Working capital management
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PART IV

EMPIRICAL STUDY
Chapter 6

Government Firms

6.1. Introduction

In the previous chapter we developed a conceptual framework for the research study, based on which we conducted fieldwork to collect relevant data. In this chapter, we start describing and explaining the data collected. After introducing the chapter in this section (section 6.1), we present Keih Bahri Food Products’ overall working capital management issues in section 6.2. Section 6.3 covers the internal management of working capital levels and operations. Section 6.4 presents external working capital management - including firm-supplier linkages and firm-customer linkages. Finally, section 6.5 winds-up the chapter with conclusions.

Specifically, this chapter answers part 2(a) of the research question: “How do government owned manufacturing firms in Eritrean manage their internal and external working capital”? To this end, we studied the internal and external management of working capital operations and levels of the two relevant government firms - Keih Bahri Food Products and Barka Canneries. Particularly, we present an analysis of Keih Bahri Food Products’ internal working capital management, its supplier linkage with Eritrean Grain Board and its customer linkage with Asmara Pastry. We selected Keih Bahri Food Products because it is one of the very few factories that the government has decided not to privatise. The government has decided to retain some factories because of their strategic importance for the availability of food supplies to the public in general and particularly to the army at affordable costs and in large volume. Keih Bahri Food Products represents a typical government firm whose supplier and customer linkages we have included in our study. We finally compare internal and external management of working capital levels and operations of Keih Bahri Food Products and Barka Canneries.

6.2. Overall working capital management

This section presents Keih Bahri Food Products’ overall working capital management issues. It includes management responses to questions related to the firm’s historical background, organizational structure, objectives of working capital management and constraints to achieve the objectives as well as the role of working capital management in creating value. We start with a background information on Keih Bahri Food Products (section 6.2.1) and then present a comparative analysis of the government firms (section 6.2.2). For detailed information on overall working capital management issues, see Appendix 6.1.

6.2.1. Background information

**Historical background** Keih Bahri Food Products is government owned and administered under the Ministry of Defence. It is made up of three small business firms - Maribetti, Kekia and St. Giorgio. The factories were nationalised in 1982 by the then Ethiopian colonial government. They were used to produce foodstuffs for the army. However, the Ethiopian Government found these three factories too small to
satisfy the demands of its huge army. Therefore, in 1987 it established another factory - Asmara Food Products with initial capital of 15,500,000 Ethiopian Birr, which is currently merged with the other three factories under the name – “Keih Bahri Food Products”.

Organisational structure The organisational structure of Keih Bahri Food products is based on a governmental regulation applicable to all government firms. The governmental guidelines provide for four main sections under the general manager: first, a production and repairs section including production and maintenance sub-sections. Second, a finance and administration section with accounts and personnel sub-sections. Third, a marketing and purchasing section. Fourth, the quality controls section. The finance and administration section is responsible to take care of the financial management of the firm. It prepares annual and quarterly budgets and presents monthly and quarterly financial and budgetary reports to the general manager of the firm and higher authorities in the Ministries of Finance and Defence. It specifically manages the working capital levels of the firm. The marketing section deals with the management of working capital operations - purchase of materials and the sales of products. It is responsible to purchase the raw materials mainly (wheat) from the Grain Board. It is also responsible to store and control inventories including the raw material wheat, finished goods (flour) and spare parts and its statistics sub-section prepares reports on the forecasted and actual operations such as purchases, periodic production and sales and then reports to the general manager. The quality controls section, controls the standard of work done by all the departments and periodically reports to the general manager.

Firm policies and constraints The objectives of working capital management according to the firm’s financial manager are mainly to increase sales and decrease costs but not to generate profit or remain liquid which is guaranteed by bank overdraft facilities and government subsidies (see also Appendix 6.1-A). Moreover, the financial manager said that: “The objectives in managing the firm’s working capital is passive because it is a government firm and as such financing sources can be obtained from the government in the form of subsidy and bank overdraft. The cost of these short-term sources of finance can also be financed with government sources such as subsidy and bank overdraft”. Therefore, the factory management is only concerned with the short-term period. Moreover, the cost of its materials is subsidised and the firm does not have any problem with regard to short-term investments or financing.

According to the general manager, formulating long-term investment and financing policies is not the responsibility of the factory management. Higher government authorities, particularly in the Ministry of Defence, make long-term investment and financing decisions. So, the firm’s management does not have the required autonomy to make relevant investment and financing decisions. He said: “The firm’s investment and financing are strictly controlled by the Ministry of Defence. Had there been no restrictions imposed on the factory management by higher authorities we would have achieved far-reaching objectives”. According to the financial manager, the factors that influence working capital levels include mostly sales growth, price levels of inputs and operating efficiency. However, the financial manager believes that the credit policy and availability of credit as well as seasonality of sales do not matter much as far as the levels of working capital are concerned.
According to the general manager’s opinion, the factors that hinder the firm from achieving its objectives include lack of production capacity, lack of skilled labour and a lack of fixed capital investment. Other factors such as working capital investment, working capital financing, product demand and markets are no problems for the firm. According to the opinion of the financial manager, government regulations dictate the management of working capital levels and operations. She says that: “The decision regarding both short and long-term investment is not within the authority of the firm’s management. The firm’s management has limited authority to manage working capital operations and virtually no power on long-term investment and financing. Government regulations dictate the source and cost of materials, the procedure of buying the materials, to whom and how the products have to be sold and at what price”.

The firm cannot invest its extra cash in revenue generating business or deposit it at a bank saving account. It has to purchase its main material from the Eritrean Grain Board and sell its products to the Ministry of Defence and other authorised (by the Ministry of Trade and Industry) bakeries and pastries. According to the firm’s commercial manager, culturally, Eritreans prefer white flour or “fino” for white bread. However, the factory produces black flour. Had the products of the factory been subjected to the normal market competition, the demand for its products would have been much lower than that of competitors who import and supply white flour to consumers. It is the very cheap government subsidised price, which has increased the demand of the factory’s products.

**The role of working capital management in value creation** According to the opinion of the firm’s general manager, decisions regarding working capital levels and operations take almost all the management time. He said that: “Managing working capital has a very significant role to play in promoting the firm’s short- and long-term objectives”. The financial manager believes that, managing working capital items affect the firms’ value. Accordingly, she believes that, sales can increase as a result of managing cash, receivables, inventory, purchase of materials and trade credit (See also Appendix 6.1D). The firm’s costs can also decrease by managing overall working capital, cash and purchase of materials. On the other hand the financial manager believes that managing liquidity, trade receivables, inventory, trade payables and bank loans do not help to decrease costs.

### 6.2.2. Overall working capital management - comparison of government firms

Here we want to know if the two government firms reveal similarity or difference on the overall working capital management. For detailed information on the issues on overall working capital management, see Appendix 6.1(C-D).

**Firm policies and constraints** The financial managers of the government firms responded that their working capital management policy is tailored towards increasing sales and decreasing costs but not to generating profit or to remain liquid. The general managers of the two government firms believe that the factor that is constraining firm objectives is mainly fixed capital investment. Keih Bahri Food products also has problems with its production capacity and with skilled labour and Barka Canneries has constraints of working capital financing. Both general managers are of the opinion that working capital investment, product demand and markets are no constraints to achieve firm objectives. Reportedly (by the financial managers), the factors that
determine working capital levels include mostly sales growth, price levels of inputs and operating efficiency. Seasonality of sales also affects the working capital levels in Barka Canneries. However, the financial managers believe that their credit policy and availability of credit do not matter much as far as the levels of working capital are concerned.

The role of working capital in value creation The financial managers of both firms are of the opinion that, overall working capital management has an important role in value creation. Their response shows that working capital management, particularly managing cash, receivables and inventory as well as purchase of materials is important for the purpose of increasing sales. They also believe that cash management and purchase of materials management can reduce operating costs but not the management of receivables, payables, bank loans and liquidity. However, they differ on the importance of managing trade payables, inventory and sales of finished goods for the purpose of increasing sales and decreasing costs. Only the financial manager of Keih Bahri Food Products believes that managing trade payables helps in increasing sales, and only the financial manager of Barka Canneries believes that managing inventory can decrease costs.

6.3. Internal working capital management

This section (6.3) deals with the internal working capital management, which is divided into levels and operations. Working capital levels refer to investments (section 6.3.1) and financing (section 6.3.2) and working capital operations include purchases (sections 6.3.3) and sales operations (section 6.3.4).

6.3.1. Managing working capital investment

6.3.1.1. Cash management

The purpose of this section is to study if government firms, specifically Keih Bahri Food Products and Barka Canneries create value by managing cash balances, collections and payments. Therefore, we asked the financial managers regarding their motive for holding certain balances of cash levels, why and how they forecast and control cash, cash flows as well as cash payments and collections. For detailed information on cash management, see Appendix 6.2.1.1.

The motives of holding cash We have reviewed in section 2.2 that cash can be held for transactions, precautionary, speculative and bank compensating motives. The empirical findings show that the main purpose for holding cash in Keih Bahri Food Products is only for transaction purposes - to make regular predetermined payments. The firm does not keep any cash to pay for unforeseen transactions (precautionary purpose), nor does it deposit bank-compensating balances as a guarantee for bank loans or hold extra cash for unforeseen investment opportunities (speculative purpose). According to the financial manager, cash for precautionary purposes is not needed because the cash inflows and outflows are quite certain, it is not held for speculative purposes because the opportunity is not there to make any monetary investment and the government regulations do not allow it. The Commercial Bank of Eritrea, is also a government firm
and does not require the firm to keep any minimum bank balance as a guarantee for loans.

