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Chapter 9

Comparative Study of Government, Transition and Privatised Firms

9.1. Introduction

To recapitulate on the work so far accomplished in this research study; in chapter 1, we introduced the research problems as well as objective and methodology of the study. In chapters 2 to 4, we presented the literature review on the internal and external working capital management and related theories of value management as well as relevant debates on ownership and value creation. In chapter 5, we developed the conceptual framework for the empirical study, based on which we collected data on the internal and external management of working capital levels and operations from three groups of firms - government owned firms, firms in transition to privatisation and privatised firms. In the last three chapters (chapters 6-8) we described and analysed our data by taking one representative firm from each group of firms. At the end of each main section in the chapters we made a comparative study of the firms in each category.

In this chapter, we compare the approaches of internal and external working capital management applied by the three groups of firms. This section (section 9-1) introduces the chapter. Section 9-2 covers a comparative description of the firms' overall working capital management. Section 9-3 deals with the firms' internal and section 9-4 the external management of working capital levels and operations. Section 9-5 concludes the chapter. The discussion in the chapter is based on the Appendices for chapters 6, chapter 7, chapter 8 as well as Appendix for this chapter (chapter 9), which represents averages of the data included in the Appendices for the three chapters.

The objective of this chapter is to answer the fourth empirical sub-question that this research addresses: "*Comparatively, how do the government, transition and privatised firms in the manufacturing sector of Eritrea manage their internal and external working capital*"? We specifically study the impact of ownership on the firms' internal and external working capital policy and its effect on the overall value creation potential. With this objective in mind, we made a comparative study of the government, transition and privatised firms' internal and external working capital management. Table 5-2 (in Chapter 5), shows a list of names of the central firms of our case study as well as their suppliers and customers.

9.2. Overall working capital management

In this section we make a comparative study of the three categories of firms' with regard to overall working capital management policy. Particularly, we consider the background information of the firms with regard to their organisational structure, their overall management policies and constraints with particular reference to government regulations. Finally, we examine the managers' opinion on the role of working capital management on value creation. For more information on the overall working capital management, see Appendix 9.1.

9.2.1. Background information

The organisational structure The government and transition firms have the same organisational structure. According to government directives, which were established before the government proclaimed its privatisation policy, their organisational structure was categorised into three divisions under the general manager, namely, production, personnel and financial administration. In 1995/1996 the government streamlined their employee size with an objective of cutting costs. So, the government restructured the firms' organisational structure into the following four main sections. First, production and repairs section with production and maintenance sub-sections. Second, finance and administration section with accounts and personnel sub-sections. Third, a marketing and purchasing section. Fourth, a quality controls section. The finance and administration section is responsible to manage the financial affairs, which includes working capital levels. The marketing section deals with the management of working capital operations including the purchase of materials and the sales of products. It is particularly responsible to purchase, store and control inventories including raw materials, finished goods and spare parts.

With regard to the privatised firms the owners' first action after privatisation was to restructure the managerial set-up. Although specific organisational set-up may differ from one privatised firm to another, a noticeable change that all the firms made is that the owner taking the place of the general manager. Under the owner, a manager takes care of the overall operations and particularly the marketing and commercial section. We found this change similarly applied in two out of the three privatised firms. The main reason for this structural change is that the owners want to make closer control over operations, but at the same time they also want to cut costs at least with regard to the marketing and commercial section that the managers of the firms take the responsibility for.

Firm policies and constraints Our main objective here is to study if the firms have clearly stated mission statements on the overall policy of working capital management. Particularly, we asked the managers whether their working capital management policy was targeted at increasing sales, decreasing costs, generating profit or remaining liquid. The government firms replied that their main objective was to decrease costs and increase sales but not to increase profits. Interviews with the managers revealed that the costs and profit margin of the government firms is dictated by government regulations. For example according to the financial manager of Keih Bahri Food Products, profit is kept at about 2% of sales price and cost of materials is subsidised by 50%. We also found out that the government firms do not bother about liquidity because they have readily available government funds in the form of government subsidy and bank overdraft. On the other hand, the transition firms responded that their main working capital policy is tailored towards increasing sales, decreasing costs, remaining liquid as well as generating profit. These firms are to be sold free of debt and until then they are forbidden from entering into long-term investment and financing commitments. This focus on liquidity has made a negative impact on the transition firms' profitability objective because the firms reported that their major emphasis is on decreasing costs without focusing at its impact on product quality and customer satisfaction. Privatised firms' working capital management policy is tailored towards maximising profit by decreasing costs and increasing sales. They show less interest on liquidity aspects of working capital management.

On the issue of constraints in achieving firm policy, the managers of the government firms replied that it is only the lack of fixed capital investments, that is a problem in achieving firm objectives. Moreover, the transition firms consider fixed capital investments and financing as well as production capacity and skilled labour to be their main constraints. However, the privatised firms are hindered from achieving their objectives because of problems in working capital investment and financing, fixed capital investment, product demand and skilled labour. The government and transition managers blame the government for the lack of proper investment policy particularly not allowing them to invest on capacity building. The privatised firms' problem of working capital investment and financing is created by the fact that they have been privatised only recently and the owners have exhausted their financial resources in buying the firms. So they have little funds left that can be used to finance investments in working capital. The empirical findings reveal that both government and transition firms are highly affected by the government regulations as well as interference by higher government bodies because the Ministry of Defence supervises the government firms while the NASPPE (National Agency for Supervising and Privatising Public Enterprises) controls the transition firms. Therefore, it is only the managers in the privatised firms who are fully empowered to decide on working capital levels and operations without interference from outside.

On the factors affecting working capital levels, the government and the privatised firms replied that the sales growth and the overall operational efficiency mainly affect the levels and operations of working capital. In addition to this, the price levels of inputs in the government firms, seasonality of sales in the transition firms and the availability of credit in the privatised firms are also considered as important factors affecting working capital. Credit policy and availability of credit are not considered as main factors in both government and transition firms. This supports the finding that the government and transition firms have no problem of financing their short-term investments because of the government subsidy and bank overdraft facilities.

The role of working capital management on value creation It can be observed from Appendix 9-1 that most managers consider overall working capital management, particularly managing working capital levels of investment and operations to be relevant both for increasing sales and decreasing costs (see Appendix 9.1D). When it comes to details, the managers of the firms believe managing working capital investments particularly cash, receivables and inventory as well as operations of sales and purchases help to increase sales and decrease costs. We also observed that managers of all the firms consider managing short-term financing particularly, trade payables, bank loans and overall liquidity is not as important for increasing sales and decreasing costs as managing working capital investment and operations.

9.3. Internal working capital management

This section (9.3) covers the internal working capital management, which is divided into levels and operations. Working capital levels refer to investments (sections 9.3.1) and financing (section 9.3.2) and working capital operations include purchase (sections 9.3.3) and sales operations (section 9.3.4). Table 9-1 also summarised our findings.

9.3.1. Managing working capital investments

9.3.1.1. Cash management

In this section we compare how the government, transition and privatised firms manage their cash balances, cash collections and cash payments. We concentrate on the firms' motives for holding cash levels, purposes for cash forecasts and forecasting approaches, cash flow approaches and purposes as well as approaches of controlling cash payments and collections. Appendix 9.2.1.1 shows the summary of the responses of the firms' managers on cash management.

The motives of holding cash As Appendix 9.2.1.1 indicates, all the government, transition and privatised firms reported that the main objective of cash management is for transaction purposes. No firm manages cash for speculative, precautionary or bank compensating purposes. This is for three main reasons. First, there is no alternative investment opportunity, so there is no need to keep money for speculative purposes. Second, if the firms need cash, the bank overdraft facility is there to use, hence there is no need to keep extra cash for precautionary purposes. Third, the banks do not require any compensating balance for extending overdraft facilities so they do not need to deposit extra cash for that purpose. Therefore, all the firms do not have a problem of borrowing from the bank. From the financial statements and responses of the managers, we can infer that, the government firms have surplus cash lying idle in their bank checking accounts. However, it is only because of the easily available financing source (bank overdraft) that most transition firms (except Keih Bahri Tannery) and the privatised Asmara Sweater Factory are managing to survive.

Cash budgeting and control According to their financial managers, both government firms prepare cash budgets as a government requirement, which they also use to plan their cash needs, to control the safety of cash levels as well as operations of cash collection and payment. It is only Asmara Milk Factory from the privatised firms as well as Asmara Textile Factory, Dahlak Shoe Factory and Keih Bahri Tannery of the transition firms that reported to use cash budgets to control liquidity. None of the government firms use cash budgets for liquidity purposes. Therefore control of liquidity is more important in the transition and privatised firms than in the government firms. In addition to this, both government firms, two transition firms (Asmara Textile Factory, Dahlak Shoe Factory) and Asmara Milk Factory from the privatised firms use cash budgets to plan cash needs in the short-term. Both government and privatised managers agree that the main forecasting base that they use to estimate their cash collections, cash payments and balances is their past experience and management opinion. For the transition firms it is only their past experience that they use for cash budgeting purposes. In addition, Keih Bahri Food Products from the government firms, Asmara Textile Factory and Dahlak Shoe Factory from the transition firms as well as Asmara Milk Factory from the privatised firms use forecasted sales as a source of information for cash budgeting. Only the commercial manager of Asmara Sweater Factory reported that he uses marketing research as a source to prepare cash budgets. All firms except Asmara Sweater Factory and Eritrea Steel Sheets Factory from the privatised firms use the receipts and disbursements approach in preparing cash flow statements, which they also use to improve future cash forecasts and to control cash. The accounting and government

regulations also require all firms in Eritrea to prepare cash flow statements along with the other standard financial statements – income statement and balance sheet.

Managing cash collections and payments Most of the firms strictly control their cash payments using the voucher system, sequentially numbered checks, bank reconciliation and the petty cash system. They also control cash collections by depositing daily in the bank and separating responsibility for sequential cash operations, handling and record keeping. We can conclude that cash management in all government, transition and privatised firms is highly control oriented. There is very little reason to believe that cash management is serving a good purpose in creating value to the firms because these control measures do not help in increasing income or decreasing costs related to investments in cash.

