Chapter 11
Comparative Study of Food, Beverage, Footwear and Leather, and Textile Industries

11.1 Introduction

The purpose of this chapter is to compare the operations, investments, financing and governance of food processing, beverage, footwear and leather and textile industries in Eritrea. Moreover, this chapter highlights the influence of privatisation on the performance of the industries studied.

In section 11.2, we present the financial performance and in section 11.3, we describe the management perceptions of the value creating activities. In section 11.4, we discuss and analyse the operations, investment and financing, governance and problems. Finally in section 11.5, we summarise and conclude the chapter.

11.2 Financial Performance

The results of operating, investment and financing performances of the food processing industry (FPI), beverage industry (BI), footwear and leather industry (FLI) and textile industry (TI) in Eritrea are summarised in table A11-1. Financial statements help in tracking the results of business operations, investments and financing and value creation. In this section, we will focus on key financial relationships and indicators that allow to assess past performance and also to project future results. Financial ratios serve best to point out changes in financial condition and they help to illustrate the trends and patterns of changes of the business under study.

Operations

The operating profit margins of the food (FPI), beverage (BI), footwear and leather (FLI) and textile (TI) industries in Eritrea for the period of 1991/92-1998 are shown on figure 11-1.

Figure 11-1 The Trend of Profit Margins of the Industries

---

1. In the previous chapters, we have analysed the financial data up to 1997 only because the 1998 data were not available, however, since we have received the 1998 data at this point we have included it in computing the financial performances.
Figure 11-1 shows differences in profit margins of the industries studied. The beverage industry has been highly profitable, while the textile industry has been unprofitable. The food and the footwear and leather industries were also profitable. Prior to 1995, the footwear and leather industry was more profitable than the food industry, while afterwards, the food industry became more profitable than the footwear and leather industry due to the increase in profit margin of Barka Canners, related to the start of the National Military Service Program in Eritrea. In 1995, (except for the beverage industry) the operating profit margins increased because the government gave autonomy to enterprise managers with respect to operations like determining sales prices, credit periods, purchases and other operation level decisions, which previously were approved by the Ministry of Trade and Industry. The profit margin of the beverage industry did not increase in 1995 because the managers of Asmara Brewery (a major beverage producing company) invested in modernising machinery and this increased the depreciation costs, which in turn increased the cost of manufacturing. However, in 1997, the profit margins of all the industries studied decreased due to the privatisation announcement and the diminishing exports to Ethiopia.

Sales Prior to 1991, the companies were not working under normal situation due to war of liberation. In 1991/92, the first year of operation under normal condition, the sales of the companies increased. In 1995, the sales of all the industries increased due to both increases in prices and volume of sales. The highest increase was found in the beverage industry (79%) and the lowest increase was of the textile industry (22%). The sales of food processing and footwear and leather industries also increased (68% and 45% respectively). However, in 1997, the sales of beverage and textile industries decreased (12% and 20% respectively). In that year, the food and footwear and leather industries increased (1% and 4% respectively).

Cost structure The material as a percent of sales helps in comparing the material costs used. The liberalisation of trade and prices in Eritrea has influenced the prices of material inputs in the manufacturing industries. Figure 11-2 shows the material costs as a percent of sales for the four industries.

Figure 11-2 The Trend of Materials Placed into Production as Percent of Sales
Figure 11-2 shows differences in material costs in the industries studied. Material costs as a percent of sales of the food processing industry were the highest throughout the study period, while the material costs as a percent of sales of the beverage industry were the lowest. The beverage industry is a least cost producer because one of the main materials, water, is locally available and is cheap. Moreover, for imported materials the managers are contracting suppliers for a whole year supply when the material prices are cheap. The material costs as a percent of sales of the footwear and leather industry was 60% in 1991/92 but decreased to 56% in 1995 because the government used to set the prices of the finished hides low and because it also restricted the export of raw hides. In addition, the managers in the Dahlack Shoe Factory imported raw materials (plastic granules) from Saudi Arabia (a neighbouring country) instead of from far away countries such as the Czech Republic and Italy, which helped them to save on transportation cost of the materials. However, in 1997, the material costs as a percent of sales increased to 70% because the government stopped interfering in the setting of prices of tanneries. The managers of the tanneries slightly increased the prices of finished leather, which in turn increased the costs of the footwear industry.

The material costs as percent of sales in the textile industry were 39% in 1991/92, but increased to 62% in both 1995 and 1997. The increase in the price of cotton, from about 3 Nakfa per kg in 1991/92 to about 13 Nakfa per kg in 1997, caused the increase in the manufacturing costs of the textile companies. Unlike the footwear and leather industry, the government has not been restricting the exports of cotton and the Aligheder Cotton Plantation managers are obliging the textile companies to buy cotton at world market prices.

Value added The value added per employee measures the productivity of employees in the industries. The beverage industry has added values per employee because of the increase in sales of beverages and due to the decrease in number of employees. Though the beverage companies are the most profitable companies in Eritrea, their managers laid-off the highest number of workers in terms of employment in 1991/92. On the contrary, the textile industry operations resulted in a decrease in value added of 1.1 thousand and 0.9 thousand Nakfa per employee in 1995 and in 1997 respectively. During the interviews, the managers explained that they did not conduct major labour restructuring because workers, in particular technical staff members, are leaving the textile companies into other lucrative jobs in the private sector. The food processing industry added value of 17 thousand and 19 thousand Nakfa per employee in 1995 and 1997 respectively. The value added per employee in the food processing industry was low in comparison to the sales of the industry because of an increase in the material costs and government intervention in sales prices in Red Sea Flourmills and Alpha Food Products. Moreover, few workers were laid-off. The value added per employee in the footwear and leather industry increased from 2 thousand Nakfa per employee in 1991/92 to 21 thousand Nakfa in 1995 due to the increase in sales, but it decreased to 15 thousand Nakfa per employee in 1997 due to the privatisation process and the trade barriers of the Ethiopian Government.
Investment and Financing

Return on assets The return on assets (ROA) measures the profitability of an industry. It is computed by dividing operating profits into the total assets employed in generating the operating profits. Figure 11-3 shows the return on assets of the industries studied over time.

Figure 11-3 The Trend of the Return on Total Assets of the Industries

Similar to the results of operating profit margins, figure 11-3 reveals that the beverage industry had the highest return on total assets while the textile industry had the lowest return on total assets during the study period. The beverage industry return on assets increased from 26% in 1991/92 to 41% in 1995, but declined to 23% in 1997. The beverage industry return on total assets has been declining since 1996 because there was an increase in total assets due to the investment of Asmara Brewery which increased the total assets and reduced operating profits due to the increase in depreciation costs. The return on assets of the food industry increased from 2% in 1991/92 to 14% and 18% in 1995 and 1997 respectively due to the increase in demand for canned foods for the military in Barka Canneries and the increase in demand for wheat flour in the Red Sea Flourmills. The return on assets of the footwear and leather industry also increased from 3% in 1991/92 to 24% in 1995 due to the improvement of the profitability of the Dahlack Shoe Factory and the tanneries in Eritrea. However, the ratio decreased to 15% in 1997 due to the decrease in sales of the footwear factories. The return on assets of the textile industry decreased from 0.7% in 1991/92 to –12% and –11% in 1995 and 1997 respectively due to the frequent operating losses.

Asset structure. The asset structure shows the composition of the short-term assets (cash receivables, inventory and other prepaids) and fixed assets (land, building, machinery and equipment and long-term investments). The short-term assets as a percent of total assets of all the industries were more than 90% in 1991/92. This evidences that the industries are heavily using short-term assets. The level of fixed assets of the industries was thus less than 10% despite the fact that the beverage, tanneries and textile (garment making) industries are considered as capital intensive. This indicates that the machinery and equipment is old and requires replacement. However, the beverage industry acquired new machinery and thus, the short-term assets as a percent of total assets of the beverage industry decreased to 68% and 58% in 1995 and 1997 respectively.
New fixed assets. The new fixed assets as a percent of sales indicates the amount of sales reinvested in the business in the form of fixed assets. The managers in the beverage industry have made a large investment of 32% of the sales in 1995 and another 15% in 1997. The other industries did not make major investments in fixed assets. The new fixed assets as a percent of sales were 3% or less throughout 1991/92, 1995 and 1997. The managers of the enterprises during the interviews elaborated that they did not replace the old machinery due to a lack of finance and due to a restriction imposed by the board of NASPPE.