**Cash budgeting and control** The Factory management prepares cash budgets because according to the financial manager, it is a government requirement and it is also used to plan short-term cash needs as well as to control cash payments and receipts. However, the firm does not use the cash budgets to control its liquidity position. The primary bases used to forecast the cash budget are past experience, forecasted sales levels and management opinion but not market research. The financial manager believes that the cash budget is quite certain. As for the control of cash levels, the financial manager said that: “We evaluate our cash performance by comparing the cash budget with the actual results and report it monthly to the factory management and once every three months to the Ministry of Defence”.

In addition to the budgetary comparison, Keih Bahri Food Products prepares yearly a cash flows statement applying the receipts and disbursements method (rather than the adjusted net income). The use of receipts and disbursements method is a government requirement and is one of the annual financial statements. By analysing the trend in the change of annual cash balances, the firm uses its cash flows statement to improve future cash forecasts as well as to control cash payments, receipts and balances. Empirically, as the above finding indicates, Keih Bahri Food Products uses its cash budget and cash flow statements mainly for control purposes.

**Managing cash payments and collections** The factory pays its expenditures using checks except for small payments and salary expenditures. It has a policy of slowing-down cash payments by making credit purchases. Its cash payment policy is to purchase on credit without discount, and not to pay at the time of purchase or in advance of the purchase. The firm controls its cash payments using – voucher and petty cash systems, checks sequentially numbered, controlled and accounted regularly and bank reconciliation prepared by an employee other than the one involved in cash collections and payments. It also controls its cash collections by depositing collections daily and separating sequential duties for cash operations and recording. The firm speeds-up cash collections by making cash sales and earlier billings. It rarely makes its customers deposit their payments at its bank account.

By the end of 2000, Keih Bahri Food Products had idle cash of more than 16.5 million Nakfa in its balance sheet. This cash is kept in the checking account and the firm pays a bank service charge, which would have been saved and interest earned had the cash been deposited at least at a bank saving account. With regard to the cost of cash levels, the firm’s financial manager said: “Our cash levels are always positive so the cost of cash levels is the bank service charge on the checking account and investment profit lost, which we are not empowered to manage”. The firm has to simply keep whatever surplus cash it has at its bank checking account until the government decides what to do with it.

**Concluding remarks** Keih Bahri Food Products’ cash management is very passive. Its management has no power to decide on the cash surpluses, other than technically controlling cash payments and collections. Given its monopoly over the market, it is very difficult to consider the firm’s cash surplus as representing its operational efficiency.
6.3.1.2. Inventory management

The objective of this section is to know if Keih Bahri Food Products creates value by managing materials and finished goods inventory balances. With this objective in mind, we asked its managers if and how they determine inventory costs and values, if and how they formulate and implement inventory planning and control (physical and cost) and whether the costs are relevant and worth of special managerial attention. For detailed information on inventory management see Appendix 6.2.1.2.1 (materials inventory) and 6.2.1.2.2 (finished goods inventory).

Materials inventory management According to the commercial manager, the firm’s primary policy of materials management is to keep production running, safeguard against inventory shortages and to reduce holding and ordering costs. The financial manager said that: “We buy materials (grain) from the Eritrean Grain Board any time we feel the raw material stock is low”.

The major holding costs of materials inventory, according to the commercial manager, include costs of insurance, handling, and record keeping. The costs of storage (power, security, handling and space), physical deterioration (depreciation, shrinkage, pilferage), opportunity costs of capital tied-up in the inventory and property taxes are small. However, according to the financial manager, because the materials are easily perishable, holding cost of materials inventory is considered relevant and is reduced by arranging with the supplier to ship the materials just in time for production. Whenever Keih Bahri Food Products feels that its materials stock is low, it orders from the Eritrean Grain Board for immediate shipment. Since both the Eritrean Grain Board and Keih Bahri Food Products are government firms, they have no problem of trusting each other. Therefore, the commercial manager claims to use the “just-in-time” approach to minimise inventory level and control the holding and ordering costs. As a result of this, investment in inventory of materials is very low. Moreover, according to the commercial manager, the firm also keeps materials safety stock enough for two to three months’ production. The firm selectively manages the physical movement of materials inventory on the basis of cost, usage rate and criticality in case of shortage. Scarcity in the market is rarely used as a selective control mechanism. Keih Bahri Food Products uses the average cost approach to determine the value and cost of materials issued to production and remaining in inventory.

Managing finished goods inventory According to the Keih bahri Food Products financial manager, the firm’s main purpose in managing finished goods inventory is only to reduce holding costs. Because the demand by far exceeds the supply of the firm’s products, goods once finished are immediately sold. According to the financial manager: “Finished goods stock is almost non-existent because customers order in advance and take their advance orders immediately. Therefore, the investment in inventory of finished goods relative to the annual production is very low”. This helps the firm to decrease inventory-holding costs. However, it does not help to satisfy customer demands. The yearly average level of finished goods inventory is less relevant and its holding costs are very small. Private customers order their purchase well in advance of production and take it immediately after production (which is a typical just-in-time approach) and pay immediately on receipt of their orders. However, the Ministry of Defence, which is the main customer, takes time before
paying for its purchases because of the long bureaucratic procedure involved in securing the government approval for payments.

According to the financial manager, the cost of holding inventory of finished goods is mainly cost of insurance. The cost of storage (deterioration, obsolescence, shrinkage, depreciation and pilferage), handling, power and security, opportunity cost of capital invested or interest on capital tied-up, property tax and clerical record keeping are small. So, these costs are not significant for the management to give special attention and the firm manages the cost of inventory by holding only the minimum level required. The firm selectively controls its finished goods inventory based on usage or sales rate and criticality in case of shortage and not based on costs. The average cost technique (not the market value) is used to determine the cost of goods sold and in inventory.

**Concluding remark – inventory management** Keih Bahri Food Products uses the just in time approach to manage both raw materials and finished goods inventories. It orders and receives materials from the Eritrean Grain Board immediately before production is completed and it gets it in time for production. Except for the two to three month supply of materials and finished goods awaiting shipment to customers, it does not carry any inventory. This inventory management approach has kept its inventory levels and costs to the minimum possible. Its inter-government firms’ cooperation with the Eritrean Grain Board and the Ministry of Defence as well as its monopolistic market position has enabled it not to bother about its supply of materials and demand for its products.

### 6.3.1.3. Receivables management

In this section we try to study if Keih Bahri Food Products creates value by managing its receivables. Therefore, we asked the firm’s financial manager if and how management formulates its policies of accounts receivable management, controls its credit collection, costs of accounts receivable balances and bad debts.

**Credit policy and receivables management** The commercial managers’ response is that, the firm totally relies on its customer’s commitment and has no credit policy or costs of credit control. The financial manager has explained the issue of receivables management by saying that: “*We have two types of customers – government ministries, mainly the Ministries of Defence and of Education, for whom we sell on credit and private bakeries and pastries, who are cash customers*”. The firm’s commercial manager elaborated it as follows, “*The credit customers pay within two to three months, so there is no need to bother about how to collect these receivables while the bakeries and pastries pay cash at (or in advance of) purchase. Hence, the investment in receivables is so minimal that the firm’s management takes little attention*”. The response of the financial manager to the questionnaire also indicated that the firm does not incur costs like customer screening, debt collection or bad debt losses and that it does not have any credit term, credit standards or collection policy.

The lack of an accounts receivable management policy is reflected in the accounts receivable (debtors) level of the firm’s balance sheet. Observations on the balance sheets of Keih Bahri Food Products for the period 1994 to 2000 reveal that the
composition of debtors to total working capital ranges from 6% (in 1995) to 69% (in 2000) with an average of 51% and shows a sharp increase in the last two years. This fact when compared to the opinion of the financial and commercial managers is contradictory. The firm’s management does not seem to be worried about the increasingly excessive investment in receivables for two reasons. First, the firm has excessive liquidity and it is never worried about the need of cash. Second, the main debtors are the Ministry of Defence, for the credit sale, which is also its supervising government body and the Ministry of Finance for unpaid government subsidy. This implies that the firm has no power to impose any pressure on its debtors to pay back the debts owed. Therefore, it is no wonder the firm’s management is not at all worried about collecting its receivables.

6.3.1.4 Managing working capital investment - Comparison of government firms

This section examines if the two government firms reveal similarity or have material differences in managing their working capital levels of investment, particularly cash, inventories and receivables. For more information on the management of working capital investment, refer to Appendices 6.2.1.1 (cash), 6.2.1.2 (inventory) and 6.2.1.3 (accounts receivable).

Cash management The purpose of cash planning for both firms is only the transaction purpose of making regular pre-determined payments because it is a requirement of the government. The firms do not budget cash requirements for speculative, precautionary or bank compensating balance purposes. This is mainly because they have neither the opportunity nor the authorisation to make cash investments with a profit motive. The government firms forecast their cash budget mostly on the basis of past experience and management opinion, which they use to plan short-term cash needs and to control cash payments and receipts but not to control liquidity. Both managers said cash budgets are quite certain and they make no hedges because the bank provides overdraft if they need it. Both firms purchase on credit without discounts. Keih Bahri Food Products considers the credit purchase as a technique of slowing down payments. Both firms control cash payments using vouchers, checks, bank reconciliation, and petty cash. Keih Bahri Food Products and Barka Canneries collect cash at sales from private buyers and on the basis of credit from their common owner – customer the Ministry of Defence. Both firms consider cash sale as a means of speeding-up cash collection. The firms control cash collections by separating the duties for sequential cash operations and depositing cash at the bank on a daily basis. In addition to this, Barka Canneries also allows its customers to pay directly at its bank.