9.3.1.2. Inventory management

The objective of this section is to make a comparative study of the three categories of firms in order to know if they create value by managing their materials and finished goods inventory balances. For this purpose, we asked the managers how they determine inventory costs and values, how they formulate and implement their inventory planning and control (physical and cost) and in doing so if the costs are relevant and worth of special managerial attention. For more detailed information on the inventory management refer to Appendix 9.2.1.2.1 for materials inventory management and Appendix 9.2.1.2.2 for finished goods inventory management.

Materials inventory management The managers of most firms reported that the main purposes for managing materials inventory is to reduce costs of holding and ordering (except Dahlack Shoe Factory of the transition firms), to safeguard against shortages and to keep production running (except Lalmba Sack Factory of the transition firms). The government and some transition firms are involved in manufacturing products related to the current war efforts and are therefore concerned with the continuous availability of critical materials. The government firms consider the costs of insurance and handling as major costs in holding inventory of materials. Out of the five transition firms, three consider the opportunity cost of capital and cost of deterioration, another two the cost of power and handling as major *holding costs* of materials inventory. From the privatised firms Asmara Sweater Factory considers all costs, that is, costs of power, security, handling, insurance and record keeping as major costs. While Eritrea Steel Sheet Factory considers only the opportunity costs of capital and insurance as major costs. Asmara Milk Factory considers only the cost of handling and clerical cost of record keeping as the main costs. However, only the financial managers of the government firms consider the costs of materials inventory as significant for the management to give it special attention.

The approach that all firms apply in order to achieve the objectives of materials inventory management is by strictly controlling and minimising the inventory level. All the privatised and government firms as well as Dahlack Shoe Factory from the transition firms buy just in time for production. Barka Canneries, from the government firms, Keih Bahri Tannery from the transition firms as well as Asmara Sweater Factory and Eritrea Steel Sheet Factory apply economic order quantity to control selective items of materials. The firms selectively control the *physical*

movement of materials inventory on the basis of cost. In addition the transition firms use scarcity and criticality of the materials while the privatised firms also apply usage rate. As for the costing and valuation, all firms use only the average costing approach to determine the cost of materials issued to production and left in inventory.

Finished goods inventory management The government firms have differing purposes in holding the finished goods inventory. The main purpose in holding finished goods inventory for Keih Bahri Food products is to reduce holding costs and for Barka Canneries is to satisfy customer demands, to keep safety stock and meet seasonal high demands. From the transition firms Asmara Textile Factory, Sembel House Hold Factory and Dahlak Shoe Factory have the purpose of satisfying customer demands and take advantage of economies of scale, Lalmba Sack Factory and Sembel House hold Factory also keep safety stocks. Moreover, the purpose of holding inventory for Asmara Textile Factory and Lalmba Sack Factory is also to meet seasonal high demands. The privatised firms reported that the main purpose for managing the finished goods inventory is to satisfy customer demands, to meet seasonal high demands and to keep safety stock.

Insurance is considered the main inventory holding costs in the government firms. While two of the three privatised firms consider the opportunity cost of capital invested in the inventory and the cost of insurance as a main cost, the transition firms reported no major cost of inventory holding. Generally, only the government firms consider the holding inventory of finished goods as significant for the management to give special attention. The firms have differing management policy in controlling inventory costs, particularly the specific approach of inventory control they apply. In order to manage their costs of inventory all the government firms, three of the transition firms and the privatised firms (except Asmara Milk Factory) try to hold only the minimum. The selective control approaches used by the government firms include usage rate and criticality in case of shortage for Keih Bahri Food Products and average cost for Barka Canneries. Asmara Textile Factory, Sembel House Hold Factory and Dahlak Shoe Factory from the transition firms apply usage rate. All the privatised firms use the average cost and usage rate (except for Asmara Sweater Factory). Asmara Milk Factory also applies criticality in case of shortage to selectively control its inventory items. The firms use the average costing approach to determine the cost of goods sold and the value of finished goods remaining in inventory.

9.3.1.3. Receivables management

The purpose of this section is to study if and how the firms' manage their receivables. Hence, we asked the managers if they have a credit sales policy (if not, why). If the firms have a credit policy we asked what their sources of information are for screening credit applicants, determining credit terms and standards as well as what measures they take to collect overdue receivables. We also asked them about the risk of uncollectables and how they monitor their credit customers and reduce the level of receivables. For more detailed information on the receivables management refer to Appendix 9.2.1.3.

Credit policy and receivables management Both government and transition firms sell to private firms only on cash basis while they sell on credit to fellow government and

transition firms. According to the interviews conducted with the commercial managers of the government firms do not sell on credit to private firms because government policy does not allow it. From a purely business point of view credit management is non-existent with these firms. The only debtor account in the balance sheet of both government and transition firms is due from related enterprises and ministries. This represents intra-government transfers and has nothing to do with the purpose of extending credit to enhance sales. Therefore, government and transition firms do not use any technique of managing accounts receivable, such as establishing policy of credit terms, mechanisms of screening credit applicants or measures in collecting overdue receivables. They have no risk of bad debts because their debtors are related enterprises and other ministries and are not considered to create doubtful accounts.

The privatised firms have different sales policies depending on whether the customer is a government or private (large or small) firm. The cash sales refer to smaller private firms while the credit sales (without discount) refer to larger private and all government and transition firms. All the privatised firms use their past experience as a main source of information for screening new credit applicants. While all privatised firms use a repeat sales approach, Eritrea Steel Sheets Factory and Asmara Milk Factory also apply credit standards based on the five C's. In order to collect overdue receivables they all make telephone calls and extend credit periods, but they do not make personal visits nor do they employ collection agents or take legal action. Moreover, according to the financial managers, the risk of bad debt is very low (except for Asmara Sweater Factory) and none of them makes allowances for it. Overall, the conclusion is that, while firms in the developed world have begun to use financial electronic data interchange rather than the more traditional methods to manage accounts receivable (Megginson, Nash and Randenborgh (1994), the firms in Eritrea are not yet able to install and properly implement the traditional approaches. The main reason we believe is because of the factors typical to underdevelopment that prevail in Eritrea, including weak managerial background, lack of financial institutions and markets as well as the firms' historical background in a command economy and strict regal requirements that the firms have to abide by.

9.3.2. Managing short-term finances

In order to study the sources and costs of short-term financing, we asked the financial managers on their sources of finance, the cost of financing and the factors influencing the need for short-term financing. For detailed information on inter-firm comparison of managing short-term finances, see Appendix 9.2.2.

Sources, costs and influences of short-term financing In addition to cash collected from operations, all firms have the opportunity to use bank overdraft to the extent of the insured value of their assets, therefore they all consider it as a main source of short-term financing. Both government firms also reported that, retained earnings and trade creditors are the main sources of their short-term financing. The main source of financing for all the transition firms and privatised firms (except Asmara Milk Factory) is the overdraft they get from the Commercial Bank of Eritrea. In addition to this Asmara Textile Factory, Lalmba Sack Factory and Sembel House Hold Factory from the transition firms as well as Asmara Sweater Factory and Eritrea Steel Sheets Factory from the privatised firms consider short-term bank loans to be a main source of short-term

financing. We have also interviewed the managers of the government, transition and privatised firms about the extent of their co-operation with the financial suppliers particularly the Commercial Bank of Eritrea regarding short-term borrowing, overdraft and long-term loans. All firms responded that they are satisfied with the relationship with the commercial bank. However, most managers of the transition and privatised firms replied that they do prefer to take over draft rather than short-term or long-term bank loans. The main reason they give for not opting for the short and long-term borrowing is because the term borrowings unlike the overdraft loans oblige them to clear their outstanding loans within a limited time period.

The bank interest cost and service charges are singled out to be the main cost of financing working capital investments for the transition firms. According to the commercial managers of the government and privatised firms the cost of financing is not relevant for management to give it special attention. Nevertheless, the cost of short-term financing in the transition firms is found to be a major portion of the firms' annual expenses and we observed that the firms do very little to reduce it.

Only Keih Bahri Food Products from the government firms consider sales growth, price levels of inputs, operational efficiency and government subsidy as main factors that influence the short-term financing items. From the transition firms, while Sembel House Hold Factory and Asmara Textile Factory consider respectively the availability of credit and price levels of inputs as main factors that influence the financing of working capital only Lalmba Sack Factory considered seasonality of sales, sales growth and credit policy as main factors. From the privatised firms Asmara Milk Factory considers sales growth, price levels of inputs and operational efficiency and Eritrea Steel Sheets Factory considers price levels of inputs and operational efficiency as main factors that influence the financing of working capital.

9.3.3. Managing working capital operations

Our aim in this section is to compare how the government, transition and privatised firms manage their working capital operations, particularly purchases and sales. Therefore, we asked the firms' commercial managers about policies and terms, as well as about the relevance and management of costs related to purchase and sales management. For detailed information, refer to Appendix 9.2.3.1 (purchase management) and to Appendix 9.2.3.2 (sales management).

9.3.3.1. Managing purchase operations

Purchase policies We observed that few firms could state what their purchasing policy is about. Moreover, from the government firms only Barka Canneries reported that the main purpose of its purchase policy is to take advantage of quantity and cash discounts as well as to decrease inventory holding costs. Keih Bahri Food Products considers only the decrease of inventory holding costs as its objective. From the five transition firms only Dahlack Shoe Factory considered the decrease of inventory holding costs and meeting seasonal production requirements as a main purpose, while Keih Bahri Tannery considered taking advantage of quantity and cash discounts as the main purpose of their purchase policy.

The government and transition firms do not have the policy of credit purchase that they apply for privatised (or private) firms because they are not allowed. There is also some time delay in the payment of purchases made to related government and transition firms, which according to their commercial managers is mainly due to the bureaucratic procedure of the government. The privatised firms buy most of their locally available materials on cash. Moreover, all of them also import some of their materials from foreign countries, in which case they pay with foreign currency that they get from the national bank, which according to their financial managers is quite difficult to obtain. Hence mostly their owners use their own foreign currency resources or exchange the local currency to foreign currency in the black market to get funds for to pay foreign purchase.

Forecasting and control of purchasing The purpose of purchase forecasting in all government firms is to meet production demands, to help in determining the quantity on hand and on order during lead times and to take care of safety stocks. All transition firms considered determining inventory usage during lead time as their main purpose in forecasting purchases. From the transition firms Asmara Textile Factory, Sembel House Hold Factory and Dahlack Shoe Factory, considered meeting production demands as their main purpose in forecasting purchases. In addition to this Lalmba Sack Factory's and Sembel House Hold Factory's main purpose of forecasting purchases is to determine quantity on hand and on order during lead times and to take care of the safety stocks.

