New South Wales
TREASURY

Office of Financial Management

COMMERCIAL POLICY FRAMEWORK

CAPITAL STRUCTURE POLICY FOR GOVERNMENT BUSINESSES

Office of Financial Management

Policy & Guidelines Paper

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Preface

The *Capital Structure Policy for Government Businesses* is a component of the NSW Government's Commercial Policy Framework.

The Framework aims to replicate within Government businesses the disciplines and incentives that lead private sector businesses towards efficient commercial practices.

The key purpose of the *Capital Structure Policy* is to ensure that Government businesses are financed by an appropriate mixture of debt and equity. The policy outlines a commercially-based methodology for determining an appropriate capital structure and a minimum-to-maximum capital structure range for a Government business. The methodology establishes surrogate mechanisms that replicate the disciplines and incentives of debt and equity markets.

The policy supersedes the previous NSW Treasury policy document on this matter, NSW Treasury's *Capital Structure Policy for NSW Government Trading Enterprises*, August 1994. The policy is to be read in conjunction with the NSW Treasury's *Financial Distribution Policy for Government Businesses*, (TPP 02-3, June 2002).

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Executive Summary

Capital is provided to a firm from two sources – debt and equity. The mixture of debt and equity used to finance the assets of a firm is referred to as its capital structure.

Debt and equity involve different costs. The cost of debt is the regular interest payments required to service the debt. The cost of equity is the minimum return demanded by the investor – a return that is related to the perceived risk of investing in the particular firm.

Providers of debt finance have a priority claim on the assets of the business should the business fail, whereas equity investors have only a residual claim. In addition, the return on an equity investment is subject to potential variability in the profits of a firm. As a result, the provision of equity is more risky than the provision of debt. For this reason, debt is generally cheaper than equity.

Modern finance theory holds that the use of cheaper debt financing (also known as gearing or financial leverage) can increase the value of a firm. This is partly due to the tax deductibility of interest payments and the disciplines imposed on firm managers by the need to make regular interest payments. On the other hand, the benefits of increased debt financing can be limited by a greater risk of financial distress or business failure and the constraints that higher interest payments place on the capacity of a firm to meet unexpected expenses or to undertake new investment opportunities.

The balancing of these issues is central to the task of determining an appropriate capital structure for a business.

Policy Application and Objectives

In the private sector, the way in which debt and equity markets operate imposes a limit on the level of gearing for a particular business. If the business is considered to be too highly geared, it will have difficulty obtaining additional debt or attracting equity investors (due to the increased riskiness of the investment).

Government businesses are not subject to these debt and equity market disciplines. It is therefore necessary to establish a surrogate mechanism for determining an appropriate mixture of debt and equity for a Government business.

The *Capital Structure Policy* applies to all Government businesses. The objectives of the policy are to:

- allow for an appropriate return on equity;
- generate appropriate incentives for boards/management and encourage them to make efficient investment decisions on a commercial basis;
- provide boards/management with greater certainty regarding the capital structures of their businesses;
- ensure these businesses do not enjoy any special advantages over their private sector competitors; and

- work together with the *Financial Distribution Policy*[1] to provide a relatively stable stream of total dividends to the Government as shareholder and, at the same time, ensure that dividends work to maintain the agreed capital structure.

Cash Flow Based Risk Analysis of the Business

The first stage of determining the capital structure for a Government business involves a cash flow based risk analysis, in order to determine the debt capacity of the business. This involves the following steps:

- development of a business profile;
- review of business plans and forecasts;
- undertaking business risk analysis;
- constructing a model to analyse the cash-flows; and
- undertaking sensitivity analysis of the impact of key variables on the cash flows.

Determination of Appropriate Capital Structure and Range

Under the policy, both an appropriate capital structure and a minimum-to-maximum capital structure range are to be determined. The range represents the acceptable variation from the capital structure and provides for flexibility given:

- the 'lumpy' nature of capital expenditure of many Government businesses;
- the Government's preference for a relatively stable stream of total dividends from its portfolio of businesses; and
- the need to allow for contingencies such as unforeseen additional expenditure or unanticipated value-adding investment opportunities.

The use of a range recognises that the value of a firm is relatively unaffected if its capital structure varies within certain bounds. The width of the range will vary for each Government business, depending on the volatility of its cash flows and the competitiveness of the market in which the business operates.

The capital structure and range must also be consistent with the following criteria:

- provision of an acceptable stream of dividends;
- maintenance of an appropriate investment grade rating, taking into account industry and firm specific factors;
- ability to meet key debt service criteria, based on industry benchmarks;
- capacity to finance the approved capital expenditure program through internally generated cash flows and debt, with consideration of the current phase of the investment cycle; and
- provision of sufficient flexibility for relevant contingencies.

[1] See *Financial Distribution for Government Businesses*, TPP 02-3, June 2002.

Setting and Reviewing Capital Structure

The capital structure and range are to be negotiated between the board/management and the shareholders (represented by NSW Treasury) for each Government business. A comprehensive capital structure study is required in the following situations:

- corporatisation of a Government business;
- the introduction of, or significant increase in, competition in output markets;
- a significant asset revaluation;
- an unexpected and persistent change in the business' investment cycle;
- an unexpected change in market conditions or the business' financial position, which is expected to persist into the long term; and
- mergers or significant restructures of Government businesses.

In addition, a Government business' agreed capital structure and range would be informally reviewed every year as part of the negotiation of Statements of Corporate Intent/Statements of Business Intent. The purpose of such a review is to confirm whether or not the Government business' current capital structure and range continue to be appropriate and, if not, to negotiate revised arrangements between the board and shareholders.

Relationship to Financial Distribution Policy

The *Capital Structure Policy* and the *Financial Distribution Policy* are inextricably linked. The *Financial Distribution Policy* guides the negotiation of dividend targets and also provides for capital repayments. Capital repayments are a form of financial distribution which may be used to achieve an appropriate capital structure, where it has been determined that the Government's equity in a business should be reduced.

Under the *Financial Distribution Policy*, dividend targets for a Government business are negotiated with reference to post-tax profits and the amount of residual cash available in the business, after allowing for working capital, and the funding of acceptable investments consistent with the target capital structure range. The preferences of the shareholder for dividends must also be considered.

This expected level of normal dividend is a key input used in setting a business' capital structure. It is used to ensure that the dividend preferences of the shareholder, over the long run, are taken into account when determining the appropriate level of debt for a business.

Once the capital structure has been determined, however, it will operate as a constraint on dividends. In other words, actual dividend payments must maintain the business' capital structure within the approved range.

1. Introduction

In New South Wales, Government businesses[2] are involved in delivering a range of essential goods and services to the community. The Government expects these businesses to deliver strong financial performance, as well as efficient and reliable services for the NSW community.

Since 1988, the Commercial Policy Framework has applied to Government businesses. The Framework consists of a suite of policies aimed at replicating, as far as possible, the disciplines and incentives that lead private sector businesses toward efficient commercial practices. The fundamental objective of the Framework is to maximise the wealth of the people of New South Wales, by requiring the boards/management of Government businesses to allocate resources efficiently and to be accountable for financial management.