Materials inventory management The materials inventory policy of Keih Bahri Food Products and Barka Canneries is tailored strongly towards minimising inventory holding costs and ordering costs, safeguarding against inventory shortages and keeping production running. They have very small carrying cost of materials because both apply just in time inventory management approaches. They use only the average cost (not first-in-first out or last-in-last out) technique to determine the cost of materials used in production and in inventory. They also use only the cost (rather than market value or cost or market whichever is lower approach) as a base to determine the value of the materials inventory. The firms selectively control the physical safety of their materials inventory on the basis of cost and criticality in case of shortage. In addition to, this Keih
Bahri Food Products applies usage rate as a criterion for selective materials inventory management.

**Finished goods inventory management** The financial manager of Keih Bahri Food Products reported that the purpose of managing finished goods inventory is to decrease inventory holding costs, while that of Barka Canneries is to satisfy customer demands, to keep inventory for safety stock and meet high seasonal demands. Both firms reported that the main cost of holding cost with regard to finished goods inventory is insurance expense. However, Barka Canneries considers opportunity costs of capital, handling and clerical costs as relevant costs. The firms use the average inventory costing approach to determine the cost and the value of their finished goods inventory. Keih Bahri Food Products selectively controls its finished goods inventory on the basis of usage rate and criticality in case of shortage while Barka Canneries uses the average cost technique as a control mechanism.

**Receivables management** Both government firms sell to private firms only on cash basis while they sell on credit to the government firms particularly the Ministry of Defence which administers both of them. According to the interview conducted with the commercial managers, the firms do not sell on credit to private firms because government policy does not allow. Therefore, they do not have a policy of credit terms, screening credit applicants or collecting overdue receivables. They have no risk of bad debts because their debtor (the Ministry of Defence) is very reliable, and therefore they do not have doubtful accounts nor do they use any other technique of managing accounts receivable.

**Concluding remarks** Both Keih Bahri Food Products and Barka Canneries manage their materials inventory on a just in time basis. According to the interview we conducted with the firm’s commercial manager, Keih Bahri Food Products has an agreement with Eritrean Grain Board (another government firm) to get the shipment of the materials as soon as it orders a purchase. Barka Canneries enters into an annual contract with suppliers to get materials periodically as needed. As a guarantee suppliers deposit in the firm’s bank account money enough for one month supply, which the firm can use if the supplier fails. Both government firms’ main business is with the Ministry of Defense, which also happens to be the supervising government body. Therefore, the executive managerial decision lies with the Ministry. As a result both government firms show very little interest in considering dynamic approaches of working capital management. With both firms cash and inventories are kept only for transaction purposes, and both have no credit policy for private customers.

6.3.2. Managing working capital finances

In order to study the alternative sources and costs of working capital financing for Keih Bahri Food Products, we asked the financial manager about the firm’s sources of finance. We also asked if the firm gets cash deficits, how it finances its deficits and whether the cost of financing is a relevant amount. For detailed information on managing working capital finances refer to Appendix 6.2.2.

**Sources, costs and influences of working capital financing** As a result of its surplus cash the firm does not use short-term bank loans or any other short-term
financing and it does not hedge against uncertainties of cash balance. With regard to working capital financing sources, Keih Bahri Food Products’ financial manager said that: “We have surplus cash from operations, which we use to pay for short-term financing needs, such as paying for the purchase of raw materials and other operating expenses. However, we cannot invest the surplus cash in interest or other income earning business operations because government regulations forbid us.” In case cash level is too low, Keih Bahri Food Products has an agreement with the commercial bank of Eritrea to use overdraft facilities.

However, in addition to its own cash revenues, we find that Keih Bahri Food Products finances its working capital needs with government subsidy. According to the financial manager, 50% of the firm’s cost of material is subsidised by the government, which the Ministry of Finance reimburses periodically. Trade credit is next to government subsidy in financing working capital investments. The firm also uses retained earnings (general reserve) and equity (state) capital, to finance its short-term financing needs. Bank overdraft, short or long-term bank loan, secured borrowing and accruals are not considered as the sources of finance. According to the financial manager, the main factors that influence the financing of working capital items are sales growth, price levels of inputs, operating efficiency and government subsidy. The seasonality of sales, the firm’s credit policy and availability of credit do not contribute to the financing of working capital items.

Concluding remark Keih Bahri Food Products finances its working capital levels and operations with the surplus cash that it generates from its government subsidised operations and monopolised food market. Trade creditors which make hundred percent of the total liabilities are other sources of short-term finances. Since the balances of current assets and current liabilities are equitable, Keih Bahri Food Products uses the maturity matching approach to financing working capital investments. This usually implies using the riskier but less expensive short-term debts. However, since the total short-term debt is owed to other government firms (Eritrean Grain Board and Ministry of Finance), there is no conceivable risk of liquidity or costs of financing. Therefore no wonder the management of working capital financing of Keih Bahri is very passive.

6.3.2.1. Managing working capital finances - Comparison of government firms

Sources, costs and influences of working capital financing The main source of short-term financing for both government firms is the cash flow from operations, retained earnings, trade creditors and government subsidy. None of the firms use bank overdraft, long-term debt, bank loans, secured borrowing or accruals. Both reported that they have no problem of financing their short-term working capital needs mainly because the government subsidy and bank overdraft are readily available regardless of their profitability.

Both firms experience cash surplus for most of their operation periods. However, they are not allowed to invest the cash in any profit or interest earning business ventures. They never use bank overdraft so the cost of financing working capital investment is insignificant. According to the financial manager of Keih Bahri Food Products the main factors that influence the levels of financing of working capital levels are sales growth, price levels of inputs, operating efficiency and government subsidy but not seasonality of sales, credit policy or availability of credit. However, the financial manager of Barka
Canneries does not believe any of the above mentioned factors to influence the levels of working capital financing.

6.3.3. Managing working capital operations

6.3.3.1. Managing purchase operations

In this section we study if Keih Bahri Food Products creates value by managing working capital purchases of materials required for production. We asked questions on the firm’s purchase policy, purchasing techniques, purchasing activities and costs as well as approaches of contacting, contracting and control of suppliers. For detailed information on managing working capital operations with regard to purchases, refer to Appendix 6.2.3.1.

**Purchase policies** During our interview with the commercial manager he said that: 
“We purchase our materials on credit from Eritrean Grain Board. Up to 1998 we used to purchase raw materials directly from suppliers. However, since then the responsibility of purchasing materials is transferred to the Grain Board, which supplies the raw materials by purchasing mostly from the foreign markets. So, we order for the supply of the materials almost continuously and do not need to store or manage investment in inventory of materials”.

The firm forecasts the purchase of its materials requirements in order to estimate its production demands, to know the quantity on hand and on order and to determine the safety stock requirement, but not to determine the inventory usage during lead time. The base that the firm uses to estimate materials requirement is mainly its past experience and the opinion of the management. In the interview the firms commercial manager said that production capacity is the major factor considered when estimating the annual purchase requirements. The factory’s purchase operations are subsidised by the government to the extent of 50% of the total cost of materials. According to the firm’s commercial manager, the firm purchases its materials on cash bases as per the relevant government regulations and there is no problem of co-ordinating materials purchase and inventory management with the supplier. The firm buys its materials only on cash basis because of the government requirement it does not have credit purchases policy.

**Contacting, contracting and control of suppliers** The only supplier of the factory is the Eritrean Grain Board, which is a government firm itself so there is no factor other than the government regulations that affect the contacting, contracting and control with this supplier. According to the opinion of the commercial manager of the firm, it does not employ purchasing agents and does not need purchasing employees to buy materials. There is no need to negotiate the term of purchase agreements because it is well known to both Keih Bahri Food Products and its supplier Eritrea Grain Board. The factory prepares the forecasts of its annual and monthly needs and presents it to the Grain Board, which supplies periodically upon the factory’s request. The firm does not need to select its suppliers or to choose preferred credit terms. Moreover, the commercial manager believes that the firm’s linkages with Eritrea Grain Board help to use the cheapest channel of communication on the basis of trust as well as apply routine control agreements with terms known to both partners in advance. As a
result of this the commercial manager believes also that the costs of contact, contract and control of suppliers are small and not relevant for the management to take special attention.

6.3.3. 2. Managing sales operations

In this section we study if Keih Bahri Food Products creates value by managing working capital operations of sales. Therefore, we asked its commercial manager questions on sales policy, selling and distribution techniques, and approaches the firm uses to contact, contract and control its customers. For detailed information on managing working capital operations of selling see Appendix 6.2.3.2.

Sales policy  Keih Bahri Food Products’ sales policy is dictated by government regulations. It sells on credit to the Ministry of Defence and Ministry of Education and on cash basis to small private bakeries and pastries. The reason for this, according to the firm’s commercial manager is: “the materials we buy from the grain board is subsidised to the extent of 50% of cost. So, there are government regulations that require us to sell at 2% profit rate only to authorised ministries for direct consumption and private bakeries and pastries for business”. In the interview conducted with the firm’s financial manager, she said that: “Strictly speaking the time taken between selling and cash collection of the government firms is only meant to allow time for the bureaucratic procedures needed to make the payments. It does not serve any purpose of business credit granting at all”. The objective of the firm’s sales policy is to fulfil the sales quota and not to expand market share, to take care of regular customer demands, to meet seasonal sales requirements or to decrease inventory holding costs. It forecasts sales requirements using the production capacity over the net working days during the year, opinion of the management and its past experience as bases. It does not use statistically forecasted sales volumes, or opinion of the sales staff. So its main objective in forecasting sales is to fully use the production capacity and forecast safety stock needs. It is not to estimate the demands for future months during the year, to determine the inventory usage or to establish the quantity on hand and on order during lead time.