With all the government firms, purchase forecasting is based on past experience and management opinion. The transition firms consider the forecasted sales volume as a main base. Moreover, for Dahlack Shoe Factory and Keih Bahri Tannery it is the past experience, for Lalmba Sack Factory and Keih Bahri Tannery, the management opinion and for Lalmba Sack Factory and Dahlack Shoe Factory the purchasing staff opinion which are the main sources of information for forecasting purchases. The purchasing staff almost have no role to play in estimating how much to purchase except with the transition firms.

As for the contact, contract and control of suppliers, all government, transition and privatised firms, choose the cheapest channel of communication to get in contact with suppliers. In addition to this from the government firms Keih Bahri Food Products manages its contact by trust and Barka Canneries employs purchasing agents. The transition firms (except Sembel House Hold Factory) and privatised firms (except Eritrea Steel Sheets Factory) also manage their supplier contact by trust. In getting into contract with suppliers all government, transition and privatised firms make routine purchase agreements with their terms of purchase known to the suppliers in advance of purchase. All government, transition and privatised firms have routine control agreements with their suppliers with the control terms known in advance to both transaction partners as well. We observed that the contact, contract and control of inter-firm transactions in the government and transition firms are done as per the government requirements while the privatised firms are mostly continuing what they used to do as government firms and are not innovating any new approaches subsequent to their privatisation.

9.3.3.2. Managing sales operations

In this section we compare the government, transition and privatised firms' approaches in managing sales operation. Therefore, we asked the firms' commercial managers about policies and terms, as well as about the relevance and management of costs related to sales management. For detailed information, refer to Appendix 9.2.3.2.

Sales policy The responses of the government firm's commercial managers to interview questions indicated that their main objective of sales policy is to satisfy the demands of the Ministry of Defence and to fill the production quota provided by higher authorities. Barka Canneries also has a sales policy to meet seasonal sales requirements and to expand its market. The purpose of the sales policy in the transition firms (except for Asmara Textile Factory) is to satisfy customer demands. For Asmara Textile Factory and Keih Bahri Tannery the sales policy is to meet seasonal sales requirements while that of Sembel House Hold Factory and Keih Bbahri Tannery is also to expand their markets. The privatised firms' main sales policy includes satisfying customer demands. All privatised firms (except Asmara Milk Factory) also include to decrease inventory ordering and carrying costs as well as to meet seasonal sales requirements and expand market. The reported sales term for all the government, transition and privatised firms is the cash basis. The government and transitions firms sell also on credit to fellow government and transition firms but do not apply any credit sales standards. However, the privatised firms apply both cash and credit sales policy using the 5C's and repeat sales as main credit standards.

Sales forecasting and control Except for Keih Bahri Food Products from the government firms and Asmara Milk Factory from the privatised firms, the purpose of sales forecasts in all the government, transition and privatised firms is to estimate future sales demand. The forecast of safety stock is also a main purpose for both government firms and privatised firms (except Asmara Sweater factory). For most of the firms sales forecasts are based on past experience and management opinion. The exception is Keih Bahri Tannery, which uses production capacity. The transition and privatised firms also consider the forecasted sales demand as a main source of information for forecasting sales.

All government, transition and privatised firms (except Asmara Sweater Factory) choose the cheapest channel of communication to get in contact with customers. In addition to this, Keih Bahri Food Products from the government firms, Asmara Textile Factory, Dahlak Shoe Factory and Keih Bahri Tannery from the transition firms as well as Asmara Milk Factory from the privatised firms manage their customer contact by developing long-lasting relationships. In getting into contract with customers all government, transition and privatised firms make routine contract agreements with their terms of sales known to both parties in the sales transaction. All government, transition and privatised firms also make routine control agreements with control terms known in advance to both transaction partners.

Generally, all firms except one transition firm (Keih Bahri Tannery), reported that the costs of contact, contract and control of sales transaction are very small and therefore not relevant for the management. All firms reported also that the possibility

of customers to back down from their sales agreement is very small and it is not difficult to find another customer. According to the firms' commercial managers opinion because their customers had never backed down from their agreements they never been to the court to regain something that they have lost as a result of an opportunistic or non-credit worthy customer.

9.3.4. Performance evaluation of working capital decisions

In this section we study if the government, transition and privatised firms evaluate the performance of their working capital decisions with regard to the levels of investment and financing as well as operations of purchasing and selling. For this purpose, we asked the managers what specific financial and non-financial criteria they apply to measure and evaluate their performance, and what factors determine their overall performance. We have also used the firms' financial statements to study the comparative performance of their working capital levels and operations. For more information of performance measurement and evaluation refer to Appendix 9.2.3.3, for performance evaluation of working capital decisions and 9.2.3.4 for a comparative financial performance.

Determinants of performance It is only the availability of labour that determines the performance of the government firms. The transition firms (except Sembel House Hold Factory and Dahlack Shoe Factory) reported that their performance is determined by the availability of short-term and fixed capital investment and financing as well as labour (both skilled and unskilled). According to the managers of the privatised firms' working capital investment and short-term financing, fixed capital investment and long-term financing as well as availability of labour determine how good or bad they perform. The exceptions here are Asmara Sweater Factory, which reported that short-term financing is not relevant and Asmara Milk Factory, for which short-term financing and the availability of labour are not considered determining factors of performance.

Performance measurement and evaluation criteria We asked the firms' managers, what mechanisms they use to evaluate the internal and external performance of their working capital decisions. In order to evaluate their performance, all government, transition and privatised firms reported that they compare their past performance with their present achievements. Moreover, both government firms, the transition firms (except Asmara Textile Factory and Sembel House Hold Factory) and the privatised firms (except Eritrea Steel Sheets Factory) compare the actual with the expected performance. However, only the government firms and Keih Bahri Tannery from the transition firms reported that they compare their performance with the performance of other firms using benchmarks.

Customer satisfaction based performance evaluation: All the government, transition and privatised firms reported that they take care of their customers satisfaction by trying to be efficient on their communication by applying the policy of faster response and delivery time. The government firms, Lalmba Sack Factory and Sembel House Hold Factory from the transition firms and the privatised firms except Asmara Milk Factory use cost minimisation by charging lower prices. Very few firms use other customer satisfaction based performance evaluation. Those who try to decrease defect rates and increase customer's perceived value of goods include Keih

Bahri Food Products from the government firms, Lalmba Sack Factory and Sembel House Hold Factory from the transition firms as well as Eritrea Steel Sheets Factory and Asmara Milk Factory from the privatised firms.

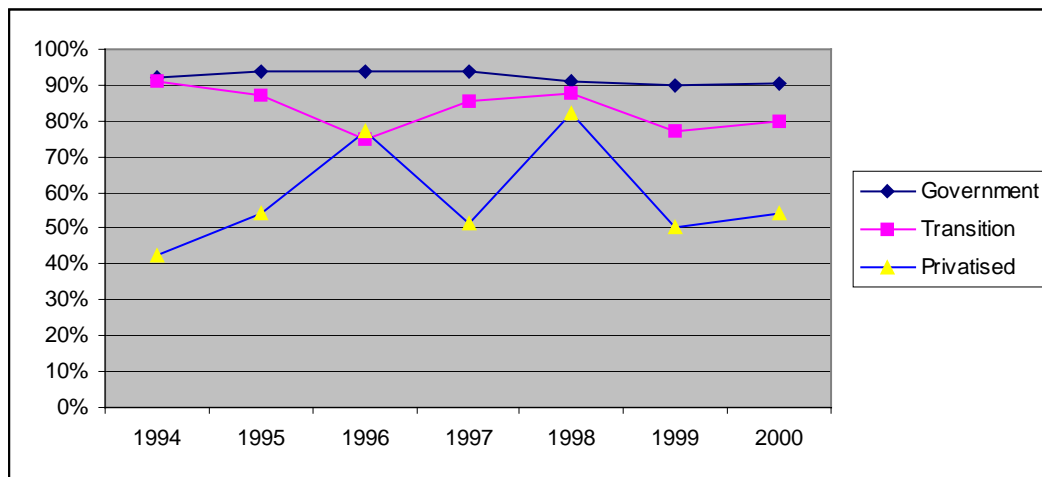
Accounting based performance evaluation criteria Both government firms use liquidity and activity ratios as well as inventory, receivables and overall working capital turnovers to evaluate their financial performance. However, it is only Keih Bahri Food Products, which reported that it also uses leverage and profitability ratios. Lalmba Sack Factory from the transition firms as well as Asmara Sweater Factory and Eritrea Steel Sheets Factory from the privatised firms reported that they use all liquidity, activity, asset structure and profitability ratios to evaluate their managerial decisions with regard to financial performance.

In the next section we present a comparative evaluation of the firms' financial performance (see Appendix 9.2.3.4). We evaluate the investment composition using asset structure ratios. Liquidity and short-term financing composition ratios are also used to evaluate the firms' short-term financing and liquidity position and lastly, we used activity and profitability ratios to study the firms' overall efficiency in turning over working capital assets.

9.3.4.1. Performance evaluation of working capital investments

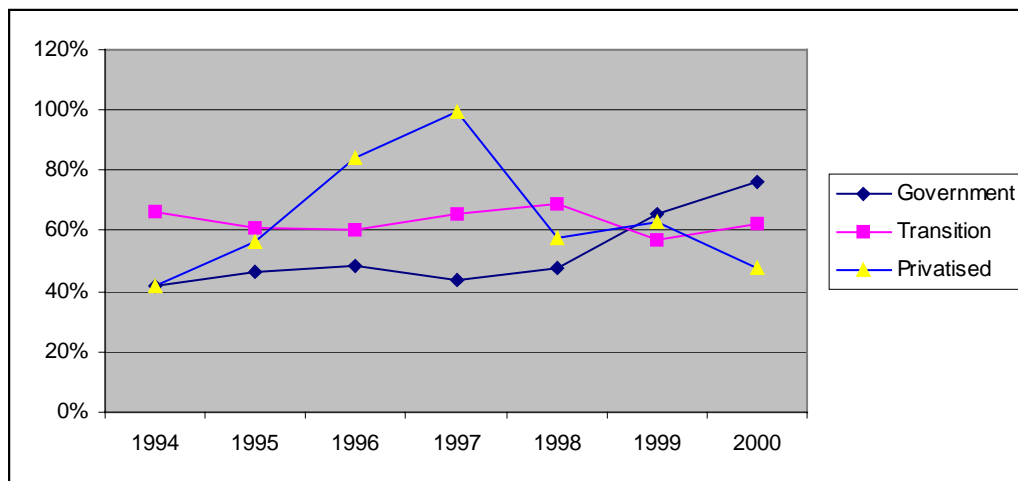
Investment composition We study the firms' investment composition by computing working capital to total assets. In order to have specific insight into the firms' working capital investment composition, we evaluated the breakdowns of working capital into cash, receivables and inventory. We used the terms "inventories" and "stock" as well as "accounts receivable" and "debtors" inter-changeably. We have used the terms inventories and receivables in our literature review, while empirically we found that the firms in Eritrea use the terms "stock" for inventories and "debtors" for accounts receivable.

