New South Wales
TREASURY

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Commercial Policy Framework: Treasury Management Policy

OFFICE OF FINANCIAL MANAGEMENT

Policy & Guidelines

Preface

The *Treasury Management Policy* is a component of the NSW Government's policies aimed at ensuring that best practice financial management and accountability frameworks are applied in the State sector.

The purpose of the policy is to strengthen the existing framework for managing the risks associated with public sector agencies' treasury functions. These functions include borrowings, investments, derivative transactions, debt and investment management and structured finance transactions. The framework applies to all public sector agencies but is of greater relevance to Government businesses, given the extent of their involvement in treasury functions.

This policy supersedes the previous NSW Treasury policy document on this matter, *Treasury Management Policy*, (TPP02-5), September 2002.

John Pierce
Secretary
NSW Treasury
July 2007

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Note
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The *Treasury Management Policy* applies to the treasury functions of all public sector agencies, incorporating both General Government agencies and Government businesses. The policy is of greater relevance to Government businesses, given the extent of their treasury functions.

Treasury functions include borrowings, investments, derivative transactions, debt and investment management and structured finance transactions.

The objective of this policy is to provide an overarching framework for managing the risks associated with treasury functions. Specifically the policy aims to:

- minimise the cost of gross debt (i.e. total borrowings), within prudent risk parameters
- identify and effectively manage financial risk, and
- ensure professional interaction with financial markets.

Policy Statement

The following principles underlie the *Treasury Management Policy*:

- centralised market interaction but decentralised strategic decisions
- identification and effective management of financial risks
- clear accountability
- contracting out of treasury functions, and
- conservative approach to derivatives.

Treasury Management Framework

Public sector agencies that are authorised to undertake treasury functions are required to prepare policies approved by the board (or the highest level of management where a board does not exist) based on the framework outlined in the policy. Establishing successful frameworks involves articulating objectives, strategies and tactics and defining how performance will be measured. Policies need to be formulated on a case-by-case basis with consideration of the nature, size and complexity of financial market activities, particularly the quantitative limits.

The fundamental objective of financial risk management is to maximise returns from the agency's core operations while controlling exposures consistent with the agency's risk tolerance, which should be determined with regard to the Government's preferences. Agencies are not permitted to operate their treasury functions as profit centres as financial risk is not to be undertaken solely for the purpose of obtaining a market return. The elements of financial risk which are to be managed on an aggregate net exposure basis are:

- Credit risk
- Market risk, and
- Operational risk.

1. Introduction

The NSW Government has implemented a number of policies aimed at ensuring that best practice financial management and accountability frameworks are applied in the State sector. The State sector is comprised of public sector agencies that are subject to the *Financial Management Framework* (in the case of most General Government agencies) or the *Commercial Policy Framework* (in the case of Government businesses[1]). The *Treasury Management Policy* covers all public sector agencies but is of greater relevance to Government businesses, given the extent of their treasury functions.

1.1 The Government's risk tolerance

The owners of any business expect their investments to earn a return that rewards them for bearing risk. This return is expected to be at least commensurate with the perceived risk of the investment. Effective management requires all risks to be identified and managed so that, irrespective of outcomes, unaffordable losses are not incurred.

The Government, in its capacity as owner, recognises that boards and management of public sector agencies need to effectively manage and mitigate risks associated with their operations. The fundamental objective of financial risk management is to maintain financial returns and liabilities within tolerable limits, in line with the Government's preferences, without adversely interfering with agency operations.

The level of exposure that is acceptable will vary among agencies depending upon firm-specific and industry factors. The policies approved by the board (or the highest level of management where a board does not exist) need to be agreed with Shareholding Ministers in the context of the Statement of Corporate Intent (for State Owned Corporations (SOCs)) and the Treasurer in the context of the Statement of Business Intent or the Results and Services Plan (for other public sector agencies).

1.2 Purpose of the policy

The objective of the *Treasury Management Policy* is to provide an overarching framework for managing the risks associated with public sector entities undertaking treasury functions. Specifically the policy aims to:

- minimise the cost of gross debt (i.e. total borrowings), within prudent risk parameters
- identify and effectively manage financial risk, and
- ensure professional interaction with financial markets.

1.3 Definition of terms

Treasury Functions

Treasury functions of public sector agencies include borrowings, investments, derivative transactions, debt and investment management, and structured finance transactions. The capacity of agencies to undertake such functions is governed by the *Public Authorities (Financial Arrangements) Act 1987*, and other Acts, such as constituting legislation.

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[1]The generic term 'Government business' includes:

- Public Trading Enterprises (or Public Non-Financial Corporations under ABS classifications). State Owned Corporations are included in this classification but are distinguished by their corporatised status.
- Public Financial Enterprises (or Public Financial Corporations under ABS classifications); and
- General Government businesses (or General Government agencies under ABS classifications, which are non-Budget dependent and operate under the *Commercial Policy Framework*).

Financial Risk

Financial risk is defined as the potential for gain or loss arising from financial assets and liabilities. This exposure takes the form of credit, market and operational risks.

Credit risk

the potential for gain or loss arising from a counterparty's failure to meet its contractual obligations.

Market risk

the potential for gain or loss arising from changes in financial and physical market prices such as interest rates, foreign exchange, equity values and commodity prices.

Operational risk

the potential for loss resulting from inadequate or failed internal processes, people and systems, or from external events.

1.4 Legislative Provisions

The *Public Authorities (Financial Arrangements) Act 1987* (NSW) (the *'PAFA Act'*) provides the legislative basis for public sector entities that are prescribed to be authorities[2] to undertake treasury functions.

Borrowing Requirements

Sections 7 and 8 of the *PAFA Act* provide that authorities can obtain financial accommodation subject to approval from the Treasurer and the Governor. Financial accommodation as defined in the *PAFA Act* typically includes debt instruments such as promissory notes, debentures, bonds and discounted securities.[3] In some cases, structured financing transactions will also qualify as financial accommodation. Section 10 of this Act requires authorities to obtain all financial accommodation from the NSW Treasury Corporation (TCorp) unless the financial accommodation is by way of an advance or the Treasurer grants an exemption by order in writing.

Investment Powers of Authorities

Section 24 of the *PAFA Act* provides for the conferring of investment powers on authorities through regulations if recommended by the Treasurer and the Minister for the authority. The specific investment powers that may be conferred are contained in Schedule 4 to the *PAFA Act*.

Both the Treasurer and the Minister for the authority in accordance with section 24(2A), have regard to the general criteria approved by the Treasurer for determining the appropriate investment powers to be conferred on authorities. The Treasurer's general criteria, in accordance with section 24(2B) refer to the:

- class of the authority within any official government classification of authorities
- volume of funds to be invested by the authority, and
- expertise of, and facilities available to, the employees of the authority undertaking the investments.