Contacting, contracting and control of customers  The same as with suppliers the contacting with the firm’s customers is done as per the regulations of the government. The government requires the firm to supply mainly to the Ministry of Defence and small bakeries and pastries. So its contacts are made with these customers. The factory does not need to sign contracts with these customers. The firm’s private customers buy only on cash so there is no need to control or sign contracts with these customers. Therefore, the firm does not make much effort to contact, contract or control its customers because the relevant government regulations are known to all of them and the sale-purchase operation becomes a routine procedure. The financial manager believes that the costs of these activities are not relevant for the management. According to the opinion of the commercial manager, Keih Bahri Food Products does not need to control its credit customers because they are government firms like itself so they fully trust each other.
6.3.3.3. Managing working capital operations - Comparison of government firms

**Purchase operation** The two government firms (Keih Bahri Food Products and Barka Canneries) have different policies and practices of purchasing materials. However, both have to comply with the relevant government regulations. Barka Canneries purchase materials from private suppliers on a bid basis to take advantage of quantity discounts and cash discounts, to minimise inventory holding costs and meet seasonal customer demands but not to decrease inventory ordering costs. While Keih Bahri Food Products purchases materials from the Grain Board as per the relevant government regulations, which has nothing to do with taking advantage of cash discounts or quantity discounts. They both forecast purchases of materials based on past experience and management opinion. However, Barka Canneries also uses forecasted sales volume and opinion of the purchasing staff to establish its purchasing policy. Keih Bahri Food Products is restricted to buy only from the Eritrean Grain Board so it does not have the option to choose from alternative suppliers while Barka Canneries buys from local market through competitive bidding. Therefore, the cost of purchasing operation is relevant for the management of Barka Canneries but not for Keih Bahri Food Products.

According to the commercial manager of Barka Canneries, the firm makes efforts to contact and screen potential suppliers as well as describe the materials that it wants to buy. Therefore, the cost of the contacting, screening and describing to potential suppliers is considered relevant. Hence the firms manage these costs by choosing the cheapest channel of communication (advertising in the public newspapers), as well as employing purchasing agents. Compared to that of Keih Bahri Food Products, Barka Canneries’ contacting, contracting and control of purchase activities are better managed. This is because Barka Canneries is more empowered to the activities, while that of Keih Bahri Food Products purchase is done by the Eritrean Grain Board so the firm has very little to do with the purchase policy of its materials.

**Sales operation** According to the commercial managers, the objective of sales and production policy of Keih Bahri Food Products is only to fulfil the quota given by the government. However, that of Barka Canneries is to take care of customer demands, meet seasonal sales requirements and expand market. The firms forecast sales to establish the quantity on hand and on order during lead time as well as the safety stock requirement. Both firms forecast sales based on past experience and management opinion. In addition Keih Bahri Food Products uses production capacity and Barka Canneries uses statistical forecasts also. Both firms sell their products to the local market and mainly to the Ministry of Defence, which also supervises both of them, so the sales operation practically looks like intra-firm management. The contact, contract and control with customers’ in both government firms is tailored towards choosing the cheapest channel of communication, with routine control agreements and terms known in advance. Both firms consider the related costs to be small and not relevant to the management.

**Concluding remark** Generally, the management of Barka Canneries is more empowered to manage its purchase operations. The firm manages these costs by establishing long-term relationships and trust, which it implements by committing its suppliers on the quality, quantity, price and time of delivery for one year. For control purposes the government regulations require the firms to make new advertisements for supplies of materials and therefore new contractual agreements each year with the
winning suppliers. On the other hand, Keih Bahri Food Products has very little managerial power and therefore uses no management approach on its purchase and related costs. With regard to the management of sales operation, both firms sell mainly to the Ministry of Defence and have very little power to manage the sales and related costs. This has resulted in close firm-customer relations in both firms, which may decrease transaction costs of contact, contract and control.

6.3.4. Performance evaluation of working capital decisions

In this section we aim at studying if and how the government firms evaluate the performance of their working capital levels of investment and financing as well as operations of purchasing and selling. With this aim, first we asked the managers if and how they apply performance evaluation criteria. Then we used the firms’ financial statements to study their working capital levels and operations. We divided the evaluation of Keih Bahri Food Products’ financial performance into three sections. First, we studied the investment composition of working capital in the total assets using asset structure ratios. Second, we evaluated the firm’s working capital financing using liquidity ratios and short-term financing composition using trade creditors, short-term bank loans, bank overdrafts and other accruals. Third, we used activity and profitability ratios to study the firm’s operational efficiency in turning over the assets and overall profitability. For detailed information on financial evaluation of working capital decisions, refer to Appendix 6.2.3.4 (Keih Bahri Food Products) and 6.2.3.5 (comparative government firms).

Performance measurement and evaluation criteria According to the financial manager, Keih Bahri Food Products evaluates the performance of its working capital investment decision using comparative analysis of past versus present, actual versus expected and inter-firm benchmarks (see also Appendix 6.2.3.3A-D). It measures its performance using accounting information and customer satisfaction. In the interview conducted with the general manager, he stated that: “The firm’s overall performance on production capacity, sales and employment has greatly increased after independence because of two reasons. First, increased production capacity as a result of repairing a factory (St. Giorgio factory), which was not functioning before independence. Second, additions of some manufacturing plans incorporated into this factory”.

The customer satisfaction based performance measurement criteria that the firm uses include cost minimisation by charging lower prices, increasing the product quality by decreasing defect rates and increasing customers’ perceived value of its goods as well as communication - by having faster response time and faster delivery time. According to the firm’s financial manager, the accounting based performance measurement criteria that the firm frequently uses include, liquidity ratios (current ratio and quick ratio). It measures its activity performance by checking the inventory turnover, receivables turnover and overall working capital turnover as well as profitability ratios such as gross profit margin, net profit margin, return on working capital investment and return on total assets. The firm also evaluates its asset structure by evaluating its working capital assets to total assets ratios.
6.3.4.1. Performance evaluation of working capital investments

**Working capital investment composition** We analysed financial statement data using asset structure ratios to find Keih Bahri Food Products’ composition of investment in assets. As we have reviewed in Chapter 2 section 2.6.3, the main asset structure ratio relevant for our study is working capital (or current assets) to total assets and related ratios such as cash, receivables and inventory to working capital.

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”.

*Working capital to total assets ratio* is expressed in percentages, it shows the relevance of working capital in total assets. As it is indicated in Appendix 6.2.3.4, asset structure ratios of Keih Bahri Food Products for the seven years studied reveal that an average of 93% of the firm’s total investment is in current assets. It can be observed from figure 6-1 that the trend of the firm’s current assets to total assets showed stable but a large proportion throughout the years. Moreover, We can understand from this that Keih Bahri Food Products invests extensively in current assets. This is because of the stagnant investment in fixed assets and a reflection of the lack of managerial empowerment over the management of investment and financing. Therefore, the low production capacity experienced by Keih Bahri Food Products is also causing this high current asset investment.

![Figure 6-1: Asset structure and ST debt leverage (%) – Keih Bahri Food Products (1994-2000)](image)

*Source: Appendix 6.2.3.4*

As it is revealed by Figure 6-1, the short-term debt compared to the total assets accounted to a considerable percentage. This implies that the total assets are largely financed by current liabilities instead of equity capital or long-term debt.

We also analysed the composition of each working capital element in the total current assets using inventory to working capital, receivables to working capital and cash to working capital ratios (see also Appendix 6.2.3.4A-1). The seven-year average of inventory to working capital was 22%, receivables to working capital was 47% and cash to working capital was 31%. The analysis also indicates that most of Keih Bahri Food...
Products current assets is tied up in receivables, while the investment in inventory and cash is much less compared to the receivables and declining. This suggests a defective receivables collection policy. It can also be observed from figure 6-2 that the firm’s working capital investment composition is generally lowest in inventory and highest in receivables while the investment in cash is also declining. This implies that working capital management has contributed negatively to the net cash flows of the firm.

**Figure 6-2: Working capital investment composition (%) – Keih Bahri Food Products (1994-2000)**

```
0% 10% 20% 30% 40% 50% 60% 70% 80%
```

Source: Appendix 6.2.3.4

6.3.4.2. Performance evaluation of working capital finances

We analyzed Keih Bahri Food Products’ working capital financing in order to study how the firm’s investments are financed and how it manages its liquidity position. Detailed information regarding liquidity ratios is indicated in Appendix 6.2.3.4.

**Liquidity position** We analysed the liquidity position of Keih Bahri Food Products using current and quick ratios. The current ratio of Keih Bahri Food Products averaged 1.3 times the current liability of the factory. Though it is within the acceptable range of 1 to 2, it falls below the global norm of 2. Therefore, it gives a good reason to check for the quick ratio. The quick ratio averaging 1 with a generally acceptable range of 1 to 1.50 and a global norm of 1 clearly indicates that the firm has optimal liquidity position. Figure 6-3 supports this assertion.
We also studied the impact of working capital decisions on short-term financing by computing the percentage composition of each short-term financing element in the total short-term financing.

**Short-term financing composition:** We also studied the impact of working capital decisions on short-term financing by computing the percentage composition of each short-term financing element in the total short-term financing.

As it is indicated in appendix 6.2.3.4C, Keih Bahri Food products short-term financing is composed mainly of trade creditors which accounted to 92% of the total. The rest includes other short-term financing sources, particularly provision for taxation and dividends payable, which account to 8% on average. The factory does not use short-term bank loans and bank overdraft to finance its working capital investments. (See also figure 6.4).

