
6 Off-budget financing by government trading enterprises

Key points

- In a number of the studied countries, public infrastructure is financed through legally independent enterprises owned by the governments (known as government trading enterprises (GTEs), or by similar descriptors).
 - Investments by GTEs are typically not included in government budgets and are separately reported.
- Over the past two decades, there has been a reduction in overall GTE investment in countries such as Australia and the United Kingdom.
 - This trend is, in part, an outcome of privatisation initiatives in these countries.
 - Nevertheless, GTEs remain responsible for significant economic infrastructure investment.
- Across the studied countries, GTEs have undergone significant corporate governance and financial reforms that have enhanced their independence and accountability for performance, with positive consequences for investment and financing decisions.
 - As a consequence of these reforms, they are in a stronger position to finance investment from retained earnings and (off-budget) borrowing.
 - However, governments continue to provide equity injections to finance investment in some circumstances.
- GTEs are suited to infrastructure industries with substantial public good aspects because of their potential to generate revenue through user charges to help fund infrastructure capital and operating costs.
- Borrowing places limits on discretionary use of cash flows, and enhances scrutiny and discipline on investment and financing decisions.
 - However, these disciplines are exercised by central agencies, rather than markets if the GTE is required to borrow through a central borrowing authority.
- The use of off-budget financing through GTEs has raised concerns over the possibility of bypassing budget processes which were established to ensure accountability and transparency of capital expenditure decisions.
 - However, this can be addressed by transparent external governance processes.

In many OECD countries, off-budget transactions are conducted through businesses commonly known as government trading enterprises (GTEs).¹ GTEs have a corporate structure and are subject to Corporations Law, and may be fully or partly owned by government. The distinguishing characteristic of a GTE is that government has a controlling interest. Most GTEs in Australia are fully owned by state or territory governments. These entities play an important role in providing economic infrastructure services in sectors such as communications, energy, transport and water supply (section 6.1).

GTEs are generally operated to provide goods and services on a commercial basis by either substantially or fully covering their costs (PC 2007a). While user charges are the main source of revenue, governments also may directly purchase or subsidise services.

The GTE sector has undergone significant reform in recent decades. The reforms have tended to enhance their independence and increase their accountability to their shareholder – the government. As a consequence they have greater control over their investment, funding and financing decisions, and greater incentives for efficient investment (section 6.2).

The resultant changes have had a bearing on the overall appropriateness of financing public infrastructure projects through GTEs (section 6.3).

6.1 Applications and trends

In many OECD countries, the financial and other activities undertaken by GTEs are not recognised in their owner-government budgets. These activities are known as ‘off-budget’ transactions, and are pervasive throughout most of the studied countries.

The broad characteristics of these entities, and trends in their infrastructure financing in the studied countries, are discussed in this section.

Characteristics of government trading enterprises

In most OECD countries, GTEs are legally independent and notionally operate at ‘arms length’ from government. From a corporate governance perspective, the key manifestation of this independence is an independent board of directors that is

¹ Government trading enterprises are also variously known as ‘public trading enterprises’, ‘government business enterprises’, ‘public corporations’, ‘state-owned enterprises’ or ‘government-owned corporations’.

responsible for setting the strategic direction of a GTE. The board appoints a chief executive officer who is responsible for investment and operational decisions (recognising that the board might wish to have the final determination in all major decisions).

GTEs are involved in the provision of infrastructure and the production and provision of services in key sectors of the economy, both at the national and sub-national level. They have played an important historical role in economic development in most of the studied countries.

GTEs finance their public infrastructure investments through a variety of revenue sources, including:

- retained earnings — earnings not paid out as dividends or taxes that are available for subsequent reinvestment by the GTE
- budget appropriations — public finances set aside by a legislature, on behalf of a government, and allocated to GTEs (usually as an equity injection or as payments for community service obligations)
- borrowing — debt security instruments, including those issued on behalf of the GTE by a central government borrowing agency.²

The relative importance of these sources of finance differs according to the fundamental nature of the business (for example, its capital intensity and security of cash flow), policy circumstances and their operating environments.

