Auditor-General of Victoria

Special Report No. 8

Foreign Exchange

November 1987

R. A Walker
(VAGO).

VICTORIA

Report

of the

Auditor-General

SPECIAL REPORT No. 8

Foreign Exchange

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No. 53

AUDITOR GENERAL

VICTORIA

November 1987

The Honourable the Speaker,
Legislative Assembly,
Parliament House,
MELBOURNE, Vic., 3002

Sir,

Under the provisions of the *Audit Act* 1958, I transmit a report on foreign exchange. The main aim in carrying out this review was to examine the efficiency and effectiveness of foreign exchange management systems and procedures at a central level and within public sector authorities.

This report was prepared by a special project team led by Mr Ian Claessen, Director of Audit, with the co-operation and assistance from the departments and public bodies covered by the review. The participation by departments and public bodies was essential in preparing this report and I am grateful for their timely and considered responses to matters raised by the project team. I am pleased to note that all organisations have responded positively and in a constructive manner to the issues raised in the report.

Dr Neville Norman, Reader in Economics at the University of Melbourne, and a team led by Mr Alan Knights, Manager, Treasury Management Services of Price Waterhouse were engaged as consultants and provided valuable support to the project team.

Yours faithfully,

R. G. HUMPHRY
Auditor-General

PREVIOUS SPECIAL REPORTS
OF THE
AUDITOR-GENERAL

Report no.	*Title*	*Date issued*
1	. *Works contracts overview - First Report*	June 1982
2	. *Works contracts overview - Second Report*	June 1983
3	. *Government stores operations* . *Departmental cash management*	October 1984
4	. *Court closures in Victoria*	November 1986
5	. *Provision of housing to government employees* . *Post-project appraisal procedures within the Public Works Department*	December 1986
6	. *Internal audit in the Victorian public sector*	December 1986
7	. *Motor vehicles*	April 1987

PART 1

REVIEW SUMMARY

1.1 BACKGROUND

1.1.1 In 1972 the State Electricity Commission of Victoria became the first public sector authority to borrow in foreign currencies. Since 1979 a number of the State's other major authorities also arranged foreign currency financing, principally to take advantage of off-shore interest rates lower than those which were available domestically. Audit reviewed the foreign exchange management practices employed centrally at the Department of Management and Budget (DMB) and Victorian Public Authorities Finance Agency (VicFin) and within all major public sector authorities which engaged in foreign currency financing, namely:

* State Electricity Commission of Victoria (SECV);
* Melbourne and Metropolitan Board of Works (MMBW);
* Port of Melbourne Authority (PMA); and
* State Transport Authority (STA).

1.1.2 The focus of this report is on off-shore borrowing and does not address issues relating to off-shore investments. The recent volatility in the equity markets and its impact on investments off-shore will be reviewed in the normal course of auditing ministerial portfolios.

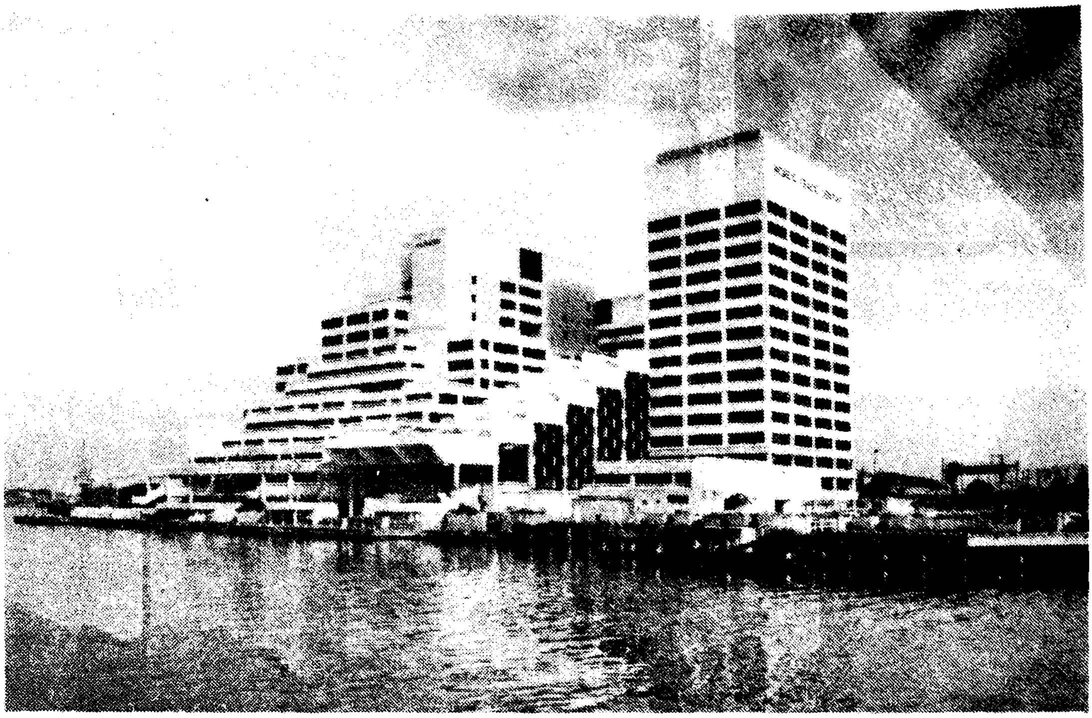
1.1.3 The following table illustrates the level of foreign currency financing in dollar terms and as a percentage of total debt for each authority during the past 4 financial years. This timeframe covers the most volatile period in which the Australian dollar fluctuated against other currencies.

TABLE 1.1A. FOREIGN CURRENCY FINANCING
(All amounts in $ million.)

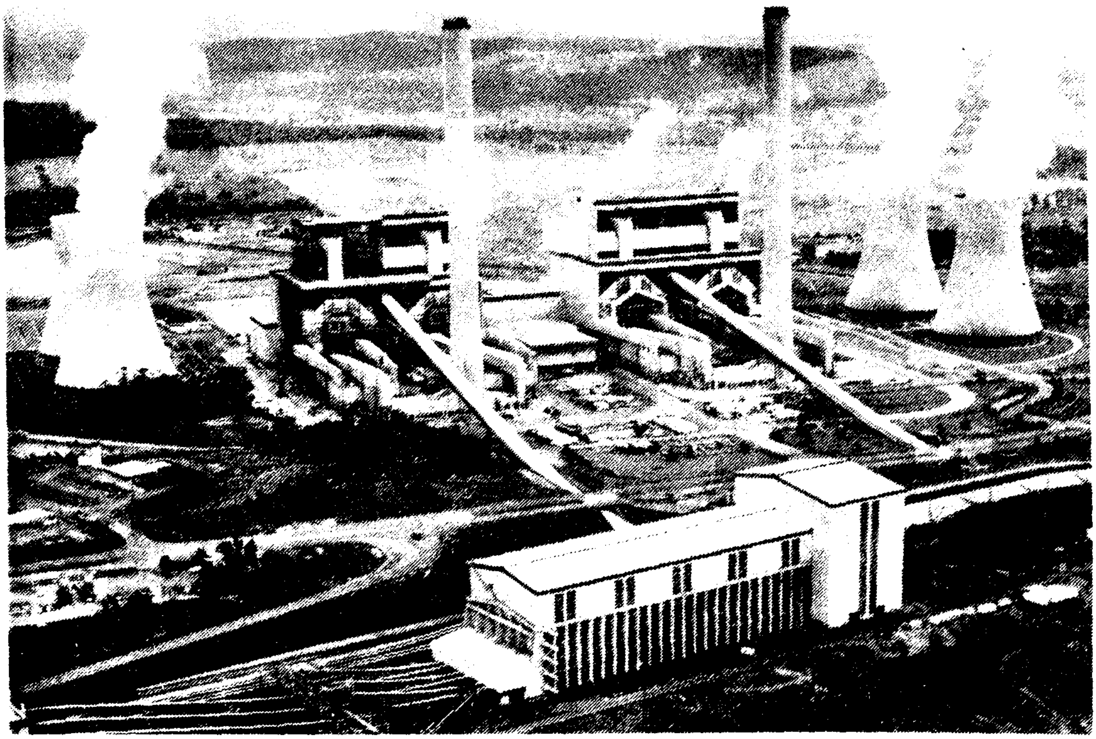
	At 30 June -			
Authority	*1984*	*1985*	*1986*	*1987*
SECV -				
Foreign currency financing ($A)	992.6	1 288.3	1 597.2	1 599.0
Percentage of total debt	18.6	20.3	22.6	21.6
PMA -				
Foreign currency financing ($A)	89.1	113.1	135.8	134.7
Percentage of total debt	39.1	43.1	47.1	46.6
MMBW -				
Foreign currency financing ($A)	42.0	129.1	189.1	178.9
Percentage of total debt	1.9	5.5	7.1	6.7
STA -				
Foreign currency financing ($A)	100.8	156.7	178.8	129.1
Percentage of total debt	23.3	26.0	22.5	*(a)* 44.2

(a) Although the majority of domestic borrowing has been transferred to VicFin as part of the Government's policy to centralise budget sector debt, the Authority still retains substantial foreign currency leases. As a result foreign currency financing expressed as a percentage of total debt has increased.

1.1.4 Off-shore borrowings in foreign currencies contributed to the funding of major government projects such as the construction of the World Trade Centre and the development of the Loy Yang Project.



World Trade Centre



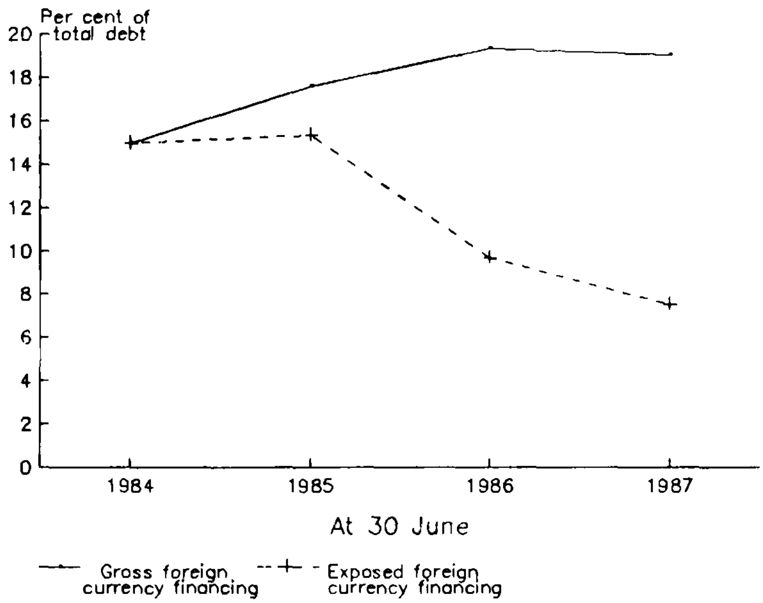
Loy Yang Project

1.1.5 In addition to foreign currency financing arrangements, authorities also entered into supply contracts which were subject to exchange rate movements.

What risks have been involved in these foreign exchange transactions?

1.1.6 Foreign currency financing arrangements have exposed authorities to the risk of increased payments of interest and principal, in the Australian dollar equivalent, as a result of adverse movements in exchange rates. Payments associated with foreign currency supply contracts also expose authorities to the risk of increased payments. Where foreign currency transactions are subject to variation in value against the Australian dollar a foreign exchange exposure arises. However, this exposure may be minimised by the use of techniques designed to eliminate or reduce this exposure. These techniques, known as *hedges*, have been used by authorities in recent years to reduce the level of foreign exchange exposure as a percentage of each authority's total debt (Chart 1.1B shows details of this reduction over the past 4 financial years) and to alter the composition of the exposure within currencies (Chart 1.1D demonstrates this change from 30 June 1984 to 30 June 1987). To some extent hedges have also been used to reduce the foreign exchange exposure arising from future interest commitments denominated in foreign currencies.