As it is indicated in Appendix 9.2.3.4, the seven year average *current assets to total assets ratios* for the government, transition and privatised firms are 92%, 69% and 68% respectively. The implication of these ratios is that the composition of working capital in total assets is excessive (when compared to the global ratio of 50%) given the manufacturing nature of the activities that the firms are in. Particularly, the government firms with an average of 92% of total investment tied up in working capital assets show excessive investment in current assets. The comparative trend over the seven years of current assets to total assets composition that is indicated by Figure 9-1 also supports the above argument.

Figure 9-1. Current assets to total assets – government, transition, privatised firms

Source: Appendix 9.2.3.4

We also computed cash, receivables and inventory to working capital, which on average accounted to 31%, 47% and 22% respectively for the government firms, 5%, 14% and 81% respectively for the transition firms and 25%, 20% and 54% respectively for the privatised firms. The government firms have invested most of their working capital assets in receivables, while the transition and privatised firms have heavily invested in inventory. Particularly, the composition of inventory in the total working capital assets is very large for the transition firms, which normally implies a warning on the policy of working capital management.

Figure 9-2. Current debt leverage (%) – government, transition and privatised firms

Source: Appendix 9.2.3.4

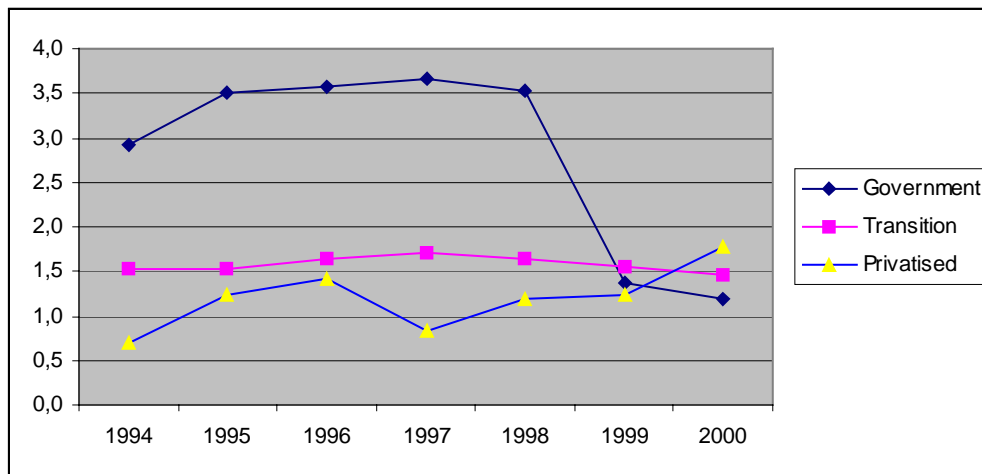
As it is revealed by Figure 9-2, the short-term debt compared to the total assets in the government firms was relatively small but increased in the last three years and at the end of the study period accounted for the largest proportion of total assets. This implies that the assets are increasingly financed by the short-term debts. The privatised firms on the other hand had at the end of the period the smallest percentage of assets financed by short-term debt.

9.3.4.2. Performance evaluation of working capital finances

Liquidity position In order to study how the firms' investments are financed and their liquidity position, we analysed the firms' financial statements by computing liquidity ratios (see Appendix 9.2.3.4). The liquidity position of the firms is analysed using current and quick ratios.

Current ratios: The average current ratios for the government, transition and privatised firms were 2.8, 1.5 and 1.4 respectively. When compared with the global norm on current ratio of 2 the government firms are excessively liquid while the transition and privatised firms may indicate liquidity problems. Moreover, the trend in Figure 9-3 shows that the current ratio of the transition and the privatised firms at the end of our study period fell below the generally accepted norm (see Appendix 9.2.3.4).

Figure 9-3. Current ratio – government, transition and privatised firms



Source: Appendix 9.2.3.4

Quick Ratio: We can observe from Appendix 9.2.3.4, that the government, transition and privatised firms respectively have quick ratio of 1.8, 0.4 and 0.9. When compared with the global norm of 1, these ratios still indicate that the transition and privatised firms have problems of liquidity, implying also that relatively a large portion of their current assets is composed of inventory.

Short-term financing composition: As it is indicated in appendix 9.2.3.4 the government firms use only trade creditors and others (such as tax payables), which accounted to about 59% and 41% respectively. The transition firms use trade creditors (59%), bank overdrafts (20%), other (19%) and short-term bank loans (2%). However, the privatised firms use mainly Bank overdrafts (49%) and trade creditors and other accruals each amounting 28%, while short-term bank loans (11%) remain relatively smaller.

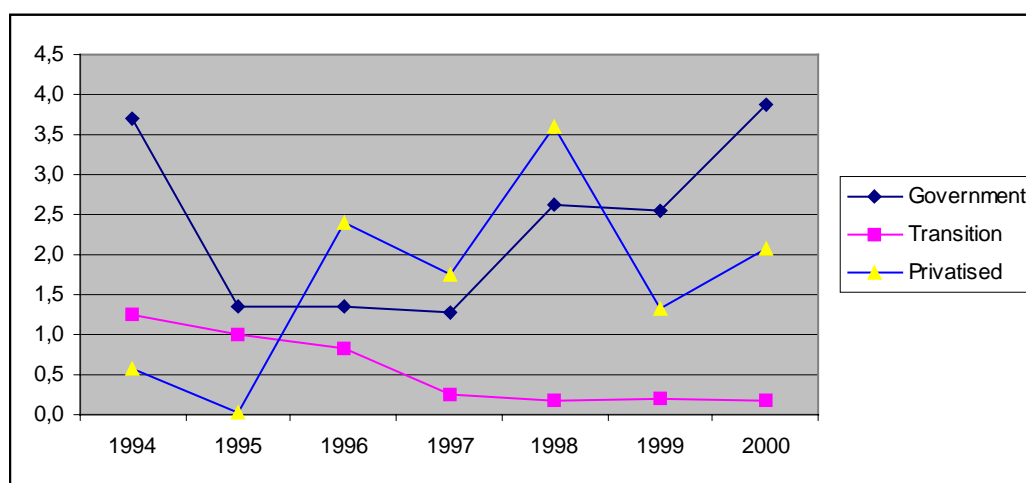
9.3.4.3. Performance of working capital operations

We used activity and profitability ratios respectively to study how efficient and profitable the government, transition and privatised firms were during the years of our study.

Operational efficiency of working capital activities Operational efficiency of working capital activities is measured by using activity ratios, which include, inventory turnover, receivables turnover and overall working capital turnover. The turnovers can also be converted to average days the current assets are held. The computations regarding activity ratios is included in Appendix 9.2.3.4.

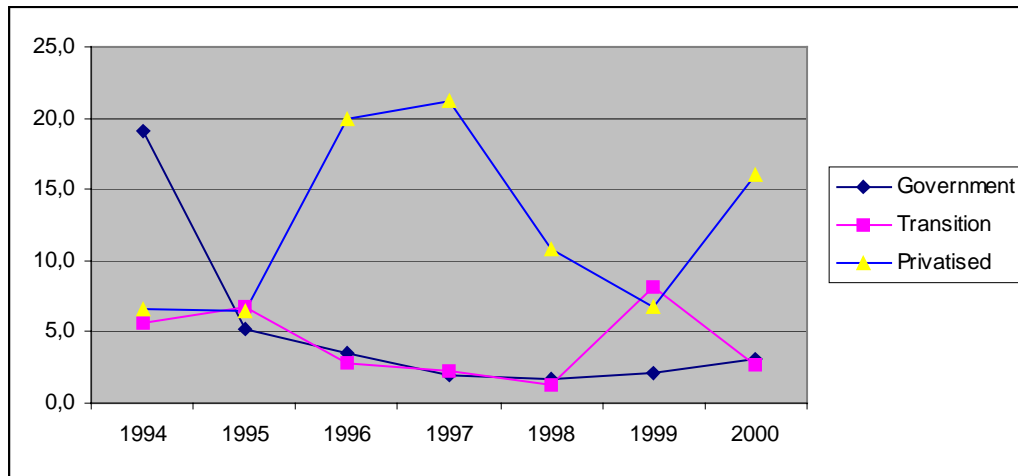
Inventory turnover and days that the inventory was not collected indicate that annual cost of goods sold for the government, transition and privatised firms respectively is 3.4 (or 107 days), 0.6 (or 608 days) and 2.3 (or 159 days). This inventory turnover ratio and days outstanding for all the firms and particularly the transition firms, indicate very slow moving inventory possibly due to inefficient working capital management, that is, poor buying and selling practice and unsound inventory management. A closer observation at Figure 9-4 reveals that the inventory turnover of the government firms is improving while that of the transition and privatised firms fell sharply though the privatised firms are picking up after privatisation.