[2] The definition of authority includes all general government agencies, public trading enterprises, public finance enterprises, ministers and their controlled entities, *PAFA Act*, s 3
[3] *PAFA Act*, s 4 contains a full definition.

Derivative Transactions

Under section 16 of the *PAFA Act*, authorities can effect financial adjustments subject to the approval of the Treasurer. Financial adjustments as defined under the *PAFA Act* include a wide range of derivative transactions such as swaps, forward rate agreements, futures and options in respect of interest rates, foreign exchange and commodities, and includes combinations of these instruments.[4]

Debt and Investment Management

Section 8 of the *Annual Reports (Statutory Bodies) Act 1984* requires statutory bodies to provide an annual operations report. In addition, sections 12 and 13 of the *Annual Reports (Statutory Bodies) Regulation 2005* prescribe that the operations report includes comparisons of investment and liability management along with guidelines issued by the Treasurer.[5] The latest guidelines are outlined in NSW Treasury Circular *Guidelines on Reporting of Investment and Liability Management Performance* (NSWTC 03/09).

Approval of Funds Manager

Under section 25 of the *PAFA Act*, authorities that have been granted investment powers can engage a funds manager, subject to the approval of the Treasurer on the recommendation of the Minister for the Authority. In accordance with section 25(4) and common law agency principles, the investment powers exercisable by the funds manager cannot be more extensive than those granted to the authority.

1.5 Structured finance and asset acquisition transactions

Agencies from time to time are involved in complex, structured finance or asset acquisition transactions. Examples of such transactions include build-own-operate (BOO) contracts, build-own-operate-transfer (BOOT) contracts and, offshore, large operating and financial leases.

Such transactions are complex, infrequent, require expert financial knowledge and can involve significant financial and transactional risks.[6] Most transactions require the approval of the Treasurer under the *PAFA Act*[7] and, in addition, some transactions must be approved by the Cabinet Standing Committee on the Budget (eg Projects of State Significance).[8]

Accordingly, Treasury will review all transactions at the inception stage and then prior to final commitment (and where applicable in accordance with the *Guidelines for Assessment of Projects of State Significance*). TCorp will act as the Treasury's financial adviser in such transactions and their involvement at an early stage may expedite the overall approval process.

[4] *PAFA* Act, s 5.contains a full definition
[5] Certain statutory SOCs operating in competitive markets are exempt from these requirements.
[6] NSW Treasury Circular 98/7: *Structured Finance Transactions* outlines the requirements to be observed by agencies considering such transactions.
[7] For example, s 5
[8] Refer to NSW Treasury, *Guidelines for Assessment of Projects of State Significance*, TPP02-4, June 2002

1.6 Application of the policy

The *Treasury Management Policy* applies to all public sector treasury functions which includes both General Government agencies and Government businesses. This policy is, however, of greater relevance to Government businesses given the extent of their treasury functions.
The following documents provide more detailed guidance on aspects of treasury management:

- *Accounting for Financial Instruments*, TPP06-4, June 2006, NSW Treasury
- *Energy Trading Policy for Retailers*, TPP99-5, October 1999, NSW Treasury
- *Energy Trading Policy for Generators*, TPP99-6, October 1999, NSW Treasury
- Public Authorities (Financial Arrangements) Act 1987
- *Reporting and Monitoring Policy for Government Businesses*, TPP05-2, November 2005, NSW Treasury
- Treasury Circular 03/09: *Guidelines on Reporting of Investment and Liability Management Performance*
- Treasury Circular 98/7: *Structured Finance Transactions*
- Treasury Circular 05/11 *Accounting for dividends*, and
- *Working with Government – Guidelines for Privately Financed Projects*, December 2006, NSW Government.

2. Treasury Management Policy

2.1 Policy statements

The following principles underlie the *Treasury Management Policy*:

Centralised market interaction but decentralised business decisions

A consistent, professional approach is required to integrate core treasury transactions with financial markets. Economies of scale and concentration of expertise can provide substantial cost savings through finer pricing and the opportunity to net existing exposures.

To ensure a consistent and professional approach, agencies are required to utilise TCorp to assist with borrowing and derivative transactions unless otherwise authorised. Agencies will, however, remain responsible for strategic treasury decisions such as the maturity structure and positioning of debt and financial asset portfolios, timing of borrowings and the use of structured finance. Where appropriate, agencies are encouraged to contract out treasury functions providing the tender documents prescribe that services must be carried out in accordance with *Treasury Management Policy* principles.

Identification and effective management of financial risks

Financial risks can be divided into credit, market and operational risks. Exposures to financial risk arising outside of agencies' core operations are considered speculative activity and are expressly prohibited. Effective risk management requires all risks to be identified, quantified, assessed and actively managed in accordance with prudent risk management policies and limits. Agencies are responsible for applying this approach to existing and proposed activities to ensure that financial risk exposures will not result in unaffordable losses irrespective of potential changes in operational circumstances.

Clear accountability

Boards and agency management are responsible for adopting clear and objective treasury performance measures and transparent accountability mechanisms. This occurs through:

- Statement of Corporate Intent, Statement of Business Intent or Results and Services Plan (RSP) processes
- accounting standard requirements to recognise, measure and disclose financial instruments in general purpose financial reports (refer AASB 132 *Financial Instruments: Presentation* and AASB 139 *Financial Instruments: Recognition and Measurement*)
- regulations issued under the *Annual Reports (Statutory Bodies) Act 1984* regarding reporting of investment and debt management performance, or
- contracting out treasury functions.

The fundamental objective of Government businesses is to maximise shareholder value. This requires strong performance from both a financial and service delivery perspective. Similarly, other public sector agencies are required to achieve value for money in the provision of Government programs and service delivery.

With the exception of public financial enterprises, treasury functions are not part of core agency operation. Significant economies of scale can occur through comprehensive technical expertise and complex support system requirements. To ensure policy requirements are met, agencies are encouraged to fully explore treasury function contracting options subject to the Treasurer's approval under the *PAFA Act* (as detailed in section 1.4). It is mandatory for these terms of engagement to comply with the *Treasury Management Policy* and related requirements.

Conservative approach to using derivatives, swaps, futures, warrants and options

Adopting a conservative approach to derivatives can reduce financial risks faced by Government agencies.

