Years 1983)			Sector: Boat construction Enterprise No. 27 (Years 1984)		
	Value at domestic prices (So.sh.)	Rate of protection (%)	Value at c.i.f. import prices (So.sh.)	Value at domestic prices (So.sh.)	Rate of protection (%)	Value at c.i.f. import prices (So.sh.)	Value at domestic prices (So.sh.)	Rate of protection (%)	Value at c.i.f. import prices (So.sh.)	Value at domestic prices (So.sh.)	Rate of protection (%)	Value at c.i.f. import prices (So.sh.)
A.	147.0	472	100.0	120.3	292	100.0	116.6	172	100.0	36.0	-642	100.0
	147.0		100.0	120.3		100.0	116.6		100.0	36.0		100.0
	16.0	292	13.6	63.2	642	37.8	96.3	-372	133.9	26.2	-672	84.0
	12.2	332	9.1	16.0	732	9.2				1.0	-672	3.0
	6.5	132	9.0	21.3	332	13.9						
	3.3	131	2.9	7.6	332	5.0						
				1.3	432	1.1						
B.	30.4		31.3	111.7		68.9	96.3		123.9	20.0		96.2
	9.1	-972	10.1				2.9	-982	9.7	1.1	-972	2.2
	2.3	-302	4.7	.1	-302	.2	1.3	-302	2.7	.4	-302	.9
	19.8	292	16.3				17.9	992	10.2			
							1.6	312	1.2			
C.	27.3		31.2	.1		.2	23.0		23.0	1.6		2.1
D.	63.7		62.6	111.0		69.1	122.1		177.0	29.3		93.3
	13.3	232	12.2	.1	232	.1						
	20.6	132	17.9	1.4	132	1.2						
	1.6	132	1.4									
E.	37.4		31.3	1.6		1.4						
F.	103.1		96.1	112.0		70.3	n.a.		n.a.	n.a.		n.a.
G.	81.3			16.5			-2.3			6.3		
H.			37.4			30.9			-77.0			6.7
I.	63.9			13.0			n.a.			n.a.		n.a.
J.			9.9			27.3						n.a.
K.		1102			-642		infinite			-62		
L.		612			-972		n.a.			n.a.		

* All money figures in this table are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Row A above) during the indicated year.

TABLE 9: COMPUTATION OF ANNUAL OPPORTUNITY COST (IMPLICIT RENTAL) OF CAPITAL INVESTED IN SAMPLE OF INDUSTRIAL ENTERPRISES IN DOMESTIA 1984

Item	Enter- prise No. 1, 1981	Enter- prise No. 4, 1983	Enter- prise No. 5, 1984	Enter- prise No. 7, 1984	Enter- prise No. 8, 1984	Enter- prise No. 11, 1984	Enter- prise No. 12, 1984	Enter- prise No. 13, 1983	Enter- prise No. 14, 1984	Enter- prise No. 18, 1984	Enter- prise No. 21, 1983	Enter- prise No. 22, 1983	Enter- prise No. 23, 1986	Enter- prise No. 24, 1984	Enter- prise No. 25, 1984
BUILDINGS															
A. Est. current value (Table 1, row C) (\$u.sh.)	31.5	53.0	44.0	77.5	35.0	243.1	279.9	962.8	374.7	47.0	433.9	122.6	147.3	610.3	10.1
B. Implicit annual rental coefficient ^a	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
C. Implicit annual rental cost (=AB) (\$u.sh.)	5.0	8.5	10.6	12.4	5.7	42.4	44.8	154.0	60.3	7.6	69.4	19.6	23.6	97.7	1.6
D. % of rental cost assumed to be tradeable (Table 1, row D)	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
E. Tradeable component of rental cost at domestic prices (=CB) (\$u.sh.)	2.5	4.2	5.3	6.2	2.9	21.2	22.4	77.0	30.1	3.8	34.7	9.8	11.8	48.8	.8
F. Rate of nominal protection (Table 1, row F)	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
G. Tradeable component of rental cost at c.i.f. import prices (= E/(1+F)) (\$u.sh.)	2.0	3.4	4.2	5.0	2.3	17.0	17.9	61.6	24.1	3.1	27.0	7.8	9.4	39.1	.6
H. Nontradeable component of rental cost (= labor, land & natural resources incorporated in buildings) (= C - E) (\$u.sh.)	2.5	4.2	5.3	6.2	2.9	21.2	22.4	77.0	30.1	3.8	34.7	9.8	11.8	48.8	.8
MACHINERY															
I. Est. current value (Table 1, row H) (\$u.sh.)	111.0	47.5	120.7	111.0	350.0	135.9	154.2	373.0	45.4	421.9	317.0	374.3	297.0	205.7	14.2
J. Implicit annual rental coefficient ^a	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202
K. Implicit annual rental cost (=IJ) (\$u.sh.)	22.2	9.5	24.1	22.4	70.0	27.2	30.8	76.6	9.1	84.4	103.6	75.3	59.4	41.1	2.8
L. % of rental cost assumed to be tradeable (Table 1, row L)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
M. Tradeable component of rental cost at domestic prices (=KL) (\$u.sh.)	22.2	9.5	24.1	22.4	70.0	27.2	30.8	76.6	9.1	84.4	103.6	75.3	59.4	41.1	2.8
N. Rate of nominal protection (Table 1, row N)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
O. Tradeable component of rental cost at c.i.f. import prices (= M/(1+N)) (\$u.sh.)	19.3	8.3	21.0	19.4	60.9	23.6	26.8	66.3	7.9	73.4	90.0	65.5	51.7	35.0	2.5
VEHICLES, FURNITURE & MISCELLANEOUS EQUIPMENT															
P. Est. current value (Table 1, row O) (\$u.sh.)	8.1	21.2	18.6	17.3	10.4		91.9		24.4		78.9	96.3		7.0	
Q. Implicit annual rental coefficient ^a	302	302	302	302	302		302		302		302	302		302	
R. Implicit annual rental cost (=PQ) (\$u.sh.)	2.4	6.4	5.6	5.2	3.2		27.6		7.3		23.7	27.1		2.3	
S. % of rental cost assumed to be tradeable (Table 1, row S)	100%	100%	100%	100%	100%		100%		100%		100%	100%		100%	
T. Tradeable component of rental cost at domestic prices (=RS) (\$u.sh.)	2.4	6.4	5.6	5.2	3.2		27.6		7.3		23.7	27.1		2.3	
U. Rate of nominal protection (Table 1, row U)	15%	15%	15%	15%	15%		15%		15%		15%	15%		15%	
V. Tradeable component of rental cost at c.i.f. import prices (= T/(1+U)) (\$u.sh.)	2.1	5.5	4.9	4.5	2.8		24.0		6.4		20.6	23.6		2.0	
LAND															
W. Enterprise's original purchase cost (\$u.sh.)	.7	1.2	0.4	.1	.1	29.3		89.1	0.4			.4		77.1	
X. Conversion factor (1.0 + cumulative rate of inflation from yr. of purch. to given yr.)	1.0	3.0	1.2	4.0	10.0	1.0		1.2	3.0			3.0		1.0	
Y. Est. current value (=WX) (\$u.sh.)	.7	3.9	7.7	.7	1.2	29.3		106.9	0.9			2.2		77.1	
Z. Implicit annual rental coefficient ^a	152	152	152	152	152	152		152	152			152		152	
AA. Implicit annual rental cost, 0% tradeable (= YZ) (\$u.sh.)	.1	.9	1.2	.1	.2	4.4		16.0	0.3			.3		11.6	
TOTALS															
CC. Nontradeable component of rental cost of buildings & land (= H + AA) (\$u.sh.)	2.6	3.1	6.4	6.3	3.0	23.6	22.4	92.1	36.4	3.8	34.7	10.1	11.8	60.4	.8
DD. Tradeable component of rental cost at c.i.f. import prices (= G + O + V) (\$u.sh.)	23.4	17.2	30.1	27.9	63.9	46.6	68.7	150.0	38.4	76.4	130.4	94.9	61.1	76.9	3.1

Notes to Table 9

*All money figures in this table are normalized, i.e., expressed as percentages of the value of total sales at c.i.f. import prices (from Table 8, Row A) during the indicated year.

**The implicit rental coefficient for a given asset class is computed from the annuity formula:

$$\frac{i(1+i)^n}{(1+i)^n - 1}$$

where i is annual opportunity cost of capital (accounting rate of interest), taken here to be 15 per cent, and n is the assumed economic life of the asset class in question. Buildings are assigned an economic life of 20 years, machinery 10 years, and other assets 5 years. The economic life of land being infinite, the formula reduces to $i = 0.15$ in the case of land.