Figure 9-4. Inventory turnover – government, transition and privatised firms



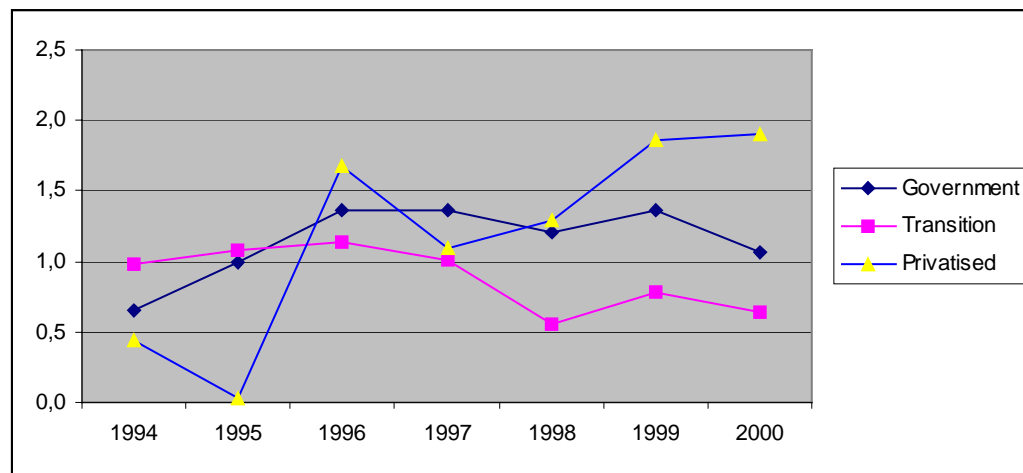
Source: Appendix 9.2.3.4

Receivables turnover and average collection days reveal 5.2 (or 70 days), 3.1 (or 117 days) and 16.4 (or 22 days) respectively for the government, transition and privatised firms. As indicated by Figure 9-5, the receivables turnover except for the privatised firms indicate very slow turnover implying longer time taken in collecting receivables.

Figure 9-5 Receivables turnover – government, transition and privatised firms

Source: Appendix 9.2.3.4

Overall working capital turnover respectively for the government, transition and privatised firms indicate that sales is 1.4, 0.9 and 1.6 times the average annual balance of current assets (see Figure 9-6). Again the overall working capital turnover is very low implying the days that the working capital assets take to turnover is very long.

Figure 9-6 Overall working capital turnover – government, transition and privatised firms

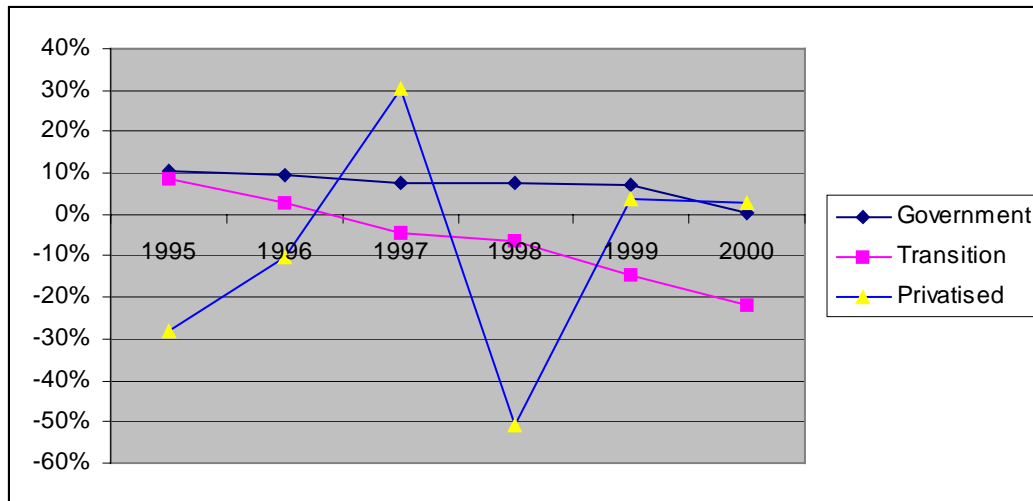
Source: Appendix 9.2.3.4

Overall profitability measures of performance evaluation include gross profit margin, net profit margin and return on total assets. As Appendix 9.2.3.4 shows, the firms' *gross profit margin* respectively for the government, transition and privatised firms was 14%, 14% and 19% and *net profit margin* was 8%, -7% and -7% respectively while the *return on assets* was 7%, 0% and 3% respectively for the three groups of firms. (See also Figure 9-7).

All firms show positive gross margins, but only the government firms have positive net profit margins and return on assets. As Figure 9-7 reveals the gross profit of the privatised firms has changed to a net loss after the deduction of operating costs. This drastic change is only caused by Asmara Sweater Factory, whose operations continuously ended up at net losses in most of the years of study. Otherwise the other

two privatised firms, Asmara Milk and Eritrean Steel Sheet Factories have ended up at a successful operating results – gross profit, net profit and return on assets through out the years. However, most of the transition firms reveal the lowest gross profit, which ended up at net losses throughout the years of study. Keih Bahri Tannery is the exception in this case.

Figure 9-7. Net profit margin (%) – government, transition and privatised firms



Source: Appendix 9.2.3.4

Concluding remarks Firms create value when the objective of working capital management is tailored towards value creation, rather than only the custody of property and operations. Empirically, the managers reported that they apply controlling mechanisms in order to manage their working capital levels and operations. In the government and transition firms the problem is mainly due to managerial empowerment. In the privatised firms we trace this lack of managing for value creation due to problems of liquidity, as well as lack of capital market investment opportunities and alternative financing sources.

Government and transition firms lack managerial empowerment. Managers of government and transition firms are not fully empowered to manage their internal working capital levels and operations as well as their external supplier linkages. In the transition firms, the privatisation agency - National Agency for Supervising and Privatising Public Enterprises (NASPPE) has the final say in both internal and external affairs of the firms and the Ministry of Defence plays the same role in the government firms. The management of these firms is given very little authority and power to manage the affairs of the firms.

For the privatised firms, the main constraint is not the problem of managerial empowerment. The privatised firms' problems can be traced to lack of managerial experience in the private sector, management culture tailored towards managing government firms, lack of clarity of managerial objectives, lack of capital market investment and financing opportunities as well as lack of both skilled and unskilled labour. We will concentrate on the privatised firms' problems of liquidity, investment opportunities and financing sources.

(a) The lack of liquidity: The response of the managers of privatised firms and observation of the firms' financial statements indicate that the privatised firms barely finance their working capital expenditures and have nothing left for both short-term and long-term investment. Though the firms have an option to deposit in a bank saving account, which can earn some interest they rarely use this option. They all use the current or checking account, which the bank requires them to maintain for the overdraft account to function. Moreover, the firms who have surplus cash are the government and some of the transition firms who are not allowed even to deposit surplus cash at a bank interest earning saving or time deposit accounts.

(b) The absence of investment opportunities: As we have conceptually reviewed in chapter two, excess cash can be invested in both primary and secondary capital markets. Long-term surplus cash can be invested in bonds and shares with long-term expected returns while short-term cash surplus is invested in near-cash liquid assets such as *marketable securities*. The government had introduced the issuance of bonds during the war with Ethiopia (1998-2000), but it was mainly targeted at the Eritreans in the Diaspora and there is no capital market in Eritrea available for the local level. Some managers of privatised firms attributed their inability to manage their short-term cash surplus to this absence of capital markets. Any surplus cash is kept in bank deposits or invested in receivables and inventories whose turnover is very low.

(c) The absence of alternative financing sources: The external financing source available to management is the bank overdraft and term loans. The firms prefer the bank overdraft facility because it is easily available. However, for some firms the cost of the bank overdraft is very expensive but still they have no way out but to take it. The firms do not prefer the short-term loans because as one manager put it, "*It has a limited pay back period and so bears liquidity risk and creates stress on the management when it has to be fully paid back*".

The following table (Table 9-1) summarises our overall findings with regard to the internal management of working capital.

Table 9-1: The empirical findings on the internal working capital management

| | Government | Transition | Privatised |
|------------------------|--|---|---|
| Overall WCM | Management policy is to decrease costs. Objectives constrained by lack of fixed capital investment, production capacity, skilled labour and managerial empowerment. | Objective is to remain liquid and generate profit. Objectives constrained by the transition process, lack of fixed capital investment, labour and managerial empowerment | Management policy is to increase sales, decrease costs and generate profit. Objectives are constrained by lack of investment and financing opportunities. |
| Internal Levels | | | |
| Investment | Do not manage the carrying costs of surpluses and shortage costs of deficits of cash, receivables and inventory levels. Do not try to harmonise policies of cash levels with that of trade receivables and inventory. Management is restricted to the control function. | Do not manage the carrying costs of surpluses and shortage costs of deficits of cash, receivables and inventory levels. Do not try to harmonise policies of cash levels with that of trade receivables and inventory. Management is restricted to the control function. | Do not manage the carrying costs of surpluses and shortage costs of deficits of cash, receivables and inventory levels. Management is restricted to the control of costs and physical safety. Do not try to harmonise policies of cash levels with that of trade receivables and inventory. |
| Financing | Working capital investment financed through subsidies. Lack careful management of financing sources, costs and liquidity positions. Do not harmonise policies of cash levels with that of trade payables and inventory of materials. | Do not harmonise policies of cash levels with that of trade payables and inventory of materials. Objectives constrained by lack of financing opportunities. | Do not try to harmonise policies of cash levels with that of trade payables and inventory of materials. Objectives constrained by lack of financing opportunities. |
| Operations | | | |
| Purchases | Managerial policy on purchase terms and standards is dictated by government regulations. Management is restricted to the control function. Management does not try to harmonise cash payments with purchases and trade credits. | Do not have clear managerial policy on purchase terms and standards. Management does not try to harmonise cash payments with purchases and trade credits. Management is more restricted to the control. | Have policy on purchase terms and standards. Try to harmonise cash payments with purchases and trade credits so that cash needed is minimised and purchase and trade credits are maximised. |
| Sales | Policy on sales and cash collection terms and standards is dictated by government regulations. Do not try to harmonise cash collections with sales and receivables. Have to comply with the relevant government regulations. Have to sell their products mainly to the Ministry of Defence, which supervises them. | Lack clear policy on sales and cash collection terms and standards. Do not try to harmonise cash collections with sales and receivables. Have to comply with the relevant government regulations. | Have policy on sales terms and standards. Credit standard to evaluate credit applicants depend on the five C's. Government firms are trusted more and are offered credit. Try to harmonise cash collections with sales and receivables. |

9.4. External working capital management – supplier and customer linkages

This section presents a comparative study of the external working capital management of the three categories of firms - government, transition and privatised. It explores if the firms have proper inter-firm co-operation on both the supplier and the customer side. Particularly, we study if the firms have proper inter-firm co-operation with their suppliers and customers on the primary activities, purchase and sales operations and inventory management and what benefits they get as a result of their co-operation or why they do not co-operate. Detailed supporting data on the firms' responses on firm-supplier co-operation are included in Appendix 9.3.1.1 and Appendix 9.3.1.2 is on the firms' responses on firm-customer co-operation. Table 9-2 summarised our findings.