The people of New South Wales are ultimately the shareholders of these businesses, however, the interests of the shareholders are represented by Ministers of State. In the context of Government businesses, the term 'shareholders' is used in this document to refer to Ministers of State who act as representatives of the people of New South Wales. For State Owned Corporations (SOCs), these Ministers are known as Voting Shareholders. There are two Voting Shareholders for every SOC. One Voting Shareholder is the Treasurer, while the other is a Minister nominated by the Premier. For non-corporatised Government businesses, the 'shareholder' role is shared by the Treasurer and the relevant Portfolio Minister.

The *Capital Structure Policy for Government Businesses* is one of the key policy mechanisms which help to ensure that Government businesses operate on a commercial basis and make appropriate investment decisions.

Capital structure refers to the mixture of debt and equity used to finance the assets of a firm. Decisions concerning capital structure can have significant impacts on the value of the firm and its cost of capital.

This document explains the rationale behind the *Capital Structure Policy* and sets out the methodology for determining the appropriate capital structure for a Government business.

[2] 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 also non-Budget dependent and operate under the Commercial Policy Framework).

2. Background

2.1 The cost of capital

Capital is provided to a firm from two sources – debt and equity. The mixture of debt and equity used to finance the assets of a firm is referred to as its capital structure.

Providers of debt and equity capital require a rate of return on their capital sufficient to induce them to lend to, or invest in, the firm. The required rate of return on debt and equity represents the cost to the firm of using each of these two sources of funds.

Debt and equity involve different costs, due to the different risks associated with the two forms of financing. Debt holders have a priority claim on the assets of the business, whereas equity holders have a residual claim on the firm's assets. The return on equity is therefore subject to the potential variability of annual profits and as a result, debt is less risky than equity. For this reason, debt is generally cheaper than equity.

The cost of debt is the regular interest payments required to service the debt. The cost of equity is the minimum returns demanded by the providers of equity finance. The required minimum return on equity is an 'opportunity cost'. An investor will require a return that is at least as great as the return available from virtually risk-free government bonds (the risk-free rate), plus a margin to compensate for the risk involved in investing in the firm. The margin required will depend on the overall risk (business and financial risk) of investing in the particular firm.

The combined cost of debt and equity capital to an organisation is generally referred to as the 'cost of capital', or the 'Weighted Average Cost of Capital' (WACC).[3]

2.2 Purpose of the policy

The key purpose of the *Capital Structure Policy* is to ensure that an appropriate mixture of debt and equity finances Government businesses. This encourages the boards/managers of these businesses to make efficient, commercial investment decisions and thereby maximise returns to the shareholders.

As in the private sector, Government businesses assess whether or not a potential investment project will add value to the business, by comparing the expected returns of the investment with the firm's cost of capital. If the returns exceed that cost of capital, the project will add value to the firm.

Inappropriate or inefficient investments can be made if a firm's cost of capital is not based on commercially sound principles. Excessively high or low levels of gearing will provide a high cost of capital, discouraging a firm from undertaking investment opportunities that may otherwise have added value to the firm.

[3] The Weighted Average Cost of Capital is calculated as the weighted average of debt and equity costs, with the weights being the respective proportions of debt and equity relative to the overall assets held in the business.

In addition, capital structures set on a commercial basis allow for an appropriate return on equity. This ensures that the Government, as shareholder, earns a comparable rate of return from its equity investment in a Government business as that earned by equity holders in private sector firms with similar risks. A commercially based capital structure therefore ensures that distortions in resource allocation between the private and public sectors are minimised.

As well as promoting economic and allocative efficiency in resource use, an agreed capital structure protects the commercial interests of Government businesses, as it limits the Government's ability to seek excessive dividends. At the same time, it provides the boards/managers of Government businesses with greater certainty that enables them to plan more effectively.

From the shareholders' perspective, establishing an appropriate capital structure for a Government business ensures that the Statement of Financial Position of the business is commercially sound and provides the right incentives and disciplines on the business' board/management. It ensures that expected returns on equity will not be jeopardised, through board/management use of retained earnings to either repay debt or to fund a greater-than-agreed proportion of capital expenditure. Similarly, a commercial level of debt provides financial disciplines on management's use of free cash flows and therefore provides incentives for management to minimise operational inefficiencies, limit the "gold plating" of investments and discourage the pursuit of non-commercial ventures.

2.3 Relationship to other policies

The *Capital Structure Policy* operates together with a number of other policies within the Commercial Policy Framework.

2.3.1 Financial Distribution Policy

The *Capital Structure Policy* and the *Financial Distribution Policy for Government Businesses* are inextricably linked.

The *Financial Distribution Policy* guides the negotiation of dividend targets and also provides for capital repayments. Capital repayments are a form of financial distribution that is used to achieve an appropriate capital structure, where it has been determined that the Government's equity in a business should be reduced.

Under the *Financial Distribution Policy*, dividend targets for a Government business are negotiated using a "modified residual approach". This means there is consideration of the level of post-tax profits and the amount of residual cash available in the business, after allowing for working capital and the funding of acceptable investments, while maintaining the capital structure within the target range. The residual approach is modified, however, to take into account the preferences of the shareholder for dividends.

The expected level of normal dividends is a key input used in setting a business' capital structure. This ensures that the dividend preferences of the shareholder over the long run are taken into account, when determining the appropriate level of debt for a business.

Once the capital structure has been determined, however, it will operate as a constraint on dividends. In this way, actual dividend payments are used to maintain the business' capital structure within the approved range.

2.3.2 Monitoring and accountability

The Government's relationship with its businesses can be compared to a private sector holding company, which controls a number of wholly owned subsidiaries. The subsidiaries are accountable to the holding company for their financial performance. This involves the holding company in the setting of performance targets and monitoring of results.

The *Capital Structure Policy* operates within the context of the monitoring and accountability regime for Government businesses.[4] The regime is based on an annual written agreement between the shareholders and board/management of each business, known as a Statement of Corporate Intent (SCI) for a State Owned Corporation and a Statement of Business Intent (SBI) for a non-corporatised business. The purpose is to enhance accountability for performance and provide the business with certainty as to the shareholders' expectations of financial performance.

The Statement contains, amongst other key matters, financial performance targets and the capital program for a four-year period, along with the business plan and projected financial statements over a 10-year period. The capital structure, including the minimum-to-maximum range, is one of the financial performance targets to be agreed in the Statement, in accordance with the *Capital Structure Policy*.

2.4 Public Authorities (Financial Arrangements) Act 1987

In addition to the negotiation and agreement of capital structure through the SCI/SBI process, Government businesses will have to comply with certain requirements under the *Public Authorities (Financial Arrangements) Act 1987*. Government businesses should ensure that the necessary procedures are completed before, for example, obtaining financial accommodation.

2.5 Application of the policy

The *Capital Structure Policy* applies to all Government businesses involved in trading activities. Government businesses involved in financing activities (such as NSW Treasury Corporation) should be subject to prudential rules and practices, such as capital adequacy requirements, which govern similar firms in the private sector. In these cases, the shareholders should set a risk-based return on equity target, rather than focussing on the Weighted Average Cost of Capital in determining an appropriate capital structure.