The capacity of GTEs to borrow for their capital projects, and limits on such borrowings, are established by their Act or other owner guidelines. In addition, GTEs can be required to borrow through a central borrowing agency which can issue corporate bonds or project bonds (chapter 5) on behalf of the GTE, or issue a loan to the GTE financed from general borrowing (chapter 4). Alternative financing vehicles are borrowing from banks or other financial institutions, or issuing bonds directly to the market.

The use of retained earnings to finance investment depends on cash profits and on the government's dividend policy. Most GTEs raise revenue from user charges and access fees, however, these are usually subject to economic regulation. The scope for GTEs to generate cash profits will also depend on the cost of obligations to implement certain non-commercial services on behalf of their owner governments (Bottomley 2000), and whether these are explicitly funded.

² GTEs in some countries are also responsible for receiving and managing contributed infrastructure assets (chapter 7).

As the services provided by GTEs are typically capital-intensive in nature, generally requiring large or lumpy investments, retained earnings are a limited financing option, so the bulk of large investments are financed through borrowings or capital (equity) injections from the government. Substantial capital resources have been vested in these entities, and they continue to be significant providers of economic infrastructure services.

Infrastructure financing by government trading enterprises

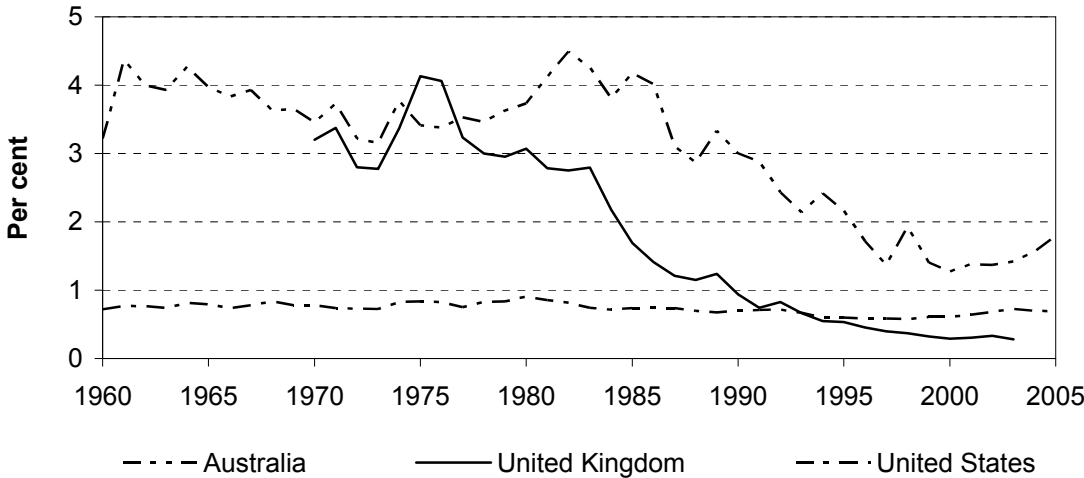
Inter-country comparisons of the public infrastructure financing activities of GTEs are not generally available. In large part, this is attributable to the variation in reporting activities across countries. However, examples of the experience in Australia and overseas were drawn on for this study.

Although the examples cited in this section are necessarily selective, they nonetheless illustrate that investment and financing decisions by GTEs are influenced by a complex interplay of factors — such as the demand for infrastructure services, asset renewal requirements, technological change and the impact of government policies.

Trends in investment by GTEs

Comprehensive timeseries information for total GTE investment expenditure is available from the national accounts of three of the studied countries (figure 6.1).

Figure 6.1 Government trading enterprise investment as a proportion of GDP, 1960–2005



^a The data used in this figure are expressed in nominal prices.
 Sources: ABS (2007a); UK Office for National Statistics (2007); BEA (2008); World Bank (1995).

For two of the three countries, capital investment by GTEs, as a share of GDP, declined over the past two decades. In Australia, GTE investment fell from 4.5 per cent of GDP in 1982 to 1.8 per cent in 2005. Similar trends have been experienced in the United Kingdom, with investment declining from 4.1 per cent of GDP in 1976 to about 0.3 per cent in 2003. On the other hand, the share of investment by GTEs in total economic output has remained relatively steady in the United States, albeit at less than 1 per cent of GDP throughout the period.