9.4.1. Firm-supplier co-operation

9.4.1.1. Responses of the central firms

Firm-supplier co-operation on primary activities We asked the managers if they co-operate with their suppliers on the primary activities. As indicated in Appendix 9.3.1.1, the only primary activity that most of the firms claimed to co-operate with suppliers is on the inbound activity particularly shipment. The firms that do not co-operate with any local supplier (because their backward linkages are mainly with suppliers abroad) in any primary activity are Lalmba Sack Factory and Sembel House Hold Factory from the transition firms and Eritrea Steel Sheets Factory from the privatised firms. Both government firms also co-operate with suppliers on other inbound activities such as material storage. Moreover, Barka Canneries co-operates with suppliers on inbound activities - inventory control and distribution to production, production operation - product testing and facility operations, after sales service – repairs, parts supply and facility operations.

From the transition firms Asmara Textile Factory and Keih Bahri Tannery co-operate with suppliers on the inbound activities of distribution to production and inventory control, production operations of assembling, product testing and facility operations. Dahlack Shoe Factory co-operates with suppliers only on the inbound activities of shipment, storing, distribution to production and inventory control. The privatised firms except Eritrea Steel Factory co-operate with suppliers on all inbound activities and production operations. In addition to this while Asmara Sweater Factory co-operates on marketing and sales – sales channel selection, after sales service repairs and product adjustment, Asmara Milk Factory co-operates on marketing and sales, including equipment maintenance, sales force and sales channel selection. The government and transition firms also co-operate on storing and distribution to production respectively. However, the privatised firms reported that they co-operate on all the inbound activities and production operations but not on the marketing/sales and after sales services.

Firm-supplier co-operation on purchases and inventory management On the issue of firm-supplier co-operation on purchases and inventory management, most government, transition and privatised firms co-operate with regard to quality and quantity of materials, terms of transportation as well as getting the materials just in time for production. The firms, which reported non-co-operation are Sembel House

Hold Factory from the transition firms and Eritrea Steel Sheets Factory from the privatised firms. Both government firms, as well as the transition firms (except Sembel House Hold Factory) and only Asmara Sweater Factory from the privatised firms reported that they get benefits such as a decrease in the time needed to purchase materials as well as in the costs of ordering and carrying materials. Keih Bahri Food Products from the government firms, the transition firms except Asmara Textile Factory and Sembel House Hold Factory as well as Asmara Sweater Factory from the privatised firms also reported that this firm-supplier co-operation creates inter-firm trust. The first reason that the managers of Lalmba Sack Factory and Keih Bahri Tannery from the transition firms and the privatised firms give for a lack of co-operation is that their suppliers do not co-operate. The second reason is that the firms themselves also have a selective policy of co-operation because they do not see benefits of co-operation with some suppliers. Both government firms reported that they co-operate fully with fellow government and transition firms. However, the interviews with the managers indicate that they do not co-operate with their private suppliers in specific primary activities because they are not allowed to establish close inter-firm linkages except with “related” government firms. For control purposes government regulations oblige the firms to purchase their materials from other government firms or from private firms on the basis of continuous competitive bidding.

9.4.1.2. Firm-supplier co-operation- responses of suppliers

We approached the suppliers of the firms to find their responses and study the value creation potential of the backward linkages. In this section, we comparatively study the firm-supplier co-operation of the government, transition and privatised firms from the point of view of their main suppliers. We explored their co-operation on primary activities, sale-purchase operations and related benefits or the reasons for the lack of co-operation. Finally, we cover the suppliers’ evaluation of firm efficiency.

Firm-supplier co-operation on the primary activities The suppliers of all the government, transition and privatised firms responded generally that they do not have strong firm-supplier co-operation on most primary activities. No supplier responded any co-operation with the firms on any activity related to production operation and after sales service. However, the suppliers of both government firms responded that they co-operate on outbound activities, particularly delivery vehicle operation and order processing. From the transition firms, the suppliers of Dahlack Shoe Factory and Keih Bahri Tannery co-operate respectively on order processing and delivery vehicle operation. From the privatised firms only the supplier of Asmara Sweater Factory reported of the existence of inter-firm co-operation on the outbound activities, particularly delivery vehicle operation and order processing. With respect to the firm-supplier co-operation on the primary activities the strongest firm-supplier linkage is observed to be between the privatised firms and their suppliers. The weakest firm-customer linkage is between the transition firms and their suppliers.

Firm-supplier co-operation on purchases and inventory management The suppliers of both government firms responded that they co-operate with the firms in providing goods when just needed. In addition to this the supplier of Keih Bahri Food products also reported positively to the co-operation on credit transactions without discount. From the transition firms the supplier of Asmara Textile Factory and Dahlak Shoe Factory claimed to co-operate respectively in providing credit without discount and

goods when just needed. The suppliers of both privatised firms (Asmara Sweater Factory and Asmara Milk Factory) reported the existence of inter-firm co-operation in providing credit without discount and goods when just needed. No supplier of any firm reported co-operation on exchanging skilled staff and on giving credit with discounts.

The benefits of co-operation The suppliers of both government firms responded that the benefits they get as a result of their co-operation include decreasing the time needed to sell the goods, as well as the costs of ordering and transportation. In addition to this the suppliers of Keih Bahri Tannery and Barka Canneries believe respectively that their inter-firm co-operation helps to decrease the carrying costs of finished goods inventory and creates inter-firm trust. From the transition firms, the suppliers of Asmara Textile Factory and Keih Bahri Tannery believe that their inter-firm co-operation helps them to decrease the time needed to sell the goods, as well as the costs of sales ordering and transportation. In addition, the supplier Asmara Textile Factory reported that the inter-firm co-operation helps in decreasing the carrying cost of inventories and creating inter-firm trust. From the privatised firms, both the suppliers of Asmara Sweater Factory and Asmara Milk Factory believe that the inter-firm co-operation helps to decrease the time and costs of selling, the costs of ordering transportation and carrying the finished goods inventory as well as to create inter-firm trust.

Supplier rating of firm efficiency The suppliers of both government firms, the supplier of Asmara Textile Factory from the transition firms and the supplier of Asmara Sweater Factory from the privatised firms rated their partners as efficient on purchase order processing, bilateral communication, explanation to enquiries, courtesy and payment habits. The suppliers of Keih Bahri Tannery from the transition firms and the supplier of Asmara Milk Factory from the privatised firms rated their partners poorly in all the issues except for the prompt payments and using supplier services. The transition and privatised firms are rated as not satisfactory on their co-operation on marketing suppliers products.

Concluding remarks on firm-supplier co-operation We observed in most cases that the transition firms agree with their suppliers on the lack of co-operation on all primary activities as well as on sale/purchase and inventory management. However, the responses of the privatised firms and their suppliers reveal that their suppliers do not support the claim of the privatised firms' co-operation on inbound activities and production operations. The government firms' claim of co-operation on inbound activities also contradicts with that of their suppliers. Generally, according to the responses of the suppliers on the firm-supplier co-operation on the primary activities, sales/purchase operations and inventory management is very poor. As a result of which we believe that all the firms are not efficiently managing their transaction costs and that their value creation potential remains weak.

9.4.2. Firm-customer linkages

9.4.2.1. Responses of the central firms

Comparatively, how efficient are the government, transition and privatised firms in managing their customer linkages? We seek an answer to this question by asking the general, financial and commercial managers of the firms about if and how they co-operate with their customers on primary activities, sales operations and inventory management. We also inquired what benefits they get as a result of their co-operation or why they do not co-operate.

Firm-customer co-operation on the primary activities Both government firms reported that they co-operate with their customers on outbound activities, particularly finished goods warehousing, delivery vehicle operation and order processing. In addition to this Barka Canneries also co-operates on production operations of equipment maintenance and product testing. From the transition firms, Lalmba Sack Factory and Keih Bahri Tannery responded positively to the firm-customer co-operation on outbound activities, specifically finished goods warehousing and materials handling. Dahlak Shoe Factory and Keih Bahri Tannery also co-operate on order processing. In the primary activity of production operations it is only Keih Bahri Tannery that reported firm-customer co-operation on equipment maintenance, product testing and facility operations. Asmara Textile Factory also co-operates with its customer on packaging. In the case of the privatised firms Asmara Sweater Factory and Asmara Milk Factory have firm-customer co-operation on all production operations and outbound activities. Generally, all firms have very weak customer linkages on all primary activities related to marketing and sales as well as after sales service. No government or transition firm reported any co-operation on these primary activities and it is only Asmara Milk Factory that claimed to have firm-customer co-operation on marketing and sales, particularly promotion and sales channel selection.

As it is the case with the firm-supplier co-operation on primary activities, the government firms reported that they have very little firm-customer co-operation with the private sector on all primary activities. These firms co-operate mainly with fellow government firms, which according to the interviews conducted is dictated by government regulations. The transition firms have some firm-customer co-operation with regard to outbound activities but not on the other primary activities such as production, marketing/sales and after sale service. According to the response of the managers, the firm-customer co-operation is observed to be the strongest among the privatised firms (except for Eritrea Steel Sheets Factory). The two privatised firms have revealed strong firm-customer co-operation on the production operation and outbound activities. The weakest firm-customer co-operation with all the three groups of firms is observed on the marketing and sales and after sale service. All firms trace the weak firm-customer linkages to the lack of co-operation from the side of their customers. The privatised firms also reported that they do not co-operate on some specific primary activities because of their selective policy on inter-firm co-operation. They do not see the benefit of having close co-operation with each customer.