Agencies must obtain the Treasurer's approval in accordance with the *PAFA Act* to use derivatives to hedge underlying financial risks. The following principles apply for agencies' derivative dealings subject to the Treasurer granting this approval.[9]

- Agencies are not permitted to operate as a profit centre for their derivative activity.
- Each agency that transacts derivatives must have a comprehensive set of guidelines on authorised instruments, parameters for transacting, credit risk monitoring procedures and risk reporting.
- Options transactions are limited to:
  - i. Purchased options which hedge underlying exposures (i.e. down-side risk is limited to the premium cost);
  - ii. Sold options providing the risk created does not exceed an existing exposure; and
  - iii. Options strategies used as part of the debt management mandate (subject to the agency approving the use of options in its permitted instruments policy) where an agency has contracted out its debt management function to TCorp.
- An agency's treasury policies must include precise limits for the use of derivatives. These limits are to be based on the size of the agency's debt portfolio where the derivatives are used for interest rate risk management and should be based on the maximum size of the exposure being managed. In particular, there should never be a greater volume of derivatives in place than is necessary to perfectly hedge exposures.

Agencies must also ensure that the recognition, measurement and disclosure requirements under the Australian Equivalents to International Financial Reporting Standards (AEIFRS) are followed (refer AASB 132 *Financial Instruments: Presentation* and AASB 139 *Financial Instruments: Recognition and Measurement*). Among other things, these standards require derivatives to be recognised on the balance sheet at fair value and disclosures to be made regarding the financial risk management objectives and policies.

Consideration may also be given to adopting hedge accounting. Hedge accounting matches the timing of profit or loss recognition on the derivative with that of the item being hedged. To qualify for hedge accounting, however, strict criteria must be satisfied including designation, documentation and effectiveness requirements (refer *Accounting for Financial Instruments* (TPP 06-4)[10], section 8).

Market values of derivative positions are to be calculated at least monthly and monitored to evaluate portfolio risks.

A conservative approach to derivatives requires policies that specify permitted instruments, unambiguous trading and counterparty limits, specific staff authorisation to enter into contracts, effective internal controls, regular portfolio valuation, stress testing and frequent reporting. Agencies are required to adopt these practices when formulating risk management policies based on the nature, size and complexity of their derivative activities.

Generic templates for the Permitted Instrument and Investment Management Policies are attached at Appendix 1.

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[9] Public financial enterprises are excluded from these requirements. These principles also apply to interest rate and currency derivative transactions related to debt and treasury management. The use of energy derivatives should be treated separately and are covered in the 'Commodity Risk Policy' section.

[10] NSW Treasury, *Accounting for Financial Instruments*, TPP 06-4, June 2006

3. Treasury Management Framework

Public sector agencies that are authorised to undertake treasury functions are required to prepare policies approved by the Board (or the highest level of management where a Board does not exist) based on the *Treasury Management Policy* framework. Establishing successful policies involves articulating objectives, strategies and tactics and defining how performance will be measured. This process requires understanding and commitment throughout the organisation to attain these central goals.

Treasury unit policies need to be formulated on a case-by-case basis with consideration of the nature, size and complexity of financial market activities, particularly the quantitative limits. More detailed requirements, in the form of generic templates, are contained in Appendix 1.

3.1 Risks associated with treasury functions

The fundamental objective of financial risk management is to maximise returns from the agency's core functions while controlling exposures consistent with the agency's risk tolerance, which should be determined with regard to the Government's preferences. Agencies are not permitted to operate their treasury functions as profit centres as financial risk is not to be undertaken solely for the purpose of obtaining a market return. Financial risk must be managed on an aggregate net exposure basis.

Credit Risk

The Basel Committee on Banking Supervision[11] found that credit risk problems generally originate through:

- a lack of understanding between credit, market and liquidity risk interaction
- poor procedures for monitoring credit, and
- excessive risk concentrations

Agencies are required to adhere to the following guidelines:

- individual counterparties, limits and instruments are to be established and approved by the Board (or if there is not a Board, by the highest level of management), and
- transactions executed for the sole purpose of earning a premium in exchange for exposing a business to credit risk are prohibited (eg credit default swaps).

Additional credit risk requirements, including limits based on counterparty credit rating and agency debt levels, can be found in the 'Credit Risk Policy' attachment at Appendix 1.

Market Risk

Specifically market risk can be considered as interest rate, foreign exchange and commodity risks. While agencies have considerable scope in determining their exposure to market risk, current exposures must be closely monitored. Businesses should seek to minimise their exposures to illiquid or volatile markets by ensuring that contracts are only entered if they are able to be easily unwound.

[11] Basel Committee on Banking Supervision "Principles for the Management of Credit Risk" July 1999.

Interest rate risk

To address interest rate risk, agencies that have debt exceeding $20 million are required to:

- establish an appropriate 'neutral' benchmark or 'core' portfolio against which to measure performance and risk levels for gross interest rate exposures;
- define risk limits in relation to the structure of the actual debt portfolio as compared with its benchmark and any derivative instruments used to manage the debt; and
- monitor debt portfolio risk exposure and performance.

This approach is aimed at minimising unfavourable interest rate movements on the market value of debt and financial asset holdings. Any agencies who consider that the approach outlined above is not entirely suited to their circumstances can apply to NSW Treasury for a modified approach. Reasons for such application could include:

- relatively small size of portfolio and/or fixed maturity date,
- specific project financing not amenable to the approach, or
- circumstances / risks peculiar to a particular industry or agency.

Any applications will be considered on their own merits.

If a modified approach is approved, this would not in itself remove any obligation the agency may have under section 13 of the *Annual Reports (Statutory Bodies) Regulation 2005* to report details of the performance of its liability portfolio relative to the performance of its benchmark portfolio. However, some agencies may already have requested and obtained an exemption from this obligation under section 19 of the regulation.

Derivative instruments (eg interest rate futures, options, swaps and forward rate agreements) must comply with the Permitted Instruments Policy list, and approval for the use of these instruments must be ratified by the Board (or the highest level of management where a board does not exist). The use of derivative instruments must not be disproportionate to the size of the debt portfolio, recognising that derivative instruments can vary in value considerably as interest rates rise or fall. Derivative use should be limited to prudent levels as derivatives, in many cases (e.g. interest rate swaps), also incur additional State and agency credit risk.

Derivative usage limits should take market-related volatility into account as derivative values will be affected by this factor to differing degrees (for example 10 year bond futures have considerably higher volatility than 90 day bill futures). An appropriate means of achieving this is to relate maximum derivatives usage directly to the maximum allowable difference between the modified duration of the total actual debt portfolio and benchmark or 'core' portfolio.

Foreign Exchange Risk

As a matter of policy agencies are not to be exposed to unhedged foreign exchange rate risk. Agencies will need to identify their key sources of foreign exchange risk and address how these risks are to be managed in the context of the overriding aim of neutralising foreign exchange exposures. TCorp, while raising borrowings from time to time in foreign currency markets, will always convert these exposures into Australian dollars. Agencies will therefore not have any foreign exchange exposure in respect of such borrowings or debt.