Financial structure The debt to total assets ratio indicates the percent of the total assets financed by debt. Figure 11-4 presents the total debt to total assets ratio of the industries studied.

Figure 11-4 The Trend of Debt to Total Assets Ratio of the Industries

Figure 11-4 shows the development of the financial structure of the industries studied. The textile industry is highly indebted, while the other industries are relatively of low debt. The textile industry had a 202% debt (abnormal) in 1991/92 due to the accumulated operating losses that resulted in a large negative (deficit) balance of the retained earnings. This evidences that the textile industry assets are financed totally by debt and moreover, the managers are using debt to cover operating expenses of the companies because the retained earnings balances of the companies show negative balances (deficit). The beverage and footwear and leather industries also had a 75% and 80% debt proportions respectively in 1991/92, while the food processing industry had 47%. In 1994, the government wrote-off all outstanding obligations to the government that were due on May 24, 1991 (the date of the liberation of Eritrea). This decree has reduced the debt of all industries. After 1995, the debt to total assets ratio of the food, beverage and footwear and leather industries decreased further, while the debt of the textile industry increased. The textile industry has been borrowing money from banks and from other state-owned enterprises in order to finance operations and investments due to a lack of internally generated funds as a result of the operating losses. However, despite the availability of government guaranteed bank overdraft loans, the managers of food, beverage and footwear and leather industries did not borrow from banks. The managers during the interviews expressed that the interest rate is high and due to this, they prefer to use internally generated profits. The managers of the food, beverage and footwear and leather industries did not finance their operations or investments using long-term debts. Finally, the profitable industries have been paying high amount of taxes because the managers did not use debt as a tax shield.
Value Creation (loss)

Value is created when the return on total capital (ROTC) exceeds the estimated cost of capital in a business. The change in value created (lost) is computed by measuring the difference between the return on total capital and the estimated cost of capital of the business. Figure 11-5 shows the change in value created (lost) in the industries studied.

Figure 11-5 The Trend in Change in Value Created (Lost) of the Industries

Figure 11-5 shows that the food, beverage and footwear and leather industries increased the value created in 1995, while the textile industry reduced the value lost. However, in 1997 the value created in most industries declined. In 1997, the value created in the beverage industry declined sharply and the value lost in the textile industry also increased. The large amount of sales in the food processing industries did not generate high operating profits because of the interference of the government in setting product prices and profit margins of Red Sea Flourmills. The increase in operating profits of the beverage industry and the formation of a joint venture in Red Sea Bottlers increased the fixed asset investments of the beverage industry. In the footwear and leather industry there was some performance improvement in 1997 in comparison to that of 1996, because the performance of the tanneries improved. However, in 1997, the footwear and leather industry did not create value. The continued operating losses of the textile industry constrained the finances of the enterprises and limited the replacement of old assets. Due to this, the textile industry has been destroying value throughout 1991/92-1997.

The Influence of Enterprise Reforms and Privatisation Announcement

The analysis of the financial data revealed that the performance of food processing, beverage and footwear and leather industries increased in 1995 and decreased in 1997. The performance of the textile industry was poor but the managers minimised the losses in 1995 while the losses increased in 1997.

The managers interviewed indicated that starting 1995, the government introduced enterprise reform measures to restructure the companies. The government transformed the companies into autonomous corporations 100% of the shares owned by the state and established a separate agency (the NASPPE) to follow up the activities of these
state-owned enterprises. At the beginning of 1995, the Government also authorised enterprise management to handle operational matters such as determining sales price, purchasing from suppliers of their choice and planning and implementing production, which were previously required approval of the Ministry of Trade and Industry. This autonomy improved the decision-making power of enterprise managers.

In order to assess the influence of these enterprise reforms that were introduced in 1995, we have compared the performance of 1995 and 1996 with those of previous years’ performances of 1993 and 1994. The before and after comparison to assess reform outcomes is used in the study of privatisation [Megginson and Netter, 1999; Boubakri and Cosset, 1998] and these authors used variables such as profit margin, return on total assets and debt to total assets. Moreover, they analysed the data using one to three years of time to evaluate the influence of privatisation. Similarly, we are using sales, profit margin, value added per employee, return on total assets, debt total assets and value created (lost) to assess the influence of enterprise reform in Eritrea on the performance of the industries studied. We have compared the performance of before reforms (1993 and 1994) and after reforms (1995 and 1996) (see table A11-2 in the appendices). We have selected two years because starting the beginning of 1997 the privatisation announcement restricted the reforms. Table 11-1 shows comparison of performance changes following the enterprise reforms of 1995.

Table 11-1 Comparisons of Performance Changes Following Enterprise Reforms in 1995 [Sales, Value Added and Value Created are in 1,000 Nakfa]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Food Processing</th>
<th>Beverage Producing</th>
<th>Footwear and Leather</th>
<th>Textile Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>+81,695</td>
<td>+86,609</td>
<td>+28,730</td>
<td>+22,307</td>
</tr>
<tr>
<td>Profit margin</td>
<td>+4%</td>
<td>-3%</td>
<td>-3%</td>
<td>+12%</td>
</tr>
<tr>
<td>Value added per employee</td>
<td>+10</td>
<td>+112</td>
<td>+8</td>
<td>0</td>
</tr>
<tr>
<td>Investment and financing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on total assets</td>
<td>+9%</td>
<td>+5%</td>
<td>+4%</td>
<td>+4%</td>
</tr>
<tr>
<td>Debt to total assets</td>
<td>+5%</td>
<td>+11%</td>
<td>-16%</td>
<td>-28%</td>
</tr>
<tr>
<td>Value created (lost)</td>
<td>+9,146</td>
<td>+29,187</td>
<td>+1,562</td>
<td>+3,499</td>
</tr>
</tbody>
</table>

Source: computed from annual accounts received on request by the courtesy of the companies
Notes: + indicates increase in the average performance following reforms in 1995 and 1996 in comparison to that of 1993 and 1994.

Table 11-1 evidences that the average sales of after enterprise reform increased in all industries. The sales increases in the food processing and the beverage industries were higher than the sales increases of the footwear and leather and the textile industries. The analysis of the change in profit (loss) margin shows that the average profit margin of food industry increased by 4% while the operating loss margin of the textile industry also decreased by 12%. This evidences that the managers of textile industry minimised the loss that they have been incurring. However, the profit margin of the beverage and the footwear and leather industries decreased by 3%. In the beverage industry the new investment in machinery increased the depreciation costs and reduced the profit margin of the industry, however, the volume of sales increased.
The average return on total assets of 1995 and 1996 was higher than that of 1995 and 1996 in all industries. The return on total assets of textile industry had been negative, but after the enterprise reforms of 1995, the loss on total assets decreased by 4% in comparison to that of 1993 and 1994. The average debt to total assets of food processing and beverage industries increased, while those of footwear and leather and textile industries decreased. In the food processing and beverage industries the increase in production and sales increased the short-term debts such as creditors’ balances and deposits for bottles in the beverage industry. The footwear and leather and textile industries were highly indebted, in particular the textile industry and the Government at the end of 1994 cancelled all debts outstanding on May 24, 1991 (liberation of Eritrea). This decree helped the industries to write-off debts. However, as previously shown in this chapter, the textile industry debts are increasing again.

The value created (lost) shows whether value was created or lost after the enterprise reforms in comparison to the performance before the implementation of these restructuring measures. The value created (lost) improved after the enterprise reform in all industries. The value created in the beverage industry was the highest. The textile industry also minimised the value lost after the enterprise reform comparatively by 3.5 million Nakfa per year in 1995 and 1996. This evidences that enterprise restructuring enhances the value created (lost) in the industries.