Firm-customer co-operation on purchases and inventory management Both government and privatised firms (except Eritrea Steel Sheets Factory) reported that they co-operate with their customers on the quality and quantity they have to sell to

customers, on the terms of transportation and in providing the goods just in time for production. However, the only co-operation that all transition firms reported is on the quality and quantity of materials that they have to purchase. In addition to this Asmara Textile Factory, Dahlack Shoe Factory and Keih Bahri Tannery co-operate on the transportation terms, while it is only Keih Bahri Tannery that co-operates on providing the goods just in time for the customers production. The government and transition firms reported that the benefits they get as a result of their co-operation with their customers include, minimising the cost of customer ordering and transportation as well as the costs of carrying inventories as well as increasing sales. However, from the privatised firms only Asmara Sweater Factory and Asmara Milk Factory claimed to get the benefit of increasing sales because of their firm-customer co-operation. The reason for the lack of co-operation according to the transition firms (except for Asmara Textile Factory) and the privatised firms (except for Asmara Milk Factory) is that their customers do not co-operate. For the government firms the reason for the lack of co-operation is that they do not have the policy of co-operation. The reason for non co-operation with customers for Keih Bahri Tannery from the transition firms and Asmara Milk Factory from the privatised firms is because they do not see the benefit of co-operation in some primary activities.

Assessing customer satisfaction According to the financial managers, all firms except Dahlack Shoe Factory get feedback on their customers' opinion on the quality of their products and services by allowing them to return any product with inferior quality and making strict quality control at the production floor. Only Barka Canneries from the government firms, Sembel House Hold Factory and Keih Bahri Tannery from the transition firms and privatised firms except Asmara Milk Factory make periodic assessments of customer opinion. However, non of them grant credit to customers or allow them to pay after they made sure that the products are as per their expectation.

9.4.2.2. Firm-customer co-operation - responses of customers

We approached the customers of the government, transition and privatised firms to find their opinion on firm-customer relations and to study the value creation potential of the forward linkages. We searched for the specific co-operation on the primary activities as well as on their purchases and inventory management. We also studied benefits of inter-firm co-operation as well as the customers' evaluation of firm efficiency. Appendix 9.3.3 contains detailed supporting data on customer responses on firm-customer co-operation and Table 9-2 summarises our findings.

Firm-customer co-operation on the primary activities The customer of Keih Bahri Tannery from the government firms replied that there is no activity related to the primary or purchase and inventory management that it co-operates with its supplier. Therefore the manager believes that there is no benefit that his firms gets as a result of its co-operation. The only inter-firm co-operation reported by the customers of the transition firms is that of Lalmba Sack Factory, Sembel House Hold Factory and Keih Bahri Tannery on inbound activities of order processing. In addition to this the customer of Lalmba Sack Factory also responded positively to the inter-firm co-operation on distribution to production and inventory control and that of Sembel House Hold Factory on advertising. The customers of both privatised firms also have

the opinion that they co-operate on inbound activities of order processing as well as purchase and inventory management specifically in having credit agreements without discounts. The customers of all three categories of firms reported that there is no benefit that they get as result of inter-firm co-operation.

Appendix 9.3.3 shows, the response of the customers of all three categories of firms on inter-firm co-operation is negative except for the customers of the transition and privatised firms on inbound activities, particularly order processing. The customers reported that they do not have any co-operation on the primary activities as well as purchase and inventory management.

The response of the managers of the customers of the government, transition and privatised firms to the question related to the benefits that they get as a result of their co-operation is a direct reflection of their responses to the inter-firm co-operation. They all believe that there is very little or no benefit that they get as a result of co-operating with the firms. They specifically believe that there is no inter-firm co-operation that helps in decreasing the cost of purchasing materials or the time needed to purchase materials or the cost of holding their material inventory and this lack of co-operation they believe does not help in developing inter-firm trust. The reason that all customers gave for the lack of firm-customer co-operation is that their business partners do no co-operate.

Customer rating of firm efficiency The only activity that all the customers of the government, transition and privatised firms rated the firms as efficient is on cash collection habits. In addition to this, the customers of the government and privatised firms rated their partners as efficient on product quality, bilateral communication and impartiality with other buyers. The customer of the government firm also rated its partner as efficient on product costs, delivery, explanation to inquiries and knowledge of customers. The rating of the customers of the transition firms was efficient on product costs and quality, delivery, bilateral communication and impartiality with other buyers. Moreover, the customers of the privatised firms also rated the firms as efficient on their sales processing. All groups of firms are rated inefficient on their marketing approach and providing customer services.

Concluding remark on the overall inter-firm co-operation We now make some concluding remarks with regard to the overall firm-supplier-customer co-operation which is prevalent in the government, transition and privatised firm.

Overall, from the above empirical findings we can conclude that the government firms' relationship with their customers and suppliers is determined by government regulations, which dictate how they have to co-ordinate their primary activities, sales/purchase and inventory management related to both backward and the forward linkage. So the firms' management has serious lack of managerial empowerment. On the other hand the transition firms have limited autonomy to manage their inter-firm linkages but because of their limited market, managerial culture tailored to custodial control and uncertain future with regard to their ownership and management's job security, they cannot design and implement dynamic approaches of firm-customer co-operation. The firm-supplier-customer relation of the privatised firms is also not efficient because of the non-customer oriented management culture, lack of managerial experience with the private sector and non-existence of other competing private firms,

which could provide for exemplary firm-customer co-operations. In general, most firms do not use a particular approach to keep in touch with their suppliers and customers or expedite their backward and forward linkages. When the responses of the firms and their customers is compared, all firms and their suppliers and customers agree that they have no co-operation in any of the marketing/sales and after sales services. However, most firms have responded that they co-operate on sale/purchase operations while their customers responded the lack of inter-firm co-operation on the same activities. The privatised firms have also exaggerated their firm-supplier and customer co-operation on their inbound and outbound and production activities in comparison to the opinion of their customers.

Table 9-2: The empirical findings on the external working capital management

| | Government | Transition | Privatised |
|-----------------------------------|---|--|---|
| External Supplier linkages | Co-operation depends on the basis of government regulations. There is close inter-government firm co-operation. Co-operation with the private sector is weak. Inter-government firms' co-operation enhanced purchases and minimised the carrying costs of inventories. | Most (except Keh Bahri Tannery and Asmara Textile Factory) have weak firm-supplier co-operation. There is no synchronisation among the policies of cash, pay-ables and inventories with the policies of suppliers. | Have strong firm-supplier co-operation. Asmara Milk Factory controls its suppliers through their supply line and buys on credit. Asmara Sweater Factory harmonises its policies of working capital levels and operations with the policies of its supplier. |
| Customer linkages | The main customer and supervising body is the Ministry of Defence and there is close inter-government firm co-operation. With this closer firm-customer co-operation sales is enhanced and the carrying costs of inventories minimised. | Most have very weak firm-customer co-operation. There is not synchronisation among the policies of cash, receivables and inventories with the policies of customers. | Only one firms (Asmara Milk Factory) has strong firm-customer linkages with some synchronisation among the policies of working capital levels and operations with the policies of its customers. |
| Evaluation | Evaluate their performance using comparative analysis of past versus present, actual versus expected and inter-industry benchmarks. Use liquidity and activity measures of accounting. Use customer satisfaction criteria of fast response to inquiries and orders and quick delivery time. | Evaluate their performance by comparing the past with the present and actual with expected results. Use no accounting and customer satisfaction measures of performance. | Evaluate their performance by comparing past and present as well as actual and expected results. Do not use inter-industry benchmarks. Take care of customer satisfaction by having fast response to inquiries and quick delivery, by minimising costs and charging lower prices and decreasing defect rates. |

9.5. The general Eritrean context

In the interviews we conducted we asked the managers of the firms the effect of ownership, government regulations, managerial empowerment and cultural factors on the management of working capital. Our findings reveal these factors have substantial influence on the managers. Table 9-3 summarised our findings.

Ownership With the government firms control by government regulations impaired managerial empowerment. There is strong government interference through subsidies and market protection. Competition is hindered by interference from the government and the firms have similar objectives and control patterns which aim at enhancing social objectives such as creating employment. Managers of the transition firms face uncertain future due to the transition process. This has crippled their managerial confidence and job security. Firms have similar objectives and control patterns with the government firms in trying to enhance social and profit objectives and so reflect characteristics of both government and privatised firms. Privatised firms reveal strong resistance to new private business environment. Due to lack of efficient financial institutions and capital markets they have no backup for investments and financing. However, competition is not hindered by interference from the government. The firms' main aim is operational efficiency with a value creation as the ultimate objective.

Government regulations Managers of the government and transition are influenced substantially by the government requirements and interference of higher government bodies. Government regulations influence the type of business operations and inter-firm linkages. Government also determines the rules and guidelines on how the firms have to be managed. With the privatised firms government regulations have less influence on the type of business operations, inter-firm linkages and the type of competition.

Managerial empowerment With the government managers, lack of management power has made an impact in the selection of alternative management approaches and has played a role in the development, acquisition and adaptation to proper managerial policies. Transition managers are also influenced substantially by the government requirements and interference of higher government bodies. Government sets guidelines on the type of business operations and how the firms have to be managed. Privatised managers are fully empowered and free to select from alternative management approaches. However, they made less visible change in the development, acquisition and adaptation to proper managerial policies because of their historical background as government firms, managerial experience in the private firms and lack of financial institutions and capital markets.

Cultural factors We did not find any cultural practices, beliefs, or norms that hinder internal or external management of working capital levels and operations.