Commodity Risk

Some agencies will have exposure to movements in the price of commodities (e.g. base metals, fuel, and electricity) as a direct consequence of their activities. Commodity risk management will need to occur where price risk management or availability of supply is essential for ongoing agency operation.[12]

Specific market risk requirements can be found in the Interest Rate, Foreign Exchange and Commodity Risk Policy attachments at Appendix 1.

Operational Risk

The Board and/or Executive management are responsible for ensuring that impact controls (e.g. insurance policies or cash reserves) are adequate to guard against Operational risk losses. Preventive controls will also need to be in place to reduce the incidence of Operational risk.

In preparing preventative controls agencies:

- should have a good understanding of where risks occur
- will need effective risk reporting and disclosure, and
- will need to foster a culture which encourages employees to act in the best interest of the organisation.

The Board of Directors (or the highest level of management where a board does not exist) should be aware of major Operational risks and periodically review the Operational risk strategy. This risk strategy will be implemented by Senior Management but should be approved by Directors and/or the Chief Executive/Director General.

Operational risk controls can also prevent business illiquidity by:

- developing a minimum required level of liquidity
- articulating treasury and core business cash forecasting responsibilities
- conducting detailed cash flow planning and assigning daily cash management responsibilities
- identifying working capital guidelines and targets
- adopting liquidity support arrangements, including surplus cash or access to on-demand funding, and
- implementing prudential limits on maturing debt in any one year period.

Since TCorp manages the liquidity of the State and provides short term finance to agencies through Come & Go Facilities, agencies will only need to independently manage cash and investments which are necessary to meet their current obligations.

Additional Operational risk requirements can be found in the Operational Risk Policy attachment in Appendix 1.

[12] More detailed guidance for electricity businesses is contained in NSW Treasury, *Energy Trading Policy for Retailers,* TPP 99-5, October 1999, and NSW Treasury, *Energy Trading Policy for Generators*, TPP 99-6, October 1999.

Benchmarks

Agencies are required to report on the performance of their treasury management functions, measured against appropriate benchmarks. These benchmarks are to be developed in consultation with Treasury and TCorp and should be formally expressed in the context of the SCI/SBI and RSP processes and monitored in the context of the existing reporting regimes. Agencies are required to establish a neutral benchmark and explicitly state acceptable risk boundaries where the portfolio is managed away from its risk-neutral position to increase returns or lower costs. The key to assessing the agency's risk neutral maturity profile is identifying how the income stream generated by the assets is produced and how debt varies over the asset life.

The application of modified duration provides a mechanism for assessing the degree of mismatch between the assets and the benchmark or liabilities of a portfolio and the portfolio's price sensitivity. In addition, agencies may need to apply supplementary benchmarks to reflect accounting and cash flow objectives. Benchmarks should be created for:

- total debt
- debt/(debt + equity)
- interest cost
- modified duration of benchmark portfolio
- investment income
- foreign currency exposure
- credit rating

4. Roles and Responsibilities

Boards and management perform a stewardship role and are responsible for gaining approval and developing business strategies and operational management. This involves:

- developing treasury management policies consistent with the framework;
- general purpose financial reporting, including recognition, measurement and disclosure of financial instruments, in accordance with Accounting Standards;
- continuous disclosure as outlined in the *Reporting and Monitoring Policy for Government Businesses*;
- operational management (including prudent risk management); and
- notifying NSW Treasury:
    - if new or renewed approvals under the *PAFA Act* are desired
    - existing approvals are no longer required, or
    - the terms and conditions are no longer appropriate.

TCorp, on behalf of public sector entities, is responsible for:

- obtaining financial accommodation on the most cost effective basis possible;
- managing outstanding liabilities so as to ensure ongoing cost effectiveness within acceptable risk limits;
- advising on and coordinating structured financing for client authorities in respect of special assets or projects; and
- managing funds to maximise returns, subject to security and liquidity restraints.

NSW Treasury is responsible for developing the *Treasury Management Policy* and its administration. The policy-making role involves:

- developing, promulgating and promoting the policy
- engaging stakeholders in consultative processes; and
- updating and revising the policy where necessary.

Agencies are responsible for risk administration in relation to treasury functions. This involves:

- ensuring that the *Treasury Management Policy* is applied as an overarching framework to manage risks associated with treasury functions
- monitoring risk management performance, and
- reporting any losses and their cause in quarterly exception reports and/or on a continuous basis, where appropriate.

4.1 Further Information

General inquiries concerning this document should be initially directed to:
Commercial Sector Performance and Reform Branch
NSW Treasury
Telephone: (02) 9228 3095
Internet: www.treasury.nsw.gov.au.

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Appendix 1: Treasury Management Template Policies

Permitted Instruments Policy

Purpose

The Permitted Instruments Policy describes the instruments that can be transacted under legislative requirements and the potential risks faced by the agency and inherent in these instruments.

Rationale

The approved agency instrument lists is governed by the operation of the *Public Authorities (Financial Arrangements) Act 1987 (PAFA Act)* and subsequent approvals granted by the Treasurer in relation to 'financial adjustments' (derivatives).

Policy Statement

The Board (or the highest level of management) resolves that:

- Only financial market instruments, to the extent provided under Part 3 of *PAFA Act* (in relation to investments) and as approved by the Treasurer (in relation to 'financial adjustments'), will be entered into subject to those instruments being legally binding and enforceable by law.
- Treasury will be notified if the power to enter into investments and/or financial adjustments is no longer required.
- Approved financial market instruments (or some subset) and delegations of authority will be deemed appropriate by the Board (or the highest level of management where a board does not exist).
- The agency will not undertake speculative transactions and only engage in instruments where an underlying exposure needs to be managed under the *PAFA Act*.
- Breaches of policy are to be reported to the Chief Executive Officer immediately and to the Board monthly with action proposed or undertaken. Where a board does not exist, breaches of the policy are to be reported to the highest level of management immediately and to the next management meeting for ratification of the action proposed or undertaken.
- Compliance issues and the strategy and timing for resolution are to be reported to NSW Treasury in the context of the *Reporting and Monitoring Policy for Government Businesses* for Government businesses or under the *Financial Management Framework* for other agencies.

Policy adopted: **[ ] 2007**
To be reviewed (no later than): **[ ] 2008**

Investment Management Policy[13]

Purpose

The Investment Management Policy establishes appropriate benchmarks for performance measurement and prudent limits for surplus fund[14] management.

Rationale

The investment management objective is to achieve an appropriate return for the level of risk assumed. Investments will be based on the nature and term of the underlying liability or cash flow requirements of the particular funds.

