CHAPTER 7

FINDINGS AND CONCLUSIONS
In earlier chapters, a number of issues pertaining to STUs in general and the five selected STUs in particular have been described, analysed and discussed. These issues are mainly in the realm of financial management, but the focus of inquiry and analysis is with reference to working capital and its management. This chapter recounts and consolidates the major findings emerging from the understanding and analysis of working capital management in the five STUs and draws appropriate conclusions not only in respect of the five STUs, but also as generalisations pertaining to the STUs as a whole. In so doing, one of the objectives of the thesis viz. to provide the state of art in working capital management in the STUs as a whole is sought to be achieved.

Though stating the findings in a consolidated manner and drawing appropriate conclusions therefrom is the main objective of this chapter, recommending solutions to the some of the problems identified in the course of the thesis has also been occasionaly indulged. This arises from a natural corollary in a study or research to suggest worth-while or well tried-out solutions when problems are identified to some degree of clarity. Therefore, solutions

1. It would be logical to extend the findings and conclusions in respect of the five STUs which constituted the sample in this thesis as generalisations for the STUs as a whole because the sample represents nearly 50 percent of the STUs in India in terms of extent of operations and fleet strength. Moreover, the five STUs are incorporated under the RTCs Act and operate inter-city and
mentioned here are more as a result of the natural consequence of a study than on the basis of their particular merit vis-a-vis the situation in STUs.

Findings & Conclusions

The findings and conclusions of the thesis may be broadly grouped under three major areas of working capital management in STUs viz. (A) features, (B) position and (C) policy.

(A) Working capital features in STUs:

1. Complexity: Classical literature in working capital management tends to dispose of working capital management in public utilities as an area without much complexity. The arguments for this are based on the notion that in public utilities -

(i) the flows of cash, especially the inflows, are regular and therefore, amenable to more precise forecasting,

(ii) the cash cycle is short and, therefore, investments in various current assets are short lived, and

(iii) services rather than goods being the products, inventory levels and investment therein are not major problems. Such over-simplification of issues appears not quite so true, at least in the case of STUs, as the understanding and analysis of the working capital management in mofussil services in the plains regions of the country. These are also the features governing the majority of STUs in India.
STUs in this thesis has shown. There is the problem of deteriorating liquidity. There is also the problem with regard to sources of financing the working capital. Thus, working capital management in STUs has complexities and problems, of a special nature.

(2) **Scope of application of concepts, approaches and theory of working capital in STUs:** Although, working capital management in STUs differs considerably from that in other manufacturing or trading industries, owing to the STUs being service organisations, there is vast scope of applying conventional concepts, approaches and theory in the field of working capital management in the case of STUs too. The 'gross' and 'net' concepts of working capital can be applied for determining the adequacy and the liquidity position as demonstrated in this thesis. The operating cycle approach for determining working capital levels, on the other hand, is not relevant because of the absence or very little presence of the major stages of the operating cycle in STUs. In STUs, sales volumes (revenues) are independent of the sales capacity (i.e., units offered for sale) in as much as the number of persons availing transport services may not necessarily be to the full capacity of the transport services provided. As public utility organisations in the public sector, the STUs have to provide transport services as per scheduled time-table irrespective of whether the buses are fully occupied or not. As a result, planning for working capital on the basis of
conventional relationship between working capital levels and sales volumes will not be realistic. Therefore, planning for working capital levels on the basis of services to be provided will be more realistic and relevant in STUs.

(3) Special features of STUs which have a bearing on the working capital management:

Working capital management in an industry is influenced by several factors such as, nature of the industry and the product, profit and cash policy, etc. While many of these factors are also relevant in STUs, there are a few special factors which have an important bearing on working capital management in the STUs. These are:

(1) Working capital financing as envisaged under the RTCs Act,

(ii) administered fares system and taxation policy which do not result in surpluses over costs of operations and

(iii) increasing cost of operations owing to inflation.

These are additional factors special to STUs over and above the usual factors affecting working capital in public utilities in general such as shorter cash cycle, preponderance of cash sales, etc.

(4) The nature of "Investments": It was seen that "investments" in the five STUs were, by and large, made due
to statutory requirements or in terms of rules framed by the respective State government. Investments made by way of profitable deployment of excess cash balances are not a common feature in STUs which is not surprising in the background of deteriorating liquidity and poor financial results.