CHART 1.1B. AGGREGATE FOREIGN EXCHANGE EXPOSURE OF AUTHORITIES' TOTAL DEBT



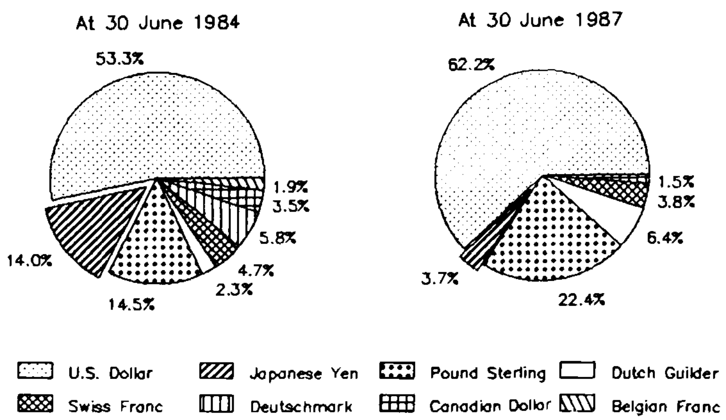
1.1.7 Table 1.1C illustrates the change in the level of this foreign exchange exposure of loan principal/leases for each authority from 30 June 1984 to 30 June 1987:

TABLE 1.1C. FOREIGN EXCHANGE EXPOSURE OF TOTAL DEBT

Authority	*Foreign exchange exposure*	*Total debt*	*Exposure as percentage of total debt*
(At 30 June -)	($A million)	($A million)	
SECV -			
1984	992.6	5 338.3	18.6
1985	1 086.0	6 358.7	17.1
1986	720.9	7 074.5	10.2
1987	591.0	7 410.8	8.0
PMA -			
1984	89.1	228.0	39.1
1985	113.1	262.4	43.1
1986	135.8	288.2	47.1
1987	-	288.8	*(a)* -
MMBW -			
1984	42.0	2 158.2	1.9
1985	114.1	2 337.3	4.9
1986	-	2 659.6	*(a)* -
1987	80.2	2 675.3	3.0
STA -			
1984	100.8	432.5	23.3
1985	156.7	603.7	26.0
1986	178.8	796.2	22.5
1987	129.1	292.0	*(b)* 44.2

(a) Foreign exchange exposure was fully hedged by means of short-term forward contracts.
(b) Although the majority of domestic borrowing has been transferred to VicFin, the Authority still retains substantial foreign currency leases. As a result foreign exchange exposure as a percentage of total debt has increased.

CHART 1.1D. FOREIGN EXCHANGE EXPOSURE OF LOAN PRINCIPAL/LEASES PER CURRENCY FOR ALL AUTHORITIES

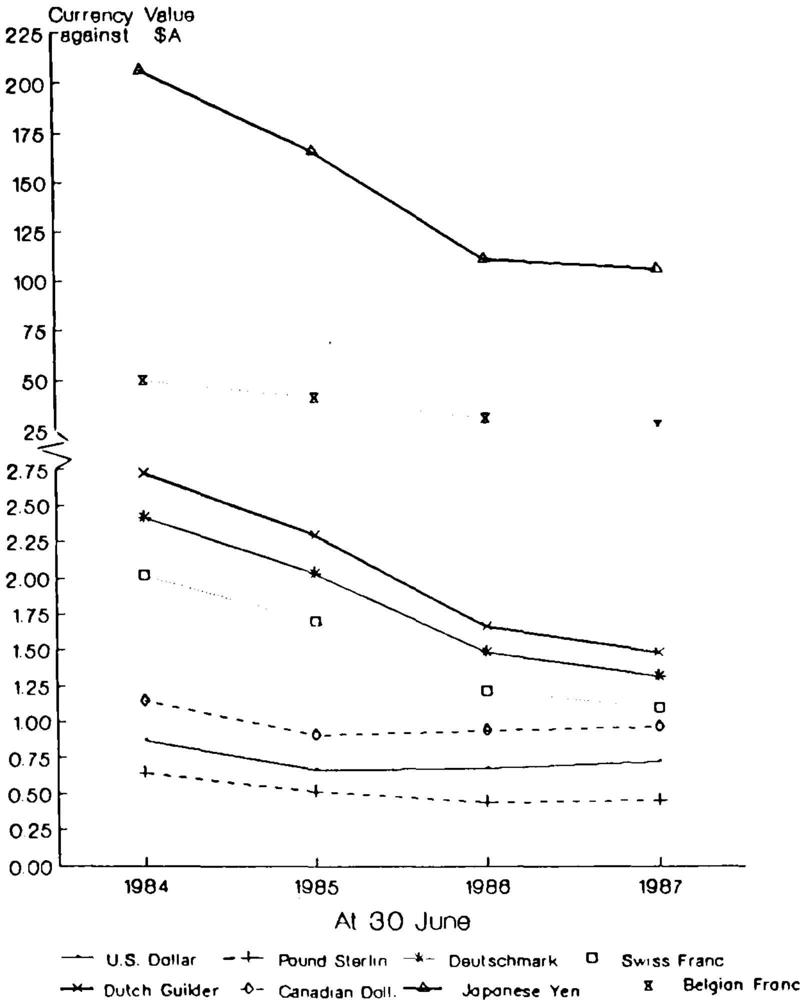


What factors have influenced the movement in exchange rates in recent years?

1.1.8 As part of the Australian Government's decision to deregulate financial markets, the Australian dollar was floated in December 1983. This decision meant that the rate of exchange was allowed to fluctuate freely, subject to occasional government intervention to influence its movement. The value of the Australian dollar against other currencies has weakened significantly since it was floated, due to the impact of the market reaction to various domestic and international economic and political factors such as the balance of payments, inflation rates, interest rates, commodity prices and political decisions.

1.1.9 The volatility of the Australian dollar is demonstrated by its substantial depreciation against other currencies which occurred in February 1985 and June 1986. An example of this depreciation has been the decrease in the value of the Australian dollar against the Japanese yen. At 30 June 1984 an Australian dollar could have been exchanged for 206 Japanese yen, whereas the exchange rate for the Australian dollar decreased to only 105 Japanese yen at 30 June 1987. Chart 1.1E highlights movements in exchange rates for the Australian dollar against other currencies.

CHART 1.1E. MOVEMENTS IN EXCHANGE RATES



What has been the impact of exchange rate movements on the operations of public sector organisations?

The effective cost of foreign currency financing has exceeded domestic rates

1.1.10 The interest rates applicable to foreign currency financing were lower than domestic interest rates at the time of arranging finance. However, the impact of adverse exchange rate movements has to date increased the (effective) cost of foreign currency financing due to:

* unrealised losses relating to the revaluation of loans denominated in foreign currencies;
* realised losses;
* increased interest payments; and
* costs involved in hedging.

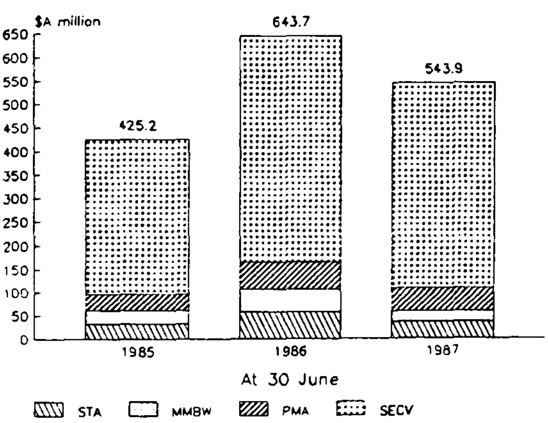
1.1.11 These factors have resulted in the effective cost of most foreign currency financing arrangements exceeding the rates that were then available domestically. However, the ultimate effective cost of these arrangements will only be known at the date the borrowings are repaid. As a result, the calculation by authorities of the effective cost is an interim calculation and may be either overestimated or underestimated depending on future interest rate and exchange rate movements. Comments relating to unrealised losses and realised losses follow:

(1) Substantial unrealised losses have arisen

1.1.11.1 In accordance with Australian Accounting Standards, authorities have used the ruling exchange rates at year end to revalue off-shore debt, in Australian dollars, for financial reporting purposes. This revaluation of foreign currency debt results in book (unrealised) gains or losses which are represented by the difference between the original value of the foreign currency financing arrangement in Australian dollars and the revalued amount. Although unrealised gains or losses are progressively brought to account (amortised) over the term of each financing arrangement, the extent of realised (actual) gains or losses will only be determined at the date the debt is repaid, depending on the ruling exchange rates at the time.

1.1.11.2 As a result of adverse exchange rate movements, authorities have recognised substantial unrealised foreign exchange losses over recent years. These losses are illustrated in Chart 1.1F.

CHART 1.1F. ACCUMULATED UNREALISED LOSSES ON FOREIGN CURRENCY FINANCING ARRANGEMENTS



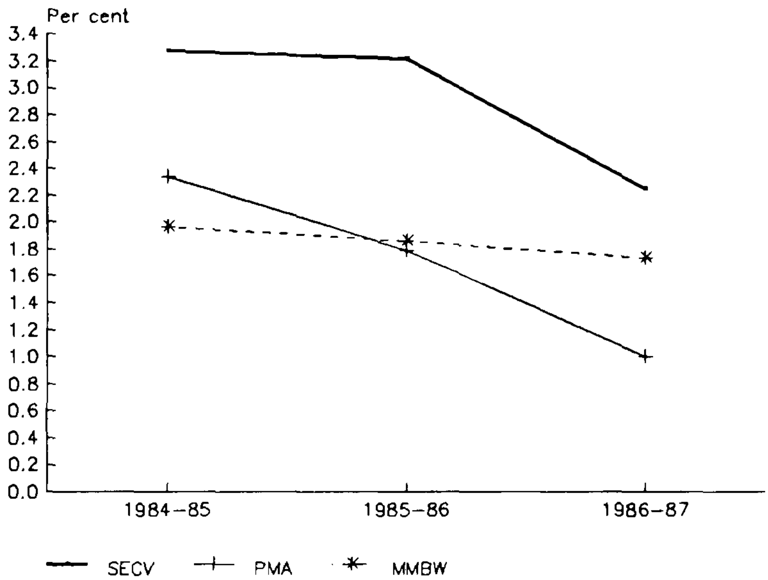
(2) *Authorities have incurred realised losses*

1.1.11.3 Many off-shore loans are not due to be repaid until the 1990s. However, in the case of the SECV, where some foreign currency loans have already matured, losses resulting from exchange rate fluctuations have been realised in recent years amounting to $33.1 million (1983-84), $45.4 million (1984-85), $59.4 million (1985-86) and $31.8 million (1986-87). These losses have been offset, to a certain extent, by savings resulting from lower off-shore interest rates than were available domestically.

Public Authority Dividend Rate has declined

1.1.12 Under the *Public Authorities (Dividends) Act* 1983, the State's large trading authorities are required to pay an annual dividend to the Government. The Public Authority Dividend Rate for each authority has declined since 1984-85 due, in part, to an increase in finance costs of foreign currency financing resulting from the effect of adverse movements in exchange rates. As indicated in Chart 1.1G, which discloses a comparison of the Public Authority Dividend Rate for each authority, the rate for the MMBW has declined only marginally.

CHART 1.1G. PUBLIC AUTHORITY DIVIDEND AS A PERCENTAGE OF OPENING PUBLIC EQUITY



World Trade Centre to be sold

1.1.13 The construction of one of the State's largest assets, the World Trade Centre, was financed predominantly by foreign currency borrowings. Increases in finance charges associated with these off-shore borrowings, resulting from adverse exchange rate movements, has had a significant impact on the economic viability of the operations of the Centre. A decision has been made to sell the World Trade Centre, based on a range of reasons including the substantial financing costs of the Centre. The Authority stated that the Centre will only be sold provided appropriate financial returns are obtained.

What initiatives have been introduced centrally and within public authorities to improve the management of foreign exchange risks?