To some degree, the reduction in relative GTE investment in Australia and the United Kingdom reflects the impact of privatisation. For example, the privatisation of UK telecoms, gas, airports, water, electricity and railways during the 1980s resulted in as much as 15 per cent of gross domestic fixed capital formation being transferred from the public to the private sector (Pollitt 2002).

GTE's use of different financing vehicles in Australia

In Australia, GTEs accounted for about 7 per cent of national gross fixed capital formation in 2005-06 (PC 2007a).

Australian GTEs finance a large proportion of their capital investments through debt (box 6.1). The weighted average debt-to-equity ratio for the 84 GTEs monitored by the Productivity Commission (excluding Telstra) in 2005-06 was 48 per cent.³

Debt-to-equity ratios have generally increased considerably over time. For example, they increased from 88.5 per cent in 2000-01 to 97 per cent in 2005-06 for electricity GTEs and from 35.6 per cent to 100.3 per cent for urban transport GTEs. In the water sector, the average debt level increased by 9 per cent (\$34 billion) between 2004-05 and 2005-06 — leading to an increase in the debt-to-equity ratio of 4 percentage points to 28.6 per cent. On the other hand, the ratio declined in railways (from 74.7 per cent to 22.4 per cent) and remained steady for ports (32 per cent to 31.2 per cent) (PC 2002, 2007a).

³ The average gearing levels of GTEs in Australia are relatively lower than that of the private sector involved in equivalent activities (with the exception of port GTEs) (PC 2006c).

Box 6.1 Borrowing activities and capital structure of government trading enterprises in New South Wales

Debt is a major source of capital funds for GTEs in New South Wales, with the remainder of the capital expenditure financed from retained earnings. Borrowing is constrained by a gearing requirement for each enterprise imposed by the government.

As a percentage of gross state product, net debt of NSW GTEs has fluctuated over the past decade.

NSW GTE net debt as a proportion of gross state product (per cent)

1995	2000	2005	2010
4.2	3.2	4.3	7.4 (est.)

According to the NSW 2007-08 Budget Statements, net debt is expected to increase over the next four years in line with additional capital expenditure, particularly in water, electricity, transport and port infrastructure.

Gearing levels are projected to increase from about 27 per cent in 2005-06 to about 43 per cent in 2010-11. According to the Budget Statements:

Although this increase is significant, it remains well within commercially prudent levels. As a guide, for price-regulated electricity and water businesses (which account for most of the borrowings), gearing levels of less than 50 per cent are consistent with a strong investment grade credit rating. (p. 5)

These gearing ranges are assessed in accordance with the NSW Government's Capital Structure Policy for Government Businesses guidelines.

Source: NSW Treasury (2007a).

In Australia, GTEs have also occasionally received equity and capital contributions from their owner governments to finance infrastructure. Currently, equity injections account for only a small proportion of overall capital financing (box 6.2).

In addition to debt and retained earnings, some water GTEs have established renewals annuities whereby funds are set aside out of each year's revenue for periodic refurbishment and replacement of infrastructure assets.⁴ For example, Goulburn–Murray Rural Water in Victoria allocated over \$20 million to capital works through renewals annuities in 2005-06.⁵

⁴ Estimates of the future profile of capital expenditure are made, and an annuity is calculated to provide the funds in advance. The calculated annuity is then raised through fixed access charges to the service provided (Roper, Sayers and Smith 2006). It is an alternative to setting prices based on the consumption of existing fixed assets using an accounting measure of depreciation (PC 2004b).

⁵ A pricing review recommended changes to pricing policy by this GTE, including the adoption of a 'regulatory asset base' approach to pricing for infrastructure replacement and rehabilitation

Box 6.2 Examples of Australian GTE infrastructure projects partly financed by equity injections, 2005-06

In reporting the financial performance of GTEs in Australia, the Productivity Commission noted that a relatively small number of GTEs received equity and capital contributions from governments in 2005-06, namely:

- The Port of Melbourne Corporation's capital investment program of \$90 million, as well as dividend payments of \$19 million, was financed, in part, from internally generated sources, borrowings of \$15 million and a \$3.6 million equity contribution.
- The Public Transport Authority investment expenditure of \$484 million was partly financed by capital contributions from the WA Government of \$425 million, and a \$135 million increase in debt.
- SunWater received an equity injection of \$50 million from the Queensland Government, secured borrowings of \$86 million and dividends of \$3.2 million were reinvested to assist in financing capital projects such as the Burdekin-Moranbah Pipeline in central Queensland. In addition, SunWater recorded \$5.6 million in government grants for undisclosed reasons.