In order to assess the influence of privatisation process on the performance of the industries studied, we compared the performance of the industries before (1995 and 1996) and after the privatisation announcement (1997 and 1998) (see table A11-3 in the appendices). Table 11-2 summarises the comparison of performance changes following privatisation announcement at the end of 1996.

Table 11-2 Comparisons of Performance Changes Following Privatisation Announcement at the End of 1996 [Sales, Value Added and Value Created are in 1,000 Nakfa]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Food Processing</th>
<th>Beverage Producing</th>
<th>Footwear and Leather</th>
<th>Textile Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>+44,360</td>
<td>-8,978</td>
<td>-10,342</td>
<td>-17,030</td>
</tr>
<tr>
<td>Profit margin</td>
<td>-5%</td>
<td>-13%</td>
<td>-5%</td>
<td>-5%</td>
</tr>
<tr>
<td>Value added per employee</td>
<td>-2</td>
<td>-14</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Investment and financing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on total assets</td>
<td>-1%</td>
<td>-20%</td>
<td>-8%</td>
<td>-1%</td>
</tr>
<tr>
<td>Debt to total assets</td>
<td>-15%</td>
<td>-25%</td>
<td>+8%</td>
<td>+14%</td>
</tr>
<tr>
<td>Value created (lost)</td>
<td>-3,835</td>
<td>-33,666</td>
<td>-5,315</td>
<td>-703</td>
</tr>
</tbody>
</table>

Source: computed from annual accounts received on request by the courtesy of the companies

Table 11-2 shows that except for the food processing industries, the sales of all industries decreased following privatisation announcement. In the food processing industry, there was increase in sales because the demand for the food products has increased and the two main companies Barka Canneries and Red Sea Flourmills are under the Ministry of Defence and are not going to be privatised in the near future.
The profit margin and the value added per employee of food processing, beverage and footwear and leather also decreased after privatisation announcement, while the textiles remained the same.

The return on total assets decreased in all companies after privatisation announcement. The debt to total assets ratio decreased in the food processing and beverage industries while it increased in the footwear and leather and textile industries. The managers of textile companies have been financing their operations and working capital investments using government guaranteed bank overdrafts. In the footwear and leather industry, only the managers of Dahlack Shoe Factory resorted to bank overdraft borrowing, the other managers believe that the bank interest rate is high and they are financing their operations and working capital investments using retained profits.

The value created in the food processing, beverage and footwear and leather industries decreased after privatisation announcement. The value created in the beverage industry decreased on average by 33.7 million Nakfa in 1997 and in 1998 in comparison to the average value created in 1995 and in 1996. The value lost in textile industry also increased on average by 0.7 million Nakfa in 1997 and in 1998 in comparison to the value lost in 1995 and in 1996. This evidences that the announcement of privatisation decreases the value created in the food processing, beverage and footwear and leather industries, while it also increased the value lost in the textile industry. The managers during the interviews explained that due to the privatisation process the Government is restricting the action of managers to create value.

In order to further explain and discern the cause of the decline in performance of the state-owned enterprises, we compared the performance of state-owned and privately owned manufacturing enterprises in Eritrea before and after the privatisation announcement. We used census data of performance indicators of the manufacturing enterprises employing 10 or more persons in Eritrea prepared by the Ministry of trade and Industry. We have used the operating performance indicators of number of establishments, number of employees, gross output (revenue from sales and from other services or income), gross inputs (includes cost of materials and supplies used in production, cost of fuels and electricity and cost of repairs and maintenance) and value added at factor costs (gross output-gross input-indirect taxes net) (see table A11-4 in the appendices).

Table A11-4 indicates that in general, the operating performance indicators show that the performance of the state-owned enterprises declined in 1997 in comparison to that of 1996, while in the same period the performance of the private companies improved. The number of state-owned enterprises remained the same, while that of private companies increased by 48 firms in 1997 in comparison to that of 1996. The number of employees in the state-owned enterprises also decreased by 970 persons in 1997 in comparison to that of 1996, while in the same period that of the privately owned companies increased by 2,537. The gross output of the state-owned enterprises decreased by 52 million Nakfa in 1997 from that of 1996, while in the same period that of privately owned firms increased by 179 million Nakfa. The gross input in state-owned enterprises decreased by 13 million Nakfa in 1997 in comparison to that of 1996, while in the same period that of privately owned enterprises increased by 109
million Nakfa. Finally, the value added at factor cost in state-owned enterprises decreased from 315 million Nakfa in 1996 to 270 million Nakfa in 1997, while in the same period the value added of the private companies increased from 37 million Nakfa to 103 million Nakfa.

The decrease in value added at factor cost in the state-owned enterprises in Eritrea in 1997 in comparison to that of 1996, while in the same time the private companies working in similar condition are adding value provides an additional evidence that the privatisation process is affecting the creation of value in the state-owned manufacturing enterprise in Eritrea. If the privatisation process takes a long time, it may further reduce the value created in state-owned enterprises.
11.3 Managers’ Perception of Restructuring Activities

The summary of the results of the managers’ perceptions of restructuring activities is presented on tables A11-5-A11-7. In this section, the relevance (whether an activity is essential for creating value) and the criticality (whether an activity is crucial) of these activities according to the managers perception are discussed as well as whether there are differences among industries are studied. In addition, the empowerment (competent influence to create value) of the management team on these activities is assessed.

The relevance and empowerment responses of the managers are clustered into three groups to reduce data and enhance interpretation of the results as discussed in chapter 5. Average scores of 2.5-3 show high relevance or high empowerment while average scores of 2-2.4 show some relevance or some empowerment. Average scores of less than 2 indicate less relevance or low empowerment. The criticality responses of the managers are ranked data and to preserve the rank, we have summed up the criticality scores. A high criticality score shows an activity is crucial in creating value in the future.

The managers’ perceptions on restructuring activities are compared using radar charts and bar charts. The charts give pertinent information on how managers perceive the relevance and criticality of the restructuring activities and the empowerment of the management team. However, in order to save space, we have presented some charts in the following sections in the body text while the other charts are included as appendices to this chapter.

Operations

Relevance The responses of the managers to the operational restructuring activities are discussed in clusters of high relevance (2.5 and above), of some relevance (2-2.4) and of less relevance (below 2). Figure 11-6 shows the relevance of the revenue restructuring activities.

Figure 11-6 The Relevance of Revenue Generating Activities
The managers of the footwear and leather and textile industries consider seeking new markets of high relevance in creating value, while the managers of the food and beverage industries feel it is of some relevance. The footwear and leather and textile industries are oriented towards export markets, mainly Ethiopia, while the food and beverage industries are mainly oriented towards the domestic markets. The managers of the footwear and leather industry feel that increasing export efforts is of high relevance, while the managers of textile industry consider this activity as of some relevance. The managers of beverage industry consider an increase in advertising as of high relevance, while the managers of the other industries feel it is of less relevance. During the interviews, the managers of the beverage companies elaborated that the government prohibits advertising of alcoholic products on radio and on television. However, the managers are trying to promote their products by using billboards and by giving out free samples and silverware. The managers of the footwear and leather industry consider a strengthening of the marketing department of high relevance, while the managers of the textile industry perceive the establishment of a sales office as of some relevance in creating value. The managers feel that the rest of the activities are less relevant in increasing sales.

Figure 11-7 The Relevance of Costs and other Operating Activities.

Figure 11-7 reveals that the managers of the food, beverage and footwear and leather industries consider improving production efficiency of high relevance, while the managers of textile industry believe it is of some relevance. The products of the food, beverage and leather industries are highly demanded and the managers are of the opinion that increasing production will help in increasing sales and in creating value. All managers consider being selective to suppliers as of some relevance. The analysis of the financial performance indicated that material costs are high in all the companies studied and the interviews also highlighted that some managers like managers of the Dahlack Shoe Factory have been reducing costs by communicating with suppliers. The managers of the beverage and the footwear and leather industries consider more effective use of resources of high relevance, while the managers of the food and the textile industries perceive this activity of some relevance. The managers of the food and the footwear and leather industries rated a change of quality also of high relevance. The managers from the beverage industry feel that increasing wages is of some relevance while the managers from the textile industry feel that a reduction of
employment is of some relevance. The respondents feel that the rest of the activities are less relevant.