[4] At the time of publication of this document, the *Monitoring Policy for NSW Government Trading Enterprises* is under review.

3. Capital Structure Theory and Practice

3.1 How debt affects the value and performance of the firm

There has been considerable debate in the finance literature about the optimal capital structure for a firm. Optimality in this context is concerned with the impact of capital structure on the market value of the firm, where the market value of the firm is calculated as the discounted present value of its expected future cash flows.

Clearly, if altering a firm's capital structure could reduce its Weighted Average Cost of Capital (WACC), then the value of the firm would increase, since the WACC is the appropriate discount rate for discounting future cash flows. Similarly, the value of the firm could be increased through financial leverage to the extent that the use of debt imposes a discipline on management, thereby promoting operational efficiency and increasing output.

Modern finance theory indicates that the use of gearing can increase the value of the firm either directly or indirectly through such factors as:

- the tax effects of debt financing on the cost of capital; and
- the incentive effects of leverage (ie by reducing management's access to discretionary cash flows).

However, the benefits of increased gearing are also limited by such factors as:

- the costs of financial distress or failure at high levels of leverage; and
- the restriction that leverage places on the firm's requirements for financial flexibility.

The implications of these factors for the determination of an optimal capital structure are discussed below.

3.1.1 Tax effects of debt financing

The interest that a company pays on debt is a tax-deductible expense. Debt financing therefore provides a 'tax shield' that may have the effect of increasing the return to the equity investor, compared to a similar firm with no debt. In this way, gearing can lower the cost of capital of a firm and increase its value.

The introduction of dividend imputation in Australia in the 1980s, however, reduced double taxation of dividends and therefore decreased the relative advantage of debt financing. To the extent that shareholders can use imputation credits, taxes paid at the corporate level are effectively returned to shareholders. If tax credits can be fully utilised, the use of debt financing has no tax advantage relative to equity financing – both dividends and interest are only taxed once in the hands of shareholders and debt holders.[5]

Despite this result, empirical evidence suggests that the tax benefits of debt do not appear to be fully offset through dividend imputation, as investors tend to have different tax positions.

[5] The impact of dividend imputation is considered for Government businesses to ensure competitive neutrality objectives are met. Examples include the determination of a regulated rate of return and the conduct of financial appraisals.

3.1.2 Incentive effects of leverage

The use of gearing may increase the output and cash flows of the firm by providing a discipline on management that aligns the interests of shareholders and managers.

Shareholders who invest in a firm face the risk that managers may erode the value of the firm by not always acting in the shareholder's best interests. Shareholders are primarily concerned with maximising the value of their shares. Managers, on the other hand, face a range of incentives and pressures that may result in them pursuing actions that do not maximise the value of the firm. For instance, management may seek to maximise the size of the firm, as management's pay is often related to the size of the firm. Similarly, managers may prefer to operate with a certain degree of financial slack that enables 'cost padding', to the benefit of employees and management.

'Agency costs' arise from the discretion that management has over the operating cash flows of the business, as it is costly for shareholders to monitor the actions of managers. Debt financing may, therefore, provide one way of managing 'agency costs' by imposing a discipline on managers to pay fixed interest and loan repayments out of free cash flows and thereby reducing management's discretionary use of operating cash flows.

However, there is a limit to the use of leverage to create appropriate incentives for managers to maximise firm value. At very high levels of debt, management may face a disincentive to perform if they perceive that they have too little control over the cash flows generated in the business and how these cash flows are employed.

3.1.3 Costs of financial distress

The risk of financial distress or bankruptcy is perhaps the most important constraint on a firm having too high a proportion of debt in its capital structure. Financial distress occurs when promises to debt holders are broken or honoured with difficulty. Increased gearing exposes the firm to a greater risk of default.

Unlike equity financing, debt financing commits a firm to make interest payments and repay principal, irrespective of its earnings. As the level of gearing increases, a greater proportion of the firm's earnings are apportioned to interest payments, which must be met in order to prevent debt holders from forcing the firm into liquidation.

To compensate for the increased risk of default, debt holders demand higher payoffs upfront, in the form of higher interest rates. In addition, they tend to impose more restrictive conditions on debt contracts, which may prevent firms from entering into risky projects, even if the projects are expected to yield returns in excess of the WACC. The impact of higher interest costs and contract restrictions may actually place the firm at further risk of default.

In addition, due to the contractual conditions that apply to debt (as a claim on the underlying assets of the firm), equity holders bear more of the 'financial risk' of the firm as leverage increases. Consequently, to the extent permissible by debt contracts, as the firm approaches bankruptcy, sub-optimal decisions may be made in order to realise immediate cash. These decisions reduce the value of the firm. In the extreme case that the firm is liquidated, the firm incurs legal costs which further reduce the firm's value.

The risk of financial distress will largely depend on the earnings and cash flow volatility of the firm. Generally, a firm with a lower earnings and cash flow volatility will be able to bear greater debt before the onset of financial distress than one with higher earning and cash flow volatility.

Specifying a capital structure, which takes account of the firm's cash flow volatility, can reduce the potential costs of financial distress. Typically, an investment grade credit rating is used as a guide of an acceptable risk of default.

In summary, the priority of debt holder claims on the assets or cash flows of the firm and the costs of financial distress and bankruptcy will generally, in the absence of parent company guarantees, impose limits on funding a very high proportion of a firm's assets by debt.

3.1.4 Financial flexibility

Financial flexibility can be defined as the ability to fund unscheduled expenditures at short notice and at reasonable cost under a wide range of financial market conditions. It essentially refers to the firm's internal funding and capacity to raise debt, since these are the sources of finance that tend to be immediately available.

In the long run, a firm's value depends more on its capital investment and operating decisions than on its financing decisions. The value of the firm will not be maximised if the firm is so highly geared that it is unable to invest in value-adding opportunities as they arise.

The key benefits of financial flexibility include:

- the ability to accommodate unexpected expenditure arising from changes to a business' operating environment or its strategic financial plan, without disrupting operations; and
- the ability to fund unplanned value-adding investment opportunities.

The need for financial flexibility will vary with the characteristics of the firm's business. For businesses whose operating expenditures do not vary markedly from budgeted levels, and where unexpected investment opportunities are unlikely to arise regularly, the need for financial flexibility will not be a significant requirement. For such businesses, there is therefore a limited need to maintain excess debt capacity.

3.2 Conclusion

Financial theory indicates that financial gearing may be used to increase the value of the firm beyond the level achievable by an ungeared (all equity financed) firm. Increased value can arise due to reductions in the WACC (mainly through tax effects, though this is offset by imputation) as well as increases in output (resulting from the discipline debt places on management's decisions). However, despite the benefits of gearing, several risks exist at high gearing levels that may have a negative impact on the performance of the firm, including the risk of financial distress and bankruptcy, and the limited financial flexibility that high levels of gearing place on the firm.