Sources: PC (2007a); Port of Melbourne Corporation (2006); PTA (2006); SunWater (2006).

Energy GTEs in New Zealand

New Zealand energy GTEs reflect the same trend to increased reliance on debt finance as observed in Australia. In 1999 three electricity generation GTEs — Genesis Energy, Meridian Energy Ltd and Mighty River Power Ltd (MRP) — were established through the break-up of the former Electricity Corporation of New Zealand (ECNZ). These GTEs produce over 60 per cent of the combined output of the larger generation entities, with the remainder provided by self-generation and independent operators of small generators (New Zealand Electricity Commission 2005).

All three GTEs have been active in recent years in developing new generation facilities, largely in response to concerns over the long-term availability of adequate electricity supply (PWC 2005). These projects have been financed, in part, by borrowings. For example, as at 30 June 2006, MRP had raised about NZ\$440 million in debt finance — of which NZ\$310 million was in the form of unsecured fixed rate bonds — to help support expanded geothermal and wind power activities. It is also in the process of lengthening its debt maturity profile and reducing its reliance on short-term bank financing (MRP 2006).

instead of the renewals annuity approach. This change was adopted in the 2006-07 financial year (GMW 2006).

Genesis Energy also increased its debt levels in recent years, in part to finance the expansion of existing facilities and the construction of new natural gas-fired power stations. The amount of debt finance raised by Genesis increased from over NZ\$150 million in 2002 to a total of around NZ\$300 million in 2006 (Genesis Energy 2006).

Over the five years to June 2005, Meridian spent NZ\$500 million in new generating capacity, and was active in renewable energy investment (Meridian Energy 2005). Improvements to cash receipts along with increases in debt were used to finance these projects (Meridian Energy 2006).

Box 6.3 Evolution of rail infrastructure financing by government trading enterprises in France

The Société Nationale des Chemins de fer Français (SNCF) was established in 1938 as part of the nationalisation of France's five main railways. Its functions include the operation of rail services for passengers and freight, and the maintenance and signalling of rail infrastructure.

Prior to 1997, the SNCF maintained ownership of the French rail infrastructure network. However, the SNCF had accumulated significant debts associated with building tracks for the high-speed TGV train network and other infrastructure developments. By 1994, the SNCF had cumulative debts of over €28 billion, or 2.6 per cent of France's GDP. This raised widespread concerns about the capacity of this enterprise to finance new infrastructure investment into the future.

In response to earlier EU directives to separate railway activities into the infrastructure network and train operations, the Government transferred ownership of the rail network to the Réseau Ferré de France (RFF) in 1997. However, it maintained the SNCF as a rail transport operator. The RFF had subsequently contracted out the maintenance and servicing of the network to the SNCF, and the SNCF pays access charges to the RFF for use of the infrastructure.

The French Government transferred SNCF's rail-related debts to the RFF in 1997. The RFF was assigned the responsibility to stabilise, and reduce over time, the accumulated debts transferred from the SNCF. The French Government has continued to subsidise the RFF in order to pay the interest on the debt previously borne by the SNCF.

A greater focus has been placed on infrastructure investment since the 1997 reforms. Total investment expenditure has increased from under €3.5 billion in 1997 to around €4.3 billion in 2005. Approximately €2.5 billion was invested by the RFF in 2005.

Sources: Freshfields Bruckhaus Deringer (2004); OECD (2005c); Perkins (2005); French Road Federation (2006).

Europe

GTEs provide infrastructure services in many continental European countries. For example, in France there are approximately 1500 GTEs with a combined total output of €150 billion, representing over 4 per cent of GDP (Wong 2006; The Economist 2007). GTEs in France have major interests in the aviation, electricity, rail (box 6.3) and telecommunications sectors.