**Criticality** Figure 11-8 shows the criticality of operating activities in the four industries.

**Figure 11-8 The Criticality of Operating Activities in Creating Value**

![Criticality Score Chart]

**Note:** The criticality scores of the industries are given in table A11-5. The maximum criticality score possible for the food processing and beverage industries is 36. However, since we have interviewed 13 managers and 11 managers in the FLI and TI respectively, the maximum criticality scores possible of these industries are 39 (FLI) and 33 (TI).

Figure 11-8 in general reveals that the managers indicated that seeking new markets is expected to be the most critical activity, followed by improving production efficiency and more effective use of productive resources and a change in product quality. Moreover, managers from the textile industry consider seeking new markets will be the most critical activity, while managers from the footwear and leather industry consider a change in product quality to be most critical. The managers from the food processing industry feel that a more effective use of productive resources and an improvement in production efficiency are the most critical activities. Managers from the beverage industry consider seeking new markets and improving production efficiency critical because the companies have invested in new machinery and this is expected to increase production. Due to this, the managers indicated that it is essential to look for export markets in order to absorb the increase in production.
Empowerment  The responses of the managers to the restructuring activities also revealed whether the management team is empowered to create value. Table A11-5 and figures A11-1 and A11-2 show the empowerment of managers on revenue generating and cost and other operating activities respectively. The managers of beverage industry consider that the management has high influence on seeking new markets, increasing advertising, being selective to suppliers, more effective use of resources and improving production efficiency. The managers of the textile industry perceive that the management team is less empowered on the most relevant activities for creating value. The managers of both the food and footwear and leather industries perceive the management team as having high empowerment on changing product quality. The managers of food and beverage industries feel that the management team is more empowered in comparison to how the managers of the footwear and textile industries perceive the empowerment of their management team.

Investment and Financing

The managers also indicated the relevance and criticality of investment and financing activities and the empowerment of the management team on these activities.

Relevance  In general the respondents consider new investment in equipment and upgrading technology of high relevance. In addition, the managers feel that improving communications with customers and suppliers, seeking foreign investors, implementing cash control techniques and controlling capital expenditures of some relevance in creating value.

Figure 11-9 The Relevance of the Investment and Financing Activities

Figure 11-9 shows that the investment restructuring activities are more relevant in comparison to the financial restructuring activities in the industries studied. Except for the managers of the footwear and leather industry, all other managers consider new
investment in equipment and machinery of high relevance. The footwear industry is labour intensive, while the leather industry is capital intensive. Except for the managers of the beverage industry, all other managers consider upgrading technology of high relevance in creating value. The beverage industry managers perceive upgrading technology as of some relevance because they have already invested in new machinery with advanced technology. The managers consider the working capital management activities less relevant in comparison to the long-term investment activities in fixed assets.

The managers of the footwear and leather and food industries consider improving communications with customers and suppliers of high relevance in creating value and the managers of textile industry feel that it is of some relevance. The managers of textile industry consider seeking foreign investors of high relevance due to a lack of finance for investments and they feel that foreign investors can alleviate the financial problem that the enterprises are encountering. The managers of the beverage and the footwear and leather industries consider seeking foreign investors as less relevant because the companies have less financial problems in comparison to the financial problems that the textile companies are encountering. The managers of the textile industry consider borrowing new loans from banks of some relevance, while the other managers feel that it is of less relevance. During the interviews, the managers elaborated that the interest rate of the Commercial Bank of Eritrea is high and unless they get low interest loans from the World Bank or other agencies they prefer to use internally generated funds.

Criticality

In general, the managers consider new investment in equipment and upgrading technology as critical from the investment restructuring activities and improving communications with suppliers and customers and seeking foreign investors as critical from the financial restructuring activities. Figure A11-3 shows the criticality of investment and financing activities.

Though all managers consider new investment in equipment and upgrading technology critical, the managers of the footwear and leather industries feel these activities are more critical in comparison to how critical the other managers consider them. The managers from the textile industry consider seeking foreign investors of high relevance due to a lack of finance for investments and they feel that foreign investors can alleviate the financial problem that the enterprises are encountering. The managers of the footwear and leather industry also indicated obtaining new loans from banks as more critical in comparison to how critical the other managers perceived this activity. During the interviews, the managers explained that obtaining loans at low interest rates from the World Bank or other agencies could help the companies to modernise equipment. However, they stated that they do not want to borrow from the Commercial Bank of Eritrea due to high interest costs. The managers of the footwear and leather industry also consider improving communications with customers and suppliers as more critical in comparison to how critical the other managers think it is. The beverage industry managers are investing in new machinery and this is expected to increase production. Due to this, the managers consider finding customers and improved communications with the existing customers as critical. The managers consider the rest of the financing activities as less critical.

Empowerment

The managers identified new investment in equipment and upgrading technology of high relevance, but the managers consider that the management team is
not highly empowered on influencing these activities (see figure A11-4 in the appendices). The managers of the food processing industry feel that the management team has some influence on these activities and the managers of footwear and leather industry feel the management team has some influence on upgrading technology. The managers of the beverage industry feel that the management team is less empowered on both (new investment in equipment and upgrading technology) activities. Due to privatisation Asmara Brewery and Asmara Wine and Liquor Factory are restricted from making long-term investments. The managers are more empowered on the working capital investment activities in comparison to the long-term investment activities. The textile industry managers consider their management team as the least empowered in comparison to how the managers of the other industries feel on the empowerment of their management teams.

The managers also indicated that improving communications with suppliers and customers is a relevant activity in creating value and the managers consider that the management team has some or high influence on this activity. The managers of the food and footwear and leather industries perceive the management team to have high influence, while the other managers consider that the management team has some influence on this activity. The managers of the food industry also believe that the management team has some influence on developing relationships with key creditors. On most of the other financing activities, the management team is less empowered and the managers are not allowed to seek foreign investors or to contact foreign banks for loans.

**Governance**

*Relevance* The managers of the textile and footwear and leather industries consider a change in ownership of high relevance, while the managers of beverage industry consider it as of some relevance. The managers of the food processing industry perceive ownership change as less relevant because two out of the four food processing enterprises selected for this study are not offered for sale. Except for the managers of the textile industry, the managers of the other industries consider a change in incentive system as of some relevance in creating value. The rest of the activities listed are considered as less relevant.

*Criticality* The managers perceive a change in ownership as the most critical activity, followed by a change in the incentive system and a change of management. The managers of footwear and leather and textile industries consider a change in ownership as more critical in comparison to how the managers of the food and the beverage industries perceive it to be. The managers of the footwear and leather, food and beverage industries consider a change in incentive system as critical.

*Empowerment* The managers consider that the management team is less empowered on the governance activities listed. Only the managers of the food processing industry indicated that they perceive the management team as having some influence in changing the incentive system. The governance activities such as a change in ownership, a change in management and a change in privatisation method envisaged are mainly the responsibility of NASPPE.
Problems

The responses of managers to the problems questionnaires revealed the relevance and criticality of the problems and the empowerment of the management team in influencing these problems.

Fig. 11-10 The Relevance of Problems

Relevance Figure 11-10 shows the results of the relevance of the problems according to the managers. The managers of the textile industry are encountering more problems in comparison to the managers of the other industries. The managers of the textile industry revealed that a high bank debt, operating losses, absence of orders, a lack of cash, staffing by management and energy costs are problems of some relevance in creating value. The managers of the food processing industry consider disturbances in materials supply as a problem of high relevance, while the managers of the footwear and leather industry consider this activity as of some relevance. The managers of the food processing industry also consider irregularity of production operations as of some relevance. The managers of the beverage industry rated all the problems listed as less relevant.