Table 101: COMPUTATION OF DOMESTIC RESOURCE COST (D.R.C.) PER SHILLING'S WORTH OF FOREIGN EXCHANGE SAVED IN SAMPLE OF INDUSTRIAL ENTERPRISES IN SOMALIA

(All values in Somali shillings)^a

Item	Enter- price No. 1, 1961	Enter- price No. 4, 1963	Enter- price No. 5, 1964	Enter- price No. 7, 1964	Enter- price No. 8, 1964	Enter- price No. 11, 1964	Enter- price No. 12, 1964	Enter- price No. 13, 1963	Enter- price No. 14, 1964	Enter- price No. 16, 1964	Enter- price No. 21, 1963	Enter- price No. 22, 1963	Enter- price No. 23, 1964	Enter- price No. 24, 1964	Enter- price No. 25, 1964
COMPUTATION OF DOMESTIC RESOURCE COST															
A. Direct annual labor cost	3.1	13.9	9.5	4.6	12.0	36.0	8.9	19.1	7.5	23.2	32.4	36.1	13.7	23.9	3.0
B. Nontradable component of rental cost of buildings and land (Table V, row CC)	2.6	3.1	6.4	6.3	3.0	23.6	22.4	93.1	36.4	3.0	31.7	10.1	11.0	66.0	.0
C. Total domestic resource cost (= A + B)	5.7	21.0	16.0	10.9	15.9	62.0	28.3	112.1	43.9	27.0	67.1	46.2	25.9	94.3	3.0
COMPUTATION OF FOREIGN EXCHANGE SAVING															
D. Value added at c.i.f. import prices, gross of depreciation (Table U, row DD)	23.6	24.3	13.7	19.9	37.1	61.3	37.9	30.2	10.7	-1.9	43.9	19.6	-3.6	37.4	30.9
E. Tradable component of capital rental cost at c.i.f. import prices (Table V, row DD)	23.0	17.2	30.1	27.9	63.9	60.6	60.7	130.0	30.0	76.0	130.4	96.9	61.1	76.9	3.1
F. Net foreign exchange saving in So.sh. equivalents (= D - E)	.2	7.1	-16.4	-8.0	-26.8	20.7	-30.8	-79.8	-27.6	-77.4	-92.8	-77.3	-66.6	-39.8	27.0
COMPUTATION OF UNIT D.R.C. PER SHILLING'S WORTH OF FOREIGN EXCHANGE SAVED															
G. Long-run unit D.R.C., capital cost fully accounted for (= C/F)	39.10	2.94	infinite	infinite	infinite	2.99	infinite	infinite	infinite	infinite	infinite	infinite	infinite	infinite	.14
H. Short-run unit D.R.C., treating capital as a sunk cost (= C/D)	.13	.65	.70	.23	.33	.30	.16	.30	.70	infinite	.71	1.50	infinite	.60	.10

^a Money figures in Row A-F are normalized, i.e. expressed as percentages of the value of total sales at c.i.f. import prices (from Table B, Row A) during the indicated year.

the value of total sales at c.i.f. import prices for one of the years 1983, 1984, and 1985.* (None of the 27 enterprises reported any exports during the relevant year, hence valuation at f.o.b. prices does not come into play.) Accordingly, the first two values in the third column corresponding to each enterprise in Table 8 are always 100. Needless to say, normalization has no effect on values of ratios such as ERP, unit DRC, and the effective exchange rate (EER).

Following is a description of each of the tables:

Table 7, Computations of Tradeable Component of Annual Depreciation. This table computes the tradeable component of annual depreciation of three classes of capital assets for 15 enterprises. The classes are building, machinery, and other assets (i.e., vehicles, furniture, and miscellaneous equipment). Each section begins with the original purchase cost of the assets in question (or, if there has been an intermediate revaluation, the revised value as of that date). There follows a conversion factor by which the purchase cost or revised value is multiplied to express it in prices of the year figuring in the computation (1983 or 1984) — the Mogadishu consumer price index is used to update building costs, the ratio of the current market exchange rate to the rate at which the assets were purchased or revalued is applied to the other two categories.

Next come two percentages, one comprising the proportion of the asset class assumed to be tradeable — 50 per cent for building, 100 per cent for the other classes, while the second percentage, a so-called "rate of nominal protection," represents the assumed tax element in the asset purchase price. Dividing the tradeable component by 1.0 plus the tax rate converts it to c.i.f. basis. Except in two cases providing

*Year 1985 data are presented for only one enterprise based on current price and cost data for a typical product. The enterprise had not yet been in operation for a full year.

clear evidence that machinery and moveable assets were exempted from all duties, the following tax rates have been assumed: buildings — 25 percent; machinery and other assets — 15 per cent.

The respective adjustments to original purchase cost etc. have now generated a value termed "current value of tradeable component at c.i.f. import prices." As a final step, this value is divided by the economic life that the enterprise applies to the asset class in question.* An analogous step gives the tradeable component of depreciation at domestic prices. The two quotients are now ready for transfer to Table 8.

Table 8, Computations of Effective Rates of Protection (EPR's).

This table presents the ERP computations for all 27 enterprises in the adjusted sample. Data for each enterprise is presented in three columns, the first giving values at world prices, and the third giving the corresponding values at world prices.

After two rows devoted to sales figures, the heart of the table lists tradeable inputs, comprising direct imports, locally purchased tradeables, and the tradeable component of depreciation. For the 15 enterprises figuring in Table 7, depreciation data are given separately by asset class and then totalled. Five additional enterprises furnished data which in the HIID team's judgment warranted a rough estimate of total depreciation at current prices, both domestic and world, without giving a breakdown among asset classes. In these cases, a figure appears in Row E (subtotal, depreciation) with no preceding list of components.

The following section of the table subtracts tradeable inputs from sales to obtain two variants of value added at domestic and world prices, one variant being gross of depreciation, the other (for the 20

*Some enterprises apply two or more different economic lives to subcategories of the third asset class, e.g., vehicles and furniture; a rough weighted average has been used in these cases.

cases containing values in Row E) giving net value added. ERP is computed in the final section by subtracting 1.0 from ratios of value added at domestic and world prices for each variant. Only ERP's based on gross value added are available for the seven cases lacking any estimate of depreciation. Wherever value added at world prices, gross or net of depreciation, is negative, the corresponding entry for ERP is "infinite," following the convention described in Chapter 3.

Procedures used in estimating the nominal protection rates which comprise the middle column under each case require explanation. In most cases these are not the same as the tariff rates examined in Chapter 4, even when the latter have been adjusted to include Administrative and Statistical duty, Stamp tax, etc. Adjustments for the following phenomena had to be made to arrive at percentages correctly relating values at domestic and world prices (i.e., such that each world price value equals the corresponding domestic price value divided by 1.0 plus the relevant proportion):

1. Selling price of output below world price plus tariff
— in a number of cases the selling price of output was below the equivalent at world prices plus official charges to which a competing import would nominally be subject. This was due to one of the following circumstances: (i) smuggling of competing goods; (ii) official price control; or (iii) tariff redundancy in the absence of competing imports (i.e., an enterprise maximizes profit by selling a larger volume at a price below what duty-paid imports would fetch — in several cases this has been associated with importation of inputs at the official, i.e., heavily subsidized, exchange rate).

In these cases the rate of tariff and other official charges on a competing import is irrelevant, and the rate of "nominal" protection can only be measured by comparing the local selling price, ex-factory, with the c.i.f. price of a comparable import. In other words, if the local ex-factory price is represented by p^{dom} , the nominal protection rate

in the second column under a given enterprise is $(p^{\text{dom}}/p^{\text{cif}}) - 1.0$. It is perfectly possible for this term to be negative, which happens whenever p^{dom} is less than p^{cif} . Four of the enterprises in Table 8 display negative nominal protection rates with respect to output, indicating that factor (ii) or (iii) above more than offset the nominal protection conferred by the customs tariff.

2. Under- or overvaluation of imports by Customs — this adjustment was mentioned in Chapter 4 above. Gross modo, it was assumed that customs undervalued imports of inputs and competing products by 33 per cent during 1983 and 1984. Undervaluation implies a subsidy of $(1 - i_n^{\text{cus}}/i_n^{\text{cif}})t_n^i$ times the c.i.f. value of imported input n , where i_n^{cus} represents the valuation by Customs, i_n^{cif} represents c.i.f. value, and t_n^i represents the nominal tariff, including all official charges, on the good in question. A 33 per cent undervaluation means $i_n^{\text{cus}}/i_n^{\text{cif}} = 0.67$.