1.1.14 *Central initiatives*

* Over the past 3 years, the Government has adopted a policy of reducing the overall level of foreign exchange exposure. As a result, foreign exchange exposures of the State relating to principal repayments have been reduced from 8.6 per cent of total public sector net debt at 30 June 1985 to 4.2 per cent at 30 June 1987.
* The *Borrowing and Investment Powers Act* 1987 (borrowing sections yet to be proclaimed) will clarify and modernise the borrowing powers of the major statutory authorities. As a result of these expanded powers, authorities will have access to a wide range of debt management products and markets which will enable more active management of risks associated with borrowing.
* To enable authorities to manage their respective borrowing programs while limiting risks to acceptable levels, DMB is in the process of finalising debt management guidelines. These guidelines include direction for authorities regarding the management of foreign exchange risks.
* As part of the Government's policy to centralise budget sector debt, the debt of the public transport authorities, including foreign currency finance, is in the process of being transferred to VicFin. The centralisation program will not extinguish the debt but it will provide enhanced facilities for its management.

1.1.15 *Public sector authorities*

* Since 1984 the MMBW and SECV have targeted, and achieved, a significant reduction in the level of foreign exchange exposure of loan principal as a percentage of their total debt.
* All authorities examined as part of the audit review have established Foreign Exchange Sections to control and manage foreign exchange transactions.
* Authorities have appointed external foreign exchange advisors to assist in the ongoing management of foreign exchange exposures. In the case of the MMBW, a foreign exchange advisor has been appointed since foreign currency borrowings first commenced.
* Foreign exchange policies have been developed by each authority.
* A Treasury Accounting Division, established at the SECV as part of a structuring of the Commission's Treasury Department, is designed to achieve an effective segregation of duties.
* The SECV appointed a number of external consultants to review foreign exchange operations within the Commission's Treasury Department.

* A Foreign Exchange Policy Committee, Foreign Exchange Review Panel and a Credit Review Committee have been established at the SECV to develop and review strategies for the management of risks.
* Sophisticated computerised management information systems have been implemented within the SECV to record foreign exchange transactions.
* Authorities have implemented procedures to enable foreign exchange transactions to be reviewed by senior management.

The Foreign Exchange Section of the SECV.

1.2 AUDIT OBJECTIVES

1.2.1 The audit objectives were to review foreign exchange management practices to determine:

(1) whether clearly defined central government policies and guidelines were in place;

(2) whether authorities' policies were consistent with government policy;

(3) the extent to which authorities had policies and procedures in place:

- (i) to justify the need to arrange foreign currency financing rather than domestic financing;
- (ii) to accurately record, monitor and control foreign currency dealings;
- (iii) to minimise the effective cost of foreign currency financing and off-shore supply contracts;
- (iv) for senior management to review foreign exchange transactions to ascertain the effectiveness of management procedures governing foreign exchange exposures; and

(4) the extent to which central systems and procedures were in place to accurately record, monitor, control and manage the foreign exchange dealings and exposures of the State.

1.3 CONDUCT OF THE REVIEW

1.3.1 A preliminary survey of organisations involved in off-shore borrowing was conducted as the first step in the review. A detailed plan was developed to gain an overview of each authority's foreign exchange operations and the factors which influenced the economy, efficiency and effectiveness of these operations. Interviews were conducted with senior management and key personnel involved in foreign exchange operations.

1.3.2 Audit established a framework of desirable management procedures for foreign exchange operations to provide a comparative standard by which to evaluate the procedures in place at each organisation. Details of these procedures are listed in Appendix A.

1.3.3 The review involved:

* the examination and evaluation of authorities' policies;
* the documentation and evaluation of procedures relating to off-shore financing;
* an examination of risk management strategies and practices employed by authorities;
* the documentation and evaluation of systems and procedures to record, control, monitor and report foreign currency transactions; and
* the quantification of relevant foreign exchange details.

1.3.4 At the completion of the review, discussions were held with senior management of each organisation to communicate the findings prior to the finalisation of this report.

1.4 MAJOR OBSERVATIONS AND CONCLUSIONS

1.4.1 I am pleased to note that a number of initiatives have recently been taken to improve foreign exchange management practices within the public sector. Paragraphs 1.1.14-15 set out in detail a number of these initiatives which essentially relate to reducing the foreign exchange exposures of the State and improving the management of foreign exchange risks. In particular the SECV has implemented a wide range of measures designed to achieve an efficient and effective foreign exchange operation. Nevertheless, the review within authorities highlighted a number of issues requiring attention which are set out below.

Justification for foreign currency financing

1.4.2 The major factor considered by authorities in deciding whether to enter into foreign currency financing arrangements, rather than arranging finance domestically, was the availability of lower off-shore interest rates. Although audit was advised that current exchange rates were taken into account, there was limited evidence to indicate that authorities had prepared an in-depth analysis, including an evaluation of the effect of future movements in exchange rates on the ultimate effective cost of finance.

1.4.3 *Had authorities prepared such an analysis, expert exchange rate forecasts could have been obtained at the time of borrowing and compared to each analysis to form an opinion as to the likelihood of whether off-shore financing would be more cost-effective than domestic financing. Whether off-shore financing actually proves to be cheaper than domestic financing depends on actual movements in exchange rates during the period of each off-shore arrangement, the accuracy of forecasts and risk management decisions made over the life of each financing arrangement.*

1.4.4 Further commentary is included in section 2.1.

Risk management strategies

1.4.5 Certain aspects of the risk management activities of authorities were considered to be inadequate and a consistent approach had not been adopted by authorities in managing foreign exchange exposures. Unsatisfactory features included the following:

* Although authorities appointed foreign exchange advisors to provide advice regarding risk management, formal risk management strategies had not been developed until recent times - MMBW (para. 2.2.9.12), PMA (para. 2.2.9.24), STA (para. 2.2.9.39).
* The majority of authorities had not established Foreign Exchange Policy Committees to independently review risk management strategies - MMBW (para. 2.2.9.12), PMA (para. 2.2.9.24), STA (para. 2.2.9.39).
* Since January 1987 the SECV engaged in foreign currency trading, subject to appropriate controls, on a relatively small scale which was not identified as a risk management strategy. Prior to June 1986 the PMA and STA engaged in foreign currency trading which did not relate specifically to foreign currency commitments. In audit opinion, the above forms of trading were speculative in nature - SECV (para. 2.2.9.1), PMA (para. 2.2.9.26), STA (para. 2.2.9.42).
* In some cases insufficient consideration had been given to long-term hedging techniques - PMA (para. 2.2.9.25), STA (para. 2.2.9.40).
* Foreign exchange exposure levels, expressed as a percentage of total debt, were very high in some instances (Table 1.1C) and PMA (para. 2.2.9.29), STA (para. 2.2.9.48). In one authority a significant proportion of this exposure was denominated in Japanese yen. PMA (para. 2.2.9.29).

* Gains or losses on extensions of forward contracts at historical rates were not adequately reported in management information systems - MMBW (para. 2.2.9.15), PMA (para. 2.2.9.34).
* Systems were not in place to measure and manage the foreign exchange exposure resulting from the transfer of the STA's former debt to VicFin - (DMB para. 2.2.9.56).

1.4.6 *In audit opinion, risk management strategies will need to be improved to further minimise the level of foreign exchange losses.*

1.4.7 Further comment including suggestions designed to improve the development of adequate and consistent risk management strategies are outlined in section 2.2.

Uniform debt management guidelines and central monitoring procedures

1.4.8 The SECV commenced off-shore borrowing in 1972. Substantial foreign currency arrangements have also been entered into by other public sector authorities since 1979. DMB has introduced a number of broad scope policies such as the decision in 1984 to reduce the level of foreign exchange exposure of the State's public sector authorities, and the development of draft debt management guidelines which commenced in June 1986. However, uniform debt management guidelines and adequate central monitoring systems and procedures have not yet been introduced. It is pleasing to note that the draft guidelines, amended in June and September 1987, were in the process of being finalised.

1.4.9 *In audit opinion, the lack of uniform management guidelines has contributed to an inconsistent approach to foreign exchange risk management practices within public authorities. In order to assess the impact of a sudden fall in the Australian dollar on the State, central systems and procedures are necessary to provide immediate access to the level of the State's foreign exchange exposures and effective ongoing monitoring capabilities.*

1.4.10 Further details are set out in section 2.3.

Policy formulation and procedural documentation within authorities

1.4.11 Foreign exchange risk management policies developed by authorities did not address all relevant issues - MMBW (para. 2.4.3.5), PMA (para. 2.4.3.16), STA (para. 2.4.3.18). For example, policies had not been formulated for acceptable levels of exposure within currencies or for limits relating to the level of transactions arranged with each financial institution (counterparty).

1.4.12 Further, procedures had not been documented in relation to foreign exchange operations - MMBW (para. 2.4.3.13), PMA (para. 2.4.3.17), STA (para. 2.4.3.19).

1.4.13 *In order to provide adequate guidance to officers involved in foreign exchange operations, minimise risks and ensure a consistent and cost-effective approach is adopted, authorities' policies need to be updated to include all relevant issues and foreign exchange procedures should be documented.*

1.4.14 Further comments are set out in section 2.4.

Operational controls and management reporting

Operational controls

1.4.15 With the exception of the SECV, examples of operational control deficiencies were noted in the majority of authorities (MMBW, PMA, STA). As an illustration, in most authorities there was a lack of segregation of duties between the dealing and confirming functions. A further example related to the minimal coverage by internal audit of foreign exchange management practices.

Management Information Systems

1.4.16 In the case of the MMBW and PMA, systems developed in-house to record foreign exchange transactions did not provide adequate controls to ensure the integrity of information.

1.4.17 In some cases management information systems within authorities lacked sufficient detail to enable senior management to effectively monitor foreign exchange transactions and exposures (MMBW, PMA).

Content and timing of reports to senior management

1.4.18 The extent of reporting to senior management varied between authorities. In the case of the MMBW, PMA and STA there was scope for improvement in the content and timing of reports.

1.4.19 *Operational controls relating to foreign exchange transactions require strengthening to reduce the risk of:*

* *funds being misappropriated;*
* *unauthorised deals being arranged; and*
* *foreign exchange transactions being incorrectly recorded in management information systems.*

In addition comprehensive management information systems and timely reporting are required for senior management to effectively monitor foreign exchange transactions and take strategic decisions.

1.4.20 Refer to section 2.5 for detailed comments.

PART 2

DETAILED AUDIT OBSERVATIONS AND RECOMMENDATIONS

Detailed audit comments are reported below under each major issue. Within some issues a general commentary is given summarising, in broad terms, the application of the issue to the public sector. To support each overall comment, details regarding the audit findings, and in some cases recommendations, are included for each organisation. Organisations' responses to each audit comment are also included. To assist in the reading of these detailed audit comments, a glossary of terms is provided in Appendix B.

As the Government's recent debt centralisation policy has substantially reduced the foreign exchange implications for the STA, this factor has been taken into account in commenting on foreign exchange dealings within STA.

2.1 JUSTIFICATION FOR FOREIGN CURRENCY FINANCING

2.1.1 The major factor considered by the authorities in deciding to enter into foreign currency financing arrangements, rather than arranging finance domestically, was the availability of lower off-shore interest rates. Whether off-shore financing actually proves to be cheaper than domestic financing depends on:

* exchange rate movements during the period of each off-shore arrangement and how closely actual exchange rates compare with the forecasts; and
* risk management decisions made over the life of the financing arrangement.

2.1.2 Although audit was advised that current exchange rates were taken into account, there was limited evidence to indicate that authorities had prepared an in-depth analysis, including an evaluation of the effect of future movements in exchange rates on the ultimate effective cost of finance.

2.1.3 If authorities had prepared detailed analyses in this form, expert exchange rate forecasts could have been obtained at the time of borrowing and compared to each analysis to form an opinion as to the likelihood of whether off-shore financing would be more cost-effective than domestic financing. Further, this information would have provided a valuable basis for monitoring exchange rate movement against original assumptions during the life of the loan.