Finance theory suggests that, in choosing its optimal capital structure, a firm will therefore need to consider a number of 'trade-offs'. For instance, the tax benefits associated with debt financing will reduce a firm's cost of capital (but only in markets where shareholders cannot utilise the full value of imputation credits). However, the benefits of greater debt financing are limited by the risk of financial distress and default at high debt levels. Similarly, an optimal capital structure for a firm is determined partially by the trade-off between having sufficient financial flexibility to meet unexpected value adding investment expenditures and not having a level of financial slack that fails to discipline the decisions of management.

Although financial theory indicates that capital structure is important to the performance of the firm, there is considerable debate as to whether an 'optimal' capital structure exists for each type of business.

In practice, capital market disciplines impose bounds on the range of acceptable capital structure for different businesses. These bounds are based on economic, firm and industry specific factors, such as the perceived risk of investing in a particular industry and other relevant market issues, including the maturity of the market and the degree of competition. The role of capital market mechanisms in influencing the capital structure decisions of private sector management, and the implication of these market mechanisms for Government businesses, is examined in the following section.

4. Implications for Government Businesses

4.1 Private sector practice and debt capacity

Capital structure in the private sector is determined by boards and management, but is to a large extent influenced by debt and equity markets. Capital markets provide disciplines on private sector firms that encourage these firms to adopt capital structures that maximise shareholder value. For instance, movements in a company's share price or interest charges and the conditions attached to loans signal to management whether they have made acceptable financing decisions and adopted an appropriate capital structure. Additionally, the threat of takeover or bankruptcy acts as a discipline on private sector financing decisions.

Decisions as to the appropriate capital structure to be employed by private sector firms are made by Boards and management with reference to the debt capacity of the firm. The debt capacity of a business refers to the amount of debt that the cash flows and assets of a business can service on a sustainable basis. Debt capacity is usually measured in two ways:

- asset coverage (ie the value of assets against which debt claims can be made); and
- cash flow coverage (the amount of cash which is available to service interest and principal repayments in a given time).[6]

Debt capacity in the private sector is influenced by a number of factors, including the increased interest cost associated with high levels of gearing, the increased probability of default and the restriction that gearing places on the firm being able to finance unanticipated value adding investment opportunities when, and if, they arise.

For highly geared firms, as debt rises, the increased risk to lenders is reflected in higher interest costs and more restrictive covenants. Since a relatively less geared business will be less fettered and more flexible in pursuing investment opportunities, the 'opportunity cost' of debt at maximum debt levels is significant. This higher opportunity cost, combined with higher interest costs and the increased risk of financial distress, would generally encourage firms to maintain a level of debt somewhat below the maximum debt capacity.

A key factor in determining the debt capacity of a business will be an assessment of its ability to cope with *business risk*. Risk factors, which are typically considered, include the volatility of the business' cash flows (which may be affected by the expected variability in input costs, earnings or profitability) the size of the organisation, and the quality and nature of its assets. The most important of these factors is generally the volatility of the business' cash flows. Typically, the higher the volatility or uncertainty associated with a business' cash flows, the lower the debt capacity of the business.

[6] Government businesses generally have highly specialised assets that cannot be sold easily for alternative uses. As a result, the value of these assets from a debt capacity viewpoint is substantially related to their dedicated cash flows. Consequently, cash flow cover ratios are considered to be of more relevance than asset cover ratios.

The range of factors considered by private sector firms in setting an appropriate capital structure include:

- tax advantages associated with the use of debt financing (ie gearing consistent with minimising total tax liabilities and minimising cost of capital);
- the use of gearing as a financial discipline to minimise agency costs and the opportunity for leveraged buyouts[7];
- industry average accounting benchmarks such as the debt/equity and debt/asset ratios;
- satisfying debt service criteria, such as interest cover and cash flow cover ratios;
- the impact of gearing on the financial risk of the firm, as measured by the firm's investment grade rating (which is a measure of the probability of bankruptcy and financial distress); and
- the need for financial flexibility to meet unexpected capital expenditure requirements, consistent with the business' strategic direction.

A number of these approaches are relevant to the determination of an appropriate capital structure for Government businesses.

4.2 The role for Government as shareholder

Government businesses are not subject to the range of debt and equity market disciplines imposed on their private sector counterparts. In particular, there is no equity market for Government businesses and therefore, no share price to discipline management's financing decisions. Additionally, as Government businesses generally borrow through the NSW Treasury Corporation, they are not subject to the same levels of monitoring or disciplines that are imposed by private sector lenders on their borrowers through loan agreements. Even if Government businesses were to source funds through private sector lenders, the practice of capital markets attaching an implicit guarantee to Government business debt would tend to reduce the intensity of debt market monitoring.

Government businesses are not subject to the risk of takeover, which acts as an equity market discipline to help align the interests of shareholders and managers in the private sector.[8] For this reason, there is a stronger case for the use of financial returns on equity as well as the discipline of debt to provide appropriate incentives to align the interests of the boards/managers of Government businesses with those of the Government, as shareholder.

Similarly, Government businesses do not face the same threat of bankruptcy as private sector firms. However, in order that capital structures for Government are determined on a commercial basis, the debt capacity of the Government business should be constrained to be consistent with an acceptable risk of default (measured by the acceptable credit rating) for the business.

[7] Leveraged buyouts refers to the use of borrowed funds to purchase a company where the equity value or potential cash flow of the target company is expected to be sufficient to result in a profit for shareholders and/or meet the debt repayments.

[8] The risk of takeover in the private sector motivates firms to use appropriate levels of debt to avoid the possibility of becoming a target for a leveraged buyout.

The absence of capital market disciplines for Government businesses requires the development of surrogate mechanisms for application to Government businesses, to ensure that they have appropriate commercial capital structures.

4.3 Surrogate mechanisms for application to Government businesses

An appropriate capital structure for a Government business will be influenced by a number of factors that may vary between Government businesses, including firm specific, industry and economic factors.

The approach considers a business' sustainable debt level, based on modelling of its cash flows and undertaking sensitivity analysis of the impact of key variables on these cash flows. The actual debt capacity of the Government business will then be determined with reference to the constraints that the capital market places on private sector debt determination. Typically, for similar reasons as outlined above, the appropriate level of debt for a Government business will lie below the maximum debt capacity of the business.

A number of factors, which influence the choice of capital structure in the private sector, are relevant to Government businesses, namely:

- tax effects on the cost of capital;
- financial discipline of debt;
- an acceptable level of 'financial risk' for the business, as indicated by the business' individual credit rating;
- debt service criteria – to match the debt market discipline faced by private sector firms;
- the capacity to finance approved capital expenditure through internally generated cash flows and debt;
- the need to provide for sufficient flexibility for contingencies; and
- the dividend preference of shareholder.

4.3.1 Tax effects for Government businesses

In the private sector, the tax deductibility of interest costs provides incentives for firms to use greater proportions of debt in financing their assets, to the extent that the tax benefits of debt are not fully offset through dividend imputation. In this case, provided financial distress costs do not arise, the use of debt financing is able to minimise the cost of capital and increase the after-tax value of the firm.

Government businesses are exempt from paying Commonwealth income tax. However, they are required to make income tax equivalent payments, in accordance with the National Tax Equivalents Regime (NTER) that calculates income tax equivalents based on the Commonwealth income tax laws, with some modifications.[9] The requirement to make tax equivalent payments encourages the boards/management of Government businesses to operate in a more commercial manner by recognising tax as an explicit business cost and thereby ensuing competitive neutrality with their private sector counterparts.