Where investment funds are managed by an agency or an outsourcing provider, a benchmark index is to be established. Management limits on the actual investment portfolio are to be established in terms of modified duration, maximum maturity, or asset sector allocation limits where applicable.

Policy Statement

The Board (or the highest level of management where a board does not exist) resolves that:

- All investments are to be in accordance with Treasury Management Policies.
- Investments in risk-leveraged derivative instruments are not permitted.
- Long-term investments are to be made on the basis of underlying liabilities relating to the funds.
- Funds held for particular purposes are to be managed in accordance with the recommendations set out in NSW Treasury Circular 03/09 *'Guidelines on Reporting of Investment and Liability Management Performance'*.
- Income relative to budget and returns relative to the appropriate TCorp Hour-Glass Facility (where investments other than Hour-Glass investments are made) are to be reported to the Board (or the highest level of management where a board does not exist) on a monthly basis.
- Breaches of prudential limits are to be reported to the Chief Executive Officer immediately and to the Board monthly with the action proposed or undertaken. Where a board does not exist, breaches of prudential limits are to be reported to the highest level of management immediately and to the next management meeting for ratification of action proposed or undertaken.
- Compliance issues and the strategy and timing for resolution are to be reported to NSW Treasury in the context of the *Reporting and Monitoring Policy for Government Businesses* or under the *Financial Management Framework* for other agencies.

Policy adopted:	**[ ]**	**2007**
To be reviewed (no later than):	**[ ]**	**2008**

[13] Under AASB 139 *Financial Instruments: Recognition and Measurement*, an investment strategy is required before certain financial instruments can be designated at fair value through profit or loss. See section 5.3 NSW Treasury, *Accounting for Financial Instruments*, TPP 06-4, June 2006.
[14] Surplus funds in this instance refer to cash balances exceeding the businesses requirements for working capital and an appropriate contingency for financial flexibility.

Credit Risk Policy

Purpose

The Credit Risk Policy establishes eligible counterparties with limits based upon counterparty credit rating and total agency debt.

Rationale

The objective of the Credit Risk Policy is to minimise the potential for counterparty default on investment transactions. Where an agency has significant credit exposures arising out of its other activities, the Credit Risk Policy will need to be more comprehensive to ensure that those credit risks are appropriately controlled in accordance with best practice. This is particularly important for agencies involved with electricity trading.

A ratings based approach will be the prime method by which credit risk will be assessed. This allows the use of external independent credit assessments and eliminates the need for the agency to allocate its scarce resources to perform credit evaluation. The ratings based policy results in a simple, easy to implement and highly prudent structure. Counterparty credit risk is spread through the operation of rating percentage exposure limits.

Credit policies may need to be expanded where credit risks flow from construction contracts. In this instance credit policies will require greater sophistication as counterparties may not have published ratings. Agencies entering construction contracts must ensure that their private sector counterparts have:

- a credit rating of at least A (Standard and Poor’s (S&P) and Fitch Ratings (Fitch)) or A2 (Moody’s), or
- a guarantee from a financial institution with a long term rating of A (S&P and Fitch) or A2 (Moody’s), or above.

It is strongly advised that agencies seek expert advice with regard to the development of a credit policy to cover these broader credit risks.

Policy Statement

The Board (or the highest level of management where a board does not exist) resolves that:

Investments may only be made with an Eligible Counterparty

An eligible counterparty is a counterparty which:

- is domiciled in an A+ or better (S&P) rated OECD country; and
- has a long term rating of at least A (S&P or Fitch) or at least A2 (Moody's), or a short term rating of at least A2 (S&P), P1 (Moody’s) or F2 (Fitch).

Short term exposure of less than one year:

- May be incurred to the limit set out below where the long-term rating is unavailable or ineligible, but there is a Fitch, S&P or Moody's short term rating of:

Tier	Short Term Rating	Long Term Rating Limit	
	S&P/Moody's/Fitch	**S&P and Fitch**	**Moody's**
1	A1+/P1/F1+	AA	Aa2
2	A1/ P2 /F1	A+	A1
3	A2/P2/F1	A	A2

Rating Reviews are to be acted upon:

- Counterparties placed on credit watch positive are to maintain current ratings and limits until a new rating is available.
- Counterparties placed on credit watch negative are to have long and short term ratings reduced by one notch (except where the short term rating is affirmed), with the appropriate reduction in limits applied, until a new rating is available.

Limit determination:

- TCorp investments and Hour-Glass Facilities are eligible investments without limits.
- Where an unrated counterparty receives the benefit of an unlimited and unrestricted parent guarantee, the limit is to be determined on the parent's rating.
- Credit limits are to be applied on a group basis. The total exposure to entities that are owned or guaranteed by a single entity is not to exceed the maximum credit limit of any entity in the group.
- Where a parent guarantee is limited by amount, the limit will be no higher than this level.
- Limits for individual counterparties are to be determined based on the value of the agency's outstanding debt and the rating of the counterparty. An example of credit limits for an agency with $200 million in outstanding debt is shown below:

Long Term Rating of Counterparty	Percentage of total Agency debt	Credit Limit per Counterparty ($m)
AAA/Aaa	[20%]	[40]
AA+/Aa1	[15%]	[30]
AA/Aa2	[10%]	[20]
AA-/Aa3	[8%]	[16]
A+/A1	[4%]	[8]
A/A2	[2%]	[4]

Calculation of the utilisation of limits

- Limit utilisation for a particular investment instrument is to be calculated based on market value (see previous table). Where this value is neither available nor consistent with standard practice in a particular market, face value or a percentage of the face value, of the securities held may be used.

Spread of Risks

- Limits should be established on the short term Tier 3 credit exposure maximum and Tier 1 minimum exposures. As a guide, the Tier 3 paper maximum should be 15 per cent of total credit exposures and the Tier 1 minimum exposure should be 20 per cent.

Documentation

- Where appropriate (eg for over-the-counter transactions such as interest rate and currency swaps), agencies will use documentation provisions[15] to mitigate credit risk and ensure transaction enforceability.
- The agency will explore the possibility of inserting early termination triggers in financial contracts to reduce counterparty default risk (eg in swap contracts). Appropriate early termination triggers could include inaccurate representations by counterparties, mergers and credit downgrades.
- The agency will, where possible, enter into netting agreements with counterparties with whom they regularly transact (eg in ISDA documentation) to reduce business credit risk exposures in the event of a default or a counterparty entering into liquidation.