North American experience

In Canada, GTEs play a significant role in delivering infrastructure services at both the national and provincial government levels in sectors such as electricity and rail transportation. However, the extent of involvement varies across provinces. For example, the western ‘prairie’ province of Saskatchewan provides telecommunication services through a GTE (box 6.4), as compared to the Manitoba Telecommunications System, which was privatised in 1996 with Bell Canada the major shareholder.

In the United States, most infrastructure services are typically provided by regulated private-sector entities. However, GTEs continue to maintain some presence in key sectors such as rail, electricity, ports and water supply.

At the US federal government level, the United States Postal Service, Tennessee Valley Authority and the National Railroad Passenger Corporation (box 6.5) are the most notable GTEs. These entities finance infrastructure investments through retained earnings and borrowings mainly from the Federal Financing Bank.⁶

At the state and local government level, public infrastructure services are provided by authorities and commissions rather than GTEs. However, the majority of services are typically provided by privately-owned businesses. For example, publicly-owned utilities supply just under 24 per cent of the total electricity supply, while the remainder is supplied by privately-owned power companies (EIA 2007).

The same can be said of sea ports and water supplies across the United States. Most sea ports are publicly-owned entities typically run as a statutory body under a state

⁶ The Federal Financing Bank (FFB), a federal government-owned corporation, borrows funds from the US Treasury to lend to federal agencies at a rate lower than what the borrower would have in the private credit market. FFB may also lend to private borrowers that have federal guarantees. Indeed, in 2007, all of the debts in FFB’s portfolio were federally guaranteed, except those of the United States Postal Service (FFB 2007).

Box 6.4 Financing activities of SaskTel (Saskatchewan, Canada)

Saskatchewan Telecommunications (SaskTel) is a Canadian provincial GTE that provides telecommunications services to over 425 000 business and residential customers in the province. It also conducts operations in other Canadian provinces and in over 30 countries.

SaskTel has invested over C\$2.7 billion in its provincial telecommunications networks since 1997. In 2006 alone, it invested approximately C\$233 million in areas such as internet and mobile telephone services. In early 2006, SaskTel announced a Next Generation Access Infrastructure plan with additional capital expenditure of C\$310 million to 2010 for new fibre-optic cable services.

In recent years, much of SaskTel's investments have been self-financed through retained earnings. In 2006, cash used in investing activities was C\$87 million higher than in 2005. The amount of long-term debt, which is issued through, and guaranteed by, the Province of Saskatchewan, was reduced by about C\$40 million over the 12 months to 2006. This reduced the debt to equity ratio to 30.5 per cent in 2006, down from 40 per cent in 2002.

There remains a longstanding debate in Saskatchewan regarding the possible privatisation of SaskTel. Against the background of a more competitive telecommunications market, commentators have questioned the financial performance of a number of high-profile investments by SaskTel outside of Saskatchewan — such as the Navigata Communications venture in Vancouver, British Columbia — which yielded revenues below expectations.

Sources: SaskTel (2002); SaskTel (2006a); SaskTel (2006b).

jurisdiction, except the Port of New York and New Jersey. Generally, these ports finance their infrastructure investment through either specific-purpose (unlimited) port improvement bonds or through municipal bonds (chapter 5).

Water supply is another area where much of the service is provided by the public sector commissions or authorities. However, with the advent of public-private partnerships (PPP), around 7.5 per cent of the water entities are engaged with the private sector, while another 8 per cent of the water entities are privately-owned companies (chapter 8).

The publicly-owned water entities mainly finance their infrastructure investments from retained earnings, debt and grants. Those engaged in PPPs typically source debt from the private capital markets or through private-activity bonds (chapter 5). For example, the Tampa Bay seawater desalination facility, which became operational in 2005, was partly financed by a private-activity bond worth US\$108 million (Deane, Hedlund and Shea, 2005).

Box 6.5 Rail infrastructure financing in the United States

The National Railroad Passenger Corporation (Amtrak), established in 1970 under the *Rail Passenger Service Act*, provides rail passenger transportation service in the major intercity travel markets. Amtrak operates commuter rail operations on behalf of several states and transit agencies. It also provides equipment maintenance services and has leasing operations.