Since interest payments are deductible, the use of debt financing reduces the cost of capital for Government businesses and therefore acts as a surrogate mechanism to create a similar incentive effect as that which encourages private sector business use of debt.

The use of debt financing reduces the amount of after-tax profits, and therefore the dividends available to the Government.[10] However, as the Government is the collector of both tax equivalents and dividends, the use of debt maximises the total payments to Government. As a result, the use of debt financing increases the value of the Government business to the shareholders, over the value of a fully equity financed business.

Hence, the choice of an appropriate capital structure for Government businesses needs to recognise the tax advantages associated with debt financing.

4.3.2 Financial discipline of debt

In the private sector, the risk of takeover acts as a discipline on the decisions of boards and management and promotes the alignment of interests between shareholders and managers.

Government businesses are not subject to the same equity market disciplines as apply to their private sector counterparts. There is, therefore, a strong case for the use of gearing as a discipline on the use of discretionary cashflows by management to ensure appropriate incentives exist to align the interests of the Government business managers with those of the Government, as shareholder.

Debt financing may impose a discipline on the use of discretionary cash flows by management. For instance, the requirement to pay a greater proportion of free cash flows on fixed interest and loan repayments can reduce "excessive" financial slack that may otherwise result in operational inefficiencies, "gold plating" of investments or the pursuit of non-commercial ventures. In addition, the requirement to make interest payments may reduce the tendency for underpricing by competitive Government businesses that may seek to gain market share at the expense of a return to shareholders.

[9] Some Government businesses with very small tax liabilities do not fall under the NTER but are still required to pay tax equivalents under a simplified, accounting profit model.

[10] Dividends are determined in accordance with the *Financial Distribution Policy for Government Businesses* (TPP 02-3, June 2002). Dividends are calculated from after-tax profits after allowing for approved capital expenditure and working capital requirements. They must also maintain the agreed capital structure range and meet the preferences of the shareholders.

4.3.3 The credit rating and an acceptable level of financial risk

The credit rating is an assessment of a business' probability of default and is therefore an appropriate measure of the financial risk of a business. The requirement for a business' gearing level to be consistent with an appropriate minimum credit rating therefore places a limit on the proportion of debt able to be used by a business in financing its assets.

Private sector firms pay close attention to their credit ratings as such ratings will affect the market's perception of the firm's risk of default and therefore the cost at which they can obtain funds in the market. Similarly, credit ratings for Government businesses affect their cost of debt. While most Government businesses source their borrowings through the NSW Treasury Corporation, which is currently able to borrow in the market at a 'AAA' credit rating, the Government has introduced a Government Guarantee Fee to apply to the debt of Government businesses. This fee, outlined in the *Government Guarantee Fee Policy for Government Businesses*[11], provides a surrogate mechanism for the operation of the private sector debt market, by requiring a Government business to pay the risk-related cost of debt it would face if it borrowed funds based on its stand-alone credit rating.

However, while the Government Guarantee Fee captures the increased interest cost associated with higher debt levels, it does not capture the risk of default or bankruptcy. Although, it could be argued that Government businesses do not face the same threat of bankruptcy as applies to their private sector counterparts, excluding consideration of the risk and costs of business failure may mean Government businesses are disadvantaged by being required to face higher gearing levels than their private sector counterparts. Therefore, from a competitively neutral standpoint, the potential risk and costs of business failure should equally be considered when determining appropriate capital structures for Government businesses. This requires the Board and shareholders of each Government business to agree on the acceptable level of financial risk for the business.

Specifying an acceptable level of financial risk for a business is equivalent to setting an appropriate minimum credit rating allowable for each Government business. The acceptable credit rating for each Government business will depend on a number of unique factors such as the nature of the industry, the level of competition to which it is exposed and the specific business risk and maturity of the Government business.

4.3.4 Debt service criteria

In the private sector, the conditions attached to loans provide a signal to managers as to whether they have made appropriate financing decisions and adopted an appropriate capital structure. Debt providers maintain a close monitoring role over private sector firms to ensure that the lenders risk exposure is managed. These monitoring rights are contained in lending documents that explicitly detail the actions available to debt providers in the event of alterations to the operations of the firm.

[11] See, *Government Guarantee Fee Policy for Government Businesses* (TPP 02-6, September 2002).

Government businesses source most of their borrowings through NSW Treasury Corporation and are therefore not subject to the same levels of monitoring or disciplines that private sector lenders impose on their borrowers through loan agreements. In fact, even if Government businesses were able to source borrowings through private sector lenders, the practice of capital markets attaching an implicit guarantee to Government business debt would reduce the intensity of debt market monitoring.

Nevertheless, a surrogate mechanism for debt market scrutiny can be developed for Government businesses through the application of debt service criteria typically employed by private sector lenders in the credit assessment process. These debt service criteria take the form of minimum covenant ratios, such as those included in formal loan agreements.

4.3.5 Financial flexibility

Private sector firms, in normal times, maintain excess debt capacity (alternatively referred to as 'reserve borrowing capacity') that can be used in the event that a value-adding investment opportunity arises.

The need to provide for 'sufficient' financial flexibility in determining an appropriate capital structure is even more relevant for Government businesses, given the limited capacity of the Government to provide new equity injections into these businesses. A sufficient level of financial flexibility is required for two main reasons.

Firstly, a certain level of financial flexibility enables a Government business to meet its operational requirements (including debt-servicing costs) and agreed capital expenditure program, under likely negative variations to the key assumptions. Insufficient flexibility may jeopardise the sustainability of the business, bring on financial distress and may imply the need for future equity injections on the part of the Government.

Secondly, a sufficient level of financial flexibility enables a Government business to consider unanticipated, but desirable, value-adding investment opportunities that may arise from time to time. This is particularly relevant for businesses operating in a competitive environment, a growth environment (where unanticipated but permanent increases in demand are likely to occur) or in an industry subject to rapid technological change. In this case, insufficient financial flexibility may result in a possible loss of market share and a corresponding fall in shareholder value.

4.3.6 Dividend preferences of shareholders

In the private sector, returns to shareholders take the form of dividend payments and capital gains realisable through the sale of their equity interest. However, as ownership rights are not readily tradeable for Government businesses, the ability of the Government to realise capital gains from its businesses is limited to capital remittances or privatisation. As a result, the Government, as shareholder, has a strong preference for a high level of dividends relative to capital growth. In addition, the Government prefers a steady stream of dividends as it relies on such a stream of dividends from its businesses to finance, in part, social services to the community.

To ensure that resource allocation between private and public sectors of the economy is not distorted, capital structures for Government businesses need to be set to provide for a return on equity consistent with the return earned by investors in private sector firms with similar risks. In order to recognise the Government's preference for a steady stream of dividends, as well as the true opportunity cost of the Government's equity investments, a minimum dividend constraint must be specified in determining the initial capital structure for a Government business. Calculation of this minimum dividend is based on the 'modified residual approach' outlined in the *Financial Distribution Policy for Government Businesses*.