Table 9-3: The empirical findings on the general issues in the Eritrean context

| | Government | Transition | Privatised |
|-------------------------------|--|--|---|
| General Ownership | Control by government regulations impaired managerial empowerment. There is strong government interference through subsidies and market protection. Competition is hindered by political interference from the government. Firms have similar objectives and control patterns. Firms enhance political, and social objectives. | Managers' uncertain future position, due to the transition process crippled their managerial confidence and job security. Firms have similar objectives and control patterns with the government firms. Try to enhance political and profit objectives and so reflect characteristics of both government and privatised firms. | They reveal strong resistance to new private business environment. Lack efficient financial institutions and capital markets. Competition is not hindered by political interference from the government. Firms opt for operational efficiency with a firm's value creation as the ultimate objective. |
| Government regulations | Managers are influenced substantially by the government requirements and interference of higher government bodies. Government regulations influence the type of business operations and inter-firm linkages, the type of competition and set rules and guidelines on how the firms have to be managed. | -Managers are influenced substantially by the government requirements and interference of higher government bodies. Government sets guidelines on the type of business operations and how the firms have to be managed. | Government regulations have less influence on the type of business operations and inter-firm linkages, the type of competition on how the firms have to be managed. |
| Managerial empowerment | Lack of management power has an impact in the selection of alternative management approaches and has played a role in the development, acquisition and adaptation to proper managerial policies. | Lack of management power has an impact in the selection of alternative management approaches and has played a role in the development, acquisition and adaptation to proper managerial policies. | Management is fully empowered and is free to select from alternative management approaches but has played less visible role in the development, acquisition and adaptation to proper managerial policies. |
| Cultural factors | There are no cultural practices, believe, and norms that hinder internal or external working capital management. | There are no cultural practices, believe, and norms that hinder internal or external working capital management. | There are no cultural practices, believe, and norms that hinder internal or external working capital management. |

9.6. Conclusions

Here we present an overview of our findings on the comparative internal and external management of working capital levels and operations in the government, transition and privatised firms. Internally, we explored the firms' objectives, the constraints they encounter in achieving their objectives, their working capital management policy on levels of investment and financing as well as operations of purchasing and selling. We also covered the external management of working capital with regard to the firms' supplier and customer linkages. Particularly, we investigated the firms' supplier and customer co-operation on primary activities, benefits of their co-operation or reasons for non co-operation and customer ratings on firm efficiency.

Overall working capital management All managers believe that working capital management can play a very important role in creating value for their firms, in terms of both increasing sales and decreasing costs. However, we also find that all the firms lack a clear objective in managing both working capital levels and operations. The government and transition firms also believe that they are doing very little in managing their working capital because they are not empowered. The managers are restricted to the control function, which is evidenced by the strict control mechanisms imposed over the levels of cash, receivables and inventory as well as operations of cash collections, cash payments, purchases and sales. The privatised firms on the other hand have relatively better stated and applied objectives and better working capital management policies.

Constraints The major constraint with the government and transition firms is managerial empowerment and the imposition of government regulations, which are implemented under the supervision of the Ministry of Defence with the government firms and NASPPE (National Agency for Supervising and Privatising Public Enterprises) with the transition firms. Policy decisions, which can have both short-term and long-term effects depend on the decisions of these higher authorities. For the privatised firms it is not the problem of managerial empowerment but the lack of investment opportunities, financing sources, labour as well as lack of managerial knowledge and experience, which constrains the achievement of objectives.

Working capital investment All firms are excessively investing in current assets. They keep cash and inventory only for transaction purposes with an emphasis on the control aspect. Credit policy is not prevalent in any firms in the real business sense. With the government and transition firms, the level of receivables is increasing mainly because of the slow payment by the related (government) enterprises. While in the transition firms, the inventory balance is increasing because of slower sales compared to production. The cumulative effect of this lack of policy is the increase of both bank overdrafts and creditors (owed mainly to related enterprises). Working capital levels are also increasing because management has no opportunity or motive for investing working capital or minimising its holding costs.

Short-term financing The firms have no clear policy of managing the levels of working capital financing. As a result most (except the government) firms are in a serious problem of liquidity. Particularly, the transition firms and one of the privatised firms have negative net cash flows that they finance with a bank overdraft, the annual interest cost of which is a very large proportion of their total expenses. The finding on

working capital level of investment and short-term financing signals that these firms have to change their policy.

Working capital operations The government and transition firms purchase and sales policies are dictated by the government regulations, though the transition firms have relatively more relaxed government policies applying to them. The managers of the privatised firms are observed to lack the experience to apply a value creating management system. Analysis of purchase and sales operations shows that the firms have no policy on how to purchase their materials and sell their products. Management of all the firms' working capital operations is restricted only to the application of clerical procedures of purchases and sales and they have no mechanism of enhancing the contact, contract and control aspects of purchases and sales transactions.

Performance evaluation of internal working capital management The study of performance evaluation has indicated that most firms evaluate their performance by comparing their past with the present and actual with the expected. Their financial managers said that they apply some accounting, customer satisfaction and product quality based performance measurement and evaluation criteria. However, they reported also that they do not compare their performance with their competitors. Liquidity analysis indicates that the transition and privatised firms are in immediate risk because on the average all liquidity ratios are below the generally accepted global norms. The exception is Keih Bahri Tannery from the transition firms and the Eritrea Steel Sheets Factory from the privatised firms. Investment in current assets whose turnover is very low make more than 90% of the total investment in assets in the government and 69% and 68% in the transition and privatised firms respectively. When compared with the global norm of 50%, this current to total assets ratio is extremely disproportionate particularly with the government firms. The profitability ratios, particularly net profit and return on assets indicate low levels, particularly in most of the transition firms and one privatised firm. Overall performance findings suggest that the firms are doing very little to create value by managing working capital levels of investment and short-term financing as well as operations of purchasing and selling.

Firm-supplier linkages – the firms' point of view The response of the government firms indicate that they co-operate with their suppliers only on the inbound activities, particularly, shipment and storage. Privatised firms co-operate on inbound activities and on production operations but to a lesser extent compared to that of the government firms. The transition firms revealed the weakest firm-supplier co-operation. Their response shows that they have moderate firm-supplier co-operation only on the inbound activities particularly shipment. Generally, all firms have very weak firm-supplier linkage on all marketing/sales and after sales services. Both government and transition firms traced the reason for the lack of firm-supplier co-operation to government regulations, which they believe are beyond their control. The reason for the lack of firm-supplier co-operation according to the privatised firms is for two reasons. First, they have not established proper policy on firm supplier co-operation and second, their suppliers do not co-operate as well.

Inter-firm linkages – suppliers' point of view The suppliers of all firms reported that they have very little co-operation on all the primary activities. The suppliers indicated that the only co-operation they have with the firms is on the outbound

activities' order processing and particularly providing goods when just needed, in addition to which the suppliers of the government firms also co-operate on delivery vehicle operation. The privatised firms' supplier response on inter-firm co-operation with regard to all primary activities is very low. The main reason for this lack of co-operation according to all the suppliers is that the central firms' lack the willingness to co-operate. Comparing the responses of the privatised firms and their suppliers indicate that the privatised firms have exaggerated their firm-supplier and customer co-operation on their inbound and outbound and production activities in comparison to the opinion of their suppliers.

Suppliers' evaluation The suppliers of both government and transition firms nevertheless believe that their partners are very efficient in their purchase order processing, bilateral communication, explanation to inquiries, courtesy and cash payment habits. The suppliers of the privatised firms evaluated the firms on marketing approaches as less efficient. The transition firms, according to their suppliers, are good only at their payment habits.

Firm-customer linkages – the firms' point of view The government firms revealed the weakest firm-private-customer co-operation. Their responses show that they have no firm-customer co-operation on any of the primary activities. The responses of the transition firms indicate that they moderately co-operate with their customers only on the outbound activities, particularly, finished goods warehousing and materials handling. According to the privatised firms' co-operation with their customers on all activities of outbound activities and production operations is very strong. As it is the case with the firm-supplier linkages, all firms have very weak firm-customer co-operation on the activities related to marketing/sales and after sales services. The reason for the lack of firm-customer co-operation according to all the firms is that their customers do not co-operate. The government and privatised firms' reason for non-firm-customer co-operation was moreover reportedly due to a lack of policy on firm-customer co-operation and they also do not see benefit in co-operating with their customers.

Inter-firm linkages - customers' point of view The customers of all firms reported that they rarely have any co-operation agreement on the primary activities, working capital levels and operations except the transition and privatised firms' co-operation on the outbound activities' of order processing. The main reasons for this lack of co-operation is that the central firms lack the willingness to co-operate. The managers of the privatised firms have exaggerated their firm-customer co-operation on their inbound, outbound and production activities in comparison to the opinion of their customers.

Customers' evaluation All firms are evaluated by their customers as efficient on their product quality, bilateral communication, impartiality with other buyers and cash collection habits. In addition the customers of privatised firms rated their partners as efficient on sales processing, delivery and knowledge of customers. The government and transition firms were evaluated as efficient on their cost of products while the government and privatised firms were rated as efficient on their explanation to inquiries. On the other hand, all firms were rated as inefficient on their marketing approaches and on their use of customer services.

Concluding remarks How close the firms co-operate with their suppliers and customers is highly influenced by whether the supplier or customer is government/transition or private/privatised firm. Generally, we observe that there is close inter-firm co-operation between the government and transition firms. Though they may not necessarily have a written instruction when it comes to inter-firm co-operation, all government and transition firms give more priority to other “related” firms. We argue here that there are three reasons for the inter-government firms co-operation. First, the government and transition firms trust each other more than they trust the private firms and therefore make transactions on credit basis. Second, government regulations require them to transact among themselves and refer to private firms only if they could not find a transaction partner within the government firms. Third, traditionally the transition firms are used to making transactions among themselves as government firms, so they cannot break with this culture, because even though they were given limited managerial autonomy since 1996 (when they were set for privatisation), they still stick to their old managerial habits and inter-firm relations. Two of the privatised firms have also maintained their old managerial policy on inter-firm linkages while the third is developing new inter-firm co-operation. We believe that there are two main reasons for the later assertion. First, the two firms have retained the top managers that existed before they were privatised who maintained their former managerial policy, while the third has changed the management and therefore its policy. Second, the two firms have not encountered any meaningful competition in both the supply as well as the product markets, while the third is faced with more open market.

A clear difference that we also observe among the government, transition and the privatised firms is on the existence of a plan for the future. The privatised firms have a clearer strategy to expand into new markets and to strengthen their existing supplier linkages while the transition firms are waiting for new buyers to take over the management. The government firms have no mandate to establish their own managerial policy and they wait for the government to give them more autonomy or to privatise them. It is observed that more inter-firm trust exists among the government and transition firms. The fact that they are government firms has increased trust among the firms and decreased the possibility of opportunistic behaviour and the need for ex-ante safeguarding and ex-post control measures. However, when it comes to the inter-firm linkages with the private firms we observe that they apply collaborative incentives (such as Keih Bahri Tannery distributing preservative chemicals to keep suppliers) or cohesive measures (such as Asmara Milk Factory’s controlling the supply line of its suppliers). Moreover, we believe that the inter-firm co-operation between Keih Bahri Tannery and its suppliers as well as between Asmara Milk Factory and its suppliers has helped the firms to be the most profitable among their group (see on profitability ratios on Appendices 7.2.3.5. and 8.2.3.5. respectively).