2.1.4 Foreign currency financing, converted to Australian dollars and expressed as a percentage of total debt, is outlined in Table 2.1A for each authority:

TABLE 2.1A. FOREIGN CURRENCY FINANCING
(All amounts in $ million.)

	At 30 June -							
	1984		*1985*		*1986*		*1987*	
Authority	*$A*	*%*	*$A*	*%*	*$A*	*%*	*$A*	*%*
SECV	992.6	18.6	1 288.3	20.3	1 597.2	22.6	1 599.0	21.6
MMBW	42.0	1.9	129.1	5.5	189.1	7.1	178.9	6.7
PMA	89.1	39.1	113.1	43.1	135.8	47.1	134.7	46.6
STA	100.8	23.3	156.7	26.0	178.8	22.5	129.1	*(a)*44.2

(a) Although the majority of domestic borrowing has been transferred to VicFin, the Authority still retains substantial foreign currency leases. As a result foreign currency financing expressed as a percentage of total debt has increased.

Authorities' responses

SECV

Since 1985 virtually all overseas borrowings have been in $A, or in foreign currency swapped back to $A at costs significantly more attractive than domestic interest rates. It is predominantly through this technique that the Commission has been able to substantially reduce overseas debt as a proportion of total debt.

As these off-shore borrowings are converted back to $A (at considerable cost saving) there is clearly no need to undertake comparative analysis of forecast movements in different exchange rates.

Prior to 1985 the Commission did borrow in foreign currencies and evaluations were prepared on the basis of economists' forecasts and other factors.

It should be noted that in the late 1970s and early 1980s Loan Council strongly encouraged the Commission to borrow off-shore to fund power station infrastructure developments.

MMBW

Evaluations were undertaken in every instance to ensure that the cost of borrowing would be lower than that achievable domestically on the basis of relatively high domestic interest rates and a firm Australian dollar. No projections were available that foreshadowed any significant decline in the Australian dollar. If the Board decides to borrow foreign currencies in the future, a detailed cost-benefit analysis will be prepared which will incorporate exchange rate forecasts and exchange rate scenarios.

PMA

As the PMA executives of the time are no longer with the organisation, it is not possible to confirm the audit contention. Audit has made this comment based on a lack of evidence to the contrary. This does not necessarily mean that such an analysis did not take place. The PMA attempted to raise the necessary finance for the World Trade Centre locally. The project was at some later stage included in a series of projects from all States which won approval from the Commonwealth for overseas borrowing. The preparation of an in-depth analysis, in the form suggested by audit, will certainly be followed should the Authority contemplate foreign currency borrowing in future.

STA

Decisions on sourcing borrowing requirements, which were approved by DMB in line with government policy, were made in the light of the prevailing economic conditions at the time.

2.2 RISK MANAGEMENT STRATEGIES

Background information

2.2.1 The term *risk management* refers to strategies developed within an organisation by management to minimise the effect of losses which may arise as a result of adverse movements in exchange rates.

2.2.2 Although strategies may vary in form and complexity, a risk management strategy generally includes the setting of objectives, defining the risks, prescribing acceptable levels of risk as a percentage of debt and within currencies, selecting suitable techniques to minimise the extent of risks and establishing exchange rate scenarios in which the retention of each off-shore financing arrangement would no longer be cost-effective in its present form.

2.2.3 Significant unrealised foreign exchange losses occurred in the early part of 1985 and mid 1986 due to the substantial depreciation of the Australian dollar against all major currencies which meant that foreign currency liabilities, when restated in Australian dollars, became more costly. As indicated in Chart 1.1F, the aggregate unrealised losses for authorities amounted to $543.9 million at 30 June 1987. The sudden fall in the value of the Australian dollar at those particular points in time was not predicted by authorities' foreign exchange advisors and authorities generally did not have measures in place to prevent the magnitude of such losses.

2.2.4 Authorities reacted to the significant weakening of the Australian dollar and became more active in the management of their respective foreign exchange exposures by implementing a variety of risk management practices. The term *foreign exchange exposure* in the context of this report refers to the value of each authority's transactions, denominated in foreign currencies, which are subject to increases or decreases in value when converted to Australian dollars, due to movements in exchange rates.

2.2.5 In actively managing foreign exchange exposures, the ever changing nature of foreign exchange markets poses many difficult questions for foreign exchange managers. Two complex questions which need to be addressed in a risk management strategy and be regularly reviewed are:

(1) What level of foreign exchange exposure is acceptable at a particular point in time?

(2) What techniques should be used to provide the most effective hedge to minimise the extent of losses?

2.2.6 The acceptable level of foreign exchange exposure for an authority in the short-term and long-term is influenced by factors such as government policy, predicted exchange rate movements, cash flows and the anticipated financial result for the year. Risk management techniques offered by financial institutions include the use of forward contracts, currency swaps, currency options, currency futures and debt defeasance arrangements. Techniques vary in cost, complexity and the degree of risk and, as a consequence, detailed evaluation needs to be undertaken in selecting the most effective mix of techniques. These two issues are included in the general commentary on risk management strategies, employed by authorities, which follows.

General situation

2.2.7 Although all authorities engaged in risk management activities to varying degrees over the past 4 years, the review disclosed certain aspects which, in audit opinion, were inadequate and inconsistent when compared between authorities. A summary of these unsatisfactory features as they applied to various authorities is listed below:

(1) Although authorities appointed foreign exchange advisors to provide advice regarding risk management, formal risk management strategies had not been developed until recent times - MMBW (para. 2.2.9.12), PMA (para. 2.2.9.24), STA (para. 2.2.9.39).

(2) Foreign Exchange Policy Committees had not been established to independently review, on an ongoing basis, risk management strategies - MMBW (para. 2.2.9.12), PMA (para. 2.2.9.24), STA (para. 2.2.9.39).

(3) Examples of trading, regarded by audit as speculative in nature, had been undertaken in the form of intra-day/spot trading - SECV (para. 2.2.9.1), PMA (para. 2.2.9.26), STA (para. 2.2.9.42).

(4) The processes followed by MMBW in entering into debt defeasance arrangements could have been improved (para. 2.2.9.17).

(5) The risk management strategy employed by the SECV was, in audit opinion, significantly influenced by accounting requirements regarding the disclosure of foreign currency transactions in the Commission's financial statements (para. 2.2.9.7).

(6) Insufficient consideration was given to alternative long-term hedging techniques - PMA (para. 2.2.9.25), STA (para. 2.2.9.40).

(7) Foreign exchange exposure levels, expressed as a percentage of total debt, were very high in some instances (Table 1.1C) and PMA (para. 2.2.9.29), STA (para. 2.2.9.48). In one authority a significant proportion of this exposure was denominated in Japanese yen. PMA (para. 2.2.9.29).

(8) Forward contracts were extended based on the historical rate, rather than contracts being settled on maturity and renegotiated at the current market rate. Gains or losses on these extensions were not adequately recognised in the respective management information systems at the date of rollover and there was no evidence to indicate that contracts were extended at the most competitive rate - MMBW (para. 2.2.9.15), PMA (para. 2.2.9.34).

(9) Systems were not in place to measure and manage the foreign exchange exposure resulting from the transfer of the STA's former debt to VicFin. (DMB para. 2.2.9.56).

2.2.8 In view of the above comments, in order to improve the development of adequate and consistent risk management strategies, consideration needs to be given by organisations to:

* establishing separate Foreign Exchange Policy Committees;
* clarifying the Government's policy regarding intra-day/spot trading;
* developing appropriate procedures for entering into debt defeasance arrangements, such as obtaining quotes;
* assessing a full range of alternative long-term hedging techniques;
* ensuring that foreign exchange exposure levels are in line with central guidelines;
* arranging meetings on a frequent basis between authorities' senior Treasury Officers to discuss strategies and techniques operative in each authority;
* ensuring competitive quotes are obtained and reporting procedures are in place in cases where forward contracts are extended at the historical rates; and
* developing and implementing central systems and procedures to regularly measure, monitor and manage foreign exchange exposures relating to the STA's former debt.

2.2.9 Detailed comments relating to each authority follows:

State Electricity Commission of Victoria

Intra-day/spot trading

2.2.9.1 In March 1987, a policy for intra-day/spot trading was developed with objectives of:

* developing expertise and improving skills of dealers in foreign exchange markets;
* facilitating close contact with the foreign exchange market and frequent testing of market rates; and

* attempting to improve foreign exchange management performance through active market participation.

2.2.9.2 Controls over such trading were also defined in the policy, including the setting of stop loss orders and a requirement to report the results of all transactions to the Foreign Exchange Policy Committee on a fortnightly basis.

2.2.9.3 Between January 1987 and June 1987 intra-day/spot transactions of up to US$5 million were arranged by the SECV. The majority of transactions were for the sale or purchase of US dollars with turnover during the period amounting to approximately US$110 million. The net results of these transactions amounted to a profit of $222 847. The extent of trading was within the SECV's approved management ranges.

2.2.9.4 This form of trading is considered by audit to be of a speculative nature as the objectives set for intra-day/spot trading were principally aimed at improving the performance of dealers and ensuring more efficient foreign exchange management practices, rather than designating intra-day/spot trading as an effective exposure management technique.

2.2.9.5 The SECV should clarify with DMB whether intra-day/spot trading, in the form practised by the SECV, complies with government policy.

2.2.9.6 If the practice of intra-day/spot trading is regarded by DMB as an exposure management strategy for bona fide hedging purposes, the SECV's stated objectives for intra-day/spot trading should be expanded accordingly.

Commission's response

Intra-day trading is not inconsistent with the foreign exchange management policies and strategies currently approved and operating within the Commission and it is misleading and incorrect to call such activity, in the context of the controls and policies established in the Commission, as speculation. In particular, we note that the DMB Debt Management Guidelines recommend currency ranges and overseas debt ratio parameters (very similar to our own) which provide flexibility to adjust exposures.

DMB has been advised of our intra-day activity in early discussions.

It is not speculative to adjust exposures within these approved predetermined ranges. Indeed it is widely accepted, prudent management practice to actively manage exposures within clearly defined risk parameters, provided the necessary controls and reporting procedures are in place.

Debt Management Strategy

2.2.9.7 The 1987-88 Debt Management Strategy, as approved by the Board of Commissioners, states that "... the FX (Foreign exchange) management strategy for 1987-88 assumes the retention of AAS20 in its present form and has been developed to minimise the impact of exchange rate movements on 1987-88 finance charges (as reported in the Profit and Loss Statement)". AAS 20 is an Australian Accounting Standard relating to foreign currency translation.

2.2.9.8 In audit opinion, although it is acknowledged that a number of forces impact on the actual debt management strategy employed, the accounting results are an overriding consideration in the development of the strategy.

2.2.9.9 For example, the 1987-88 target range of 5-10 per cent debt exposure set in the annual funding strategy may be assessed as being economically justified, when based upon consideration of the long-term overall cost of debt. However, the current Debt Management Strategy would result in a reduction in this range to minimise the amount of foreign exchange losses reported in the financial statements. It should be noted that the changes to AAS 20 foreshadowed in the strategy have now been approved and that these changes will not alter the actual amount of foreign exchange losses reported but only the timing of their recognition in the Profit and Loss Statement.

2.2.9.10 As a further example, where an off-shore loan is refinanced accounting standards require that, unless certain conditions are met, past foreign exchange gains/losses, which had been deferred pending amortisation over the remaining life of the loan, must be recognised in the Profit and Loss Statement immediately. The 1987-88 Debt Management Strategy states that "... it was not possible (during 1986-87) to refinance any (off-shore) loans during the year because of the accounting requirements to bring significant foreign exchange losses to account in 1986-87". Refinancing opportunities were available to the SECV, some of which had been taken advantage of in previous years. Had these opportunities been acted upon during 1986-87, audit is of the view that savings may have been realised over the remaining lives of certain loans capable of being refinanced.