Setting the capital structure of Government businesses to ensure a steady stream of dividends is consistent with private sector practice, where financing decisions are constrained by the likely response of shareholders and their perceived preference for dividends. Due to the signalling effect provided by dividends, private sector firms often tend to set their capital structures with a view to ensuring they are able to pay stable dividends over time.

5. Methodology for Determining an Appropriate Capital Structure

Capital structures are to be determined and agreed upon in the context of the annual Statement of Corporate Intent/Statement of Business Intent (SCI/SBI) negotiations between the board/management and the shareholders for each Government business.

The methodology, to be applied in determining an appropriate capital structure, involves two stages. The first stage is determination of the debt capacity of the business using a cash flow-based, risk analysis of the business.

The second stage involves determining a capital structure that is consistent with the following criteria:

- provision of an acceptable stream of dividends;
- maintenance of an appropriate investment grade rating, taking into account industry and firm specific factors;
- ability to meet key debt service criteria, based on industry benchmarks;
- capacity to finance the approved capital expenditure program through internally generated cash flows and debt, with consideration of the current phase of the investment cycle; and
- provision of sufficient flexibility for relevant contingencies.

5.1 Capital structure and capital structure range

The methodology is used to determine both an appropriate capital structure as indicated by the corresponding gearing ratio (defined as debt to total assets) and a minimum-to-maximum capital structure 'range', based on commercially sound principles.

The range is an acceptable variation (indicated by gearing ratios) around the business' capital structure. Specifying an appropriate range acknowledges the Government business' requirement for flexibility. This is particularly relevant given:

- the "lumpy' nature of capital expenditure of many Government businesses;
- the Government's preference for a relatively stable stream of dividends, irrespective of the business cycle; and
- the need for financial flexibility in order to allow for relevant contingencies, including major variations to operating requirements and the ability to invest in unanticipated, but desirable value-adding investment opportunities, as they arise.

The value of a firm is generally unaffected if the capital structure varies within certain bounds. An acceptable range will be negotiated between the board/management and the shareholders for each Government business. The width of the range will vary for each Government business depending on the volatility of its cash flows and the competitiveness of the market in which the business operates. The potential volatility of cash flows may also warrant setting a more conservative target capital structure initially.

For valuation purposes, debt should be marked to market. Assets, in accordance with accounting standards and NSW Treasury policy, are required to be valued at fair value. Fair value will generally equate to market value where a market exists for the assets or replacement cost in the absence of a market. Consistent with AASB 1041 "Revaluation of Non-Current Assets", this approach requires revaluations with sufficient regularity to ensure that the carrying amount of the asset does not differ materially from its fair value at reporting date (i.e. at least every five years).

5.2 Stage 1: Determining the debt capacity of a Government business

The first stage involves a cash flow-based risk analysis of the Government business, comprising the following steps:

- develop a business profile;
- review business plans and forecasts;
- undertake business risk analysis;
- construct a model to analyse the cash flows; and
- undertake sensitivity analysis of the impact of key variables on the cash flows.

5.2.1 Develop a business profile

The business profile should identify, among other things, the core business of the Government business and all its key revenue and cost drivers. Development of the business profile would draw upon the entity's annual corporate planning process.

5.2.2 Review business plans and forecasts

The choice of an appropriate capital structure is primarily dependent on the reasonableness of the Government business' financial forecast estimates.

As part of their SCI/SBI negotiations, Government businesses are required to prepare business plans, capital expenditure estimates, Statements of Financial Performance, Financial Position and Cash Flows for the forthcoming four-year period, as well as high-level projections over a ten-year horizon.

The cash flow forecasts provided by each Government business should be reviewed and discussed with the business' management, in light of a detailed risk analysis. The impact on the projected cash flows of the factors identified in the risk analysis can then be assessed. Conclusions as to the appropriate capital structure will be influenced by the probability of the risk factors arising and affecting the forecasts.

5.2.3 Undertake business risk analysis

An analysis of the 'business risks' facing each Government business should be conducted[12]. Types of 'business risks' that should be assessed include:

Raw Material and Input Cost Risk

Raw material risk is a function of factors such as the source, diversity and price volatility. Other input costs are likely to be dominated by labour costs. Although a large number of Government businesses are capital intensive, they all have significant labour costs. Labour costs and industrial relations therefore represent a potentially significant risk to a Government business' operations.

Production Risk

Production risk relates to factors such as plant capacity, technology, quality of plant and equipment, obsolescence and environmental risks.

Regulatory and Legislative Risk

Regulatory risks refer to the risks that are externally imposed on the business through regulatory or legislative requirements.

Many Government businesses are subject to formal or informal price regulation. A Government business' cash flows are, therefore, at risk to the extent that future regulation imposes revenue stream limitations that diverge from those assumed in the cash flow forecasts. Regulatory and legislative risks may also take the form of higher externally imposed operating standards, which result in increased operating costs for the Government business.

Revenue Risk

Revenue risk is a function of the Government business' products, markets, demand, competition, barriers to entry and pricing.

Regulatory risk has potentially the greatest impact on revenues, for price regulated Government businesses. However, for Government businesses operating in contestable markets, the risks associated with increased competition are likely to have the largest impact on revenues.

5.2.4 Develop a model for risk adjusted cash flow analysis

The approved projected Statements of Financial Performance and Financial Position for each Government business are to be used to generate a dynamic cash flow model of the business. The model is to be used in a cash flow analysis of the Government business to help assess the impact of changes in key variables on asset and cash flow cover, relevant debt service criteria and expected dividends.

[12] Detailed guidance on risk management is contained in the *Risk Management and Internal Control Toolkit* (TPP 97-3, September 1997).

Since the majority of Government businesses are capital intensive, the model will estimate the amount of internal capital financing available in the business. Internal finance available for capital programs is to be calculated by deducting working capital increases, dividend payments and an allowance for financial flexibility from net profit after tax and adding back depreciation and other non-cash items[13]. The internal finance projections are to be compared to agreed capital expenditure plans to assess the ability of the Government business to fund this expenditure (through debt and equity) with reference to the target capital structure range.

The cash flow analysis examines the ability of the Government business to service and repay existing debt as well as additional debt arising from internal cash flow shortages, with the objective of maintaining gearing levels within an approved range. The impact of higher and lower levels of opening debt may also be assessed, together with alternative dividend payment scenarios.

Certain financial ratios (such as cash flow ratios and profitability ratios) and indicative stand-alone credit ratings are to be used in the model to assist in the analysis of the financial strength of the Government business.

5.2.5 Undertake sensitivity analysis

Sensitivity analysis based on the major risks identified is then to be undertaken using the Government business' cash flow model. This analysis is used to identify the impact of likely changes in the business' key value drivers (such as revenue, cost and projected capital expenditure) on the financial ratios and the level of required dividends.

Sensitivity analysis gives an indication as to how much debt the Government business can sensibly service under the worst foreseeable conditions that might result within its particular business environment. An assessment of the probability of the worst-case scenario eventuating needs to be made, before deciding on the maximum debt level that the business could prudently service.