Criticality Figure 11-11 shows the criticality of the problems of investment and financing activities. The managers consider an absence of orders and contracts, disturbances in materials supply, irregularity in production operations and energy costs as critical. The managers of the footwear and leather and the textile industries consider an absence of orders and contracts as more critical in comparison to how the managers of the food and the beverage industries consider them to be. The managers of the footwear and leather industry consider a lack of cash more critical in comparison to how the other managers’ consider it to be. The managers of the food and the footwear and leather industries consider disturbances in materials supply as more critical in comparison to how the managers of the beverage and the textile industries consider it to be. The managers of the food and the beverage industries consider irregularity in production operations as more critical in comparison to how
the managers of the footwear and leather and the textile industries perceive this problem. The managers of the beverage industry consider irregularity in energy supply as more critical in comparison to how critical the other managers feel. The managers of the food, beverage, footwear and leather industries consider energy costs (electricity) as critical and the managers of the textile industry consider operating losses as critical.

**Figure 11-11 The Criticality of Problems**

<table>
<thead>
<tr>
<th>Problems</th>
<th>TI</th>
<th>FLI</th>
<th>BI</th>
<th>FPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment lay off</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Operating losses of the company</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Staffing by management</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Poor work discipline</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Energy cost (electricity)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Irregularity in fuel supply</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Irregularity in energy supply</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Irregularity of production operation</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>High trade liabilities</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>High bank debt</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Disturbances of materials supply</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Non paying debtors</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lack of cash</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Absence of orders, contracts</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Note:** The criticality scores of the industries are given in table A11-7. The maximum criticality score possible for the FPI is 36 while that of BI and TI is 33 because we have interviewed 11 managers in both. However, since we have interviewed 13 managers in the FLI, the maximum criticality score possible is 39.

**Empowerment** Figure A11-5 shows the empowerment of the managers on the problems listed. The managers of the beverage industry feel that the management team has high influence on the absence of orders and some influence on staffing, laying-off employees, a poor work discipline, operating losses, a lack of cash and high trade liabilities (creditors balances). The managers of the textile industry consider that the management team is less empowered on all the problems listed. The managers of the footwear and leather industry consider that the management team has high influence on disturbances in materials supply and some influence on the lack of cash and the poor work discipline. The managers of the food processing industry also perceive that the management team has some influence on the poor work discipline, disturbances of materials supply and irregularity of production. The managers perceive that the management team is less empowered on the rest of the problems listed.
11.4 Discussions

In this section, we will discuss and compare the main issues of operations, investment, financing, and governance.

Operations

Products demand Except for the wine products of Asmara Wine and Liquor Factory, the products of the beverage industry (such as beer and Coca-Cola) are highly demanded by consumers. On the contrary, there is low demand for most of the major fabrics and knitted articles of the textile factories (except blankets, bed sheets, yarns and towels). There is also a high demand for food products such as wheat flour, bread and edible oil because these are basic necessities. Prior to 1994, there was less demand for canned foods of Barka Canners and the financial condition of the company deteriorated. However, in 1994 the demand for canned foods increased because the government started the National Military Service program. The government is also subsidising wheat flour of Red Sea Flourmills. Since it is subsidised, the price of a quintal of wheat flour is low and thus there is a high demand for it. The demand for leather products is high in the local as well as in the export markets, but due to skin damages during slaughtering and transportation and old machinery in the leather processing plants, the quality of the tanned leather is becoming of low grade. The footwear products had demand in the Ethiopian markets, but trade is halted due to the present war with Ethiopia. However, the military and working leather boots still have high demand locally. The managers are also trying to export leather shoes to the Great Lakes Region of Africa.

Competition From the interviews, it can be concluded that there is not much competition with imports in the beverage companies, while there is fierce competition in the textile companies due to the liberalisation of trade and prices. The beverage companies’ managers are relying on low cost of materials and cheap labour to repel imports and they are setting the price low so that it will be affordable to consumers. However, textile products from foreign countries such as China are selling at a lower price in Eritrea because the foreign manufacturers are mixing cotton and polyester. The managers of textile companies are using 100% cotton in order to produce the highest quality while at the same time the consumers are looking for affordable fabric. The textile companies were used to produce large quantities during the socialist era in order to meet the target set. At present, however, they do not tailor their production towards customers’ demand. With respect to pricing there is also a difference between the two industries. In fact, there was collaboration on prices among beverage companies. For instance, Asmara Brewery and Asmara Wine and Liquor Factory produce similar liquor products and they negotiate the sales price to avoid a price war at the local market. At the same time there was a fierce competition among the local textile factories.

There is less competition in the food processing industry because there is a strong supplier and producer relationship among them. The Red Sea Flourmill supplies wheat flour to Alpha Food Products and the National Edible Oil Factory supplies cooking oil to Barka Canners. Due to this there was good co-operation among the food producing enterprises. The financial manager of Alpha Food Products elaborated his factory’s relationship with Red Sea Flourmills as follows: “Since both factories
are government owned, there is good co-operation.” In the footwear and leather industry, the footwear manufacturing enterprises have been competing with imports in the local market and with the footwear manufacturing enterprises of Ethiopia in the Ethiopian markets. However, the competition was less in comparison to that of the textile manufacturing companies because the Eritrean shoe products are qualitatively better and they had a good reputation with the customers. When the government nationalised the footwear factories in 1975, the managers continued producing shoes with the previous private owners trade logo and name in order to maintain the reputation of the shoes. After independence of Eritrea also, the managers continued to produce with the same moulds and designs. The shoes are still produced with a trademark made in Ethiopia and unlike the textile factories' products; this helped in reducing the political attitude of consumers in Ethiopia. In the tanneries, the Keih Bahri Tannery had less competition in the domestic markets because it is the sole supplier of hides, while in the export markets it has been competing with other developing countries hides. Asmara Pickling Tannery produces goat and sheepskins and has been competing with the private tanneries in Eritrea and there is a high competition in attracting suppliers of skins.

**Selling experience** Beverage companies have been distributing their products in Eritrea with their own sales staff during the Ethiopian period. This helped that staff to acquire sales skills for over thirty years. On the contrary, the textile and footwear industries had been selling their products directly to Ethiopian Domestic Distribution Corporation (EDDC). The textile and footwear companies thus were only occupied with production that was based on the command economy of Ethiopian Socialist Government. When the Eritrean Government liquidated the EDDC, the two industries faced an acute problem of know-how and a lack of skilled sales staff. The food processing enterprises have been selling to the Ministry of Defence and other institutions such as hospitals. There was a high demand for food products (except for the canned foods of Barka Canneries during 1991-1994) and due to this, the companies in the food processing industry encountered less sales problem than the textile companies.

**Cost structure** The cost structures of the beverage and the other industries are different. In 1997, material costs were 21% of sales in the beverage industry, while it was 62% in the textile, 57% in the food and 70% in the footwear and leather industries. The beverage companies were minimising cost by laying-off redundant workers, minimising energy cost and treating wastewater for reusing it in washing cars. The managers of Asmara Brewery also were entering into contracts with suppliers for a whole year supply when materials were cheap. The beverage company managers were stressing the need for keeping the quality at international standards to compete and they were not emphasising a reduction of material input at the expense of quality. The interviews revealed that the textile factories were even more trying to minimise costs because the import competition put pressure on them to reduce their sales prices. A special feature is that the textile companies are not engaged in major labour restructuring because employees are leaving the companies themselves for better paying private sector jobs.

The financial data revealed that material costs as a percent of sales of the food processing industry have been high and the managers consider disturbances of materials supply critical and perceive improving communications with suppliers of
Comparative Study of Industries

high relevance. The Barka Canneries produces meat products, lentils and vegetable products. Vegetables are locally grown and are cheap but seasonal. Due to this the managers usually produce vegetables during the season and during off-seasons they produce meat and lentils products. The managers have been purchasing beans, lentils and red pepper from Ethiopia and when the trade problem with Ethiopia started, the managers shifted to other countries such as India and Australia. However, though these countries provide high quality, it is more expensive in comparison to what the companies have been importing from Ethiopia. This increased the material costs. Eritrean farmers grow beans and lentils but not on a commercial basis and they are less informed about the possibility of selling their produce to the food processing enterprises. Eritrea also has a long-coast line with rich marine resources. Barka Canneries is testing on laboratory scale the production of canned fish. Diversifying product lines into raw materials that can be found in abundance at the country can make companies least cost producers and may help them to create value.