Amtrak has a history of substantial operating losses and is highly dependent upon Federal Government subsidies to sustain its operations. As recently noted by KPMG in their Independent Auditors' Report, Amtrak would not be able to continue to operate in its current form without such subsidies (Amtrak 2006). This financial position has been influenced, in part, by strong competition from other modes of passenger and freight transport (CBO 2003a).

As a consequence of its operating performance, Amtrak has been unable to use retained earnings to finance infrastructure investment and instead relies on borrowings and grants. In 2006, Amtrak recorded debt of US\$390 million, which included bonds of around US\$62 million. This is slightly lower than the US\$440 million debt in 2005.

For the 2007 financial year, Amtrak requested funding from the US Government of US\$1.6 billion. This includes US\$730 million for capital (rolling stock and infrastructure), US\$500 million for operating support, US\$300 million for debt service (to service Amtrak's long term debt of US\$3.6 billion), and US\$75 million for working capital and restructuring support.

Sources: CBO (2003a).

6.2 Policy issues

In Australia, reform of GTEs over recent decades has been undertaken in response to concerns about poor economic and financial performance. This was attributed to:

- inappropriate governance structures and the existence of competing policy objectives
- the lack of separation of their policy setting, purchasing, service provision and regulating roles
- muted competitive pressures facing monopoly GTEs and the associated failure to improve productivity and to modernise services and facilities
- the absence of capital market disciplines, including the threat of bankruptcy, takeovers or buyouts and, to an extent, a decline in credit status (EPAC 1990; Smith 1992).

These problems were thought to have increased the risk of poor investment decisions adversely affecting overall resource efficiency.

In response, GTEs were reformed to operate on a more commercial basis. The stated intention was to replicate, as far as possible, the economic, financial and corporate governance arrangements that apply to the private sector — a process generally known in most countries as ‘corporatisation’. These reforms included:

- changes to corporate governance arrangements such as the appointment of independent GTE boards with greater investment and operational flexibility
- measures to ensure ‘competitive neutrality’ between GTEs and the private sector, including the application of general corporate laws and business regulation to GTEs, and the payment of taxes or tax-equivalent payments, dividends and debt guarantee fees by the GTE to their owner government
- restructuring GTE activities, including the creation of separate entities to manage otherwise conflicting objectives in service delivery, policy making and regulation.

Some aspects of these reforms, which are discussed below, have a significant bearing on the role of off-budget infrastructure financing through GTEs.

Capital structure issues

A key objective of the reform was for GTEs to operate commercially. In order to meet this objective, managers and boards have to identify the ‘optimal mix’ of financing — the capital structure where the weighted cost of capital is minimised — to maximise shareholder value. Both the choice of capital structure and ongoing government interventions potentially affect a board’s ability to realise and maintain an appropriate capital structure.

Effect of highly leveraged structures

It has been argued that leveraged capital structures increase discipline on GTE investment decisions (PC 2006c; Tirole 2006; Williamson 1996). First, having a significant proportion of capital expenditure financed through debt and having to make interest payments serves as a discipline on managers. The reduced cash flow also constrains the ability of managers to over invest. Second, debt financing potentially exposes managers to greater external scrutiny by lenders, disciplining investment and limiting managerial discretion (box 6.6).

Box 6.6 External limits on managerial discretion in private-sector businesses

Asymmetries of information provide management with the opportunity and incentive to pursue their own objectives rather than maximise profit. However, for private-sector businesses, there are incentives for managers to make investment and financing decisions that maximise shareholder returns (including remuneration and job security).

Stock markets create incentives to analyse performance and prospects of public companies and this information is capitalised in the price of companies' shares. They also create a market for corporate control, where the buying and selling of shares provides an avenue for changes in ownership and management. Competition serves to maintain pressure on manager's performance, with bankruptcy the ultimate sanction against poor management in the private sector.

Source: Church and Ware (2000).