Reporting

- Breaches of prudential limits are to be reported to the Chief Executive immediately and to the Board monthly for ratification of the action proposed or undertaken. Where a board does not exist, breaches of prudential limits are to be reported to the highest level of management immediately and to the next management meeting for ratification.
- The agency will endeavour to reduce any overexposure provided no significant costs are incurred. If this is not possible the transaction should be allowed to mature where it is not greater than 180 days.
- Longer dated transactions should be liquidated unless otherwise specifically approved by the Board or where a Board does not exist the Chief Executive or Director General.

Details of compliance issues and the strategy and timing for resolution are to be reported to NSW Treasury in the context of the *Reporting and Monitoring Policy for Government Businesses* for Government businesses or under the *Financial Management Framework* for other agencies.

Policy adopted:	**[**	**]**	**2007**
To be reviewed (no later than):	**[**	**]**	**2008**

[15] Applicable provisions include the market-standard International Swaps and Derivatives Association (ISDA) documentation.

Interest Rate Policy

Purpose

To establish a 'neutral' benchmark portfolio for measuring performance on liability management and set predetermined limits for benchmark variance and parameters for the use of hedging instruments.[16]

Rationale

Interest rate risk can be measured by the following separate components:

- *Economic effect* - focuses on the market value of an agency's debt portfolio, as reflected by the net present value of future cash flows, and the potential for this to be reduced by interest rate changes. That is, to manage the debt portfolio to achieve a lower cost of funds than the 'neutral' benchmark portfolio.
- *Accounting effect* - is the risk that movements in interest rates can adversely impact the reported periodic accounting result, e.g. the refinancing of maturing debt at higher interest rates or the realisation of losses as a result of liability management transactions.

A 'neutral' benchmark portfolio is to be established to enable comparison of the actual cost of funds for debt with the cost of the 'neutral' debt position.

The performance of the total debt portfolio (including any derivatives) should be measured against the benchmark on an economic basis, i.e. measuring the change in portfolio market value (including both realised and unrealised profits/losses on all physical and derivative instruments) compared with the change in benchmark portfolio market value.[17] Outcomes in terms of debt interest costs will also need to be considered in assessing debt management performance. Any performance fees paid to external debt portfolio managers will be primarily related to performance measured on this basis.

The benchmark portfolio will be taken to be the actual core portfolio of loans provided this is constructed within the specified benchmark constraints and not actively traded (apart from necessary loan draw downs or repayments and any transactions necessary to maintain the portfolio within the benchmark constraints). In this situation, any active management to provide performance relative to benchmark should then be undertaken in a separate sub-portfolio so that the performance relative to benchmark would be represented by the value added by sub-portfolio transactions.

Management limits on the actual total debt portfolio are to be established in terms of:

- maximum deviation of the total portfolio's modified duration from the benchmark portfolio's modified duration[18]; and
- maximum usage of hedging instruments (which may be directly related to the modified duration limits).

This approach is similar to the widespread investment practice of managing against indices and involves taking a deliberate position as opposed to passive holding.

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[16] The term 'hedging instrument' should be given its ordinary meaning throughout this document.

[17] More detailed guidance is contained in NSW Treasury Circular 03/09 *'Guidelines on Reporting of Investment and* Liability Management Performance'.

[18] Modified duration is the standard measure of volatility of a portfolio's value with respect to changes in interest rates.

Policy Statement

The Board (or the highest level of management where a board does not exist) resolves that:

- A neutral benchmark is to be established against which portfolio performance is to be measured. Establishing a debt benchmark is a complex task that requires high level treasury expertise. In cases where agencies do not have the requisite level of expertise external advice must be sought. The construction of an appropriate benchmark should have regard to factors such as:
  - the agency's business plan
  - future capital expenditure and other cash flow requirements
  - capital structure
  - the debt position of market participants and private sector competitors, and
  - the interest rate outlook.
- Management of the debt portfolio is to be achieved by two main methods:
  - adjustment of the debt maturity profile from time to time, to shorten or lengthen the actual portfolio's maturity structure relative to the benchmark portfolio, and/or
  - use of derivatives, where approved, to shorten or lengthen the portfolio maturity structure relative to the benchmark.
- The Board (or the highest level of management where a board does not exist) is to approve a maximum portfolio risk position, where risk is defined as:
  - the difference in modified duration from the benchmark portfolio. For example, where the benchmark portfolio has a modified duration of 3.0 years then such a limit may be set at, say +/- 0.5; and/or
  - a maximum deviation in percentage terms from the benchmark portfolio. For example, the benchmark portfolio may be set to contain, say 40 per cent in debt to mature in the next 12 months (floating rate debt) and 60 per cent thereafter. In such a case, the risk position could be specified to allow between 30 and 50 per cent as the floating rate range.
- The Board (or the highest level of management where a board does not exist) is to receive a monthly report covering:
  - compliance with the interest rate risk constraints, with policy breaches separately explained as to how the breach occurred and action undertaken or proposed to remedy the breach. The Board (or the highest level of management where a Board does not exist) must ratify any action to remedy a breach.
  - the market value cost of funds of the actual and "neutral" benchmark portfolios, and
  - actual and budget comparison for interest expense and the expected interest expense outcome for the financial year.
- Details of compliance issues and the strategy and timing for resolution are to be reported to NSW Treasury in the context of the *Reporting and Monitoring Policy for Government Businesses* for Government businesses or under the *Financial Management Framework* for other agencies.

Policy adopted:	**[ ]**	**2007**
To be reviewed (no later than):	**[ ]**	**2008**

Foreign Exchange Risk Policy

Purpose

The Foreign Exchange Risk Policy is to ensure that the agency's foreign exchange exposure is minimised through hedging instruments.

Rationale

The objective of this policy is to mitigate the potential for financial loss arising through unfavourable exchange rate movements. As a matter of policy, agencies should not be exposed to foreign exchange rate risk.

Policy Statement

The Board (or the highest level of management where a board does not exist) resolves that:

- Net foreign exchange positions in all currencies will be regularly monitored, including reconciliations to financial statements (Profit and Loss, Balance Sheet and Cash Flow) and stress simulation tests.
- Net foreign currency exposures totalling more than $500,000 are to be managed within five days of the exposure arising.
- An exposure is to occur at the firm commitment of an approved purchase or a signed contract in a foreign currency.
- Where a contingent foreign exchange exposure in excess of $500,000 emerges (for example where a tender is submitted), the Chief Executive Officer is to be advised and the management of that exposure reported to the Board at its next meeting. Where a Board does not exist breaches are to be reported to senior management immediately and to the next management meeting for ratification of the action proposed or undertaken. Management options for a contingent exposure can include leaving the position uncovered, option strategies and forward cover or any combination of the above.
- Gross exposures to foreign currency exchange rates (including costs and revenues and segmentation by price and volume), details of hedging instruments and the source of benchmarks for forward price curves are to be reported to the Board on a monthly basis.
- Policy breaches are to be reported to the Chief Executive Officer immediately and to the Board monthly with the action proposed or undertaken. Where a Board does not exist breaches are to be reported to senior management immediately and to the next management meeting for ratification of the action proposed or undertaken.
- Details of compliance issues and the strategy and timing for resolution are to be reported to NSW Treasury in the context of the *Reporting and Monitoring Policy for Government Businesses* for Government businesses or under the *Financial Management Framework* for other agencies.