**6.3.4.3. Performance evaluation of working capital operations**

We studied the efficiency and profitability of Keih Bahri Food Products’ using activity and profitability ratios (Appendix 6.2.3.4).
**Operational efficiency** Activity ratios show the operational efficiency of working capital activities, in terms of how fast receivables and inventories are converted or turned over to cash. They are also used to analyse the operational efficiency of a firm from the point of sales volume, cost of goods sold and volume of assets used. The ratios include, inventory turnover and days inventory held, receivables turnover and collection period as well as overall working capital turnover. We did not include the data on the days inventory held and receivables collection period because it can be derived from the data presented in Appendix 6.2.3.A-3 (activity ratios).

The average *inventory turnover* of Keih Bahri Food Products for the seven years (1994-2000), show that annual cost of goods sold was 3.4 times average inventory. Inventory turnover is converted to “days inventory is held” in order to have a clearer picture of how fast inventories were turned to sales. The days inventory held was an average of 107 days. *Receivables turnover* is expressed in annual sales “times” average receivables. It measures the number of times credit sales or receivables is turned over to cash. High turnover indicates quick collection or strict credit policy and low turnover indicates slow collection or liberal credit policy. The firm’s seven year average receivables turnover indicates that annual sales was 5.2 times average receivables. This means receivables were turned over every 70 days. *Overall working capital turnover*, measures the capacity or speed (in number of days) of working capital to generate sales volume. A high turnover shows efficient utilisation of working capital investment, effective marketing management efforts and/or favourable business conditions. *Overall working capital turnover* for the firm in the seven years (1994-2000), indicate that on the average sales was 1.4 times average current assets or it took the firm on the average 261 days to turnover the working capital assets. It can be observed from figure 6-5 that in particular the trend of the firm’s inventory and receivables turnover declined sharply up to 1997 and then inventory turnover revealed a sharp increase in 2000 while receivables turnover stabilised.

![Figure 6-5: Working capital activity – Keih Bahri Food Products (1994-2000)](image)

**Source:** Appendix 6.2.3.4

**Concluding remarks** The point of reference for analysing activity ratios is a firm’s credit policy for receivables and policy on turnovers for inventories. Activity showing an average inventory turnover of 3.4 with average inventory held of 107 days denotes a slow turnover and a long period inventories remaining unsold. However, closer...
examination reveals that the low inventory turnover is mainly attributed to the pre 1998 (when the firm lost its market in Ethiopia) but it increased again after 1999. However, after 1998 (the start of Eritrea-Ethiopia war) its activities showed a sharp increase and its inventory turnover in 2000 was 6.7 with only 54 days inventory held. This is in support of our findings during the interviews that the firm does not keep inventory because the customers take their orders as soon as the production is completed. An average receivables turnover of 5.2 (70 days collection period) shows a similar situation to that of inventories. In 1996 the firm had a more strict credit policy (with turnover of 6 and a collection period of 61 days) compared to that of 2000 (with turnover of 2.1 and collection period of 170 days). Moreover, the overall working capital turnover of 261 days on average is hardly an indication of efficient management. This finding also supports the fact that the firms’ debtors are mainly the ministries of Defence for credit sales and the Ministry of Finance for subsidies. They take their time to pay but there is no risk of default so the firm does not make a desperate effort to recover amounts overdue from these ministries. Similarly, the time the firm takes to pay its debt to the Eritrean Grain Board (another government firm) is very long for the same reason.

Overall we have learned that the firms with which Keih Bahri Food Products interact are mainly government owned, so their inter-firm transactions are highly based on trust in each other for the following four reasons. First, the fact that they are all government owned implies that they rely on government subsidies if the worst happens. Second, the transactions are considered as inter-governmental firms’ transactions. So, their managers know (and are confident) that no government manager has a motive to take opportunistic advantage over another because no one will get a personal benefit out of it. Third, the Ministry of Defence is their common supervising body with more or less clearly defined regulations known to all managers. Fourth, as government firms there is no risk of default because even if the firm is unable to afford to pay the government can settle its debt.

*Overall profitability* Profitability ratios were computed to study whether Keih Bahri Food Products’ operations are profitable. As Appendix 6.2.3.4 shows the firm’s seven-year average gross profit margin and net profit margin are 6% and 3% respectively, while the return on assets was 3%. It can be observed from figure 6-6 that the trend of the firm’s profitability has continuously decreased during the seven years of our study. It has finally crossed the break-even point and resulted at loss in the year 2000.
It is observed from Appendix 6.2.3.4 and figure 6-6 that the firm has low and decreasing rates of profit and return on assets. This is a reflection of the government regulation on the firm’s policy. The government regulation allows it to make a minimal profit from its operations. As the firm’s financial manager in an interview said, “The firm’s profit margin is restricted at about two percent of the cost of the products”. Moreover, we believe this positive profitability has very little to do with the efficiency of the firm’s management, because as it is mentioned earlier in this chapter the firm has almost a monopsonist position in the supply of its materials and a monopolist position in the market for its products. It has nothing to do with the firm’s ability to purchase raw materials at favourable terms, efficient utilisation of plant and machinery, lowering cost of production or reduction of prices to obtain large sales volume. The concluding remark that can be inferred by comparing the liquidity and profitability is that the firm’s management has very little control over its operations, investments and financing. Working capital levels of financing and investment as well as operations of selling and purchasing based and dictated by government regulations and supervised by higher government bodies, particularly, the Ministry of Defense. The management of the firm has no role in the determination of the purchasing approaches, sources and costs of materials as well as the selection of customers and pricing of finished goods.

**Concluding remarks** It is observed from Appendix 6.2.3.4 and figure 6-6 that the firm has low and decreasing rates of profit and return on assets. This is a reflection of the government regulation on the firm’s policy. The government regulation allows it to make a minimal profit from its operations. As the firm’s financial manager in an interview said, “The firm’s profit margin is restricted at about two percent of the cost of the products”. Moreover, we believe this positive profitability has very little to do with the efficiency of the firm’s management, because as it is mentioned earlier in this chapter the firm has almost a monopsonist position in the supply of its materials and a monopolist position in the market for its products. It has nothing to do with the firm’s ability to purchase raw materials at favourable terms, efficient utilisation of plant and machinery, lowering cost of production or reduction of prices to obtain large sales volume. The concluding remark that can be inferred by comparing the liquidity and profitability is that the firm’s management has very little control over its operations, investments and financing. Working capital levels of financing and investment as well as operations of selling and purchasing based and dictated by government regulations and supervised by higher government bodies, particularly, the Ministry of Defense. The management of the firm has no role in the determination of the purchasing approaches, sources and costs of materials as well as the selection of customers and pricing of finished goods.
Cash flow analysis It can be observed from table 6-1 that the net cash inflows of Keih Bahri Food Products were positive except for 1996. It can moreover be observed that both the changes in working capital assets (stocks and debtors) had an average negative impact on the net cash flow while the changes in creditors had positive effect. However, the overall net cash flow ended up at a positive average and implies that the major sources of cash for the firm were items other than stocks, debtors and creditors and these items did not make much contribution to the positive net cash flows of the firm.

Table 6.1: Cash flow Analysis - Keih Bahri Food Products (figures in ‘000)

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<tbody>
<tr>
<td><strong>A. Annual net cash flow</strong></td>
<td>11,003</td>
<td>-12,391</td>
<td>15,442</td>
<td>5,883</td>
<td>4984</td>
</tr>
<tr>
<td><strong>B. Net cash flow to total assets</strong></td>
<td>20%</td>
<td>-17%</td>
<td>24%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>C. Annual change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase (-), decrease: stocks*</td>
<td>-27,504</td>
<td>1,622</td>
<td>29,004</td>
<td>-1,115</td>
<td>-2008</td>
</tr>
<tr>
<td>Increase (-), decrease: debtors*</td>
<td>4,561</td>
<td>-30,398</td>
<td>-7,868</td>
<td>1,911</td>
<td>-7948</td>
</tr>
<tr>
<td>Increase, decrease (-): creditors**</td>
<td>13,781</td>
<td>5,997</td>
<td>305</td>
<td>14,475</td>
<td>8639</td>
</tr>
<tr>
<td><strong>D. Annual % effect on NCF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase (-), decrease: stocks</td>
<td>-250%</td>
<td>-13%</td>
<td>188%</td>
<td>-190%</td>
<td>-66%</td>
</tr>
<tr>
<td>Increase (-), decrease: debtors</td>
<td>41%</td>
<td>245%</td>
<td>-51%</td>
<td>32%</td>
<td>67%</td>
</tr>
<tr>
<td>Increase, decrease (-): creditors</td>
<td>125%</td>
<td>-48%</td>
<td>2%</td>
<td>246%</td>
<td>81%</td>
</tr>
<tr>
<td>Others: Increase, decrease (-)</td>
<td>84%</td>
<td>184%</td>
<td>-139%</td>
<td>-88%</td>
<td>-82%</td>
</tr>
</tbody>
</table>

*(Year1-year2), **(Year2-year1)

6.3.4.4. Performance management: Comparison of government firms

Appendix 6.2.3.3 includes the information on the performance evaluation and evaluation criteria and Appendix 6.2.3.5 reveals relevant financial performance evaluation ratios of the two government firms.

Performance measurement and evaluation criteria According to their financial managers, both Keih Bahri Food Products and Barka Canneries evaluate their performance of working capital investment decisions using comparative analysis of past versus present, actual versus expected and inter-industry benchmarks. However, while Keih Bahri Food Products uses various accounting based measures (mentioned earlier), Barka Canneries uses only liquidity and activity measures of accounting as well as customer satisfaction criteria particularly faster response and delivery time to evaluate its performance. Our computation of the firms accounting based performance reveals the following results.