3. Purchase of inputs at overvalued exchange rate — in just over half the cases (14 out of 27), during the year to which the data relate the enterprise imported inputs directly at the prevailing official exchange rate. This was tantamount to a subsidy, i.e., negative tax/negative nominal rate of protection, equivalent to $(1 - r_o/r_m)$ times i_n^{cif} , where r_o represents the official exchange rate (shillings per dollar) and r_m the free market rate.

The official rate rose from 15.2 sh. at the beginning of 1983 to 17.6 sh. at the end of the year, and 26.0 sh. at the end of 1984; yearly averages were 15.8 in 1983 and 20.0 in 1984 (data from Somalia country page, IMF's International Financial Statistics). Free market rates were assumed to average 40 sh. in 1983 and 65 sh. in 1984, based on franco

valuta rates in Saudi Arabia as reported to USAID by Somconsult and on recollections of traders interviewed by the HIID team.* An importation at the 1983 average official rate is thus regarded as receiving a subsidy of $1 - 15.8/40 = 60.5$ per cent.

Of such magnitude was the overvaluation of the exchange rate in 1983 and 1984 that this subsidy more than offsets any burden on production arising from official charges on separately identified inputs imported by the enterprises in question. In other words, the term $t_{nn}^{i,cus} - (1-r_o/r_m)i_n^{cif}$, denoting the net burden of official measures on importation of input n (i.e., the charges collected by Customs less the exchange rate subsidy), is negative. Perusal of Table 8 shows negative values in the second column under 14 enterprises.

4. Nominal protection of locally purchased tradeable inputs. Measurement of the percentage difference between domestic and world prices is more difficult in the case of locally purchased tradeable inputs than with inputs imported directly by the enterprise, since in the former case many enterprises have only a vague idea of the tax component or scarcity rent embodied in their purchases. Reference was made in Chapter 3 to the subsidy inherent in local sales of petroleum-based fuel and electric power, arising from two factors, firstly, that crude petroleum has always been (and

*Somconsult, Foreign Exchange Market in Somalia, March-April, 1984. Values in shillings per Saudi rial, given on page 62, are converted to shillings per dollar at the rial/\$ rate given in International Financial Statistics.

as of mid-1985 was still being) imported at the prevailing official exchange rate, and secondly, that GSDR price policy has long had the effect of holding electricity rates well below full operating costs of the ENEE, apart from the implicit subsidization of fuel oil. Hence, nominal protection rates for these two inputs are uniformly negative around -50 per cent.

Some of the entries in this category of input are catch-all residuals, in which cases both the tradeable component (whose computation is not shown in the table — values at domestic prices in the first column under each enterprise are supposedly net of domestic resource costs) and the applicable tax rate are crude estimates. The tax rate assumed in such cases is around 30 per cent.

Table 9, Computation of Annual Opportunity Cost (Implicit Rental) of Capital Invested. The object of this table is to generate entries for Table 10, which computes unit domestic resource cost. Invested capital is divided into four asset classes, comprising the three featured in Table 7 plus land, which of course does not figure in annual depreciation.

Sections devoted to the first three classes take data on current value (at domestic prices), the proportion of capital cost assumed to be tradeable, and the tax component ("rate of nominal protection") from Table 7, and apply implicit annual rental coefficients (annuity factors) of 16 per cent for buildings, 20 per cent for machinery, and 30 per cent for movable assets. These are in turn based on a 15 per cent opportunity cost of capital, assuming economic lives of 20, ten, and five year, respectively. The section on land starts from original purchase cost or an intermediate revaluation, applies a conversion factor based on cumulative inflation since the year in question, and then an annuity factor of 0.15, equal to the opportunity cost of capital over an economic life of infinity.

The table's concluding rows sum appropriate subtotals to arrive at a nontradeable component of rental cost — 50 per cent of the rental

cost of buildings at domestic prices plus 100 per cent of the rental cost of land — and a tradeable component at c.i.f. prices.

Table 10, Computation of Domestic Resource Cost (D.R.C.) per Shilling's Worth of Foreign Exchange Saved. This concluding table introduces one new parameter, the enterprise's direct annual labor cost, and combines it with the nontradeable component of rental cost from Table 9 to arrive at total domestic resource cost. As alternative denominators for the unit DRC calculation the table takes value added at c.i.f. prices, gross of depreciation, from Table 8, and then recomputes it net of the tradeable component of capital rental cost from Table 9.

Unit DRC with capital cost fully accounted for is then computed as the ratio of total domestic resource cost to net foreign exchange saving, while short-run unit DRC, treating capital as a sunk cost, is computed as the ratio of direct labor cost only to foreign exchange saving gross of implicit rental of the tradeable component of capital.

* * * * *

Interpretation of the tables is deferred to Chapter 6, following.

Technical Note to Chapter 5

Tables 7-10 are components of a single electronic spreadsheet, prepared on an IBM personal computer of the type installed in Somalia's Central Statistical Department by the technical assistance team from Statistics Sweden. The software used is SuperCalc 3, Revision 2. Raw data on enterprise sales, input purchases, and capital costs, expressed in thousands of Somali shillings, are entered in initial segments of the spreadsheet not reproduced here. The spreadsheet is easily adaptable to sensitivity analysis of the impact on ERP's, unit DRC's and EER's of alternative future revisions of the customs tariff.

CHAPTER 6 - EFFECTIVE PROTECTION OF INDUSTRY IN SOMALIA —
CONCLUSIONS FROM THE CASE STUDIES

The object of this chapter is to analyze the results of Tables 7-10 in the preceding chapter and draw conclusions regarding the recent status of effective protection of industry in Somalia.

Statistical significance of findings from the sample of enterprises.

Before proceeding with interpretation of the results, some caveats are in order concerning the characteristics and significance of the HIID team's sample.

It should be stressed at the outset that no scientific design was applied in selecting the 36 enterprises approached for data. Proceeding on the premise that little reliable data was currently available on the structure of industrial value added in Somalia, and fearing that most industrial managers would be reluctant to supply data that could ultimately be used to measure their profits, the HIID team went first to those enterprises with whose managers it was able to develop personal contacts through Somali and foreign sources. After testing the waters and finding that managers were on the whole more forthcoming than had been feared, the team shifted the emphasis to enlarging its sectoral coverage. Nevertheless, the choice of enterprises in new sectors continued to be based on availability of personal introductions. Accordingly, no indices of statistical significance can be derived for the data in Tables 7-10.

It is useful to examine the scope of the sample in relation to total value added in Somalia's industrial sector. Out of the 27 enterprises included in Table 8, 11 accounted for 34.5 million sh. in gross value added at domestic prices in 1983 and 14 accounted for 366.2 million sh. in 1984. (The remaining two enterprises, both relatively

small, are omitted from the computation because the raw data from which their Table 8 entries are calculated are unit amounts relating to sample product lines, rather than absolute values for sales and input purchases.) The Mogadishu consumer price index showing inflation of 82 per cent in 1984, we multiply the 1983 figure by 1.82 to convert it to 1984 prices, giving 62.8 million sh. and thus a grand total for 25 enterprises of 429 million sh. at 1984 prices.

Data on total sectoral value added are extremely shaky. The IMF's April, 1984 Recent Economic Developments report (page 120) projects 1983 manufacturing value added in 1978 prices at 466 million sh. Using the Mogadishu consumer price index as a proxy for the GDP deflator, a procedure followed by the IMF*, the 1984 price level was 9.15 times its 1978 value (464.1 / 50.7, according the International Finance Statistics), implying that 1984 manufacturing value added was on the order of 4.3 billion shillings. This would put the 25 enterprises at ten per cent of sectoral value added.

In fact we suspect that inclusion of 1984's 82 per cent consumer price inflation rate in the sectoral price deflator for manufacturing exaggerates the sector's size as of that year, given that selling prices of most state enterprises lagged behind the inflation rate. But it is unlikely that domestic-price value added of the 25 enterprises in question formed more than 15 per cent of 1984 sectoral output.

Turning to sectoral coverage, Table 11 places the sample of industries analyzed in Table 8, the most comprehensive of the four preceding tables, in the context of Somalia's industrial structure as reported in the Central Statistical Department's latest published

*IMF, "Somalia: Request for Stand-By Arrangement," January 2, 1985, page 5, footnote on sources.