The managers of the footwear and leather industry as well consider disturbances in material supply critical and improving communications with suppliers as highly relevant. There is high competition for skins and the tanneries are at a disadvantage because they cannot decide on prices without a committee meeting while private owners decide on the spot and are therefore able to buy quality skins. There is also an information problem regarding the world prices of skins. The footwear industry has been receiving tanned skin at a low price before 1995, but afterwards the tanneries increased price and thus the material costs for the footwear industry are increasing.

Supplier-producer-consumer linkages Figure A11-6 shows that many of the enterprises studied are linked to each other. The Aligheder Cotton Plantation is the sole supplier of cotton to the textile companies and Asmara Textile Factory supplies ginned cotton to Eritrea Textile Factory and cotton seeds to National Edible Oil Factory, which in turn supplies cooking oil to Barka Canneries. Barka Canneries also produces canned meat and hides and skins of the livestock slaughtered are supplied to the tanneries. Keih Bahri Tannery processes hides and the tanned leather is used for upper shoes and soles in the footwear industry.

A change in one of the enterprises affects the supplier producer relationship of the other enterprises linked. For instance, due to low demand for canned foods, Barka Canneries was not fully functioning prior to 1995. This influenced the performance of the tanneries due to a shortage of hides and skins. After 1995, the financial performance of the tanneries improved because the supply of hides and skins increased due to the increase in the production of Barka Canneries and the allowance of the government of an increase in finished leather prices. On the other hand, Denden Glass Works used to supply empty bottles to the beverage producing companies, however, when the government liquidated the factory, the beverage companies encountered a shortage of empty bottles. Asmara Brewery management is trying to solve this problem by introducing draft beer and the management of Red Sea Bottlers is now importing bottles from abroad.

The military is also the core customer of many enterprises studied. Table A11-8 shows enterprise products consumed by the military (the Ministry of Defence). This evidences that the Ministry of Defence is a major buyer of the products and in the
future, even if companies are privatised, the new owners may benefit by maintaining a good relationship with the government in order to retain it as a major customer.

**Flexibility** The beverage companies introduced new products, changed their product mix, enhanced their distribution channels and tried to expand their local markets by establishing sales offices. For example, Asmara Wine and Liquor Factory faced a problem in 1992 when the main consumers of its wine products (Ethiopian soldiers) had left at the liberation of Eritrea. Then, the company shifted its production mix from 70% wine and 30% liquor products prior to liberation to 70% liquor and 30% wine. This strategy helped the company to become profitable again. Textile companies do not (yet) show such flexibility. For instance, Lalmba Sack Factory had been profitable because it used to produce sacks for two major customers. However, when the two major customers shifted to using plastic bags, the company lost its major market and it experienced financial problems. The factory management tried to retain the customers using plastic lined bags, but they were not able to reduce costs and then could not compete on price with the plastic bags imported from abroad. Textile factories also have a variety of product lines such as knitwear, yarns, blankets and variety of fabrics. Some of these product lines are highly profitable (blankets, bed sheets and towels), but the weaving looms that produce these product lines are limited. The textile managers were not able to add more looms to meet the market demand. Moreover, textile companies managers did not introduce new products. Another example is presented by the Lome IV convention. At that convention the European Economic Community allowed selected developing countries to sell product quota free in member countries, while the customers would receive a tax rebate for buying from the developing country because of this convention. Eritrea is entitled to sell its products quota free in EEC member countries, but the textile companies' managers were not able to sell to this available market opportunity.

The food processing and the footwear and leather factories, except Dahlack Shoe Factory, were also not very flexible. For instance, The managers of National Edible Oil Factory are operating the company only for two months due to a shortage of cottonseeds. The managers did not shift to other oil seeds that can be processed like sesame seeds, which are available in Eritrea. The Red Sea Flourmills produces wheat flour from imported wheat. When the world market price of wheat increased, the management continued importing wheat at a high price. However, shifting to processing hard wheat, sorghum and maize, which are available in Eritrea would have reduced costs. At present the management is planning to install a flourmill that produces sorghum flour. Unlike the other footwear and leather processing factories, the Dahlack Shoe Factory management was more flexible. The management introduced a new product line (plastic utensils) and also eliminated the commission charges of intermediaries and made company products competitive by directly distributing to wholesalers and retailers in the Ethiopian markets. In addition, the management reduced materials transportation costs by shifting to suppliers who are in the neighbouring country (Saudi Arabia, previously they were buying from the Czech Republic and Italy).

**Diminishing Ethiopian exports** The textile and footwear companies as well as the beverage companies have been selling their products in Ethiopian markets since the time of their establishments. The food and leather industries have been selling their produce at local markets or export markets in Italy. After the liberation of Eritrea on
May 24, 1991 the companies continued exporting their products to Ethiopia due to the free trade agreement signed between the two countries. The main challenge that the companies faced from 1991 to 1996 was changing the attitude of Ethiopians towards Eritrean products, because many Ethiopians were boycotting Eritrean products for political reasons. The Eritrean companies tried to change this attitude of the Ethiopian customers by attending trade fairs, while they were also trying to sell at a lower price.

At the beginning of 1997, however, the Ethiopian government started levying custom taxes at its borders. This made Eritrean products non-competitive price-wise at Ethiopian markets, while also the delays at the border increased the cost of transporting the goods to Ethiopia. Despite all these challenges the Eritrean companies continued to sell their products by reducing their sales price. However, in November 1997, the Eritrean government introduced a new currency in Eritrea: the Nakfa. The Nakfa replaced the Ethiopian Birr, which had been the official legal currency in both Eritrea and Ethiopia. This created a problem on how goods should be exchanged between Ethiopia and Eritrea. The Ethiopian Government stressed that a hard currency such as the US Dollar should be used as an intermediate currency. This would involve transaction costs, and the Eritrean Government maintained that the exchange rates should be left to the market and that the traders could use whatever currency they wanted. This disagreement and the forced use of letters of credit in Ethiopia virtually stopped trade between the two countries and the textile and the footwear industries were the most hurt. The outbreak of a war between Ethiopia and Eritrea in 1998 finally stopped the trade of goods between the two countries.

**Government intervention** The government is subsidising the Red Sea Flourmills and determines the sales price and the profit margin of the company. This is helping the bakeries to buy at low cost, but the government also determines the profit margin they charge. Though the food processing companies’ sales are large, their operating profits are low due to government restrictions on sales prices and on profit margins. In the footwear and leather industry also prior to 1995, the government had been restricting the tanneries to set their prices low and this helped the footwear manufacturing enterprises. However, after 1995, the government gave autonomy to company management and the tanneries are setting their prices and thus, they have introduced price increases which benefited the tanneries but increased the cost of the footwear manufacturing enterprises. In addition, the government proclaimed a free market policy and the Eritrean businessmen exported raw skins directly and the tanneries encountered a lack of skins. However, afterwards, the government prohibited export of raw skins without added value and the supply of skin increased and the performance of the tanneries increased. The price of cotton also has been increasing because the management of the only cotton plantation in Eritrea, which is state-owned, is asking the textile companies to buy the cotton at world market prices. The managers of textile companies have been buying cotton from Ethiopia, though it is of lower quality in comparison to that of Eritrea. However, at present they are obliged to buy from Eritrea at world market prices and this is benefiting the Aligheder Cotton Plantation, while the textile companies are becoming non-competitive cost-wise.