Investment We compared the asset structure ratios to study the overall investment composition. Keih Bahri Food Products and Barka Canneries have a seven-year average current asset to total asset composition of 93% and 92% respectively. For manufacturing firms this working capital ratio is an indication of excessive current asset and/or deficient fixed asset investments. Almost the total investment of the government firms is in current assets. This finding has been substantiated by the managers’ opinion that the firms have serious problem of production capacity because investment in capital assets is completely disregarded. The study of working capital investment composition in the two government firms suggests that in particular debtors are higher in Keih Bahri Food products than in Barka Canneries, while receivables and cash are lower in Keih Bahri
Food products. On the average however, the three types of working capital assets are almost evenly distributed among inventories, receivables and cash.

**Financing** We analysed the overall financing management of the two government firms by computing liquidity ratios. The liquidity positions of Keih Bahri Food Products and Barka Canneries indicate a current ratio of 1.3 and 4.4 and a quick ratio of 1.0 and 2.6 respectively. This reveals that Keih Bahri Food Products may possibly face problems of liquidity because a current ratio of 1.3 and quick ratio of 1.0 is barely enough to cover the short-term debts, while Barka Canneries is overly liquid. Appendix 6.2.3.5 also shows that there is a mismatch between the short-term investments and financing. Keih Bahri Food Products uses trade creditors to the extent of 92% while Barka Canneries trade creditors account only for 37%. Barka Canneries mostly uses other short-term sources such as accrued tax payable to the extent of 73%. However, both firms do not use bank loans.

**Operations** We study the efficiency of overall management of working capital operations by analysing activity and profitability ratios. The seven-year average for activity ratios indicate that Keih Bahri Food Products and Barka Canneries respectively have an inventory turnover of 3.4 (or 107 days held) and 1.3 (or 281 days held). Receivables turnover for the two firms was 5.2 (or 70 days collection period) and 5.3 (or 69 days collection period). The ratio for the overall working capital turnover shows 1.4 and 0.9 respectively for Keih Bahri Food Products and Barka Canneries. Profitability ratios indicate gross profit margins of 6% and 22%, net profit margin of 3% and 13% and a return on asset of 3% and 14% respectively for the two firms. Keih Bahri Food Products scored thus higher on inventory, receivables and working capital turnovers. This implies a longer period of inventory held and a larger receivables collection period for Barka Canneries. With regard to profitability Keih Bahri Food Products trails far behind Barka Canneries on all the indicators. The main reason for this is that Barka Canneries management is relatively more empowered to manage its purchase operations while Keih Bahri Tanneries is restricted in both purchases and sales operations.

**Cash flow Analysis** The comparison of the net cash flows of the two government firms revealed that while Keih Bahri Food Products ended up at a positive net cash flow that of Barka Canneries was negative. However, the trend of both inventories and receivables for Keih Bahri Food Products was much larger than that of Barka Canneries and indicated a proportional impact on net cash flows.

**Concluding remark** Evaluation of the two government firms’ average composition of current assets in total assets indicates their major investment is in current assets. This is because the government is not allowing investment in fixed assets and this has resulted in the firms’ problem of production capacity. Moreover, on average the investment in the working capital and current asset to total asset investment ratio is similar. The liquidity ratios indicate differing positions, that is, Keih Bahri Food Products being only marginally liquid while Barka Canneries being overly liquid. Keih Bahri Food Products uses mostly (92%) trade creditors while Barka Canneries uses other short-term financing sources particularly tax and dividend accruals. In both cases working capital activities show low turnovers. Though both show profits during the first six years, Keih Bahri Food Product’s profitability has revealed a continuos
decline and finally resulted at loss in the final year of our study while Barka Canneries remains still profitable.

6.4. External working capital management: supplier and customer linkages

As we have reviewed in chapter 3, value is created not only by managing a firm’s internal affairs but also through co-operation in the value chain (the co-operation among a firm, its suppliers and customers). This means that value chain linkages exist not only within a firm but also between a firm, its buyers and suppliers. If the firms, their suppliers and customers jointly optimise the performance of their activities they can create value with synergetic effects. This means that buyer-supplier relationships are not a zero sum game where one gains only at the expense of the other. Based on these assertions this section explores if the government firms have proper inter-firm co-operation with their suppliers and customers on primary activities including purchase and sales operations and inventory management. We also asked what benefits they get as a result of their co-operation or why they do not co-operate. For detailed information on external working capital management and inter-firm co-operation, see Appendix 6.3.1 – for the responses of firms on firm-supplier co-operation (6.3.1.1) and firm-customer co-operation (6.3.1.2), Appendix 6.3.2 – for responses of suppliers and Appendix 6.3.3 – for responses of customers.

6.4.1. Firm-supplier co-operation

6.4.1.1. Responses of the central firms – Keih Bahri Food Products

Our objective in this section is to study how the government firms manage their supplier linkages. Therefore, we asked their managers if and how they co-operate with suppliers on the primary operations. We review the response of Keih Bahri Food Products, which is one of the government firms and compare the responses of both government firms and later then we also analyse the responses of their suppliers (section 6.4.1.3 and 6.4.1.4) and customers (section 6.4.2.3).

Firm-supplier co-operation on primary activities The general manager of Keih Bahri Food products is of the opinion that the firm co-operates on inbound activities (receiving and storing) but not on production, marketing or after sale service with its only supplier – Eritrea Grain Board. Moreover, the factory cannot buy from other private suppliers even if it would get better terms.

Firm-supplier co-operation on purchase and inventory management The government regulations dictate how the factory has to co-ordinate its purchasing, inventory management and other activities related to the backward linkage with its supplier (Eritrean Grain Board). The commercial manager’s opinion is nevertheless that the two firms (Keih Bahri Food Products and Eritrean Grain Board) co-operate on having advance agreements on the quality and quantity of materials to be purchased and on the terms of transportation during purchase, which he believes is usually on the basis of just in time. With regard to this issue, the firm’s commercial manager says that: "Our sole supplier of materials is the Eritrean Grain Board, (a government firm itself) so it is only the government regulations that affect our co-operation on
According to the commercial manager’s opinion, Keih Bahri Food Products’ co-operation on primary and purchase activities with Eritrean Grain Board helps to minimise the time taken to purchase materials, the cost of ordering, carrying and purchasing materials as well as creating firm-supplier trust.

**Concluding remark** Keih Bahri Food Products co-operation with its supplier Eritrea Grain Board in purchase ordering, transportation and storage of materials is dictated by the fact that both firms are government owned. According to the interviews conducted and questionnaire data collected from the firm’s general, financial and commercial managers the backward linkage is passive and their co-operation is similar to the management of two departments of the same firm. The only time that the two firms negotiate on the terms of purchase is during the preparation of the yearly forecasts. Once they agree on the type, quality, quantity (volume) and budgeted costs of Keih Bahri Food Products’ annual demand, the communication becomes routine - writing purchase orders, receiving and inspecting the shipment. Though they are two firms with different entity, the fact that they both are government firms has increased trust between each other and decreased the possibility of opportunistic behaviour and the need for ex-ante safeguarding and ex-post control measures. As a result of this close inter-government co-operation, the financial manager of Keih Bahri Food Products believes that the firm is getting benefits such as decreasing the time needed to purchase materials, decreasing the cost of ordering and carrying materials. He also believe that the close inter-government co-operation creates inter-firm trust.

6.4.1.2. Firm-supplier co-operation: Comparison of government firms

**Firm-supplier co-operation on primary activities** Both Keih Bahri Food Products and Barka Canneries responded that they co-operate their inbound activities, particularly shipment and storing. Barka Canneries is also positive with regard to inter-firm co-operation on production operations on product testing and facility operations as well as after sales service on repair, parts supply and products adjustments. However Keih Bahri Food Products does not co-operate on all the activities related to production operations and after sales service.

**Firm-supplier co-operation on purchase and inventory management** As has been mentioned earlier, the government regulations require Keih Bahri Food Products to co-ordinate its purchasing and inventory management with its supplier Eritrean Grain Board which is a government firm itself. However, Barka Canneries buys its materials from the open market through open bidding. Moreover, the commercial managers of both firms believes that they co-operate with their suppliers on the quality and quantity of materials to be purchased, the terms of transportation during purchase and in supplying the materials on the basis of just in time. According to the commercial managers of both firms, their firm-supplier co-operation on primary and purchase activities helps them to decrease the time needed to purchase materials and to
minimise costs of purchasing materials as well as helps in the creation of inter-firm trust.

**Concluding remarks** The firm-supplier co-operation of the two government firms differs depending on whether they deal with fellow “related” government firms, (case for Keih Bahri Food Products) or private firms, which applies to Barka Canneries. Keih Bahri Food Products deals with another government firm (Eritrean Grain Board) so its firm-supplier linkages are dictated by government regulations and subsidised costs. Both manage the transaction costs of their firm-supplier linkages on the basis of abiding by the regulations of the government and inter-firm trust. In which case related costs are minimal. Their suppliers store and bear the costs of transporting the purchase and ship just-in-time for production, which further reduces the costs of materials inventory. Both the central firms have close agreements and co-operation with suppliers on the quality and quantity of materials to be purchased, the terms of transportation during purchase and in supplying the materials on the basis of just in time. As a result of their co-operation their managers believe that they get benefits such as minimising the time needed to purchase materials, decreasing the cost of ordering and transportation of purchasing materials. Barka Canneries deals with private suppliers and it therefore requires them to deposit cash at its bank account enough to pay for one month’s supply of materials – a form of risk sharing.

6.4.1.3. Responses of supplier: Eritrean Grain Board

We approached the suppliers of the government firms to find their responses and study the value creation potential of the backward linkages. In this section we study the firm-supplier co-operation of Keih Bahri Food Products from the point of view of its main supplier - Eritrean Grain Board. We explored firm-supplier co-operation on primary activities and on sales and inventory management as well as related benefits or the reasons for non-co-operation. Finally, we evaluate the supplier responses on firm efficiency. The data related to the empirical findings are presented in Appendix 6.3.2.