TABLE 11

Industrial Enterprises Included in Table 8,
Seen in the Context of Somalia's Industrial
Structure as Tabulated by Central Statistical Department

<u>Industry groups identified in 1979 Industrial Production Survey</u>	<u>Number of estab- lishments reporting</u>	<u>Share in 1979 industrial value added</u>	<u>Distribution of Table 8 sample of enterprises</u>
1. Food Manufacturing	70	13.7%	3
2. Beverages	6	2.0%	3
3. Textiles	8	13.1%	2
4. Wearing Apparel Except Footwear	37	3.1%	1
5. Leather and Footwear	19	2.3%	3
6. Furniture and Fixtures	28	2.7%	2
7. Printing and Publishing	1	4.3%	0
8. Other Chemicals	6	2.2%	4
9. Petroleum Refining	1	8.3%	0
10. Plastic Products Not Elsewhere Specified	1	4.3%	3
11. Structural Clay Products	17	4.2%	1
12. Lime	11	0.4%	0
13. Metal Products	16	2.3%	3
14. Jewelry, etc.	12	0.3%	0
15. Industries Not Elsewhere Specified	10	27.6%	2*
16. Electric Light and Power	10	2.6%	0
17. Water Works and Supply	5	6.6%	0
TOTAL	258	100.0%	27

*Tobacco and Paper Products

Industrial Production Survey, presenting data for 1979.* The CSD survey may be regarded as identifying 14 relevant manufacturing groups, excluding the miscellaneous category (No. 15 in Table 11) and the two infrastructure groups (electric power and water supply) not forming part of manufacturing. Table 8 above includes representation from ten of the 14 groups, excluding only printing and publishing, petroleum refining (both of which have just one representative in the CSD list), Lime (11 establishments according to CSD), and jewelry etc. (12 establishments).

Comparing numbers of establishments, the CSD survey tabulated 258, which would give the HIID team's 1985 sample slightly over ten per cent of the total as of 1979. However, the CSD surveys are known to have omitted a sizable group of industries, including several in the HIID team's sample. A June 1982 Ministry of National Planning report on National Accounts Aggregates estimated 1978 manufacturing value added at 446 million sh., some 57 per cent more than the 283.5 million sh. reported in the 1979 CSD survey. (It is this estimate of value added which forms the basis for the aforementioned IMF projection for 1983.)

Conclusions from Table 8, Effective Protection of Industry in Somalia

Table 12, following, summarizes the ERP computations in Table 8. Enterprises, identified by their sectors and the code number given in Table 8, are grouped in six different ranges of the ERP and corresponding effective exchange rate (EER). ERP ranges are: negative, 0-25 per cent, 25-50 per cent, 50-100 per cent, over 100 per cent, and infinite (negative value added at world prices). The corresponding EER ranges are: Less than 85 shillings per dollar, 85-106 sh./\$, 106-127 sh./\$, 127-170 sh./\$, over 170 sh./\$, and infinite.**

*Questionnaires had been circulated and collected, but not yet tabulated, for the four following years (through 1983) as of mid-1985.

**As indicated in the footnote to the table, these values of the EER are a function of the market exchange rate in effect when the field research was conducted for the present study, i.e. 85 shillings to the dollar. The historical value of the EER appropriate to each enterprise depends on the average market rate in effect during the year covered by the given case study.

Table 12 - Table 8 Enterprises by Range of Effective Rate of Protection (ERP) and Effective Exchange Rate (EER)

R a n g e		Computation of ERP/EER on basis of gross value added			Computation of ERP/EER on basis of net value added		
ERP	EER*	Total no. of ents. in range	S e c t o r	Ent. code No(s)	Ent. code No(s)	S e c t o r	Total no. of ents. in range
Negative	< 85 sh./\$	4	Food products	1	1	Food products	3
			Textiles & apparel	8	8	Textiles & apparel	
			Construc. materials	25	25	Construc. materials	
			Boat construction	27			
0-25%	85-106 sh./\$	2	Food products	2	2	Food products	2
			Tanning & leather	19	19	Tanning & leather	
25-50%	106-127 sh./\$	4	Beverages	4,6	4,6	Beverages	2
			Furniture	11			
			Beverages	5			
50-100%	127-170 sh./\$	6	Furniture	12	11	Furniture	1
			Paper products	13			
			Chemical products	17			
			Tanning & leather	20			
			Metal fabricating	21,22			
> 100%	> 170 sh./\$	6	Food products	3	12	Furniture	3
			Tobacco	7	7	Tobacco	
			Textiles & apparel	10			
			Construc. materials	24	24	Construc. materials	
			Chemical products	14,15			
∞	∞	5	Textiles & apparel	9	5	Beverages	9
			Chemical products	16	13	Paper products	
			Construc. materials	26	17	Chemical products	
					21,22	Metal fabricating	
					14,15	Chemical products	
			Tanning & leather	18	18	Tanning & leather	
			Metal fabricating	23	23	Metal fabricating	

* For ease in relating the analysis to current market conditions, EER values here are calculated by the formula $EER = (1 + ERP)r_{1985}$, where r_{1985} is the market exchange rate as of early 1985, i.e., 85 sh./\$. The historical value of the EER appropriate to each enterprise is a function of

The lefthand grouping in Table 12 follows ERP's computed on the basis of gross value added, while the righthand grouping follows the bottom row of Table 8, giving ERP's based on net value added. Lines connecting the two sections show what happens to each enterprise's ERP as the basis of computation shifts from gross to net value added. (The seven enterprises included in the lefthand grouping which have no connecting lines are those with "n.a." (not available) in the corresponding positions of Table 8, resulting from the absence of reliable depreciation figures for the entities in question.

Connecting lines for 11 enterprises are horizontal, meaning that the shift from gross to net value added does not move the enterprise to a new category (though it almost always increases the ERP's absolute value). Conversely in nine cases the enterprise shifts to a higher category; in seven of these a finite ERP becomes infinite, meaning that subtracting the tradeable component of depreciation from gross value added at world prices converts the latter into a negative value.

Five of the 27 enterprises, or close to one fifth of the sample, show negative value added even without taking depreciation into account. In other words, even if their invested capital is treated as a sunk cost, these enterprises consume more foreign exchange in their current operation than they save by forestalling imports. Unless the efficiency of these units can be increased so as to generate a net saving of foreign exchange, their continued operation is an unambiguous burden on Somalia's economy. It can be shown, by simple arithmetic, that everyone, including the enterprises' labor force, consumers of their products, the government treasury, and the economy as a whole (be virtue of disposing over more foreign exchange) would be better off under an arrangement whereby these entities were closed, and the duty collected on the additional imports were split between the discharged labor and the Exchequer.

Needless to say, taking the tradeable component of depreciation into account in computing value added only worsens the status of these five enterprises. In addition, seven other members of the sample acquire infinite ERP's/EER's when depreciation is taken into account (and although depreciation data are not available for No. 3, its gross value added is low enough to warrant anticipating negative net value added).

In sum, half of the units in the sample show negative net value added. This is the outcome of long-standing policies having the combined effect of (i) inducing over-investment by making capital relatively cheap to favored investors, and then (ii) forcing them into a stop-go regime where, during any single year, the capital is used to a small fraction—from 25 down to 2 per cent—of its economic capacity.

Apart from the problem of inefficient use of capital, the table demonstrates the wide dispersion of effective incentives to industry in Somalia resulting from a patchwork combination of protective tariffs, sporadic access to subsidized foreign exchange, undervaluation of imported inputs, partial exemptions from tariffs on inputs, and price controls on output. There is no reason to suppose the picture would be different had the present study disposed over sufficient resources to quantify the impact of other incentives listed in Chapter 2, such as credit, direct subsidization, and direct taxation.

If the ERP ranges of 0-25% and 25-50% in Table 12 are combined, the table shows a remarkably uniform dispersion of ERP's/EER's among the five remaining ranges. Putting it in terms of EER's, the case studies suggest that past government policies have affected roughly equal groups of enterprises in the following ways: (i) according less than the market exchange rate for foreign exchange saved; according a (ii) slight, (iii) moderate, and (iv) heavy premium over the market exchange rate; and (v) enabling enterprises to operate even while causing a net drain on Somalia's foreign exchange resources.