5.3 Stage 2: Determining an appropriate capital structure

Once the cash flow estimates have been prepared and the relevant risks identified and assessed, the approach to setting an appropriate capital structure for a Government business is to determine a capital structure (and minimum-to-maximum capital structure range) consistent with the criteria detailed below.

5.3.1 Provision of an acceptable dividend stream

In determining an appropriate capital structure for Government businesses, the required 'normal dividend'[14] stream needs to be specified. Setting the required 'normal dividend' payment ensures that an appropriate cost of equity is factored into the determination of the capital structure.

[13] That is the internal finance that is available for capital programs is calculated by deducting agreed dividends from the Net Cash Flows from Operations.

[14] Normal dividends are defined in the *Financial Distribution Policy for Government Businesses* (TPP 02-3, June 2002), as payment from current year profits which are expected to be maintained in the foreseeable future.

The *Financial Distribution Policy for Government Businesses* outlines the approach to negotiation of dividends for a Government business. A "modified residual approach" is used, whereby dividends are based on post-tax profits and residual cash after allowing for working capital needs, and the funding of acceptable investments consistent with the target capital structure range. This residual approach is modified, however, to take into account the Government's preferences for a relatively stable stream of dividends from its portfolio of businesses.

The expected level of normal dividends, as negotiated under the *Financial Distribution Policy*, is a key input used in setting a business' capital structure and the associated range. This ensures that the dividend preferences of the shareholder over the long run are taken into account.

Furthermore, actual payments of both normal and special dividends[15] are determined with reference to their impact on the business' capital structure. In this way, the *Financial Distribution Policy* and the *Capital Structure Policy* are inextricably linked.

5.3.2 Maintenance of an appropriate investment grade rating

An appropriate credit rating is to be agreed upon between the Board and the shareholders, and will be determined taking into account economic, industry and firm specific factors. These may include the nature of the industry, the degree of competition, the commercial maturity of the enterprise and its business risk profile. The negotiated credit rating will be the one that reflects both the shareholders' and board's view as to what is an acceptable level of financial risk for the business. The credit rating that reflects an acceptable level of financial risk to the board and management of the business and the shareholders will act as a constraint upon the debt capacity of the firm.

Determining a Notional Credit Rating for a Government Business

Annual credit rating assessments of Government businesses are undertaken by a ratings agency and advised in July each year. However, it will not be possible to use the ratings agency to assess a range of possible capital structures during the negotiation process. For this reason, it will be necessary to focus on a 'notional' credit rating, until the actual rating can be determined through the formal ratings process. The notional credit rating is relevant only to the determination of an appropriate capital structure range and will not be used to replace formal ratings, which are required under the *Government Guarantee Fee Policy for Government Businesses*.

[15] Normal dividends are payments from current year profits that are expected to be maintained in the foreseeable future; while special dividends are additional, one-off payments made from retained earnings and/or the asset revaluation reserve.

A notional credit rating for a Government business can be determined by examining the resulting value of certain financial ratios, at particular levels of debt. The key financial ratios used by Standard and Poor's Ratings Groups (S&P) for assessing a business' credit rating include:

- EBIT interest coverage[16]
- EBITDA interest coverage[17]
- Cash from operations/average total debt[18]
- Return on average total capital[19]
- EDITDA/Sales
- Funds Flow Net debt pay back[20]
- Internal Financing Ratio[21]
- Financial leverage, or the ratio of Debt/(Debt plus Equity)

Each of these financial ratios informs on a different but related aspect of a business' debt service capacity. From time to time, credit ratings agencies provide industry specific guidelines on the financial ratios associated with different credit ratings.[22] It is important to note that the ratings associated with certain financial ratios will vary depending on the business risk profile of firm in the relevant industry.

In the absence of such guidelines, the financial ratios listed above can be used to determine a notional credit rating, by assigning appropriate weights to each of these measures.

However, it should be noted that while a notional credit rating can be determined based on financial ratios, such a credit rating is only indicative and should be interpreted with caution. Financial ratios need to be interpreted in the context of a Government enterprise's business risk.

16 The Financial Ratios are defined as per Standard and Poor's Corporate Ratings Guide (2000).

$$\text{EBIT interest coverage} = \frac{\text{Earnings from continuing operations before interest and taxes}}{\text{Gross interest incurred before subtracting capitalised interest and interest income}}$$

17 $$\text{EBITDA interest coverage} = \frac{\text{Earnings from continuing operations before interest, taxes, depreciation and amortisation}}{\text{Gross interest incurred before subtracting capitalised interest and interest income}}$$

18 Cash from operations excludes interest payments and any tax effects of interest. i.e. Cash from operations excludes any financing charges, in contrast to accounting standards, which incorporate interest payments in cash from operations.

19 Return on average total capital = EBIT (1-t)/average total capital, where t is the effective company tax rate.

20 The net payback period indicates the ability of cash flows (before working capital and capital expenditure) to repay the outstanding debt.

21 The Internal Financing Ratio indicates the relative reliance on debt to finance capital expenditure and is a forward indicator of a changing debt service burden.

22 Standard and Poor's have recently issued a guide on credit ratings associated with certain financial ratios for US Industrials and US Utilities, based on company risk profile.

A Government business with higher business risk requires higher cash flow coverage ratios (than one with lower business risk) to obtain the same credit rating. Conversely, a Government business with more favourable prospects and more predictable cash flows (ie lower business risk) can afford to undertake added financial risk while maintaining the same credit rating as a business with higher business risk.

In addition, credit ratings agencies employ both quantitative and qualitative factors in determining an overall credit rating for a business. While financial ratios may go some way to capturing the quantitative factors used in determining a credit rating, they cannot capture the qualitative factors, which are also important in a credit rating assessment. As a result, the credit rating associated with any proposed capital structure and range will need to be independently assessed by the ratings agency, prior to finalisation of the capital structure for a particular business.

Impact of a Government Business' Credit Rating on the State's Credit Rating

A Government business with an investment grade credit rating of less than 'A' will not necessarily affect the State's credit rating.

The State's overall credit rating is based on the capacity of the State to meet the total financial obligations of both its Public Non-Financial Corporation Sector (consisting of most Government businesses) and General Government Sector. As a result, the State's credit rating will be unaffected by an increase in the indebtedness of the Public Non-Financial Corporation Sector, provided this is offset by a reduction in the indebtedness of the General Government Sector. This is regardless of whether a capital repayment is used to actually retire General Government sector debt or simply increase the Crown's cash reserves, as long as they are not used to finance additional General Government Sector expenditure. In such cases, the capacity of the Government to meet its total financial obligations would be unaffected.

5.3.3 Ability to meet key debt service criteria

A surrogate for private sector debt market monitoring and disciplines is required to assist the determination of capital structures for Government businesses. Debt service criteria such as those typically employed by private sector lenders in the credit assessment process are to be assessed. These criteria are to be regularly monitored and reported against, with corrective action taken when necessary.

The suite of financial criteria to be employed include:

- financial leverage ratios (eg debt to capital, debt to assets, long term debt to capital);
- profitability ratios (eg return on assets, return on equity, return on capital);
- cash flow ratios (eg debt service cover, loan life cover, payback period, internal financing); and
- dividend expectations (eg required dividend payout).