**Firm-supplier co-operation on primary activities** According to the general manager of Eritrean Grain Board the two firms co-operate on outbound activities particularly, delivery vehicle operation and order processing but not on finished goods warehousing or inventory control. Overall, the manager believes that the firms do not co-operate on primary activities such as production operations, marketing and sales as well as after sale services.

**Firm-supplier co-operation on sales and inventory management** Both Eritrean Grain Board and Keih Bahri Food Products are government owned and their co-operation is governed by related government regulations. According to the general manager of Eritrean Grain Board the two firms co-operate in having credit transactions without discount and providing goods when just needed for production. However, the two firms do not have inter-firm co-operation on exchanging skilled staff, credit transactions with discounts. In the interview we conducted with the general manager of Eritrean Grain Board he said that: “The Ministry of Finance and the Ministry of Defence serves as a bridge between Eritrean Grain Board and Keih Bahri Food Products. The Ministry of Finance pays us for all subsidised purchases made by Keih
According to the general manager of Eritrean Grain Board, both firms are supposed to co-ordinate their activities as per the government regulations and there is no problem of co-operation. The benefits that Eritrean Grain Board is getting as a result of its co-operation with Keih Bahri Food Products include, a decrease in the time needed to sell goods and in the costs of selling, as well as the cost of ordering, transportation and carrying inventory.

Supplier evaluation of firm efficiency The general manager of Eritrean Grain Board believes that the relation between the two firms is very good. He is also of the opinion that Keih Bahri Food Products is efficient in processing its purchase orders, explanations to inquiries and in its payment habits, in its marketing approach, bilateral communication and courtesy.

Concluding remarks Keih Bahri Food Products and its supplier - Eritrean Grain Board responded similarly to the questions on firm-supplier co-operation. Because both are government firms they closely co-operate on their primary activities, particularly inbound and outbound activities as well as sale-purchase and also in inventory management. It is however, still possible that they co-operate only because they are obliged by government regulations. In this case abiding by government regulations is a main reason for inter-firm co-operation and trust.

6.4.1.4. Firm-supplier co-operation – Comparison of responses of government suppliers

Firm-supplier co-operation on primary activities As it is indicated in Appendix 6.3.2, the suppliers of the two government firms replied that they co-operate with the government firms on outbound activities, particularly order processing and delivery vehicle operation. However, their response indicates that they do not believe that they co-operate with these customers on other primary activities, such as production operations, after sale service and the inventory control aspect of the outbound activities. The response of the suppliers differed on the inter-firm co-operation on the primary activities of outbound and marketing/sales. Both the suppliers of Keih Bari Food Products and Barka Canneries responded that there is close co-operation on outbound activities, particularly delivery vehicle operation and order processing. In addition the supplier of Barka Canneries responded positive to the inter-firm co-operation on the outbound activities of finished goods warehousing as well as marketing/sales, on advertising sales force and sales channel selection.

Firm-supplier co-operation on sales operations Both suppliers of the government firms have the opinion that they co-operate with the government firms on having an advance agreement in providing goods when just needed for production. However, the two firms do not have inter-firm co-operation with their suppliers on exchanging skilled staff and credit transactions with discounts, while that Keih Bahri Food Products, nevertheless co-operates with its supplier on credit transactions without
discounts. Suppliers believe that their co-operation in the sales operations and inventory management helps to decrease cost of selling, particularly cost of ordering and transportation. The supplier of Keih Bahri Food Products believe also that the co-operation results at decreasing the time it needs to sell goods and the cost of carrying finished goods inventory, while the supplier of Barka Canners believes it results at creating trust between the two firms.

The supplier of Keih Bahri Food Products believes that the two firms are fully co-operating with each other. However, the supplier of Barka Canners responded there is some lack of co-operation and the main reason for that he believes is because the government firm has not developed the business culture of co-ordinating its primary activities as well as sales and inventory management policies with customers.

**Supplier evaluation of firm efficiency** The general managers of suppliers of the government firms are satisfied with their inter-firm co-operation. Both suppliers evaluated their relation as good because they believe the government firms are efficient in processing purchase orders, explanation to enquiries, payment habits, marketing approach, bilateral communications and courtesy.

**Concluding remarks** Keih Bahri Food Products and its government supplier Eritrea Grain Board closely co-operate their outbound/inbound activities of delivery vehicle operation as well as purchase and sales operations. This co-operation has an impact on decreasing the level of Keih Bahri’s inventory of materials. Both firms are required to co-operate because they are government owned and subject to the same government regulations. Barka Canners and its privatised supplier Gejeret Carton Factory have continued their co-operation that existed before Gejeret Carton Factory was privatised and both are satisfied with their co-operation. There is also a lack of an alternative supplier for Barka Canners. In the absence of a viable competitor Gejeret Carton Factory is the only one of its kind in the country. The overall effect of the close inter-firm co-operation according to the opinion of the managers suppliers of the government firms is that both sides have benefited in decreasing the carrying costs of their inventories and inter-firm transaction costs of operations.

### 6.4.2. Firm-customer linkages

How efficient are the government firms in managing their customer linkages? To get an answer to this question we asked the general and commercial managers of the government firms about if and how they co-operate with their customers on primary activities sales operations and inventory management. We also studied the benefits that the government firms believe they get as a result of their co-operation or why they do not co-operate and whether they assess their customers’ opinion.

#### 6.4.2.1. Responses of the central firms - Keih Bahri Food Products

Here we deal with the firm-customer co-operation from the point of view of Keih Bahri Food Products. For detailed information on the response of the managers of Keih Bahri Food Products and another government firm, refer to Appendix 6.3.1.2.
**Firm-customer co-operation on primary activities** The customers of Keih Bahri Food Products’ are divided into two categories – the ministries (particularly the Ministry of Defence) and private bakeries and pastries. The firm’s inter-firm co-operation differs among these customers. When asked to describe the firm’s relationship with its customers, the commercial manager said that: “Our factory is administered under the Ministry of Defence, which is also our main customer, so, our relationship is governed by state regulations. The small bakeries and pastries get their quota determined by the Ministry of Trade and Industry based on which we sell to each customer. Therefore, we have almost no role in determining our policy on customer relations”. The general manager is of the opinion that the firm co-operates with the Ministry of Defence on outbound activities such as finished goods warehousing, materials handling, delivery vehicle operation and order processing but not on production, marketing or after sale service. The bakeries and pastries take their periodic quota and the factory provides them with their approved quota if there is stock available.

**Firm-customer co-operation on sales and inventory management** According to the firm’s commercial manager Keih Bahri Food Products co-ordinates its sales and inventory management with customers by specifically agreeing on the transportation terms, quality and quantity of goods to be produced and sold on the basis of just in time. According to the financial manager of Keih Bahri Food Products the benefit that the firm gets include minimising the cost of transportation, decreasing the cost of carrying inventories as well as increasing sales. As for the non-co-operation with the private customers, the firm’s commercial manager responded that the main reasons are the firm does not have the policy because it does not see the benefit of co-operation.

**Assessing customer satisfaction** According to the commercial manager, Keih Bahri Food Products gets the feedback from its customers on their opinion on the quality of its products and services by allowing them to return any product with inferior quality and by having strict quality control at the production floor. However, it does not allow its private customers to pay after they made sure that the products are as per their expectation.

**Concluding remarks** Keih Bahri Food Products’ relationship with its customers is determined by government regulations, which dictate how the factory has to co-ordinate its management of sales, inventory and other activities related to the forward linkage with its customers. Hence the firm’s management has little room to manoeuvre around. Therefore, the factory’s management does not use any particular approach to keep in touch with its privately owned customers or expedite its forward linkages with them. As a result, its private customers are mostly not satisfied with the way it sells its products because they have to wait for a very long period in order to get their quota. Its production capacity is much lower than the demand for its products, so it has strict government instructions to satisfy the demand of the Ministry of Defence before that of its private customers. Moreover, it has very close co-operation with the Ministry of Defence, which also happens to be its supervising body. This co-operation has greatly enhanced its sales and decreased costs of sales and inventory holding.
6.4.2.2. Firm-customer co-operation - Comparison of government firms

**Firm-customer co-operation on primary activities** The area of co-operation between the two firms and their customers with regard to the primary activities is that Barka Canneries co-operates with its customer on production operations particularly equipment maintenance and product testing. Moreover, both Keih Bahri Food Products and Barka Canneries co-operate only on the outbound activities, particularly finished goods warehousing, delivery vehicle operation and order processing.

**Firm-customer co-operation on sales and inventory management** Both government firms produce mostly by the order of their main customer – the Ministry of Defence. However, Keih Bahri Food Products also produces to the general market for the small bakeries and pastries. According to the firms’ commercial managers they co-operate with customers on their sales and inventory management by specifically agreeing on the transportation terms, quality and quantity of goods to be produced and sold on the basis of just in time. According to their financial managers of Keih Bahri Food Products and Barka Canneries the benefit that the firms get include, minimising the cost of transportation, decreasing the cost of carrying inventories as well as increasing sales. As for the non-co-operation with the private customers, the firms’ commercial managers say that the main reason is that the customers do not co-operate while Keih Bahri Food Products’ general manager also believe that the firm does not have the policy because it does not see the benefit of co-operation.

**Assessing customer satisfaction** Keih Bahri Food Products and Barka Canneries reported that they make strict quality control at the production floor and if customers are not satisfied they are allowed to return any product with inferior quality. Barka Canneries makes periodic assessment of customer opinions and the manager believes that its customer relation is very good.