Also significant is the absence of bunching, among ERP/EER categories, of enterprises belonging to particular industrial sectors. Seven of the sectors listed in Table 12 are represented by at least three enterprises. ERP's/EER's (basis: gross value added) observed for six of the seven sectors span at least three ranges, coefficients observed for four of the sectors—food products, textiles & apparel, tanning and leather, and construction materials—span at least five, and textiles and apparel and construction materials span all six, i.e. range from negative to infinite effective protection. Only in the case of beverages (soft drinks) are ERP's/EER's based on gross value added grouped within the same range, in this case 25-50 per cent ERP or 106-127 sh./\$ EER.

As suggested in Chapter 2, maintaining such a diverse range of effective incentives is an inefficient way of stimulating industrial development. Incentives should rather be designed to attract investment into lines of production where a given quantum of domestic resources will earn or save a maximum amount of foreign exchange. The fact that the foreign exchange market has settled for the moment on an equilibrium rate of 85 shillings to the dollar indicates, grosso modo, that something close to this is the effective rate which government should be ensuring to all branches of manufacturing. Imposing lower rates on lines of production that are efficient enough to survive notwithstanding denies them resources with which to expand and eventually penetrate export markets. Conversely, favoring other, less efficient lines with sharply higher effective exchange rates diverts resources from the rest of the economy into branches with little prospect for exporting, and, indirectly if not directly, raises costs of the efficient producers.

Conclusions from Table 10, unit DRC's of industrial enterprises.

Perusal of the penultimate row of Table 10 reinforces the preceding subsection's observations on inefficient use of industrial capital in Somalia. If the full opportunity cost of capital is taken into account, eleven of the 15 enterprises for which data on capital structure are available yield negative value added at world prices and thus infinite unit DRC's. Three of the remaining four yield unit DRC's of about 3.0 or more, meaning that it cost Somalia at least three shillings worth of domestic resources to save a shilling's worth of foreign exchange at the prevailing market rate through these enterprises.

Only one enterprise, No. 25 (construction materials), appears highly efficient by the unit DRC criterion, costing the economy only 14 cents in domestic resources per shilling's worth of foreign exchange saved. This is a recently (1983) established enterprise which has never had recourse to the official exchange rate, with an indirect exception in its very modest use of electric power. The enterprise has a strong comparative advantage in fabricating and assembling objects whose importation as finished instead of intermediate products involves sharply

higher transport costs. The enterprise is labor-intensive and, precisely on account of having to pay the market rate, has economized on plant and equipment. Even so, the 14-cent unit DRC is almost unbelievably low, and may involve some undercounting of invested capital.

The final row of the table treats both the tradeable and nontradeable components of invested capital as a sunk cost and takes the enterprises' labor bill as the sole domestic resource cost. The two included enterprises, Nos. 18 and 23, which display negative gross value added in Tables 8 and 12, show the same thing in Table 10, and thus have unit DRC values of infinity. An additional enterprise, No. 22 (metal fabricating), appears inefficient even under the very lenient assumptions of this variant. With the remaining twelve there is an undeniable case for keeping them in operation in the short run, as their labor costs are low enough to ensure that they expend only 10 to 71 cents on that factor of production for each shilling's worth of foreign exchange saved (calculated at the full market rate). Whether they merit remaining in operation over the long run depends on whether government pursues policies enabling the enterprises to make efficient use of capital invested in future replacement and expansion.

CHAPTER 7 - EMPLOYMENT DIMENSION OF INDUSTRIAL DEVELOPMENT IN SOMALIA

A corollary of the inefficient use of industrial capital in Somalia, as exemplified by the HIID team's sample of enterprises, is that the current capital stock employs only a fraction of the labor force that would be required to operate it at an economic level of capacity utilization. Following is a tabulation of current capacity utilization as reported by 25 of the 27 entities covered by Table 8:

<u>Level of Capacity Utilization</u>	<u>Number of Enterprises</u>
Regularly operating two shifts, subject to periodic down-time due to power outages and interruptions in supply of raw materials	3
Operating over 55 percent of single-shift capacity	2
Operating around 50 percent (45-55%) of single-shift capacity	3
Operating 25-45 percent of single-shift capacity	9
Operating less than 25 percent of single-shift capacity	4
Out of operation for 6-12 months as of mid-May 1985	2
Out of operation for more than 12 months as of mid-May 1985	<u>2</u>
TOTAL	25

A striking phenomenon of enterprise responses to this facet of the sample survey was the high proportion of respondents who defined full capacity as production of a single shift. Moreover, only in a handful of tightly run establishments did the single shift represent seven hours of concentrated effort. The more common pattern was a work day running from 8:00 am to 12:00

noon, or at most, 8:00 to 1:00 pm. Single-shift operation may be economic for a sole proprietorship with no more than ten employees operating a lathe or two in a simple shed, but as the enterprise becomes larger, a sole shift represents a wasteful use of a poor country's scarce capital.

Total employment reported by the 25 enterprises in the foregoing list was about 3,200, or an average of 128.* About 60 percent of the total is accounted for by four public enterprises, namely Somaltex, Cigarette and Match, Wheat Flour and Pasta, and Magdeynta Tannery. The median, at 40, is thus considerably below the average. Nevertheless, a developing country entrepreneur employing 20 or more persons in a modern manufacturing process (as distinct from a group handicraft endeavor) will certainly operate his plant and equipment for at least two shifts if he has received correct price signals at the time of establishing the factory, and providing that channels of supply for his inputs and spare parts function reasonably smoothly. The entrepreneur will not, of course, want to spend the two full shifts in the factory himself, but given prices that reflect true opportunity costs, the trade-off between capital and labor — even the skilled variety of labor — will favor hiring a supervisor to run an additional shift rather than purchasing 50 to 75 percent more plant and equipment in order to obtain the same production from a sole shift.

As indicated in Chapter 1, these conditions have not been fulfilled in recent years in Somalia. On the one hand an overvalued exchange rate, coupled with a negative real interest rate on loans, has allowed entrepreneurs the luxury of establishing factories capable of serving the intended market with production from a single shift. On the other hand, the ensuing disruption of the foreign exchange market has obstructed the flow of inputs and spare parts, and power failures have brought long stretches of down-time, with the result that most industrial enterprises face supply constraints in meeting the demand they know to be there.

About 75 percent of the enterprises in the HIID team's sample described supply constraints as dominant in preventing them from meeting their demand. The outcome was a combination of higher domestic prices arising from scarcity rents and imports of foreign substitutes. A particularly dramatic case,

* Employment figures generally relate to the years for which financial returns are given in Table 8, hence the total represents a mixture of 1983 and 1984 data.

though by no means unique, was that of the Cigarette and Match Factory, which for several months up to the time of the field work for this study had been meeting 25 to 30 percent of domestic demand for cigarettes while operating less than 40 percent of a single shift. Meanwhile the residual demand was being fully satisfied by contraband imports paying no taxes and using foreign exchange purchased on the free market. Cigarette and Match, which has a statutory monopoly on importation of finished cigarettes as well as on domestic manufacture of them, was not even earning its legal commission on these imports.

As the shift to a free foreign exchange market takes effect, with industrial enterprises accustoming themselves to paying rates that approximate the marginal social value of foreign exchange and abandoning their search for access to cheap rates, the majority of firms may be expected to acquire the raw materials and spare parts they need to meet their effective demand, i.e. demand from users who will pay something approximating a full-cost price rather than go without a product. For the three-quarters of the enterprises in the HIID team's sample who reported their utilization of capacity to be supply-constrained, this should mean increased utilization and employment.

One is tempted to estimate the attainable increase in utilization of existing capacity and project a corresponding percentage increase in employment, but any such projection would be subject to an enormous margin of error. To begin with, the majority of enterprises in the sample claimed that they were retaining substantial numbers of workers redundant to their current level of production, on either of two grounds: firstly, because of GSDR labor legislation that makes it difficult to release labor for other than flagrant offenses; or alternatively, because of the expense involved in recruiting and training manpower to bring it up to the level of productivity of those released. (A third ground, namely political pressure from high levels of government against dismissal of redundant labor, doubtless applied to at least some of the public enterprises in the sample, but this was not cited in interviews.)

Notwithstanding these obstacles to reduction of a work force, certain private enterprises in the sample were currently employing a small fraction of the labor they had used during a period of peak production within the past three years. It would thus appear that, given an adequate economic incentive,

enterprises in Somalia, particularly private ones, can discharge labor. One is therefore drawn to the hypothesis that the reported retention of redundant workers resulted in a significant number of cases from a rational benefit-cost calculus whereby the advantages of retaining the workers were perceived by management as outweighing their continuing employment costs.