These financial ratios should be benchmarked against industry averages and major market participants.[23] It is acknowledged that industry benchmarks should be interpreted with caution. This is highlighted by discrepancies associated with the basis of asset valuation, as the private sector tends to use historical cost whereas Government businesses are required to apply current value (ie fair value). The potential exists for significant distortions, particularly in the case of the energy and water industries, as the replacement cost of long life assets in capital-intensive firms is much higher than their historical cost values.

However, reasonable comparisons between the financial ratios of a Government business and its private sector counterparts can be made by stripping out the value of the asset revaluations from the balance sheets of the Government business. A corresponding adjustment would also need to be made to the operating statements of the Government businesses to remove the additional depreciation associated with higher asset values.

Rather than attempting to emulate a formal debt compliance reporting regime, selected appropriate debt service criteria will be incorporated under the existing shareholder monitoring framework. These criteria will be agreed upon in the SCI/SBI and reported against in the quarterly monitoring process. Government businesses are required to report any material changes in the agreed criteria and NSW Treasury analysts are responsible for instituting corrective action.

5.3.4 Capacity to finance approved capital expenditure

Assumptions about the financing of capital expenditure have a crucial effect on the determination of an appropriate capital structure. Government businesses are required to prepare four-year capital expenditure plans in the context of a 10-year planning horizon, as part of their annual SCI/SBI negotiations. The shareholders approve these plans.

Both growth and replacement capital investments can be 'lumpy' and this can have a significant impact on the business' cash flows in any one year. Given the Government's preference for a smooth and predictable dividend stream, the capital structure will be set so that an agreed level of dividends can be maintained during various phases of the investment cycle, with gearing levels increasing or decreasing (within an acceptable range) depending on capital expenditure requirements.

All other things being equal, this would mean that gearing levels would normally fall during periods of low capital expenditure, as businesses pay down debt in anticipation of future capital expenditure, and increase during periods of high capital expenditure. If gearing levels systematically fall over the SBI/SCI period to below the minimum point of the agreed range, this would indicate the potential for either a review of the capital structure (ie higher capital structure achieved through an equity return) or an increase in the future annual normal dividend payment.[24]

[23] Industry benchmark data is available through services provided by Bloombergs and Reuters.

[24] An alternative approach would be to maintain gearing levels at a constant target level over time. This would require that a fixed proportion of approved capital expenditure would be automatically funded by debt, consistent with the target gearing level. All residual cashflow would then be available for distribution to the shareholder as dividends. This approach would potentially result in a relatively volatile and unpredictable dividend stream, depending on the current phase of the business' investment cycle and the business' ability to forecast future capital expenditure requirements. This approach has therefore been rejected, as it is not consistent with the modified residual approach to dividend determination outlined in the *Financial Distribution Policy for Government Businesses.*

The range is to be agreed in the context of the SCI/SBI process and should reflect the investment cycle of the Government business by providing for both current and forecast capital expenditure. Along with close monitoring by NSW Treasury, these additional SCI/SBI measures will help to ensure that retained earnings are not being used for purposes other than approved future capital investment.

5.3.5 Provision for financial flexibility

The determination of an appropriate capital structure must take into account a business' need for financial flexibility, where appropriate.

The extent of financial flexibility required by each business will vary depending on the nature of the business and the degree of competition to which it is exposed. Generally, the need to maintain excess debt capacity is not likely to be a significant requirement for Government businesses which operate in non-competitive environments (whose operating expenditures do not vary markedly from their forecast levels) or businesses for which unexpected value-adding capital investment opportunities are unlikely to arise regularly.

The extent of financial flexibility determined to be appropriate for each business will be negotiated on a case-by-case basis between the boards/management of the Government business and the shareholders in the SCI/SBI process and built into the acceptable capital structure range for that business.

It should be noted that where sufficient flexibility exists in the agreed capital structure range to allow Government businesses to engage in unanticipated, but desirable, value-adding investment opportunities, boards will still need to seek the shareholders' approval to proceed with the new investment, under the existing SCI/SBI process and other relevant investment appraisal or approval requirements.

6. Setting and Reviewing Capital Structure

6.1 Setting capital structure

The capital structure and capital structure range will be determined in accordance with the methodology outlined above and agreed between the board and the shareholders of each Government business. The capital structure and minimum-to-maximum capital structure range will be determined for a four-year forward period, taking into account the 10-year planning horizon of the business, its investment cycle and the shareholders' dividend preferences.

A comprehensive capital structure study is required in the following situations:

- corporatisation of a Government business;
- the introduction of, or significant increase in, competition in output markets;
- a significant asset revaluation;
- an unexpected and persistent change in the business' investment cycle;
- an unexpected change in market conditions or the business' financial position, which is expected to persist into the long term; and
- mergers or significant restructures of Government businesses.

6.2 Reviewing capital structure

Capital structure decisions are based on the use of forecasts and assumptions about the business' financial performance over time and the perceived risks associated with that performance. Changes to revenue projections (as a result of the impact of regulatory reviews or changing market conditions), required capital expenditure or the shareholders' dividend preferences may prompt the need for a revised capital structure and/or range.

A Government business' agreed capital structure and range will therefore be reviewed every year as part of the SBI/SCI process. The purpose of such a review is to confirm whether or not the Government business' current capital structure and range continue to be appropriate and, if not, to negotiate revised arrangements between the board and shareholders.

In the majority of cases, the annual review would not be expected to lead to significant change to the capital structure and range unless there has been a long-term change in the market conditions, the capital expenditure requirements or the volatility of a business' cash flows.

7. Roles and Responsibilities

The roles and responsibilities of all participants in the process of determining an appropriate capital structure for Government businesses are outlined below.

Boards and managers of Government businesses are responsible for:

- negotiating the capital structure and minimum-to-maximum range;
- complying with relevant requirements under the *Public Authorities (Financial Arrangements) Act 1987* prior to, for example, obtaining financial accommodation;
- ensuring the agreed capital structure is maintained;
- reporting movements in capital structure and the associated reasons in quarterly reports to the shareholders (Voting Shareholders or the Treasurer and Portfolio Minister); and
- advising NSW Treasury on an exception basis of changes in the operating environment that would warrant a capital structure review.

NSW Treasury analysts are responsible for:

- advising the shareholders on the appropriate capital structure and minimum-to-maximum range;
- monitoring debt levels and the maintenance of a Government business' capital structure from the shareholder perspective;
- reporting movements in capital structure and the associated reasons in quarterly exception reports to the Treasurer and recommending corrective action;
- instituting scheduled (or other) capital structure reviews where necessary;
- checking that forecasts and assumptions provided by the Government business are reasonable;
- reviewing capital structure in collaboration with the Government business; and
- documenting negotiations on, and changes to, capital structure as part of the SCI/SBI process.

NSW Treasury is responsible for the development of the *Capital Structure Policy* and its administration. The policy-making role involves:

- developing, promulgating and promoting the policy;
- engaging stakeholders in consultative processes;
- gathering feedback on the effectiveness of the policy; and
- updating and revising the policy where necessary.

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