**Culture and customs** The culture and customs of the society also influence the industries. The increase in the custom of visiting relatives and then giving an alcoholic drink has helped Asmara Brewery and Asmara Wine and Liquor Factory to increase liquor sales, while the negative attitude of people towards wine drinking...
decreased the sales of wine products of Asmara Wine and Liquor Factory. The Eritreans also are not accustomed to eating canned foods due to the availability of fresh foods and the availability of ample time of women who are mainly engaged in house keeping. This has made it difficult to sell canned foods of Barka canneries to the general public. The older generation of Eritreans was using fabrics for making clothes, but the new generation shifted to ready made clothes and thus, the textile companies that are producing fabrics are losing market.

Investment and Financing

Old machinery The financial data revealed that the short-term assets of all industries studied were more than 90% of the total assets in 1991/92. This indicates that the fixed assets of the industries were old and highly depreciated. In most industries (except in the beverage industry), this is still the case. Most of the equipment there requires complete reconditioning or replacement. Obsolete machinery leads to frequent breakdown, increases cost of production and decreases productivity. The company staff has nevertheless considerable capabilities to undertake repairs of mechanical and electrical components and this capability is helping companies to run the old machinery. The old machinery requires spare-parts, but the companies are encountering problems in getting the spare-parts because the manufacturers do not exist any more or because they do not produce such obsolete machinery any more. If spare parts are then needed, the suppliers have to set up new workshops. This makes the spare-parts expensive and the interviewed managers stated that it is sometimes cheaper to buy new machinery. However, since the government is not authorising long-term investments, the managers have no option except for continuing to use the old machinery incurring high costs of repairs and of spare-parts.

New fixed asset investment In line with the previously mentioned problems, the new fixed asset investments as a percent of sales indicated that (except for the beverage industry) the industries did not make major investments in machinery. The managers, however, consider new investment in equipment and upgrading technology of high relevance and critical, but the managers consider themselves as less empowered to influence these activities. During the interviews the managers explained that there is an authorisation problem. The government has been pressuring companies to keep using old machinery. Some managers in the beverage industry were able to make a major renovation of machinery due to the formation of a joint venture of Red Sea Bottlers and Asmara Brewery managers also rehabilitated the preparatory departments using retained operating profits. However, the government stopped the 2nd phase of the project and the company did not benefit from its 1st phase investments. The government is also rejecting new investment plans even if the companies have enough funds such as Barka Canneries (which is not offered for privatisation). Many companies know the machinery they need and completed feasibility studies such as Alpha Food Products and Eritrea Textile Factory, but due to a lack of funds and a lack of authorisation from the government, the managers could not implement the investment projects.

Financing The analysis of the financial structure of the industries using the debt to total assets ratio showed that there is a difference between the textile and the other industries studied. The debt to total assets ratio of the textile industry was 202% of the total assets in 1991/92. This shows that the operations of the textile companies
resulted in losses and the retained earnings balance became negative (deficit) due to continued losses. The managers during the interviews elaborated that they have been borrowing from banks using the government guaranteed bank loans to finance operations and investments. Asmara Textile Factory also borrowed from other state-owned enterprises such as Asmara Brewery due to the financial constraints faced. The managers are paying high interest costs, but they believe that the government will keep funding the companies using bank loans to solve the social problem of employment, as the textile factories are the largest employers in Eritrea. Indeed, the government is guaranteeing bank loans to manufacturing industries and due to this the budget is not hardening and managers of textile factories are borrowing from the bank to finance operations.

In 1994, the government cancelled all debts that were outstanding at the time of liberation. This has reduced the debt level in textile, beverage and footwear and leather industries. There is a theory based concern that writing–off debts gives a signal to managers that the government will intervene at the time a company is in financial trouble and the managers may therefore proceed with borrowing without prudential analysis of the loans for working capital and fixed capital investments.

Though the government allows enterprises to borrow from banks using overdrafts, the food, beverage and footwear and leather enterprises generally, did not use their overdraft bank accounts, except for the Dahlack Shoe Factory. During the interviews, the managers elaborated that the interest rate of the Commercial Bank of Eritrea is high. The managers prefer to borrow at a lower interest rate from the World Bank and other financial institutions for a long-term investment, though many feel that they can finance their operations from retained earnings. In order to avoid interest payments, the managers have been using internally generated funds by retaining profits. The government was not collecting its dividends prior to 1997 and this gave managers of Asmara Brewery the possibility to invest the retained funds in machinery.

The managers have not been borrowing to avoid interest payments while there is a dire need of finance for investments. Interest payments have a tax saving advantage because interest expenses are deductible for tax purposes. The managers have been financing working capital and fixed capital investments using retained earnings. Even though the companies are government owned, they are separate corporate entities. Financing of operations and investments using debt would have helped the profitable companies to save tax payments and to get additional funds needed for investments. Asmara Brewery, for instance, has financed its rehabilitation project from retained earnings and has paid high income tax during those years. Financing using long-term debt would have helped the company to save on taxes and to make funds available for other purposes.

**Dividend** The beverage, footwear and leather industries also are paying 80% of their net profits as dividend to the government since 1995. During the interviews the managers complained that the 20% retained profits are not enough for financing the working capital and the Dahlack Shoe Factory, for instance, resorted to bank overdraft with high interest costs. The 20% retention limit is also set equal to the amount that the sum of retained earnings reaches 20% of the total assets. If the retained earnings balance reaches this level, all profits above this threshold are taken as dividend. Due to this, even if companies are profiting, they are getting a problem to retain their
profits in the business when the retained earning balance has exceeded the limit. This strict dividend policy is constraining managers from engaging in profitable long-term investment projects and from buying materials when prices are cheap.

Subsidies The government has fixed the sales of a quintal (100-kg) of wheat flour at 138 Nakfa to bakeries irrespective of its production cost. For instance, if the production cost of a quintal of wheat flour reaches 200 Nakfa, the company sells it to bakeries at 138 and the Ministry of Finance pays the difference, 62 Nakfa (200-138), to the factory as a subsidy. The government also restricts the bakeries to keep the price of a loaf of bread (100 grams) constant at 20 cents of a Nakfa to the final consumer. The government fixed the Red Sea Flourmills profit margin at 2% of sales and due to this, even if the sales of the company are large, the operating profits will stay low. The managers consider the subsidy system as constraining the profitability of the company because prior to 1993, there was no subsidy and they were charging a 5% profit margin. The financial manager of Red Sea Flourmills stated: “We would like to operate like other businesses without subsidy, but it is a government policy and we cannot change it. The government is of the opinion that the citizens will be charged high prices if this factory is not subsidised.” The other industries are not receiving subsidies and the managers do not expect to be subsidised by the government.

Governance

The managers consider a change of incentive system and a change of ownership as relevant and critical. The enterprises studied are state-owned and the Ministry of Defence administers Barka Canneries and Red Sea Flourmills while a joint venture board administers Red Sea Bottlers. The NASPPE administers the rest of the 11 companies studied. During the interviews, the managers revealed governance problems like ownership neglect, restrictions on management power, employee-management relationships and a need for training.

Ownership neglect The analysis of ownership equity on the financial statements revealed that the government as an owner did not inject new funds to rehabilitate the factories during 1991/92-1997. There are three government institutions that are concerned with the companies offered for sale: the Ministry of Finance, the Ministry of Trade and Industry and the NASPPE. The Ministry of Finance controls the financial aspects. This Ministry approves bank loans and budgets and collects dividends from profitable companies. The Ministry of Trade and Industry was responsible for the day to day administration of the companies before 1995, but afterwards, its role is an advisory. The NASPPE is responsible for administration of the companies offered for sale. The managers elaborated that since the companies are for sale the government has deserted them. The production manager of Keih Bahri Tannery commented: “It seems that the factory does not have an owner.” The general manager of Alpha Food Products stated: “The relationship between the owner and the company management was not good. The owner did not pay attention to the factory and was not helping in solving problems.” Moreover, the managers of Barka Canneries and Red Sea Flourmills, which are assigned to the Ministry of Defence, revealed that the Ministry is not committed to operate businesses and there is no board to oversee the companies. In addition, the management interviews in Eritrea Textile Factory showed that there was ownership confusion. The NASPPE and the
prospective buyer (EPFDJ) were giving different directives to management and the management was not able to know from whom to receive orders and to whom to report.