(B) **Working Capital Position in STUs**

1. **Current assets:**

   The dual aspects of liquidity: In the case of the five STUs, the two components, Stores and Cash & Bank balances accounted for nearly 50% of the total current assets, while the other components, such as investments, sundry debtors and loans, advances & deposits, accounted for the remaining 50%. Among the other components investments and sundry debtors were comparatively less than Loans, Advances & Deposits. A sizeable part of sundry debtors did not possess the characteristic of liquidity i.e. quick convertibility into Cash because it represented items which were old or virtually dead account balances or results of accounting mis-classification. Similarly a major part of Loans, Advances & Deposits represented advances and loans to employees and, being regulated by specific terms and conditions as to their recovery/repayment, can not be really called liquid. It can, therefore be concluded that the liquid assets in the sense of convertibility into cash are only cash and bank balances and
investments, which together accounted for between 30% and 43.8% only of the total current assets. In other words, only a small proportion of the current assets in STUs can be said to be truly liquid. Therefore, the concept of liquidity in STUs should be not only in a relative sense i.e. excess of liquid current assets over current liabilities but also in the absolute sense as a quality of current asset items.

**Differences in policies and practices:** Each of the five STUs held one or the other component of current assets in a proportion vastly different from the other STUs. For example, MSRTC held a higher proportion of its current assets in Stores than the others, Kerala SRTC in Cash & Bank balances and APSRTC in Loans, Advances & Deposits. These reflect a deliberate policy of excess inventory in MSRTC, and a policy for higher liquidity in Kerala SRTC, while in the case of APSRTC a certain deficiency in the functioning of the accounts department is reflected. The important conclusion in this regard is notwithstanding the various points of similarity among the five STUs, differences existed in the matter of policies and practices as reflected by differences in composition of working capital.

**The importance of Stores in STUs:** Among the various items comprising the current assets in STUs, Stores occupy a special and significant place because of their impact on the operational efficiency in terms of reliability and
punctuality of services and break-down accident-free operations. Further, Stores alone possess the characteristic of direct variability with volumes of operations. The materials management function assumes great significance in STUs. It is characterised by centralized buying and decentralized storage and consumption of a large variety of items. The efficiency of this important function has been judged on the basis of a set of two parameters in this thesis, viz. the cost of stores per kilometre of operations and the size of the inventory holding. It was noticed that MSRTC had high inventory of stores which was stated to be the result of deliberate policy. Kerala SRTC held the lowest inventory level. As regards cost of stores per km, APSRTC had the highest cost and GSRTC the lowest. On a combination of these two parameters, it was found that GSRTC ranked as the most efficient and MSRTC as the least efficient.

Since fuel consumption has assumed highest importance in the wake of the energy crisis, the efficiency in this respect is of great significance in the STUs. While GSRTC achieved significant improvement in this area, the other four STUs showed either slight improvement or slight deterioration.

By way of generalisation, it may be stated that inventory or Stores management in the STUs needs to be given careful attention in view of the direct relationship between stores and operations, and the high cost of stores per unit of operation as well as from the point of working capital
management because inventory affects the liquidity adversely and the STUs exhibited a tendency to hold increased inventory levels especially in 1979-80.

The problem of Cash-in-transit: A consistent policy in cash management was seen in each of the five STUs because changes in cash balances during the ten year period were within a small range of 5% only and a near static trend was noticed.

The other most notable feature about Cash was the proportion of Cash-in-transit at a point of time, which varied between 28.0% and 7.2% of total cash and bank balances in three STUs. In terms of number of days' revenues, cash-in-transit was between 3.9 and 1.5 days revenue and owing to several reasons such as, wide-spread areas of operations, collection and remittance procedures, etc., a delay of at least one week occurred before the Cash-in-transit became available for use by the STUs. Moreover, the volume and number of transactions involved in depositing Cash into the bank and getting the deposits at various branches of the bank transferred and credited into the main bank account of the STUs was also fraught with the risk of mis-credits and non-credits. This causes severe ways and means problems for STUs. A feasible solution should include the following:

Cash budgeting techniques should take into account the feature of Cash-in-transit and the delay owing to transfer procedures.
Frequent reconciliation between book balances and cash bank balances must be made to trace missing transfers.

Decentralization of cash management should be introduced. For instance, consolidation of deposits made by the depots can be at Divisional/Regional office levels. Since these levels are also payment centres, cash receipts and payments can be decentralized at these levels.