2.2.9.11 Although accounting requirements, such as those dealing with the timing of the recognition of foreign currency gains and losses, need to be considered in the development of debt management strategies, it is audit's view that they should not be a major determinant of such strategies. In particular, accounting-based considerations should not override the assessment of acceptable debt ranges based on predicted exchange rates, and predicted positive cash flows which may be identified by an analysis of alternative refinancing strategies.

Commission's response

Implications for the business result is a major factor in the formulation of policy, but is only one of many other major considerations. Of course, the relative importance of this factor (i.e. business implications) depends upon the degree of certainty associated with alternative debt management strategies, as well as the predicted magnitude of any benefits.

This view is supported in the latest draft of the DMB draft Debt Management Guidelines where "sensitivity of the business result to foreign exchange and interest rate risk" is listed as the first consideration in development of exposure management policy.

Melbourne and Metropolitan Board of Works

Formal development of risk management strategy

2.2.9.12 Although a foreign exchange risk management policy was developed in 1985, a formal risk management strategy was not prepared by MMBW until recent times. Audit was advised that an advisor has been engaged for the entire period of the MMBW's off-shore borrowing whose role included the development of risk management strategies. Audit was also advised that the MMBW's General Manager was consulted when risk management decisions were made. A Foreign Exchange Policy Committee should be established in order to enhance effective planning, control and scrutiny of risk management activities.

Board's response

In the past there was clearly defined lines of communication in the decision making process and no significant position was taken without the agreement of the Board's foreign exchange advisor and the General Manager. A Foreign Exchange Committee has now been established to formally address the management of the Board's foreign exchange exposure.

Exposure management

2.2.9.13 In audit opinion MMBW funds were placed at risk by:

* excessive exposure to certain currencies;
* excessive amounts owing by one counterparty; and
* trading with counterparties which did not have a sufficiently high credit rating.

2.2.9.14 Detailed comments follow:

(1) Currency exposure

The MMBW had not set limits for acceptable levels of individual currency exposure and its total exposed debt was all in US dollars at one point in time.

(2) Counterparty exposure

Limits had not been set by the Board for acceptable counterparty exposures.

During 1986-87 a series of forward contracts were placed and lifted depending on market conditions. The net effect of forward contracts settled on 6 July 1987 involved payments to 7 counterparties and amounts received from only 2 counterparties. It was noted that 98.7 per cent of receivables amounting to $32.8 million were with one counterparty.

(3) Counterparty credit rating

The draft Debt Management Guidelines, issued by DMB, recommend that counterparties used by an organisation should have a credit rating of AA or better.

Audit noted that the MMBW dealt with a number of counterparties with a March 1987 credit rating that were below AA.

Board's response

Although these aspects have always been informally monitored, the Board will now also formally address and document the aspect of credit ratings and acceptable exposure limits for both currencies and counterparties as a matter of priority.

Extension of forward contracts - historical rate rollovers

2.2.9.15 The practice of extending forward contracts by means of historic rate rollovers is acceptable provided that adequate control mechanisms are in place. Unsatisfactory aspects of this practice were:

* gains/losses were not recognised in the management information system at the date of rollover; and
* contracts were automatically extended with the original counterparty and there was no evidence that competitive quotes were obtained at this time.

2.2.9.16 Short-term forward contracts were used by the MMBW to cover exposures to currency fluctuations. On many occasions these contracts were extended where cover was still considered necessary at the maturity date. For example, a forward contract for the purchase of US$90 million on 16 March 1987, was rolled over 5 times to 23 April 1987, and on that date US$30 million was settled which resulted in a loss amounting to $2.1 million. The remaining US$60 million was rolled forward twice to 7 May 1987 and on settlement a loss of $5.3 million was incurred. At the date of each rollover the contract was not reversed but extended with the same counterparty based on the historical rate, adjusted for a new forward margin. Although there may have been a net payment due to the MMBW or to the counterparty at this time, resulting from exchange rate movements, settlement was not made. The interest cost-benefit was reflected in the new forward margin.

Board's response

The Board will establish the controls and reporting procedures considered necessary for rolling forward of foreign exchange contracts at historical rates. These will include the comparison of market rates to ensure that the rolled historical rate is competitive.

Debt defeasance

2.2.9.17 In April 1986 and June 1987, the MMBW entered into debt defeasance arrangements in order to reduce the level of exposure on 2 Japanese yen loans. Debt defeasance is an arrangement designed to extinguish a debt, whereby the obligation to repay the debt is taken over by a third party. These transactions which defeased a total of 9.4 billion yen were arranged through the MMBW's foreign exchange advisor without first obtaining competitive quotes, thereby creating a potential conflict of interest.

2.2.9.18 The exchange rate forecasts were a major factor put forward by the MMBW's foreign exchange advisor in support of the defeasance proposals. There was no documentary evidence to substantiate whether the MMBW obtained independent forecasts prior to agreeing to the proposal.

2.2.9.19 To ensure that MMBW enters into the most cost-effective arrangements, substantial dealings should not be effected through the Board's advisor unless they have provided the most suitable quote.

2.2.9.20 In selecting the organisation to arrange the debt defeasance, proper records should be maintained to substantiate the cost-effectiveness of the decision.

Board's response

The Board obtains several quotations for any transaction or product which is generally available in the market. The Board maintains confidentiality when advised of a new proprietary product, such as debt defeasance, so that market makers will be willing to disclose innovative financing techniques to the Board.

The benefits in having an advisor closely attuned to the market outweighs the ever present risk of conflict of interest which is always assessed by management before a decision is taken. The authorities and responsibilities of our advisors are clearly differentiated from their institutions trading activities, but their complete knowledge of the Board's position enables them to put forward relevant proposals to meet the Board's requirements.

Port of Melbourne Authority

Risk management

(1) Overall observation

2.2.9.21 In audit opinion the planning, control and scrutiny of risk management activities were inadequate. The extent of realised and unrealised losses may also have been minimised during 1984-85 and 1985-86 if the PMA had:

(i) developed a formal risk management strategy;

(ii) considered alternative hedging techniques other than foreign currency trading; and

(iii) set limits for acceptable levels of currency exposure.

(2) Background

2.2.9.22 Risk management actions taken by PMA, since off-shore borrowing commenced in 1979, include the following details which are set out in chronological order.

(i) Between 1979 and 1985 activities were restricted to switching currencies within multi-currency agreements to take advantage of interest rate savings.

(ii) In March 1983 a foreign exchange advisor was appointed to the PMA. The advisor's role was to provide information and advice regarding market rates and analysis, foreign exchange exposures and performance measurement.

(iii) A Foreign Exchange Management Policy was adopted by the Board of the PMA in February 1985.

(iv) The Victorian Transport Borrowing Agency appointed an advisor to authorities within the Transport Ministry in August 1985.

(v) Between February 1985 and June 1986, risk management undertaken by the PMA consisted of active day-to-day spot currency trading.

(vi) In December 1986 the Treasurer of Victoria advised the Minister for Transport that the PMA was to consult with DMB to devise a foreign exchange strategy in order to reduce the PMA's foreign exchange exposure.

(vii) In February 1987 an exposure management strategy, developed by the PMA in conjunction with its advisor, was submitted to the PMA's Board. The major recommendations of the strategy were adopted and the document was forwarded to DMB in March 1987.

(viii) A report on the PMA's operations, prepared by the Ministry of Transport, was presented to the PMA's Board in March 1987. In addressing issues relating to financing the World Trade Centre, the following observations were made:

- financing any long-lived asset in a currency other than that in which its revenue is denominated carries substantial commercial risks;
- the proposed annual amortisation of foreign exchange losses amounting to $7 million represents an extraordinary capital loss for the PMA; and

- the PMA's off-shore currency exposure has grown progressively with the movement of the yen against the Australian dollar.

Independent advice sought by the Ministry revealed that:

- there was virtually no prospect of the PMA recouping the unrealised foreign exchange losses over the remaining life of the underlying debt using present foreign exchange management techniques; and
- the PMA should review its overall portfolio of liabilities.

The report included a major recommendation to sell the World Trade Centre and identified the need to consider the early repayment of off-shore loans, particularly those denominated in Japanese yen.

(ix) The PMA's Board appointed an advisor in May 1987 to review financial management options concerning the World Trade Centre and the management of existing off-shore loans. The advisor recommended that the World Trade Centre be considered for sale and that all overseas debt be redenominated into Australian dollars. A further report received in June 1987 from the Board's advisor recommended a detailed strategy be adopted for foreign debt refinancing or redenomination.

(x) As a result of consultation between the Board and senior management, all foreign exchange loan principal exposures were fully hedged to Australian dollars in May 1987.

(xi) In May 1987, submissions were invited from 5 leading property firms with a view to providing advice on the packaging of the World Trade Centre for sale.

2.2.9.23 Audit noted in August 1987 that restructuring of the PMA's debt remained unresolved, pending the outcome of the sale proposal for the World Trade Centre being offered to prospective investors. Audit understands that the proposed restructure will be arranged in consultation with DMB, the Ministry of Transport, VicFin and the PMA's advisor. A committee, consisting of representatives from these organisations, was established in July 1987 to oversee implementation of the PMA's proposals.

(3) Risk management strategy

2.2.9.24 Offshore borrowing was undertaken by the PMA between 1979 and 1984 but a formal documented exposure management strategy was not developed until 3 years after borrowing had ceased. The development and ongoing review of a formalised exposure management strategy would have enhanced the:

(i) definition of risks relating to interest rate, exchange rate, credit risks and operational risks;

(ii) quantification of exposures using forecasts; and

(iii) identification of the techniques to be used to manage the risks.

A Foreign Exchange Policy Committee should be established in order to enhance effective planning, control and scrutiny of risk management activities.

2.2.9.25 There was no evidence to indicate that a detailed evaluation had been undertaken regarding the use of alternative hedging techniques such as swaps and refinancing prior to February 1987 and, in most cases, only spot trading and short-term forward contracts were used by the PMA to hedge foreign exchange exposures.

Authority's response

The Authority acknowledges audit's contention that the planning, control and scrutiny of risk management activities could have been improved. While the Authority accepts that no formal risk management policy was in place prior to early 1985 (after the major devaluation of the Australian dollar occurred), it should be noted that since March 1983 a merchant bank was appointed as a foreign currency advisor and control/scrutiny of foreign currency operations occurred in both an informal and formal manner.

Foreign currency trading

2.2.9.26 Between February 1985 and June 1986, the majority of transactions entered into by the PMA involved the spot purchase and sale of US dollars. Amounts of up to US$10 million were transacted with turnover amounting to US$34 million in 1984-85 and approximately US$300 million in 1985-86. Smaller volumes of Japanese yen and pounds sterling were also transacted during these years. Although currency trading resulted in a net loss of $18 477 in 1984-85 and a net gain of $841 628 in 1985-86, accumulated unrealised foreign exchange translation losses amounted to $35.3 million at 30 June 1985 and increased to $58 million at 30 June 1986. These transactions did not directly relate to actual exposures in the form of interest or principal repayments.

2.2.9.27 The Director-General of Transport instructed the PMA in June 1986 to cease engaging in spot transactions. Audit supports the Director-General's decision and is of the opinion that this form of trading is of a speculative nature and is not regarded as an effective exposure management strategy. As a consequence it subjected the PMA to unnecessary risks. In addition, this activity is not considered to be within the scope of the PMA's objectives.

Authority's response

It is not intended that this form of trading will resume in future.

Currency exposure

2.2.9.28 The Authority had not set limits for acceptable levels of currency exposure:

* of loan principal as a percentage of total debt;
* in relation to interest payments;
* for supply contracts; and
* for various currencies.