Policy adopted:	**[**	**]**	**2007**
To be reviewed (no later than):	**[**	**]**	**2008**

Commodity Risk Policy

Purpose

The purpose of the Commodity Risk policy is to ensure that agencies are aware of risk exposures and take appropriate action to offset positions, if deemed necessary, through hedging instruments or contracts.

Rationale

The objective of this policy is to ensure that agencies are able to adequately source key inputs to their production processes at prices which do not place the organisation in financial stress. The decision to hedge commodity risks will be at the discretion of the Board for Government businesses or the Chief Executive/Director General for other agencies.

Sufficient liquidity exists in a number of commodity markets to provide inexpensive cover often up to (and in some cases beyond) 12 months into the future. Where commodity markets are unable to provide this cover, contracts can be used to guarantee supply or act as a commodity hedge.

Policy Statement

The Board (or the highest level of management where a board does not exist) resolves that:

- Where necessary, adequate contractual supply agreements will be in place for essential businesses inputs such as electricity and water access rights. The decision whether to enter into supply contracts or to engage in spot market purchases will be an individual business risk decision which the Board or Chief Executive/Director General (where a Board does not exist) will need to manage.
- Where the Board or Chief Executive/Director General decides that these risks should be eliminated, the business must not enter into a position where it over hedges its existing exposures.

Policy adopted:	**[**	**]**	**2007**
To be reviewed (no later than):	**[**	**]**	**2008**

Operational Risk Policy

Purpose

The Operational Risk Policy establishes a prudential framework covering approved policies, best practice internal controls and reporting systems for treasury risk management. Agencies are required to seek board approval or approval by the highest management level where a board does not exist.

Treasury risk management may be outsourced to a competent treasury management expert providing that the terms of engagement specify that compliance with the *Treasury Management Policy* and related requirements are mandatory.

Rationale

The primary objectives of the Operational Risk Policy are to:

- have a good understanding of where risks occur
- develop and maintain effective reporting and disclosure of risks, and
- foster an organisational culture which encourages employees to act in the best interest of the organisation.

For these objectives to be met in an efficient and effective manner, best practice requires the establishment of:

- approved policies and procedures documentation, with regular reviews as business and market circumstances change or on an annual basis, for all treasury activities
- appropriate segregation of duties between staff responsible for initiating transactions, settlements, accounting, risk control and performance measurement
- Board (or where a Board does not exist Chief Executive/Director General) reporting requirements for existing and future liquidity positions
- programs to develop staff expertise to the appropriate skill level and degree of specialisation in line with their responsibilities
- procedures to manage the risks associated with outsourcing, including reputation risks and service disruption, and
- adequate systems and additional controls including:
  - business continuity or disaster recovery plan for treasury operations
  - effective reporting systems including sensitivity analysis
  - appropriate delegations of authority
  - a treasury code of conduct including permitted instruments
  - appropriate contractual agreements with external managers
  - regular audit of treasury operations to ensure compliance with policies
  - re-evaluation of the success or failure of past transactions, and
  - accurate detailed preparation of cash flow projections and the implementation of prudential limits on maturing debt in particular financial years.[19]

[19] The frequency and provision of forecasts should be determined by the size and nature of the mismatches which will ensure that the funding pressures on the State are within reasonable limits.

Policy Statement

The Board (or the highest level of management where a board does not exist) resolves that:

- Treasury risk management will be conducted in accordance with the *Treasury Management Policy* and related requirements.
- Operational risk management may be outsourced to a competent treasury management expert for all treasury management functions or elements of those functions.
- Operational risk management is to be carried out internally or through an outsourcing provider with:
  - qualified and experienced personnel acting under specific delegations with appropriate segregation of duties and acting within a best practice code of conduct, and
  - superior standard systems incorporating effective performance reporting and sensitivity analysis with a regularly tested business continuity plan.
- Compliance issues and the strategy and timing for resolution are to be reported to NSW Treasury in the context of the *Reporting and Monitoring Policy for Government Businesses* for Government business or under the *Financial Management Framework* for other agencies.
- Detailed cash flows are to be prepared by management on an ongoing basis highlighting material net liability gaps.
- No more than [30] per cent of total face value debt is to mature in any one financial year.

Breaches of prudential limits are to be reported to the Chief Executive immediately and to the Board monthly for ratification of the action proposed or undertaken. Where a board does not exist, breaches of prudential limits are to be reported to the highest level of management immediately and to the next management meeting for ratification.

Any cash balances exceeding the business' working capital needs, approved capital investments and an appropriate contingency for financial flexibility will be classified as excess cash. In accordance with the *Financial Distribution Policy*, excess cash[20] is required to be returned to shareholders as investment in financial assets are not core operations for Government businesses.

Policy adopted:	**[**	**]**	**2007**
To be reviewed (no later than):	**[**	**]**	**2008**