It should be possible to make working arrangement with the banks whereby the STUs are allowed to draw on their main accounts irrespective of the delay in telegraphic transfer of deposits collected at several branches of the bank to the main account. Since STU revenue collections are per day more or less uniform and regular within each season of traffic fluctuations viz. heavy, low or medium, the deposits of the revenue will also be uniform. Based on this, the main branch of the bank and STUs should be able to work out a minimum amount per day which could be credited every day in the main account of the STU subject to adjustment in due course on the basis of transfers of actual deposits through telegraphic transfers. Such an arrangement will reduce the impact of the delay caused by Cash-in-transit and enable STUs to draw the Cash-in-transit for immediate use.

2. Current liabilities

Reliance on trade credit: It was found that sundry creditors for supplies to STUs and other transactions
accounted for the highest percent of current liabilities indicating heavy reliance on trade credit as a source of financing the current assets.

**Liquidity preference in Kerala SRTC:** A possible explanation of the comparatively lower percent of sundry creditors in the current liabilities of Kerala SRTC in the light of its larger cash and bank balances and lower levels of inventory as revealed by the analysis is that Kerala SRTC tended to follow a policy of liquidity preference. This squares with the financial results of that Corporation, which is a series of losses, and proves the theory that higher the concern for liquidity lower will be the overall profitability.

**Short-term credit from banks:** Short-term borrowings from banks figured in the balance sheets of the selected STUs in spells and for fewer years except in the case of Karnataka SRTC. This confirms the difficulty in obtaining short-term credit from commercial banks. With government contributions restricted to capital expenditure only and commercial banks being guided by the directives of the Reserve Bank of India, which do not accord priority to the STUs, the problem of obtaining short-term loans is acute in STUs. Even the amended provisions in the RTCs Act concerning working capital have merely enlarged the "open market," from which STUs are permitted to raise working capital, to include the nationalized banks, State Finance Corporation, I.D.B.I.,
or any financial institution which is subject to the control of the Reserve Bank of India. 2 As long as the STU activities are not included in the Reserve Bank’s guidelines for providing loans on priority basis such amendments can hardly help. 3

To ease the situation so that short-term bank loans can be made available to STUs a concerted action by all STUs is called for. The Association of State Road Transport Undertakings (ASRTU) which is the common forum for all the STUs should take up with the banks and the Reserve Bank of India the important role played by the STUs in accelerating of the economic and social development of rural and backward areas. If other industries are entitled to priority considerations for loans from banks for the development of rural and backward areas, STUs too appear no less entitled. 4 In fact, STUs provide the necessary infrastructure for the industries which quicken the process of economic and social development. If this is accepted by the Reserve Bank of India, the STUs too could be covered under the RBI guidelines.

**Exceptionally large provisions for statutory liability in the case of Kerala SRTC:**

While provisions for statutory liabilities constituted small proportions of the total current liabilities in the four other STUs, they accounted for as much as 56%, on an

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2. The Road Transport Corporations (Amendment) Act, 1982 (Act No. 63 of 1982 assented to by the President of India on 6.11.1982).

3. An interesting instance of the application of the rules or guidelines in letter and not in spirit came to the author’s notice when the Chief Accounts Officer of an STU mentioned that as the SFCS, IDBI, LIC etc. are empowered to provide loans to “Companies” only, they
average, in the case of Kerala SRTC. This was mainly because provisions for the payment of taxes such as Motor Vehicle tax etc. were made increasingly larger and larger which accounted for 91.5%, 93.4%, 62.5% and 63.5% of the total current liabilities in 1976-77, 1977-78, 1978-79 and 1979-80, respectively. Such large provisions have several implications e.g. increasing the cash balances and, thus, artificial liquidity. Whether these liabilities are because of the poor financial health of that Corporation is a fit matter for detailed inquiry.

Working capital management levels

Net working capital: Net working capital, i.e. total current assets reduced by total current liabilities, showed a tendency to decrease in the latter half of the ten year period between 1970 and 1980. In some STUs it was even negative. While current assets and current liabilities increased over the years, the rate of increase in current assets was less than that in current liabilities. This appears to be the effect of continuous rise in prices as a result of inflation. The latter half of the seventies witnessed high increases in cost of STU operations because of price hikes in diesel, tyres, batteries etc. Also in 1979-80, for the first time, all automobile spare parts attracted excise duty. Therefore, investment in current assets had to be reduced to meet the challenge of inflation placed inability to grant loans to STUs because "STU incorporated under the RTC's Act is not a "Company" under the Companies Act 1956"!
as a result of which growth in current assets became less while current liabilities maintained normal or faster growth because of the strain on cash, ways and means problems etc. In any case negative net working capital or only a slight excess of current assets over current liabilities is hardly a symptom of sound financial position of adequate liquidity. In GSRTC and Kerala SRTC there was negative working capital continuously for 5 and 7 years respectively, while in MSRTC the excess of current assets over current liabilities was dangerously low in 1974-75 and 1976-77. The conclusion under the circumstances is that while inflation caused the net working capital in the STUs to shrink especially in the latter half of the seventies, perhaps poor financial management is the reason for negative working capital.