2.2.9.29 Prior to hedging action taken in early 1987, the PMA's exposure of loan principal expressed as a percentage of total debt was 39 per cent at 30 June 1984, 43 per cent at 30 June 1985 and 47 per cent at 30 June 1986. Of this exposure, over 40 per cent was denominated in Japanese yen. These excessive levels of exposure contributed to the level of accumulated unrealised translation losses totalling $50.4 million at 30 June 1987. At the date of finalising the audit in August 1987, principal loan exposures were fully hedged, although interest payments to the date of maturity, amounting to at least $A80 million, were exposed to currency fluctuations.

Authority's response

In the event of the Authority electing to retain a foreign exchange exposure or should the World Trade Centre not be sold, acceptable parameters for currency exposures will be determined.

Counterparty exposure

2.2.9.30 The PMA had not set limits for acceptable exposures with each counterparty. During 1986-87 forward contracts were arranged to cover the PMA's foreign exchange exposure. Audit noted that at 30 June 1987 contracts amounting to approximately $77 million, which represented 39 per cent of the cover, were outstanding with one counterparty.

2.2.9.31 The DMB draft Debt Management Guidelines recommended that counterparties used by an authority should have a credit rating of AA or better. Although the PMA had not established a list of approved counterparties, it was noted that contracts had been arranged with a number of counterparties with a March 1987 credit rating that were below AA.

2.2.9.32 In audit opinion the PMA's funds were placed at unacceptable risk by:

* excessive amounts owing by one counterparty; and
* trading with counterparties which do not have a sufficiently high credit rating.

Authority's response

Parameters for acceptable levels of exposure and minimum credit ratings will be determined immediately.

Extension of forward contracts - historical rate rollovers

2.2.9.33 Short-term forward contracts were used by the PMA to cover exposures to currency fluctuations. On many occasions these contracts were extended at historical rates where cover was still considered necessary at the maturity date. The original contracts were not reversed at the maturity date but extended with the same counterparty based on the historical rate, adjusted for a new forward margin. Although there may have been a net payment due to PMA or to the counterparty at this time, resulting from exchange rate movements, settlement was not made. As a result, the new forward margin reflected the charge/benefit of not settling the contract in addition to the normal interest differential component.

2.2.9.34 Unsatisfactory aspects of this practice were:

* contracts were automatically extended with the original counterparty and there was no evidence that competitive quotes were obtained at this time; and
* gains/losses were not adequately recognised at the date of rollover within the PMA's management information system.

Authority's response

Gains/losses are in fact recognised at the date of rollover and adequate controls and reporting procedures are in place. This matter will however be reviewed in the light of the audit comments.

Option contract

2.2.9.35 In May 1986 the PMA purchased a 2 week option to buy US$7 million for a fee of US$84 000. The use of currency options was not defined as an acceptable risk management technique within the PMA's policy document.

2.2.9.36 Transactions undertaken outside the PMA's policy do not provide adequate control over foreign exchange operations.

2.2.9.37 All risk management operations should be consistent with the policies of the PMA.

Authority's response

The use of this technique was approved by the General Manager and the Board of the Authority. The policy document will be amended should the Authority continue to have a foreign exchange exposure post the World Trade Centre.

State Transport Authority

Risk management strategy

2.2.9.38 Although off-shore finance was first arranged by the STA in 1984, a foreign exchange policy was not adopted by the STA's Board until April 1986.

2.2.9.39 The STA did develop a further foreign exchange policy in September 1986, which was intended to include the formalisation of foreign currency strategies, but this document did not include the following key matters:

* a clearly defined target for the composition of the STA's overseas exposure; and
* an evaluation of alternative hedging techniques, including a calculation of discounted cash flows predicted for each alternative.

The STA did not establish a Foreign Exchange Policy Committee. This Committee if established would have enhanced the effective planning, control and scrutiny of risk management activities.

2.2.9.40 The STA engaged in currency trading or short-term forward contracts to hedge foreign exchange exposures. Although audit was advised that alternative techniques such as debt defeasance were in fact considered, there was no evidence to indicate that the use of alternative techniques such as foreign currency swaps, or refinancing had been evaluated by the STA.

2.2.9.41 As a result risk management strategies may not have been undertaken in the most cost-effective manner.

Authority's response

A policy paper was submitted to the Authority's Board on 13 December 1985. The Authority is of the opinion that foreign exchange cover beyond one year is very costly because of the uncertainty in the direction of currencies. Not only is there no ready market for such transactions, the cost would be prohibitive. The Authority contends that evidence is available to substantiate that alternative strategies were considered. For example, the Authority converted the Dutch guilder lease to a loan, and the floating interest rate on the United States lease was swapped into a fixed interest rate.

Foreign currency trading

2.2.9.42 Between September 1984 and June 1986 the majority of foreign exchange transactions entered into by the STA involved the spot purchase and sale of US dollars. Amounts of up to US$5 million were transacted with turnover during 1985-86 amounting to US$430 million. Smaller volumes of Japanese yen and Dutch guilders were also transacted during the period.

2.2.9.43 Foreign currency trading undertaken since September 1984 did not directly relate to interest, rental or principal repayments. Although currency trading resulted in a net profit of $595 000 in 1984-85 and $723 000 in 1985-86, accumulated unrealised foreign exchange translation losses amounted to $32.9 million at 30 June 1985 and increased to $58.2 million at 30 June 1986.

2.2.9.44 At the STA Board Meeting of 30 May 1986 it was agreed that pending further consideration of foreign exchange transactions by the Board, no further spot trading would be undertaken.

2.2.9.45 A foreign currency strategy meeting held in July 1986 agreed that hedging activities should continue where the underlying transactions directly relate to interest and principal payments. It was also stated that the "speculative" aspect of spot trading, unrelated to specific interest or principal payments had ceased.

2.2.9.46 The Board's decision to cease foreign currency trading where it is not linked to commitments of interest, rental or principal payments is supported by audit. In these circumstances this form of trading is considered by audit to be speculative in nature and subjects the STA to unnecessary risks.

Authority's response

The maximum hedge contracts the Authority had at any one time was US$20 million. The accepted practice in currency hedging, as pursued by the Authority and in accordance with the Authority's financial advisor's advice, was to purchase and sell currencies with the objective of effecting currency gains. This form of trading ceased in May 1986.

Currency exposure

2.2.9.47 The STA had not set limits for acceptable levels of currency exposure:

* of loan principal as a percentage of total debt;
* in relation to interest payments;
* for supply contracts; and
* for each currency.

2.2.9.48 The STA's exposure of loan principal expressed as a percentage of total debt was 23.3 per cent at 30 June 1984, 26.0 per cent at 30 June 1985, 22.5 per cent at 30 June 1986 and 44.2 per cent at 30 June 1987. Although it is recognised that the abnormally high level of foreign exchange exposure at 30 June 1987 was due to borrowings transferred to VicFin as part of the Government's debt centralisation policy, audit is nevertheless of the opinion that the levels of exposure in prior years contributed to the substantial accumulated unrealised translation losses of the STA.

Authority's response

Audit's comments grossly distorts the situation as loans were transferred to VicFin in 1986-87 under the Government's debt centralisation policy.

Counterparty exposure

2.2.9.49 The STA had not set limits for transactions with counterparties or for acceptable credit ratings for counterparties.

2.2.9.50 The STA's list of 14 approved dealing parties included 7 financial institutions which, in audit opinion, did not have a sufficiently high credit rating.

2.2.9.51 In audit opinion, the STA's funds could have been placed at risk by:

* excessive amounts owing by one counterparty; and
* trading with counterparties which did not have a sufficiently high credit rating.

Authority's response

Transactions effected by the Authority were with banks which are authorised dealers in the foreign exchange market.

Department of Management and Budget

2.2.9.52 As part of the Government's debt centralisation program, a Japanese yen loan liability was transferred from the STA to VicFin in January 1987. At the date of transfer, the liability amounted to $47.6 million.

2.2.9.53 Funds to meet the debt service payments on this loan are appropriated to the Capital Works Authority (CWA) which, in acting as an agent for the State on-passes the funds to VicFin. Although VicFin has acquired the liability, it has also acquired an offsetting asset represented by a covenant signed by the CWA, acting as agent, to provide VicFin with sufficient funds to enable it to service and redeem the transport debt, subject to parliamentary appropriations.

2.2.9.54 It is intended that the STA's off-shore lease liabilities, amounting to approximately $130 million at 30 June 1987, will be transferred to VicFin during 1987-88 as part of the debt centralisation program.

2.2.9.55 As indicated in the 1986-87 Budget Strategy and Review document, DMB is to undertake a comprehensive review of the domestic and off-shore debt transferred to VicFin with a view to restructuring and refinancing the debt.

2.2.9.56 At the date of finalising the audit review in October 1987, systems and procedures had not been implemented by DMB to measure, monitor and manage foreign exchange exposures relating to the STA's off-shore debt transferred to VicFin. Audit was advised that an Exposure Management Committee is to be established within DMB. The functions of this Committee will include the management of foreign exchange exposures and the development of a strategy to restructure the debt transferred as part of the centralisation program.

2.2.9.57 Realised and unrealised foreign exchange gains or losses, resulting from currency fluctuations since the date of transfer, were not clearly disclosed in the financial statements of VicFin and DMB.

Departmental response

A Treasury Committee, established early this year, has been primarily devoted to determining a borrowing strategy for the CWA. Because of the need to establish a borrowing strategy for 1987-88 this work has taken priority over active debt management both of domestic and foreign denominated debt. The Exposure Management Committee will implement audit's recommendations relating to the measuring and monitoring foreign exchange exposures, the development of a risk management strategy and the disclosure of relevant foreign exchange details.

2.3 UNIFORM DEBT MANAGEMENT GUIDELINES AND CENTRAL MONITORING PROCEDURES

Department of Management and Budget

Central Debt Management Guidelines

2.3.1 Substantial foreign currency financing arrangements, approved and guaranteed by the Treasurer of Victoria, have been undertaken by public authorities since 1979. However, uniform guidelines, in relation to the management of foreign exchange exposures resulting from these finance arrangements, had not yet been finalised. Draft Debt Management Guidelines developed by DMB in June 1986, and amended in June and September 1987 were in the process of being finalised at the date of completing the audit review.

2.3.2 In audit opinion, uniform debt management guidelines will promote consistent application of government policy and a better quality of foreign exchange management. Lack of uniform management guidelines has contributed to an inconsistent approach to foreign exchange risk management practices within public authorities. For instance in the PMA and STA there was excessive exposure to fluctuations in exchange rates.

2.3.3 A review of the September 1987 draft Debt Management Guidelines revealed that the following items had not been included:

* debt defeasance arrangements;
* an acceptable composition of transaction exposure;
* the acquisition of foreign currency denominated assets as a permissable option to hedge against foreign exchange exposures;
* the need for authorities to establish adequate management policies to ensure non-speculative use of spot contracts;
* the issue of whether dealers should be permitted to deal in their own names;
* the role of advisors in the management of the authority's exposures, including a suggested terms of reference;
* a requirement for an independent assessment to be given to DMB concerning the system of internal control in operation at each organisation, with particular emphasis on computer systems;
* foreign exchange exposures arising from future interest payments; and
* a standardised basis for authorities to calculate the effective cost of borrowing in order for meaningful comparisons to be made by DMB in its monitoring role. The across-the-board review revealed that a consistent approach was not adopted by authorities in calculating the effective cost of foreign currency financing.

2.3.4 Audit noted that some staff interviewed were unsure of the meaning attached to terminology used by DMB in the guidelines.

Department's response

DMB will seek to include in the guidelines as many of the issues that have been raised and which are considered relevant in the context of the philosophy of the guidelines. With regard to each specific point raised by audit, DMB will endeavour, in the majority of cases, to either amend or review the guidelines.

Central monitoring of foreign exchange exposures

2.3.5 A computerised treasury management system was implemented by DMB in 1985 with a view to enabling the central on-line monitoring of the State's foreign exchange exposures. The MMBW and Aluminium Smelters of Victoria Pty Ltd (Aluvic) also implemented the system at that time and the PMA adopted the system, on a trial basis, in April 1987.