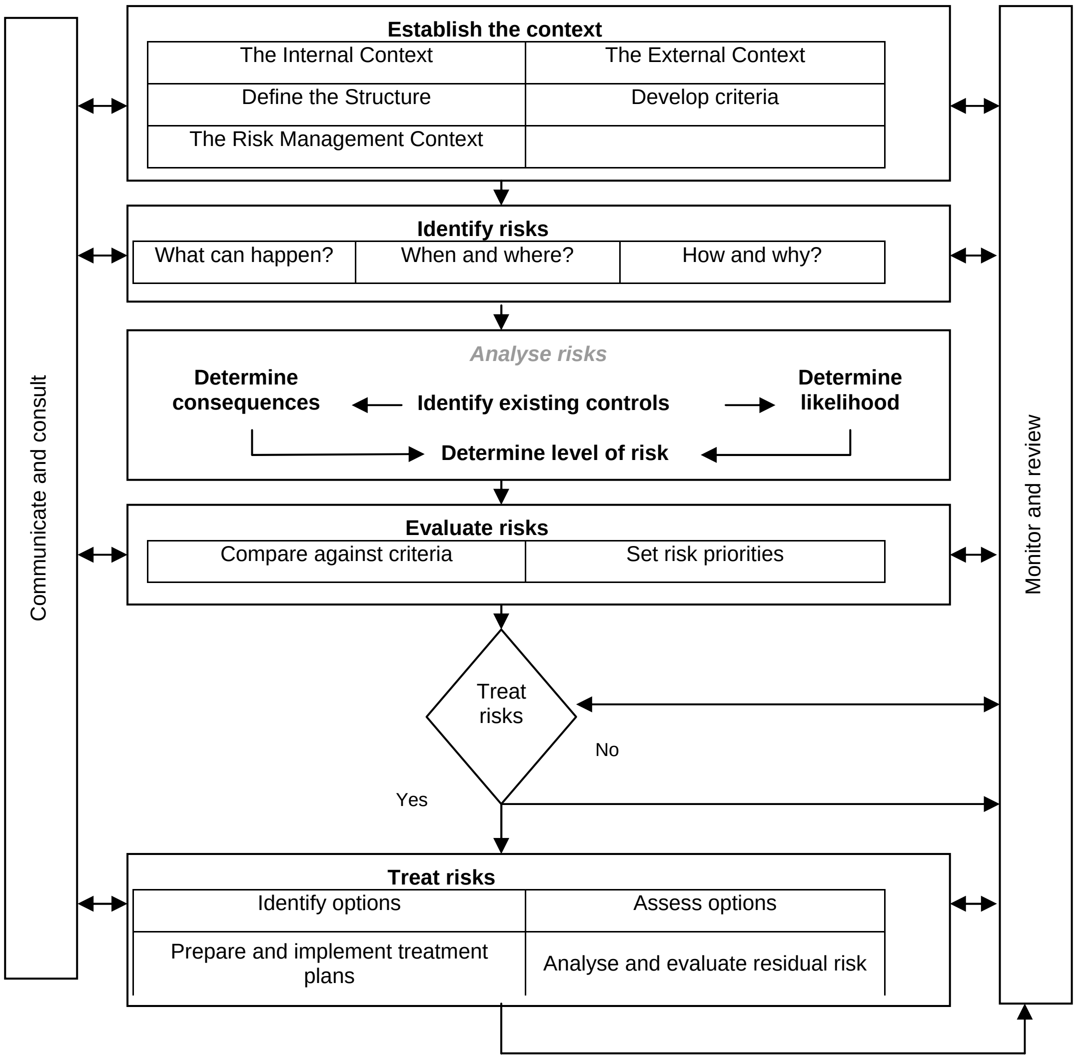
[20] Under the *Financial Distribution Policy for Government Businesses* (TPP02-3, June 2002) excess cash is defined as any cash balances exceeding the business' requirements for working capital, the funding of acceptable investments and an appropriate contingency for financial flexibility.

Appendix 2: Finance Theory and Private Sector Practice

Risk management

Risk management is an established business discipline that requires the application of quantitative and qualitative tools in the identification, measurement and management of the potential for loss. Detailed guidance on risk management is contained in the *Risk Management and Internal Control Toolkit* (TPP 97-3) and the Australian and New Zealand standard on risk management (AS/NZ 4360: *2004 Risk Management*). The Australian and New Zealand standard provides a generic framework for the establishment and implementation of the risk management process.[21] The multifaceted process is depicted below:

Risk Management Process – in detail



[21] AS/NZS 4360: 2004 Risk Management is a joint standard prepared by the Joint Standards Australia/Standards New Zealand Committee OB/7 on Risk Management as a revision of AS/NZS 4360: *1999 Risk Management*.

Financial risk management

Financial risk management is becoming more widespread in response to volatile markets, developments of new technology and the dismantling of regulatory constraints. This situation has led to the evolution of a range of financial risk management products which can be used to manage exposures. The increasing focus on financial risk management has generated much debate in academic circles as to whether it affects firm value.

Although the vast majority of financial risk management material has concentrated on financial intermediaries, these principles can equally apply to the corporate sector. The extent of treasury unit involvement in financial risk management will depend upon the nature, size and complexity of their treasury functions and associated risk exposures.

Corporate treasuries differ from financial intermediaries as they are subject to inherent market risks from normal operations. To this extent, corporate treasuries traditionally operate as a cost centre while financial institution treasuries are profit centres. A large number of highly publicised failures at an international level have led to risk management strengthening. These failures strengthen the argument that corporate treasuries should only operate as cost centres.[22]

Modigliani and Miller[23] in their seminal paper established the relationship between the value of a firm and its financial policies. Smith and Stultz[24] and, Froot, Scharfstein and Stein[25] translated this general proposition into a specific rationale for the use of risk management. These theoretical studies indicated that risk management has the potential to add value by facilitating optimal investment and, reducing the costs of financial distress and taxes.

Smithson[26] supports the notion that financial risk management can increase shareholder value under certain conditions. He argues that financial risk management, which avoids excessive business debt, can encourage optimal investment by:

- reducing the likelihood that creditors will impose restrictive debt covenants
- avoiding excessive debt servicing costs for businesses with high debt to equity ratios, and
- discouraging businesses, who are under threat of liquidation, from pursuing projects with short payback periods instead of investing in projects with the highest net present value.

Smithson argues that the cost savings from reduced financial stress will depend on a firm's probability of encountering this situation and the resulting cost if it occurs. Direct financial distress expenses effectively occur through liquidation or bankruptcy. Businesses are also likely to face indirect financial distress costs through higher contracting costs with suppliers, employees and customers.

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[22] Some of the highly publicised derivative disasters include Proctor & Gamble, Metallgesellchaft and Orange County.

[23] Modigliani F and Miller M H, "The Cost of Capital, Corporation Finance and the Theory of Investment," *American Economic Review*, 48: p.261-297, June 1958.

[24] Smith, C Jr and Stulz, R, "The Determinants of Firms' Hedging Policies," *Journal of Financial and Quantitative Analysis*, 20, p.391-405, 1985.

[25] Froot K, Scharfstein, D and Stein, J, "Risk Management and Co-ordinating Corporate Investment and Financing Policies," *Journal of Finance*, 48, p.629-658, 1993.

[26] Smithson, C, "Managing Financial Risk: A guide to derivative products, financial engineering, and value maximization", 1998, p.503-508.

Private sector practice

Since the early 1990s, there has been increased emphasis on the establishment of an independent risk management function. Within the financial sector, the Basel Committee on Banking Supervision has been the major player developing financial risk management standards. Despite the Basel Committee's emphasis on addressing Credit and Operational risks, much of this work is relevant for corporate treasuries. The main financial risks faced by corporate treasuries are Market risks, which occur due to underlying business exposures.[27] It is, however, important for Government businesses to develop strategies to address Operational and Credit risks.

[27] Jorion, P. Value at Risk, 2001, McGraw Hill, 2nd edition, Chapter 19

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