**Current ratio:** The current ratio showed a decreasing tendency. APSRTC maintained a comparatively higher current ratio. Karnataka SRTC exhibited exceptionally high current ratios in the first five years and low ratios in the next five years, Kerala SRTC revealed alarmingly low ratios in the last five years. MSRTC and GSRTC showed a more or less static low ratio for most of the period. A unique feature about the current ratio is its sudden weakening after a period of high values in the first one or two years of the seventies. This corroborates the fact that inflation plays a significant role in working capital management. During the first few years of the seventies inflation was certainly less than
during the latter half of the decade and therefore, the STUs exhibited a better current ratio in the earlier part than the latter part of the decade.

**Current ratio norm for STUs:** Against a current ratio norm of 1.5 times developed in the thesis by taking into account many relevant factors, it was seen that no STU among the five considered measured up to this norm in all the years during the seventies. In 1979-80, in particular, all the five STUs had current ratios significantly below this norm.

Thus poor adequacy of net working capital characterised the STUs at the end of the decade.

**Current assets levels:** The adequacy of current assets (gross working capital) vis-a-vis the volume of operations, examined through the statistical technique of regression analysis revealed that in 1979-80, except APSRTC, the other STUs maintained current assets at levels higher than their respective normative levels, while in the other years each STU had different positions of either excess or lower levels. The general or average tendency for all the STUs was, however, one of excess.

The dichotomy between adequacy from the external point of view of the creditors and from the internal point in relationship with volume of operations appears as the most notable feature of working capital position in the STUs.
It reveals two aspects. First, current assets management needs to be planned and controlled more systematically especially in APSRTC and Kerala SRTC as revealed by the regression curves. Secondly, financing of current assets has to be more and more from permanent capital or long-term debt than by short-term funds as at present. It is generally argued that financing the current assets by permanent capital (equity) or long-term debt is more costly than by short-term debt. But this does not appear valid in the case of STUs because the equivalent of permanent capital (equity) in their case is the government’s capital contributions which bear an interest rate of only 6.5% per annum. No short-term debt can have a lower cost of capital than this rate.

Liquidity: As pointed out earlier while discussing the dual aspects of liquidity of current assets, components of current assets in STUs which are liquid in the sense of convertibility into cash, are only Cash & Bank balances and Investments. But such a rigorous notion of liquidity can not be enforced in an analysis. Therefore, only Stores have been considered as illiquid or least liquid among the current assets as per the conventional practice of omitting inventories only when considering liquidity aspects. The analysis in this respect showed a general trend of deteriorating liquidity in the STUs. Once again, Kerala SRTC stands apart from the other four STUs exhibiting extremely poor liquidity.
While many factors may be cited for the deteriorating liquidity in STUs, the major reason appeared to be the inadequate or lesser cash inflows than cash outflows which is perhaps due to the policy of administered fares as, quite often, fares are fixed deliberately below costs on socio-political considerations. Cash inflows, though regular as in the case of any public utility, are not adequate in STUs to meet the increasing cash outflows due to inflation and other causes. This indeed is a special feature of the STUs and is responsible for poor liquidity.

The other aspect in liquidity is the amount of net working capital tied up in illiquid current assets like stores. An examination of this aspect, in the case of those STUs which did not suffer from negative working capital, revealed that during the latter half of the decade, net working capital was represented entirely by illiquid assets by a factor of several times. This adds to the complexity of the liquidity position in the STUs.

Thus, declining liquidity or a weakening of the ability to pay current liabilities as they fell due and a strong indication of technical insolvency characterised the STUs during the seventies. It is often stated in explanation of worsening liquidity that technical insolvency is only hypothetical and not a reality especially in government supported or directed public enterprises. While this may be true to a large extent, symptoms of technical insolvency, even in the accounting statements, is a poor
reflection on the efficiency of management and do not portend well for public sector organisations who have the inherent responsibility to reflect the governmental support through the financial attribute of sound liquidity.