2.3.6 The system was implemented by DMB, despite some authorities considering it to be unsuitable for their foreign exchange operations. For example, the system was not introduced by the SECV, apparently due to certain security problems associated with access to data recorded on a bureau, and the system not being suited to the size of the SECV's foreign exchange operation.

2.3.7 As a result of the system not being utilised by all relevant authorities, a centralised system was not in place to provide on-line measurement of the State's foreign exchange exposures and to assess the impact on the State of a sudden fall in the Australian dollar.

2.3.8 The consolidated position of foreign exchange exposures was only prepared annually by DMB, from information held on the computerised system and manual reports supplied by the SECV and STA. However, the exposures were not consolidated and monitored on a frequent basis as is desirable.

2.3.9 Audit considers that effective central monitoring requires a system which provides immediate details of all foreign exchange exposures and the measurement of these exposures against parameters defined in the proposed Debt Management Guidelines.

Department's response

On-line measurement of the State's foreign exchange exposures was an objective of the implementation of the computerised treasury management system, but is now not considered practical. Without the involvement of the SECV the original objectives of the computerised treasury management system have never been achieved. Given the difficulties in transferring data from the SECV's computer systems to the treasury management system, it is not practical to implement a system which provides immediate details of foreign exchange exposures. Instead, we have concentrated on putting in place Borrowing and Investment Guidelines which make provision for comprehensive and regular reporting on debt, borrowing and investment matters in addition to foreign exchange exposures. In a decentralised foreign exchange management arrangement in which the individual authorities take primary responsibility for the foreign exchange transactions, the value of on-line information is highly questionable. Whilst it is accepted that regular reporting to DMB is necessary, monthly reporting on a routine basis is considered acceptable, with supplementary information gathered on an ad hoc basis in the case of substantial currency realignments.

2.4 POLICY FORMULATION AND PROCEDURAL DOCUMENTATION WITHIN AUTHORITIES

2.4.1 Although formal policies on foreign exchange risk management had been developed by authorities, in most cases these policies did not cover all relevant issues. For example, acceptable levels of exposure within currencies and limits for dealing with counterparties were not addressed in the policies.

2.4.2 In some of the authorities examined, procedures had not been documented in relation to foreign currency transactions.

2.4.3 Detailed comments in respect of each authority are set out below.

State Electricity Commission of Victoria

Policies

2.4.3.1 Policies of the SECV, formulated by various policy committees, were recorded in the minutes of each meeting and, in some cases, individual policy documents but a consolidation of policies relating to off-shore borrowing and the management of foreign exchange risks was not maintained.

2.4.3.2 This would assist in keeping all staff informed on the SECV's overall policy on foreign exchange.

Commission's response

There is no difficulty in consolidating all policy papers and minutes of meetings onto one central file.

Supply contracts

2.4.3.3 Supply contracts entered into by the SECV during 1986-87 amounted to $A371.4 million of which $A65.2 million related to overseas contracts. Foreign exchange exposures resulting from these contracts are presently managed as part of the short-term and long-term currency baskets.

2.4.3.4 Revised procedures for arranging contracts and managing resulting exposures are presently being drafted. Audit suggested that prior to finalising these procedures the following aspects need to be considered:

* procedures to be followed in relation to ongoing price variations and order cancellations;
* the management of anticipated exposures between the budget date and the date of arranging contracts. This may be necessary, particularly in relation to major contracts; and
* the inclusion of proposed clauses in overseas contracts to indicate that contract prices be expressed in the supplier's preferred currency rather than the currency of the country of origin.

Commission's response

Audit's comments will be taken into consideration in this regard.

Melbourne and Metropolitan Board of Works

Policies

2.4.3.5 While only a small group of officers are involved in foreign exchange matters and reliance is placed on verbal communication, this arrangement is not considered by audit to be satisfactory as a means of communicating risk management decisions. Commentary on the Board's Foreign Exchange Risk Management Policies adopted in May 1984 and July 1987 follows:

(1) Exposure management

2.4.3.6 The MMBW's policy did not outline the acceptable level of:

* foreign exchange exposures within each currency; and
* exposure to specific counterparties.

2.4.3.7 The MMBW policy which related to acceptable exposure management techniques was too broad in audit opinion. Limits were not placed on the use of any hedging technique and there was no justification for the availability of this broad range of techniques.

2.4.3.8 The policy did not address the specific risks associated with each technique and control requirements had not been documented for each acceptable technique.

(2) Approved counterparties

2.4.3.9 The policy detailed a number of counterparties, approved by the MMBW, as being recognised as participating in the spot and forward foreign exchange market. An analysis was not evident to demonstrate that the listed counterparties were of sound credit ratings and total assets or shareholders funds of each counterparty had been considered by the MMBW.

2.4.3.10 The reference used for compiling the list of approved counterparties was a news service rather than a credit agency.

2.4.3.11 The MMBW entered into transactions with a number of counterparties not referred to in the policy. In audit opinion there is inadequate control over the selection of counterparties.

(3) Currency assets

2.4.3.12 The objective outlined in the policy only related to liabilities and did not address currency denominated assets such as overseas bank balances.

Procedures

2.4.3.13 To ensure that consistent procedures are followed, it is necessary that procedures be documented to provide practical guidance. Procedures had not been documented in relation to:

* borrowing;
* dealing;
* preparation and flow of all documentation indicating the stages at which authorisations were necessary;
* identification of officers with the power to make such authorisations;
* recording of transactions in the accounting system;
* reporting to senior management;
* monitoring by senior management; and
* reporting to the Board.

Supply contracts

2.4.3.14 An *Administrative Instruction* issued in November 1983 regarding procedures to be followed in relation to offers, contracts or purchase orders for supplies of more than $10 000, involving exchange rate considerations, had not been subsequently reviewed. In audit opinion, the stipulation of $10 000 is considered too low when compared to current costs. In addition, a control mechanism was not in place to:

* ensure that the Foreign Exchange Section was consulted on foreign currency implications at the time of assessing tenders; and
* enable the Foreign Exchange Section to be advised of exposures in a timely manner.

2.4.3.15 Audit was advised that a document regarding the treatment of supply contracts with foreign exchange exposures was in the process of being prepared.

Board's response

The Treasurer reports directly and meets regularly with the General Manager which indicates that foreign exchange management is being managed at a very high level. In addition, in the presentation of the foreign exchange report to the Board, on each occasion the Treasurer is required to personally present a verbal report and answer questions from Board members.

The need for a revised, all-inclusive policy and procedures manual is recognised and the finalisation of such a document will become a priority. While procedures have not been documented, actual practices are well recognised and adhered to.

Port of Melbourne Authority

Policies

2.4.3.16 An audit review of the PMA's Foreign Exchange Policy and associated delegations developed in 1985 revealed that:

* specific risks and control requirements associated with each acceptable currency management technique were not identified;
* delegations for foreign currency management did not limit the value of the following transactions requiring approval by the General Manager:
  - forward exchange contracts;
  - currency and interest rate swap agreements;
  - interest rate future contracts;
  - forward rate agreements;
* levels of acceptable exposures had not been set in relation to:
  - currency exposure of loan principal as a percentage of total debt;
  - each currency;
  - specific counterparties; and
* minimum credit ratings had not been set for counterparties.

Procedures

2.4.3.17 To ensure that consistent procedures are followed, it is necessary that procedures be documented to provide practical guidance. Procedures had not been documented in relation to:

* borrowing;
* dealing;
* preparation and flow of all documentation indicating the stages at which authorisations were necessary;
* identification of officers with the power to make such authorisations;
* entering into overseas contracts with foreign exchange implications;
* recording of transactions in the accounting systems; and
* monitoring by senior management.

Authority's response

It is acknowledged that the Foreign Exchange Policy document prepared in 1985 was not exhaustive in its content, and that some procedures associated with foreign exchange had not been documented. Until the outcome of the decision to sell the World Trade Centre is known, the development of a comprehensive manual is considered unnecessary.

State Transport Authority

Policies

2.4.3.18 The passage of the *Transport (Amendment) Act* 1986, which came into force on 12 January 1987, has centralised the transport debt. At the date of audit this debt, including foreign currency finance, was in the process of being transferred to VicFin. Unsatisfactory aspects of the STA's foreign exchange policy documents related to limits not being established for certain exposures and delegations not being limited to the STA's total exposure.

Supply contracts

2.4.3.19 The STA has negotiated a small number of large off-shore contracts. Unsatisfactory aspects supply contracts, subject to currency fluctuations, were:

* the STA had not documented policies and procedures to be adopted;
* the possible effects of currency movements were not considered at the time of arranging contracts; and
* minimum dollar value benchmarks had not been set for exposures to be notified to the Group Manager - Finance.

Authority's response

Foreign exchange policies and procedures on supply contracts will be prepared and submitted to the Authority's Board for approval. Delegations in this regard will be reviewed.

2.5 OPERATIONAL CONTROLS AND MANAGEMENT REPORTING

Operational controls

2.5.1 With the exception of the SECV, operational controls were found to be deficient in the smaller foreign exchange operations.

2.5.2 In respect of the MMBW, PMA and STA, examples of unsatisfactory practices were:

- a common weakness was the lack of segregation of duties between arranging deals and confirming foreign exchange transactions;
- foreign exchange policies, procedures, controls and information systems had not been reviewed by internal audit since borrowings commenced; and
- inadequate controls were in place over the recording of foreign exchange transactions.

2.5.3 Strong operational controls, including the effective segregation of duties between dealing and the confirming functions, are an essential feature of an effective foreign exchange operation. Substantial losses, resulting from poor internal controls, have been highlighted in recent private sector cases. Benefits which may be derived from strong operational controls include:

- detection of unauthorised transactions;
- integrity of information used for management information and financial reporting purposes;
- a reduction in the risk of funds being misappropriated;
- provision of an adequate management and audit trail;
- accurate recording of transactions in an environment where foreign exchange deals are generally arranged by telephone; and
- assurance that competitive rates have been received for transactions.

Authorities' responses

MMBW

Executive officers operating within their delegated authority are the only ones to complete deals, and as they are both actively involved and responsible there is no chance of unauthorised deals being entered into beyond those officers.

The approved strategic audit plan for the Audit Services Branch includes audits of foreign currency transactions, control procedures and management information systems from 1987-88 onwards.

The deficiencies identified by audit will be acted upon.

PMA

The roles and responsibilities of Treasury staff will be reviewed in line with audit comments. Should the Authority have an ongoing foreign exchange exposure the Internal Audit Division will develop the necessary expertise and undertake frequent examinations of foreign exchange procedures and systems within the Treasury Division.

STA

Audit's comment that foreign exchange policies, procedures, controls and information systems had not been reviewed by the Authority's Internal Audit Division since the inception of foreign exchange dealings in 1983 is accepted.

Management information systems

2.5.4 Systems implemented by authorities to record and monitor foreign exchange exposures and transactions varied significantly. Within the SECV sophisticated computerised systems had been developed while in the MMBW and PMA, where smaller volumes of transactions were involved, systems had generally been developed in-house using spreadsheet applications. Inadequate controls were in place at the MMBW and PMA over the access to, recording and changing of, information.

Melbourne and Metropolitan Board of Works

2.5.5 An information system was not in place at the MMBW to readily disclose:

* actual and projected exposure per currency in relation to interest payments, loan liabilities and supply contracts;
* value of contracts outstanding with each counterparty; and
* hedging costs as distinct from gains or losses on hedging contracts.

Board's response

A system recording all forward contracts has been developed. The introduction of additional hardware has meant the security aspect can now be addressed and a sophisticated security package is being considered to safeguard the foreign exchange data.

Although there is no system currently providing immediate information as to the value of currency and counterparty exposure, all details referred to by audit are always readily available within a short space of time. Investigation will be undertaken as to the provision of immediate information.

Port of Melbourne Authority

2.5.6 It was noted in the PMA that an information system was not in place to readily disclose:

* the counterparty to each transaction;
* hedges relating to interest payments; and
* actual and projected exposure per currency in relation to interest payments, loan liabilities and supply contracts.