**Concluding remarks** The main customer of both firms is the Ministry of Defence, under whom they are also administered. Therefore, relevant government rules (and trust) dictate their co-operation on the primary activities. Keih Bahri Food Products also deals with private businesses, particularly Bakeries and Pastries. The firm sells its products to these customers on government-subsidised prices. It makes cash sales on a quota basis because the demand for its products by far exceeds its production capacity. The findings on firm-customer co-operation reveal very close inter-government firm co-operation because the main customer of both firms is also the supervising government body. Therefore, as a result of the inter-government co-operation the firms have managed to minimise the cost of transportation, to decrease the cost of carrying inventories as well as to increase sales.

6.4.2.3. Responses of customer - Asmara Pastry

We approached the customer of Keih Bahri Food Products to find its responses on firm-customer relations and to study the value creation potential of the forward linkages. We search for the specific co-operation on the primary activities as well as sales operation and inventory management. We also study the benefits that the customer gets as a result of the co-operation or the reasons for the non-co-operation.
Finally we evaluate the customer rating of firm efficiency. For further information on the responses of the general manager of Asmara Pastry refer to Appendix 6.3.3.

**Firm-customer co-operation on primary activities** According to general manager of Asmara Pastry, the two firms do not co-operate on any primary activity related to production operations, outbound activities, marketing and sales or after sale service.

**Firm-customer co-operation on sales and inventory management** According to the Asmara Pastry’s general manager, the firm does not co-operate with its main supplier Keih Bahri Food Products in any activity related to the sales and inventory management. He replied that there is no co-operation specifically on the transportation terms, quality and quantity of goods to be produced or getting goods when just needed. According to general manager the only benefit is buying the products at a reduced price, though he believes the quality is also low. As for the non-co-operation with its customers, the firms managers believes that the main reason is that Keih Bahri Food Products does not co-operate and not because Asmara Pastry does not have the policy and does not see the benefit of co-operation.

According to the general manager of Asmara Pastry, the firm buys flour from Keih Bahri Food Products based on the quota given to it by the Ministry of Trade and Industry. This quota is divided into the amount of flour that the firm can buy every week, so the purchase policy of Asmara Pastry or the sales policy of Keih Bahri Food Products has nothing to do with their managerial policies. The manager said that: “The sales policy of Keih Bahri Food Products, which is a government owned firm, is based on the government policy of subsidising costs of food products, particularly bread. So Keih Bahri Food Products does not act as a business partner but as a father distributing food to his children. Keih Bahri Food Products knows very well when we come and how much we buy”. The manager of Asmara Pastry is not satisfied with the selling, shipment and transporting system of its supplier. He says that: “As a government firm selling on a subsidised price, the seller sees no business reason why it has to take care of the interests of its customers, because whether the customers like it or not they will continue coming to buy”.

**Customer evaluation of firm-efficiency** The manager of Asmara Pastry believes that Keih Bahri Food Products is very efficient in its cash collection habits, costs of products, bilateral communication, impartiality with other buyers, knowledge of its customers and explanation to inquiries. However, the manager believes that Keih Bahri Food Products is less efficient in sales processing and marketing approaches. The manager of Asmara Pastry said that, “We buy from private businesses and Keih Bahri Food Products, comparably we co-ordinate our activities with the private businesses in a much better way. So, there is a lot to improve in our relationship with Keih Bahri Food Products. Private businesses keep in touch with each other while Keih Bahri Food Products is indifferent”.

**Concluding remark** According to the general manager of Asmara Pastry, the firm’s co-operation with Keih Bahri Food Products is not satisfactory on both primary activities as well as sales operation and inventory management. He therefore believes that his firm gets very little benefit as a result of the co-operation. The main reason for the lack of closer inter-firm co-operation he believes is that the supplier is government owned and does not care much about its customers.
6.5. Conclusion

This chapter has presented an analysis of Keih Bahri Food Products’ internal and external working capital management. The intra-firm analysis is divided into managing working capital levels of investment and financing and working capital operations of purchasing materials and selling finished goods. The inter-firm management of working capital levels and operations refer to backward linkages with suppliers and forward linkages with customers. We explored Keih Bahri Food Products linkage with its supplier - the Eritrean Grain Board and its customer linkage with Asmara Pastry. A comparison of working capital management is also made between Keih Bahri Food Products and another government firm – Barka Canneries. Here we give overview of our findings. First, we review the intra-firm management with regard to the overall objective of value creation and the constraints to achieve the objective. Then, we comment on our findings with reference to working capital levels of investments and financing as well as operations of purchases and sales. Finally, we comment on the evaluation of the firms overall results of management decisions as reflected by the financial indicators of performance.

The role of managing working capital The managers of both firms believe that managing working capital operations and levels has a very significant role in creating value to their firms. However, we find that the government firms in general lack a clear objective and vision of managing both working capital levels and operations. Actually they are restricted to the control function, which is evidenced by the stringent control mechanisms imposed over cash, receivables and inventory levels. The reason for the lack of a clear working capital management policy is the imposition of government regulations, which are implemented under the supervision of higher government authorities (the Ministry of Defence). The response of the managers of both firms was that they are not fully empowered to manage the affairs of their firms. The authority to take policy measures and decisions, which can have both short and long-term effect lies with higher authorities. This makes the managers less empowered because the firm’s management is practically overtaken. This also explains the fact that the managers of the government firms reported that they have no problem of working capital levels of investment and financing as well as operations of purchasing and sales.

Working capital investment and financing We find that the firms have no clear policy of managing working capital investment and both firms have excessive levels of cash and receivables. However, inventories are kept to a lower level due to the close relationship of inter-government firms in Keih Bahri Food Products as well as efficient purchase and materials inventory management in Barka Canneries. The inventory of finished goods is also minimised due to the excessive demands of the Ministry of Defence and the firms’ monopolised food market. The government firms finance their working capital levels and operations with the net cash inflow from operations, government subsidy and trade credits (due mostly to related -government firms). The firms cannot expressly state their working capital financing policies. However, because of the profitable operations (thanks to the subsidised costs and monopolised market), which have resulted in positive net cash flows, the firms have no problem of financing their working capital levels and operations.

The main conclusion that we make on the management of working capital levels of investment and financing is that the firms have no clearly set objectives. This is
affecting the efficiency of managing internal working capital levels of investment in cash, receivables and inventories as well as short-term financing sources.

**Working capital operations** The management of the firms working capital operations was restricted only to the application of clerical procedures of purchases and sales (Appendix 6.2.3.1 and 6.2.3.2). Analysis of purchase and sales operations showed that the management of Keih Bahri Food Products is not empowered to manage its *purchase operations*. So it has nothing to do with it except preparing the annual budget and having it approved by the Ministry of Defence and sending periodic purchase orders to the Eritrean Grain Board. However, Barka Canneries applies purchase approaches, though it of course abides by the relevant government regulations. It also makes annual contractual agreement with its suppliers, who make deposits that will enable the firm to buy one month supplies in case the supplier fails to deliver according to the agreement. The firm uses this approach as a mechanism to control any future opportunistic behaviour of the supplier. Most of the *sales* of both firms are made to the Ministry of Defence, which is also their supervising body. The Ministry of Defence simply forwards purchase orders and the firms supply whatever is requested. Keih Bahri Food Products also sells to small pastries and bakeries according to the rationed quota approved by the Ministry of Industry and Trade. So, both firms have very little to do with how to sell their finished goods. We therefore, claim that both government firms are not fully empowered to manage their working capital operations as a result of which their efficiency and value creating potential in that area is restricted. Therefore, the managers are concentrating at the custodial rather than at the value maximisation aspect of working capital management.

**Evaluation of internal working capital management** Analysis of performance has indicated that the firms use no accounting, customer satisfaction or quality based performance measurement and evaluation criteria. Responses of the managers as well as observations of their financial statements reveal that the firms have excessive cash and marginal profits. Liquidity analysis showed that Keih Bahri Food Products is marginally liquid. On the other hand, Barka Canneries is excessively liquid. The activities of both firms show very low asset turnovers and increasingly higher receivables collection periods. All profitability ratios (gross profit, net profit and return on assets) indicate decreasing levels.

**Inter-firm co-operation** Firm supplier linkages indicate that the co-operation on working capital levels and operations between Barka Canneries and its supplier – Gejeret Carton Factory, (which is a non-government firm) is low. The main reason for this according to the managers is the interference of government regulations. Both firms reported that they make little co-operation in all the primary activities. However, Keih Bahri Food Products and its government supplier (the Eritrean Grain Board) fully co-operate in their activities in as much as the government regulations permit. Firm-customer linkages revealed that the main customer of both government firms is the Ministry of Defence, which is also their supervising body. Keih Bahri Food Products also deals with private Bakeries and Pastries. Because the Ministry of Defence is the supervising and controlling government body for both firms, intra-firm hierarchy governance dominates the relationship between the Ministry of Defence and both Keih Bahri Food Products and Barka Canneries. The inter-firm relationship between Keih Bahri Food Products and the private bakeries and pastries is also dictated by government regulations. However, when the relationship between
government and private firms is considered, there is less inter-firm co-operation and the government firms play a dominant and controlling position. Moreover, the closer inter-firm co-operation among the government firms has a positive effect in inter-firm trust related costs of activities. However, the relevant government regulations rather than business linkages dictate the inter-firm relationship.

**Evaluation of inter-firm working capital management** The government suppliers and customers evaluated each other’s linkages as efficient while the non-government firms considered that the government firms are less efficient in co-ordinating their primary activities. The government firms’ supplier and customer co-operation is unsatisfactory from the privately owned suppliers and customer’s points of view. Both private linkages reported that there is no firm-supplier or firm-customer co-operation between them and their government partners except in few areas for control purposes. Overall, the findings reveal that the government firms are doing very little to create value by managing working capital levels of investment and financing as well as operations of purchasing and sales.