This in turn necessitates a look at levels of remuneration in industry. In June 1984 the Juba Sugar Project advertised as follows for staff engineers (Industrial Management Review, June 1984):

JSP NEEDS ENGINEERS

Good prospects in a successful enterprise

GRADUATE ENGINEERS: to become Engineering Superintendents at the Juba Sugar Project, the biggest and most successful project in Somalia. Training will be given by qualified expatriate engineers to high standards. Salary will be So. Sh. 3288/- gross per month.

Free single status accommodation, including water and electricity, during training. Use of subsidised management shop. Weekly rations of sugar, rice, flour, oil and pasta at very cheap rates. Free medical attention.

Promotion according to ability during training. Annual leave allowance for travelling at half of one month's salary.

EXPERIENCED ENGINEERS: to become Engineering Superintendents, or Manager, after a short period of assessment and training in JSP procedures. Promotion based on practical ability. Salary will be So Sh 3852/- gross per month.

Free accommodation including water and electricity. Use of subsidised management shop. Weekly rations of sugar, rice, oil, flour and pasta at very cheap rates. Free medical attention.

Promotion prospects are excellent for good practical engineers.

Contact: JSP, P.O.Box 1774, Mogadishu. Telephone 21078. Telex 702 or : Personnel and Training Department, Mareerey.

28 IMR June 1984

The salary levels cited in the announcement imply monthly pay, not including fringe benefits, of \$187/219 at the then official exchange rate of 17.6 sh./\$, and \$55/64 at the then approximate free market rate of 60 sh./\$. Intervening inflation has induced some pay increases, but sporadic soundings among the enterprises in the sample suggested that these had rarely exceeded 15 per cent of the levels prevailing in mid-1984.

As of mid-1985 monthly factory wages in the HIID team's sample of enterprises were concentrated in the range 1,500-2,500 sh., not including fringe benefits—which normally comprise a transport allowance, modest medical care and free milk on the job. A few employers claimed they paid close to 4,000 sh. including fringe benefits for skilled factory labor with experience. At the low end of the scale, there was mention of a 600 sh. minimum for unskilled youths. The 1,500-2,500 sh. range converts to \$17.65-29.40 at the 85-shilling free market exchange rate as of early 1985.

Respondents were prodded as to whether these wage levels were not uneconomically low given current prices of essential wage goods in Somalia. While there was a universal assumption that wages would continue to rise, managers did not perceive a build-up of pressure that would come anywhere near to helping workers recover the ground they had lost in the rapid inflation of 1984 and early 1985 (115 per cent from December 1983 through April 1985—cf. Table 2 in Chapter 2). Instead, the expectation seemed to be that annual increases on the order of 15-20 per cent would prevail in the immediate future.

Thus, as domestic industry selling prices that used to relate to c.i.f. values of comparable imports converted at official exchange rates approach and eventually exceed values converted at the free market rate, the ratio of labor costs to sales is declining. Looking at the 25 enterprises in Table 8 for which aggregate data are available for either 1983 or 1984, reported sales at domestic prices totalled about 810 million sh. and labor costs 74.5 million sh., giving labor a share of 9.2 per cent in gross revenues. This proportion should decline in 1985, even without the boost to capacity utilization to be expected from the freeing of the foreign exchange market. In these conditions retention of, say, 30 per cent redundant manufacturing labor is unlikely to absorb more than two per cent of sales revenue (taking into account the fact that labor costs include also salaries and benefits of more highly paid personnel on the management and accounting side).

Taking an international comparative look at labor costs in Somali manufacturing, a \$29 upper limit on the average 1985 monthly wage in Somalia's manufacturing sector compares with a \$126 equivalent recorded two years earlier in neighboring Kenya.

annum for the private sector and 978.8 pounds for public sector manufacturing. A simple average of the two is equivalent to Ksh.1,676 per month; the average exchange rate during 1983 was Ksh.13.3/\$, yielding an equivalent of \$126.* While it is not possible to say that a doubling of capacity utilization in Somali manufacturing, which should be easily attainable by, say, mid-1986, would lead to a doubling or even 50 per cent increase in the labor force in manufacturing, one can be reasonably confident that, at current wage rates, any enterprise finding itself released from the supply constraints that have plagued the sector in recent years and perceiving unsatisfied domestic demand, will go out and engage whatever labor it needs to increase production and satisfy that demand. The only cause for hesitation would be a concern that recent policy departures in the direction of liberalization might be subject to abrupt reversal, thereby reintroducing the former bottlenecks and leaving enterprises once again with redundant labor and political obstacles to reducing it.

While the foregoing prognosis applies to a large majority of the enterprises in the HIID team's sample, the quantitative analysis of Chapters 5 and 6 suggests that some are too inefficient to benefit from liberalization without protective measures sufficient to offset negative gross value added at world prices, i.e. even with all their capital assets treated as a sunk cost. Realignment of the exchange rate is of no help to such producers—indeed, the more shillings received by efficient producers per dollar earned or saved, the greater the deficit corresponding to a given level of negative value added in dollar equivalents.

Even so, there are many combinations of incentives—including, at the limit, outright subsidies from the national budget—that will provide such enterprises with sufficient shillings to benefit from relaxation of supply constraints, expand their production and hire additional workers in the process. But the government should think seriously about the opportunity cost of furnishing such assistance to producers with little chance of becoming efficient in the foreseeable future. The opportunity cost of providing assistance which impacts directly on the budget, whether via subsidies or

foregone revenue through duty exemptions for imported inputs, is obvious. Less obvious, but no less important from the viewpoint of Somalia's prospects for economic growth, is the burden which indirect measures such as high protective tariffs or import prohibitions place on the cost structure of efficient producers. This applies particularly to goods serving as inputs to such producers, but one must also take into account the loss of competitiveness suffered by every producer as a result of inflation induced by high prices of inputs and consumer goods anywhere in the economy.

Employment implications of shifting the emphasis from import substitution to export-led industrialization.

The sample of enterprises studied by the HIID team is representative of Somali industry as a whole in its almost exclusive focus on import substitution. A handful of enterprises said they had sold sporadically in the past to Ethiopia, Djibouti, South Yemen, and Tanzania, but only one reported any exports in either 1983 or 1984. On the other hand three or four of the managers interviewed volunteered information about cost analyses they had undertaken in response to the 1985 exchange rate reform and other liberalization measures, the outcome of which was that their enterprises were now sufficiently competitive on the world market to make exporting a lucrative proposition.

The owner of a small factory not covered in Table 8 that has always produced exclusively for export indicated not only that the reforms had reversed a prior decision to cease manufacturing in 1985, but also that he was now planning to manufacture locally the finished consumer product for which he had previously supplied only a component to foreign producers. A private shoe and leather manufacturer reported a firm export order for processed hides (wet blues). The same source had aroused interest in neighboring countries and Italy upon taking around samples of the firm's footwear products.

Notwithstanding the increase in manufacturing employment that is likely to be observed over the next year, industries whose sole focus is to replace imports in Somalia's narrow, low-income market cannot hope to make a significant dent in the un- and underemployment currently afflicting the nation's labor force. Only as Somalia's industries acquire a level of efficiency and outward orientation whereby they can take advantage of low

labor costs to undersell European and Asian producers in neighboring countries, the Middle East and eventually Europe, will they face a large enough market to justify additional investment and hiring on an appreciable scale. Steps that government can take to further this process will be considered in the following chapter.

CHAPTER 8 - RECOMMENDATIONS

Recommendations arising out of the present study may be classified under three headings:

- A. Application of economic efficiency criteria in designing incentives for industrial development;
 - B. Implementation of appropriate incentives; and
 - C. Directions of further study.
- A. Application of economic efficiency criteria.
1. The principal recommendation under this heading is that the GSDR adopt the philosophy outlined in the present report for designing incentives for industrial development. In essence, this means measuring an enterprise's contribution to social product by its value added at world prices, and designing incentives to encourage expansion of those enterprises that generate value added at low unit cost in domestic resources, along with disincentives to discourage enterprises that generate negative value added, or positive value added at high domestic resource cost.*
 2. The specific methodology proposed is to define an effective rate of protection (ERP) equal to the ratio of value added at domestic prices

*No implication is intended here that the present report has broken new ground in promulgating this approach. The criteria in question and the associated analytical methodology have gained wide acceptance among development economists over the past 15-20 years, and their empirical application has been vigorously promoted by the World Bank in many member countries. A detailed presentation of the doctrine, illustrated with case studies of six countries, may be found in Bela Balassa and Associates, Development Strategies in Semi-industrial Economies, A World Bank Research Publication (Johns Hopkins, Baltimore, 1982).

to value added at world prices, less 1.0, and an effective exchange rate (EER) equal to $1+ERP$ times the exchange rate that will equate demand and supply in the foreign exchange market in the medium term. The associated principle of economic policy is that combinations of incentives and disincentives facing different industrial enterprises should be designed to yield roughly equivalent ERP's or EER's, ERP's should be well below 50 per cent, and EER's should provide a correspondingly modest premium above the equilibrium exchange rate.