2.5.7 Gains or losses on transactions entered into to hedge interest payments were included in interest costs and were not separately identified and reported to management.

2.5.8 In view of the high value of foreign exchange transactions and the effect of changing market conditions, it is important that management information systems provide reliable and timely information. Unless systems provide adequate controls, records could be vulnerable to accidental corruption or manipulation and may not provide a satisfactory management trail of transactions.

Authority's response

In view of the current level of activity in the Treasury Department, the implementation of a more sophisticated system is not considered necessary.

Content and timing of reports to senior management

2.5.9 The reporting of detailed and timely information to senior management is considered an important element in the overall control framework of a foreign exchange operation, as it is generally not feasible for senior management to be directly involved in foreign exchange activities on a daily basis.

2.5.10 A number of unsatisfactory aspects were noted by audit in the reporting of foreign exchange transactions to senior management of the MMBW, PMA and STA. These aspects related to certain reporting policies of each authority not being complied with and additional information which, in audit opinion, should have been included in reports to improve the extent of monitoring by senior management of the foreign exchange position and related transactions.

2.5.11 Specific comments on the operational controls and management reporting systems in each organisation were communicated to each authority in a detailed management letter.

Authorities' response

MMBW

The audit comments do not recognise that foreign exchange activities in the Board are carried out by senior management and an external financial advisor is retained. The Chairman is satisfied with quarterly reporting. In recent months the report to the Board has been expanded to inform Board members of the wider activities of its Treasury Division. In the light of audit comments further consideration will be given to the reports to be provided to the newly established Foreign Exchange Committee and the Board.

PMA

Audit comments will be considered if a foreign exchange exposure is retained. It is intended that all foreign currency debt will be repaid as soon as possible after the sale of the World Trade Centre, assuming the purchaser does not assume the debt.

STA

The contents and format of reports to the Authority's Board are being reviewed.

APPENDIX A

DESIRABLE MANAGEMENT PROCEDURES

Examples of desirable management procedures are listed below. This list of procedures was modified by audit to suit each foreign exchange operation.

JUSTIFICATION OF THE NEED TO ARRANGE FOREIGN CURRENCY FINANCING

Cost-benefit analyses should be prepared which:

* identify exchange rate scenarios that would result in the financial arrangement no longer being cost-effective; and
* take into account exchange rate forecasts.

RISK MANAGEMENT

* Foreign exchange risk management strategies should be developed and reviewed on a regular basis in line with fluctuations in:
    . domestic and international economics;
    . financial markets;
    . portfolio composition; and
    . emerging foreign exchange exposures.
* A foreign exchange risk management strategy should include:
    . objectives of the risk management strategy;
    . the identification of risks such as:
        - exchange rate;
        - credit risks (counterparty risk);
        - operational risks;
        - interest rate;
    . acceptable levels of risk as a percentage of debt and within currencies;
    . suitable techniques to manage the extent of risks;
    . the identification of exchange rate scenarios over the life of each foreign currency financing arrangement which highlights situations in which each financing arrangements would no longer be cost-effective; and
    . the quantification of foreign currency exposures using forecasts and measuring each forecast against the exchange rate scenarios.
* Procedures should be developed, implemented and regularly reviewed in line with the established strategy.
* Procedures should be developed for obtaining and using foreign exchange forecasts.
* Forecasts should be independently reviewed, authorised and compared with actual results.
* Procedures should exist for the use of exchange rate forecasts in determining risk. Such forecasts should be used to cost the risks involved in specific strategies.

* Estimated costs of alternative strategies should be evaluated, using discounted cash flows, ranked and finally reviewed by an independent officer.

* Advice should be sought from consultants on the alternatives available and the recommended strategy to adopt.

* Limits should be established setting the maximum foreign exchange contract value to be outstanding with the one counterparty and within each currency.

* Reporting systems should be established which identify present and future exposures to foreign exchange risk and their impact on the organisation.

* Senior management should review reporting systems and approve suitable hedging techniques and cover.

* An ex-post comparison of forecasts to actual should be undertaken by senior management together with an assessment of the adequacy of risk management procedures undertaken.

* An independent review panel should exist for the ongoing review of procedures and transactions in foreign exchange.

POLICIES AND PROCEDURES

* A formalised foreign exchange policy statement, consistent with government policy, should be established.

* The policy statement should include:

  . the organisation's philosophy to foreign exchange risk including acceptable levels of exposure;

  . the objectives of the organisation's foreign exchange risk management program;

  . permissible management techniques;

  . internal and external information systems;

  . control procedures; and

  . organisational structure which clearly defines the Foreign Exchange Section and the levels of responsibility/delegation within the Section.

* A Foreign Exchange Policy Committee should be established and comprise representatives from senior management, the Foreign Exchange Section, Treasury/Finance Branch, Economics Division and DMB.

* The Committee should develop and revise policies and procedures on a periodic basis or whenever business activities or accounting systems change. The establishment and review of risk management strategies should also be addressed by the Committee.

* The Committee should maintain formal minutes of all meetings held.

ARRANGING, RECORDING AND CONTROLLING FOREIGN CURRENCY DEALINGS

* Procedure manuals should exist for foreign currency dealings and accounting for foreign exchange transactions.

* Duties should be segregated between dealings in foreign exchange, accounting for foreign exchange, settling transactions and confirming deals.

* All key staff within the Foreign Exchange Section should have pre-established academic qualifications (or appropriate expertise) and professional development should be both monitored and encouraged.

* A list of approved counterparties should be established and circularised within the Foreign Exchange Section.

* The list should be periodically reviewed.

* Dealing/trading limits should be established for dealers, counterparties and also for currencies.

* Procedures should be established for variations in established limits and correct levels of authorisation should be obtained before obtaining extension of limits.

* An established policy should exist for obtaining quotes.

* All quotes obtained for each deal should be recorded.

* All foreign exchange transactions should be recorded on a dealing slip.

* Dealing slips should be pre-numbered or consecutively numbered, authorised and entered in the accounting records.

* All dealing confirmations from counterparties should be matched with internal dealing slips and checked by an independent officer.

* Procedures should exist for follow-up where mismatches exist.

* Regular reconciliations should be undertaken of:
    . foreign exchange records to the general ledger;
    . suspense accounts; and
    . outstanding contracts with contingent liability accounts and foreign exchange records.

* Reconciliations should be reviewed and authorised by an independent officer.

* Procedures should exist for foreign exchange conversions (revaluations) and all rates should be independently verified.

* Procedures should exist for the review of forward contracts.

* All forward contracts should be reviewed by an independent person on a regular basis.

* Systems should be in place to ensure the accurate recording of transactions in the foreign exchange management information system and accounting systems.

* Internal audit should undertake periodic reviews of management procedures and transactions undertaken in foreign exchange.

MONITORING BY SENIOR MANAGEMENT

* Systems and procedures should exist to provide the generation of reports for:
  . current and projected exposures resulting from all foreign exchange transactions including interest and principal repayments, supply contracts and foreign currency bank account balances;
  . the value of transactions with each counterparty;
  . limit excesses;
  . the effective cost of foreign currency financing; and
  . comparative costs of domestic financing.

* The above information should be provided to senior management on a frequent basis, together with prior period comparisons.

APPENDIX B

GLOSSARY OF FOREIGN EXCHANGE TERMS

Carded rates	Exchange rates quoted by the trading banks each day for small foreign exchange transactions.
Confirmation	The written document confirming the foreign exchange deal arranged by telephone/telex.
Counterparty	The financial institution with whom a foreign exchange deal is made.
Coupon rate	The agreed interest rate stipulated at date of borrowing.
Credit rating	Assessment of the credit-worthiness of a counterparty.
Credit risk	Risk that the counterparty to a deal or loan is unable to meet the obligation.
Currency basket	The denomination of off-shore borrowings in a range of currencies in order to spread the risk of exchange rate fluctuations against the Australian dollar.
Currency option	The right, but not the obligation, to buy or sell a foreign currency at an agreed price up to, or at, a future date.
Currency swap	An agreement to exchange at future dates one currency obligation for another over an agreed period.
Currency weights	The percentage of the currency basket in each foreign currency.
Deal	A foreign currency transaction between two parties.
Dealing slip	Document used to record the details of a foreign exchange transaction.
Debt (total)	Comprises loan principal and lease repayments and does not include interest commitments.
Debt defeasance	An arrangement designed to extinguish a debt whereby the obligation to repay the debt is assumed by a third party.
Devaluation	Fall in a currency's value.
Discounted cash flow	Recognises that the value of money changes over time, i.e. an amount received today is worth more than the same amount received in the future.
Exchange rate	The price of one currency in terms of another at a given moment of time.
Exchange rate forecasts	Estimated future exchange rates based on future expectations of economic circumstances or technical analysis.
Exposure - foreign exchange (currency)	Foreign currency denominated assets or liabilities subject to increase or decrease in value due to fluctuations in the foreign exchange market.
Foreign currency debt	A debt raising which includes either directly or indirectly the costs of adverse or potentially adverse effects from unforeseen currency movement.
Foreign currency financing arrangement	Includes borrowings and leases denominated in foreign currencies.

Foreign currency trading — Daily or relatively short-term buying or selling of currencies with the objective of making currency gains. Generally the buying and selling of these currencies is not directly related to an underlying foreign exchange exposure of the organisation.

Forward contract — Foreign currency contract in which the currency is due for delivery at a future date.

Forward margin — The difference between the forward rate and the spot rate of a currency. The forward margin is either at a discount or a premium to the spot rate or where the forward rate is the same as the spot rate the margin is referred to as par, i.e. zero.

Forward rate (of exchange) — The rate of exchange between any two currencies which are bought and sold for future delivery.

Hedge — (verb) To cover a foreign exchange exposure through an offsetting transaction. Also known as *cover*.

Hedging — The meeting of future commitments or the protecting of future income by buying or selling a forward contract to offset or minimise the costs of *(a)* major risks implicit in devaluations, revaluations or other types of parity changes, and *(b)* general movements in exchange rates.

Historical rate rollover — Extension of a foreign exchange contract based on the original exchange rate, adjusted for a new forward margin.

Intra-day/spot trading — Buying and/or selling foreign currency and reversing the transaction within 2 days.

Limits — Specifically, the maximum amount that a party, usually a financial institution, will accept from another party, for forward or money market transactions or for payments arising from foreign exchange transactions on the same day. Generally, any limit placed on foreign exchange transactions.

Long-term — Greater than 12 months.

Margin — See *Spread*

Maturity date (settlement date, value date) — Date on which, under the contracted agreements, the foreign exchange is to be delivered or received.

Mid rate — The mid point between the buy and sell rates.

Position — The balance of assets (bank deposits, investments and spot and forward purchases) and liabilities (loans and spot and forward sales) in a foreign currency.

Refinancing — The rearrangement of an existing loan on different terms and conditions or at the maturity of the existing loan, the arrangement of a new loan to maintain the existing debt position.

Revaluation (currency) — An upward change either in the official parity of a currency, or in an exchange rate which had been pegged for some time at the pre-revaluation level.

Revaluation (debt) — A foreign currency debt expressed at the exchange rate applicable at the date of revaluation.

Rollover — When a forward exchange contract or loan or deposit is about to mature, a new *deal* is written to extend the maturity of the contract and a new rate current on the day of rollover is applied.

Settlement date — See *Maturity date*.

Short-term	Within 12 months.
Spot transaction	Foreign exchange transaction which is due to be delivered within two days of the contract date.
Spread	The difference between the buying and selling rates of a foreign exchange quotation or between the borrowing and lending rates in deposits.
Transaction exposure	Foreign currency exposure relating to commitments due to be paid within the following year.
Translation exposure	Foreign currency exposure relating to liabilities due to be paid after the following year which is represented by the difference between the repayment due at current exchange rates and the historical exchange rate.

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