**Current assets investments:** Investment in current assets as a percent of investment in total assets varied between 23.2% and 40.3% in the five STUs. Kerala SRTC accounted for the highest proportion of investment in current assets and employed short-term debt to finance the same entirely. In fact, that Corporation was found to have used short-term debt to finance a portion of its fixed/permanent assets as well. The other four STUs have by and large used both short-term and long-term debt for working capital and not permanent capital since by statute (the RTCs Act) government contributions are not available for working capital purposes. Incidentally, as long-term debt from term-lending financial institutions is also mainly for fixed assets expenditure, it is legitimate to infer that STUs might have perhaps diverted long-term debt from the purpose for which it was obtained. The use of long-term debt to finance working capital ranged between 14.4% and 46.7%.

By a consideration of investment levels in current assets vis-a-vis the two criteria for efficiency of transport operations viz. fleet utilization and vehicle utilization, it was seen that APSRTC and Karnataka SRTC seemed to have
obtained the right balance between current assets investments and fixed assets investment.

**Debt-equity ratio:** An examination of the extent of likely creditor interference in the operating freedom of the STUs, through the analysis of current liabilities - net-worth ratio, revealed that Kerala SRTC exhibited high vulnerability since its current liabilities alone, on an average, worked out 391.4% of its net-worth. Other STUs such as GSRTC and MSRTC also exhibited such vulnerability, though not to an alarming degree as Kerala SRTC.

**Profitability/liquidity trade off:** The statistical technique of rank correlation between the quick ratio and a combined profitability ratio revealed that significant and positive correlation existed between illiquidity and losses in the five STUs. This means that the low level of liquidity in the STUs must be improved in order to reduce the financial losses suffered by them.

(C) **Working Capital Policy in STUs**

Several shades of management policy as regards risk and profitability are called into play in the overall financial management of organisation. These range from an aggressive policy which attaches a premium on profitability to a conservative policy which gives greater weightage to liquidity. While it is difficult to arrive at a definite conclusion as to the nature of the policy adopted by an
organisation merely on the basis of a study of its working capital position, it is perhaps possible to draw some inferences through such analysis.

It is held that a conservative management would employ more working capital for a given volume of operations than another which is willing to assume more risk. The analysis of adequacy of working capital levels vis-a-vis the volume of operations in the five selected STUs indicates that although variations between actual levels and normative levels were not much significant during major part of the period studied, there were more years when the working capital levels were marginally higher than the normative levels. In the year 1979-80 particularly the working capital levels in all STUs were significantly higher than the respective normative levels. This indicates a conservative policy.

The nature of the policy is also determined by the financing pattern employed by an organisation. A conservative policy aims at avoiding short-term financing for current assets i.e. a high level of current assets is financed by long-term debt or permanent capital. On the other hand, an aggressive policy is to finance current assets and even fixed assets by short-term borrowing. By this token, the financing pattern in the five STUs revealed that in the case of all except Kerala SRTC a conservative policy
existed because a sizeable portion of their assets was financed by net-worth and long-term debt. Kerala SRTC alone relied on short-term debt for financing its current assets totally and a part of its fixed assets too. This perhaps indicates an aggressive policy which coupled with the other feature of liquidity preference noted earlier could be the main reason for its poor financial performance.

By way of summing up and generalisation, this thesis has established that

1. Working capital management in STUs is not without its own complexities and problems,

2. Current assets in the form of Stores and cash hold the key in managing the current assets efficiently,

3. Trade credit ranked as the most important source for financing current assets followed by long-term debt. Net-worth has financed only a small portion of the current assets owing to statutory provisions. Short-term loans from commercial banks are proving difficult mainly because of a lack of appreciation of the role of STUs vis-a-vis their claim to priority considerations and, therefore, there is the need to inspire and influence bankers' attitude in favour of STUs,

4. Net working capital position was decreasing leading perhaps to an impairment of creditor confidence. At the same time, gross current
assets levels showed a tendency to be larger than what was warranted by the volume of operations.

(5) Liquidity was declining and bore a positive correlation with increasing financial losses.

(6) Cash management in STUs has to reckon with the characteristic feature of sizeable cash balances-in-transit. and

(7) In general, STU policy with regard to working capital management was tempered with more conservatism than aggressiveness.