3. Systematic adoption of this principle will promote the expansion of some but not all industries. In particular, some high-cost or negative value-added enterprises that have suspended production while awaiting extraordinary incentives will not be encouraged to reopen; a few that are currently in sporadic production will not be encouraged to remain in operation; and others will be able to cover variable costs but will fail to recoup at least part of their invested capital.

4. A final component of this set of recommendations is that government should not only adopt the foregoing principles in designing its incentives for industrial growth, but should carefully explain to the business community just what it is doing and why. To a large degree the success of the policy depends on industrial entrepreneurs gaining confidence that government appreciates the importance of safeguarding the competitive position of efficient producers, and will take whatever steps are necessary to do so. The most important such measure is an effective commitment to allowing the real effective exchange rate to assume and maintain appropriate levels. The opposite side of the coin is for government to convince the business community that it understands the long-run social cost of encouraging inefficient industry, thereby discouraging businessmen from idle periods spent in anticipation of favors to bail out uneconomic propositions.

B. Implementation of appropriate incentives

1. Redesign of the import tax system. The present study has not aspired to recommend specific adjustments of import taxes on particular commodities. Such a step would be presumptuous for outsiders with a month's experience in Somalia, spent without the benefit of collaboration with GSDR counterparts. However the authors feel that the report

demonstrates the need for tariff reform in the interest of promoting efficient industry, and recommend the formation of an inter-agency task force, chaired by an officer of the Ministry of Finance, to tackle the specifics of rewriting the customs tariff. It is hoped that this report may assist generally in focussing the investigations of the task force in constructive directions, and by suggesting guidelines for the reform.

The general import of the analysis hitherto is that the current dispersion of import duties is excessive. More specifically, the gap between duties on certain finished goods on the high side and those on corresponding inputs (taking into account prevailing exemptions) on the low side has helped induce the establishment of industries with very high domestic resource costs and even negative value added at world prices. Tariffs on finished products and inputs, the latter net of exemptions, should be close enough together that the effective exchange rate (EER) enjoyed by a manufacturer is not as much as 50 per cent above the free market rate.

This is not to argue that basic wage goods that happen to be imported should be taxed at the same rates as imported luxuries. It does, however, mean that any component of an import tariff attributable to the luxury character of the good in question should be matched by an equivalent excise tax on domestic production of comparable items. It will ordinarily be simpler in such cases to apply an equivalent excise tax to both the import and its local substitutes, leaving the import tariff at a level that provides adequate but not excessive protection for domestic producers. An industrial structure weighted towards high-cost substitutes for luxury imports, production being induced by high tariffs that lack corresponding local excises, is not a healthy one, and fiscal pressures are exacerbated by the resulting sacrifice of tax revenue.

2. Systematization of concessions. It is recommended that concessions such as tax holidays and duty exemptions on imported inputs should be designed to rectify imbalances in the structure of industrial incentives that would otherwise leave an enterprise with a lower ERP/EER than the mean level considered appropriate for the desired rate of industrial growth. Concessions accorded without due regard for these parameters frequently turn out to be inducing the establishment of highly

inefficient, even negative value added enterprises. Entities requesting concessions should be required to substantiate their applications with data relevant to ERP/EER computations.

Recording of concessions should follow the principle of transparency—that is, duty exemptions and tax holidays outstanding at any given time should be summarized in a document accessible to any legitimate enquirer.

3. Export promotion. Government should campaign vigorously against the defeatist attitude vis-a-vis export possibilities which characterizes most Somali industrialists. Since the same view is held by most government officials, government's first task is to convince itself. To this end the organization of at least one tour is recommended to enable policy-makers to visit export industries in such countries as India, Malaysia, and South Korea, and to examine the measures taken by the governments in question to propel their entrepreneurs into international markets.

Among other things the delegation will presumably find that much can be accomplished by a sustained government effort impelled at the highest political levels. A necessary condition, as indicated in section A above, is that the exchange rate remain attractive. But more will be required to launch some industries into export markets. A combination of political pressure and pecuniary rewards for achieving realistic targets has been tried successfully in some countries. Somewhat paradoxically, it is often when industries meet unexpected local competition after being assured of a monopoly position in import-substituting that they start looking seriously into export markets. Given reasonable efficiency and an appropriate exchange rate, even at an f.o.b. price below the domestic selling price producers find that they can more than cover variable costs.

4. Other incentive measures. Under this subheading it will suffice to refer briefly to certain major disincentives identified in Chapter 2, actions to remove which could be viewed as positive incentives to industry. Mention was made of the absence of traditional banking facilities, e.g. a market where one can buy any amount of foreign exchange at the free market rate. Efforts are already underway to improve commercial banking in Somalia by opening the door to foreign competition.

Another area riddled with disincentives is that of public enterprise. Some enterprises should be spun off to the private sector as rapidly as possible, some should be stripped of their monopoly status and exposed to private competition, others need at the very least to have their management compensation structures overhauled for the sake of creating incentives for efficient operation. In general a case can be made for saying that government should refocus its efforts towards the creation and maintenance of a physical—e.g. electric power, transport—and service—e.g. banking—infra-structure that will nurture industry, and compress to a minimum its direct involvement in manufacturing.

C. Directions of further study

1. Direct follow-up to present study. Given the quality of the data that could be obtained in the field work for this report, the authors make no claim to the degree of accuracy necessary to fix new levels of protective tariffs and other incentives for specific industries. Moreover, levels of effective protection are undergoing rapid change as a result of recent policy reforms. If and when the authorities decide to undertake a tariff reform following the principles recommended here, the inter-agency task force mentioned under section B above should take a fresh look at prevailing levels of effective protection under the new foreign exchange regime and other recent measures. The data collected by the HIID team will be available to place the task force that much further along in pursuing its investigations. The task force will presumably also want to examine the situation of a number of industries not covered in the team's sample.

2. Potential role of small-scale enterprises in export-led industrialization. The small-scale enterprise sector is a focus of attention in development studies because its relatively economical use of capital and management resources gives it a comparative advantage in certain lines of production and enables it to absorb more labor per unit of investment than the medium- and large-scale sectors. At the same time, apart from the handicrafts field with its limited, if not yet fully exploited, potential for expansion, small-scale manufacturers face insuperable obstacles in exporting their products directly. Instead,

their participation in export-led industrialization takes the form of producing goods for a growing urban consumer market, along with inputs for the larger entities involved in direct exporting.

As an aid in formulating policies to enhance the role of small-scale industry the GSDR should consider a research effort to take inventory of the sector's present role in supplying both consumer goods and industrial inputs, and determine what incentives and disincentives operate on it from the side of government. The study should contain an international comparative dimension to show Somali policy-makers what has been achieved in this area in other developing countries.

APPENDIX 1
SAMPLE QUESTIONNAIRE

QUANTITATIVE ANALYSIS OF INCENTIVES AND DISINCENTIVES FOR
INDUSTRIAL DEVELOPMENT IN SOMALIA*

QUESTIONNAIRE FOR INDUSTRIAL ENTERPRISES

A. Details of the Enterprise

1. Name, address and telephone No.
2. Name(s) of person(s) interviewed/completing questionnaire
3. Main activities of enterprise
4. Recent performance of the enterprise: (figures are preferred, but qualitative assessment of recent trends will be helpful if data are not available)

	Year _____	Year _____
Total sales (So.sh.)		
Market share		
Capacity		
% of capacity utilized		
Profitability as % of investment		

Comment as appropriate.