**Management empowerment** The managers perceive that the management team is less empowered on the governance issues. Moreover, the analysis of management empowerment on operations and investments and financing activities revealed that the managers are hardly/almost not empowered on the critical activities such as new investment in machinery and upgrading technology. The managers during the interviews explained that prior to 1995, the Ministry of Trade and Industry was strictly controlling the factory management on all matters such as pricing, sales, credit, investment and other management decisions. The managers had to request the permission of the authorities of the Ministry of Trade and Industry. After 1995, the government gave autonomy to managers on operational matters and this has helped the companies to set their own prices and to select their own suppliers. However, the managers complain that the Ministry of Trade and Industry had been interfering using directives on operational matters and that the autonomy was not offering managers full authority and responsibility for their actions. The process of privatisation, which started in 1997, is also constraining the enterprise managers from making long-term decisions relating investments, the amount of stock level they keep and the period of credit they can extend. All these restrictions are making managers powerless and as one manager commented: “There was a lack of management freedom.” This supports the findings of the management empowerment analysis that the managers know what actions can create value, but that the management team is less empowered on the critical activities such as new machinery investment and upgrading technology due to the restrictions of the NASPPE and a lack of finance in some companies. As the general manager of Alpha Food Products stated: “The company management does not have power and can do nothing.”

**Employees** The management interviews evidence that the employees are entitled to bonuses depending on the accounting profit of the company and to other social benefits such as medication, workers compensation insurance and foods. The Ministry ordered managers to stop providing benefits in kind such as companies products and foods. All companies (except Red Sea Flourmills) defied the order of not providing tea and bread during breaks, but stopped the other benefits in kinds like company products, which were given to employees before. The managers feel that giving employees company products had been motivating workers. The managers from the textile industry also indicated that the employees are paid low and the bonus plan is unachievable due to the present condition of the factories. This is not motivating employees to improve productivity. Nevertheless, most managers believe that there is a good management-employee relationship.

**Training** The managers during the interviews also highlighted the need for management and employee training. They revealed that there is a training need in managerial fields, in particular marketing (export marketing in particular) and in technological fields related to leather processing, textile processing, food processing and milling, which are offered in polytechnic institutes. There is no polytechnic institute in Eritrea. Moreover, the investment in advanced PLC systems in Asmara Brewery and Red Sea Bottlers revealed the need for technicians in this field as small malfunction is creating production shutdowns while inviting experts from the
suppliers costs a large amount of money. However, as the financial manager of Asmara Brewery elaborated, the government is considering training as long-term investment and it is therefore not allowing the training of employees of companies to be privatised. Most respondents indicated that there were not much training opportunities during 1991-1997 and the general managers during the interviews indicated that training is essential, but the higher authorities think that it is a waste of money and that the managers are requesting training to entertain themselves and to benefit from the trip. Due to this, the managers are not asking for a training budget.

11.5 Conclusion

The profitability measures (profit margin and return on total assets) indicated that the profitability of the industries studied improved in 1995, but decreased in 1997. The government gave autonomy on operational matters to enterprise managers in 1995 and this helped managers to improve profitability. However, in 1997 the privatisation process and trade barriers put by the Ethiopian government contributed to the decline in profitability of the industries studied. The liberalisation of trade and prices increased the material costs. The companies have been using old machinery and except Asmara Brewery and Red Sea Bottlers the other companies did not make a major investment in long-term assets. In addition, the managers of the textile industry have been using bank overdrafts. The other managers consider the interest rates of the banks high and therefore, they used internally generated funds for financing operations and working capital. The managers of the profitable companies paid a large amount of taxes since they did not use debt financing. Prudential use of debt may have shielded companies from paying a large amount of taxes and may have provided additional funds for investments. The value created measure revealed that the beverage industry has been creating value while the textile industry has been destroying value throughout the study period. Unlike the profit margin and the return on total assets measures, the change in value created showed that the footwear and leather industry created value only in 1995 and the food processing industry has been destroying value up to 1995, but since then it created small amount of value.

The comparative analysis of the managers’ perception of restructuring activities revealed similarities and differences among the industries studied. The managers consider a search for new markets, an increase in exports, a more effective use of resources, efficiency in production, selectivity to suppliers and a change in product quality as relevant operational restructuring activities. The managers from the textile and footwear and leather industries perceive seeking new markets of high relevance while the managers from the beverage industry consider this activity as of some relevance. The footwear and textile industries are oriented towards exports (Ethiopia) and the food and beverage industries are oriented towards domestic markets in Eritrea. The managers from the food and the beverage industries consider improving production efficiency more relevant in comparison to the managers from the footwear and leather and the textile industries. All managers consider being selective to suppliers of high relevance because material costs are increasing and the managers of food and footwear and leather industries consider disturbances in materials supply as critical. The managers from the footwear and leather industry consider a change in quality of high relevance and critical. The managers from the food and beverage industries perceive that the management team is more empowered than the managers
of the footwear and leather and textile industries consider it to be. All managers agree that new investment in equipment and upgrading technology are relevant and critical, but they feel that the management team is less empowered to influence these activities. The managers from the textile industry are encountering more problems and they perceive seeking foreign investors to be highly relevant.

The comparative financial and questionnaire data analysis and management interviews revealed differences among the industries studied. There was high demand and less competition in the food and the beverage industries in comparison to the footwear and the textile industries. The history of selling experience of distributing products to customers for over 30 years has helped the beverage industry while the lack of selling experience directly to customers in the footwear and leather and the textile industries worsened companies’ problems when their distribution agency (EDDC) was liquidated.

Several companies studied are interdependent on each other because they are interlinked as supplier and producer. A change in one factory can cause a chain reaction on other dependent factories. The comparative analysis also revealed that though material is a major cost element in all industries, the material costs as a percent of sales were low in the beverage industry in comparison to the other industries studied. The availability of cheap material and the management practice of entering into contracts with suppliers when the material prices are cheap helped the managers of the beverage industry to become least cost producers.

The attitude of consumers in Ethiopia towards Eritrean products due to political reasons and the trade barriers of the government of Ethiopia introduced in 1997 reduced the exports of Eritrean products to Ethiopia and the present border conflict halted the trade between the two countries. This affected the footwear and textile industries most.

The government of Eritrea is also interfering in the industries in different ways. The government provides a direct subsidy to Red Sea Flourmills only while the other state-owned enterprises are allowed to use government guaranteed overdraft loans form the Commercial bank of Eritrea. The Government also prohibits the exports of raw skins without processing and this benefited the tanneries. However, the government allows exports of cotton and this is benefiting the Aligheder Cotton Plantation, but it is hurting the textile industry. It should be considered whether it is wise to add value to cotton and to export finished textile products to get a higher value.

The government as an owner also neglected the companies and the Board of NASPPE, entrusted to restructure and privatise companies is hindering restructuring by reducing the empowerment of management. The research suggests that the process of privatisation itself can endanger value creation. The financial performance showed a decline in profitability of the industries studied after the privatisation announcement. The privatisation process did not give real authority to managers and it created uncertainty and disengagement, while it also diminished the orientation on the future. Managers often do not consider the management team to have influence. In particular in the textile industry, managers do not consider the team to be empowered. Most managers of the companies to be privatised do know the bottlenecks in their
companies’ operations, but they do not feel to have any real authority. The process of privatisation is making managers powerless to create value and the longer time the process takes, the more value will be destroyed. A government would then act wise to take the knowledge of managers into account and to avoid restrictions that reduce empowerment and managers’ potential for creating value.

The government and management can nurture creation of value by reducing costs by diversifying to product lines based on materials that can be found in abundance at the country and by empowering managers with training in marketing and other employees in technological fields needed. Moreover, building managerial capacity by establishing polytechnic institutes and strengthening the management institute of Embatkala (in Eritrea) can help in developing the skills needed for the industries studied. In addition, completing the partially implemented projects such as that of Asmara Brewery may enhance the value created in the companies and the competitiveness and attractiveness of the companies to prospective buyers.