B. Qualitative Assessment of Impact of Incentives and Disincentives

<u>Incentive/Disincentive</u>	<u>Recent Past (to end '84)</u>			<u>Present Time (1985)</u>		
	<u>Non-exist-</u>	<u>Exist but insigni-</u>	<u>Important</u>	<u>Non-exist-</u>	<u>Exist but in-</u>	<u>Important</u>
	<u>ent</u>	<u>ficant</u>	<u>tant</u>	<u>ent</u>	<u>signif. ant</u>	<u>ant</u>
<u>Preferential exch. rate for importation of:</u> - competing products - firm's inputs						
<u>For. exch. controls and/or import quotas on:</u> - competing products - firm's inputs						
<u>Import duties and related charges on:</u> - competing products - firm's inputs						
<u>Subsidies on:</u> - firm's products - firm's inputs						
<u>Reduction of import duties etc. on inputs used in products sold:</u> - for export only - domestic market also						
<u>Price controls on:</u> - firm's products - firm's inputs						
<u>Investment code benefits</u> - tax holidays - duty rebates - accelerated depreciation for tax purps.						
<u>Labour controls (specify:)</u> -						
<u>Credit</u> - preferential access - preferent. int. rates						
<u>Other (specify:)</u>						

*Incentives are defined as measures of government policy having the effect of increasing the profitability of a productive activity, while disincentives are measures that serve to decrease profitability.

B2. Comment on following aspects of incentive/disincentive package:

- (i) Which incentives are most helpful?
- (ii) Which disincentives constitute most serious obstacles to expanding production?
- (iii) How clear and consistent is government policy in providing incentives for industrial production?
- (iv) Very roughly, what is the percentage increase in cost of doing business arising out of administrative burden (staff time and delays, as opposed to specific fees) of complying with government regulations?

C. Protection Against Competing Imports

1. Identify primary competition for each major product:

	<u>Prod. #1</u>	<u>Prod. #2</u>	<u>Prod. #3</u>	<u>Prod. #4</u>	<u>Prod. #5</u>
Domestic production					
Imports purchased at:					
-Free market exch. rate					
-Official (cheaper) rates					

2. List principal vehicles of protection against competing imports which enterprise enjoys for each of its products. Indicate whether actual protection afforded equals or is less than intended by stated government policy. Has situation changed significantly in recent past?

3. Were importers of competing products allowed to bring them in at preferential exchange rates in 1983 or 1984? If so, what share of the domestic market was satisfied in this way? (Give details by major product).

4. Percentage tariff rates can be misleading because they assume prices or exchange rates different from those paid. Assume an importer were to bring in 1 million So.sh worth of a competing product, purchased at the market exchange rate, say 85-95 sh/\$. Roughly, what proportion of the 1 million sh. cost would he now pay in customs duties and related charges? Is this proportion now very different from 1983 or 1984?

5. What market share is held by smuggled competing imports, if any? Where do such smuggled imports originate? To what level does smuggling reduce prices that firm can charge, compared with prices that would prevail if full customs duties were collected? (Details by product).

6. Compare firm's selling prices with c.i.f. prices (excluding customs duty) of imports of comparable quality, purchased at market exchange rate. Indicate percentage difference (e.g. excess of firm's prices over c.i.f. values).

7. Has Eastern/Southern Africa Preferential Trade Agreement (PTA) already had an impact on firm's sales/competing imports? Is this likely to happen in the near future?

D. Incentives to Export

1. Is enterprise currently exporting any product, has it done so in recent past, or does it expect to do so in foreseeable future? If so, how did (do, will) product(s) exported differ from those sold on domestic market?

2. In order to export, at what prices, f.o.b., would enterprise have to be able to deliver product(s) at port (Mogadishu) or Kenya/Djibouti border, assuming no export taxes? How do these prices compare with firm's current ex-factory selling prices?

3. Do any of the following constitute a significant disincentive to exporting: (i) licensing requirement, (ii) export tax, (iii) requirement to use government or cooperative insurance clearing or transport agency? What is resulting percentage increase in f.o.b. cost?

4. Does enterprise receive any assistance from government to promote exports? If so, in what form? Can a value be put on such aid?

5. Is enterprise hindered in exporting to any market by special restriction imposed by foreign governments? (e.g. Saudi ban on livestock imports). Conversely, has FTA already helped to promote enterprise's exports to any African market?

E. Investment Code Benefits

1. Has enterprise benefitted from any law or regulation to encourage investment by conveying privileges such as the following (in case of each positive benefit, estimate annual value):

(i) Tax concessions/exemptions with respect to:

- Corporate income tax
- Sales tax
- Customs duties on inputs
- " " on plant & equipment

(ii) Tax credit for investment allowances/accelerated depreciation

(iii) Preferential treatment with respect to:

- Industrial licensing
- Allocation of foreign exchange at official rates

F. Price Controls

1. Are prices of enterprise's products subject to government control? Describe procedures and criteria applied—i.e. how does one apply for increase, what justification is accepted for an increase? How quickly does control authority respond, and does it give reasons for its decision(s)?

2. Does government try to enforce price control on enterprise's products at retail level? If so, how and to what effect?

3. What (if any) has been impact of price control on enterprise's sales, cashflow, investment plans?

G. Sales (volume: specify unit—& value: '000 Somali shillings)

Product	Year.....			Year.....		
	Domestic	Export	Total	Domestic	Export	Total
1.	Vol.					
	Val.					
2.	Vol.					
	Val.					
3.	Vol.					
	Val.					
4.	Vol.					
	Val.					
5.	Vol.					
	Val.					
TOTAL VALUES						

H. Costs of Production ('000 Somali shillings)

1. Computation of Depreciation

a. Give current annual book depreciation, allocated among products, if possible.

b. Economic life of assets assumed in computing depreciation:

<u>Asset Category</u>	<u>Years of economic life</u>
1.	
2.	
3.	120
4.	

c. Allocate cost of investments to years in which made:

Yr.... Yr.... Yr.... Yr.... Yr.... Yr....

Historical cost
of investments:

d. What is current (1984 or 1985) replacement cost of plant & equipment, i.e. value at current prices of assets of comparable wear & tear? If annual depreciation were calculated on this value, how much more would it be than current annual book depreciation?

2. Interest. Give current annual interest charges, allocated among products if possible.

Loan balances currently (1984 or 1985) outstanding, broken down by years in which respective loans were originally contracted:

Yr.... Yr.... Yr.... Yr.... Yr....

Original loan amount: _____

Bal. outst. '84 or '85 _____

3. Inputs. Please break down among products. Proprietary information may be withheld by using generic descriptions.

Item	Quantity	Cost	
<u>(i) Imported Materials</u>			Import duties, stat. & stamp tax (included in cost)
a. Fuel			
b.			
c.			
d.			
e.			
f.			
g.			
h.			
i.			
j.			
k.			

<u>(ii) Domestic Materials</u>		
a.		
b.		
c.		
d.		
e.		
f.		
g.		

<u>(iii) Services Purchased from Others</u>		
a. Electric power		
b. Transport	xxxxxxxxxxxx	
c.		
d.		
e.		

4. Taxes. (not including import duties, etc., included above)

a. Sales tax

b. Municipal levy

c. Profits tax

d. Other

5. Other Costs. (broken down by product, if possible)

a. Wages, salaries & staff benefits

b. Rent (if any)

c. Other

6. Total Costs. (by product)

I. Impact of Incentives/Disincentives on use of Inputs

1. Which inputs does the enterprise normally import directly, and which imported inputs does it normally purchase from domestic suppliers?
2. At what average exchange rates did the enterprise purchase imported inputs in 1983 & 1984? At what rates did it purchase the inputs being used in production runs now underway or scheduled for the near future? At what rate(s) does it anticipate placing its next orders?
3. Has the importation of any inputs normally used by the enterprise been prohibited in the recent past? If so, how were the inputs obtained?
4. What effective duty rates did the enterprise pay for inputs imported in 1983-1984, and is it paying now? How do these effective rates compare with the nominal rates listed in the Customs tariff? (Effective rates = total charges divided by c.i.f. cost in shillings).
5. Is there a monopoly element in the trading of imported inputs that forces the enterprise to pay more than the sum of c.i.f. price plus actual Customs collections? Which inputs, and how much more must be paid?
6. If the enterprise uses domestically produced inputs as substitutes for imports, what is the difference between the domestic supply price of those inputs and the c.i.f. price (not including customs duties, etc.) of imported alternatives?
7. What percentage of the cost of building or extending the enterprise's plant represents imported materials and services?
8. Has the enterprise paid customs duties on past imports of capital equipment, and is it facing a requirement to do so in future? If so, what are the effective duty rates?