For GTEs shareholder activism takes a different form than experienced by private companies as it can reflect government objectives other than profit maximisation. Creditors may take a greater interest in cash flow to meet debt service obligations than does the government shareholder, and hence creditors should provide increased pressures for efficient investment. However, if the debt comes with an implicit or explicit government guarantee, this commensurately reduces the incentives for creditors to provide such discipline.

Increased leverage (the debt to equity ratio) will raise the cost of financing as the exposure to default risk rises for the creditors. At some point the benefits from debt financing will be outweighed by this rising risk premium. The higher overall cost of capital discourages, at some point, the debt financing of projects.

For GTEs in particular, there could be reduced scope for gains from a highly leveraged capital structure. They commonly have a high proportion of specialised assets that have limited alternative uses. This could raise the cost of debt finance (Williamson 1996).⁷

GTEs are also generally subject to price regulation. However, if a highly leveraged and financially distressed GTE has to increase prices in order to meet interest payments on debt, a regulator might have limited ability to protect consumers. This effectively results in a transfer of some of the risk from creditors to consumers (OFWAT and OFGEM 2006).

⁷ Certain assets support more debt than others. A private-sector business with highly specialised assets — which would not have good resale value in a 'fire sale' situation — typically has a lower leveraged capital structure.

Centralised borrowing arrangements

In some countries (including Australia), governments require GTEs to borrow through central borrowing authorities (CBAs), or other entities established for the purpose of raising debt finance.⁸ In other countries, such as Canada, sub-national governments (including Alberta, British Columbia and New Brunswick) coordinate the borrowing of local government bodies (including, where applicable, GTEs).⁹

A number of potential benefits of GTE borrowing through CBAs have been identified (chapter 4). First, governments can more effectively monitor the loan-raising activities of GTEs. This facilitates the coordination necessary to achieve the overarching macroeconomic and fiscal policy objectives of governments (chapter 2).

Second, governments and, in some cases, GTEs can benefit from a lower cost of financing through central borrowing efficiencies (box 6.7). Economies of scale associated with centralised borrowing arrangements can help reduce the transaction costs for smaller GTEs compared with the alternative of stand-alone borrowing in the open market. Economies of scale can also result in deeper market liquidity and lower financing costs because the number of common maturity date instruments is increased.

Finally, centralised borrowing protocols prevent unproductive intra-governmental competition within the capital market.

However, investment disciplines are attenuated when GTEs borrow through CBAs. For example, in Australia, all jurisdictions guarantee their Treasury Corporation debt (at least implicitly) and there is not a direct relationship between the bondholder, the GTE or the investment.¹⁰

⁸ These bodies are common in Australia. For example, approximately 56 per cent of borrowings undertaken by the New South Wales Treasury Corporation in 2006 were on behalf of the State's GTEs (Standard & Poor's 2006).

⁹ In the United States, on the other hand, GTE borrowings are often sourced through the market, for example by issuing specific-purpose securities. GTE borrowings in other countries, such as New Zealand, are also largely conducted in the open market (chapter 5).

¹⁰ The implicit government guarantee of GTE debt could be considered as the provision of 'off-balance sheet' equity finance by government. In other words, debt markets expect that in the event that a GTE becomes technically insolvent, government will meet outstanding liabilities (NSW Treasury 1988).

Box 6.7 Central borrowing and competitive neutrality

GTEs can face lower debt costs than their private-sector counterparts because lenders perceive that there is negligible risk of default by virtue of government ownership (PC 2002). Other things being equal, a GTE with borrowings that are either explicitly or implicitly guaranteed by its owner government is able to raise capital at a lower interest cost than its private-sector counterparts.

In response to this, the Competition Principles Agreement (CPA), which all Australian jurisdictions signed in April 1995, requires a debt guarantee fee to be imposed on GTEs to offset the competitive advantages implicitly provided by government guarantees.

The CPA stipulates that the fee should be commensurate with the credit risk the GTE would face if it had no guarantee — exposing the GTE to the full risk-related cost of its debt (TOIRGTE 1991a, b; PC 2002). As an effective premium on GTE borrowings, debt guarantee fees restore competitive neutrality between the public and private sectors.

Some OECD countries, including Canada, have initiated similar policies, whereas in other countries such as the United States, competitive neutrality issues are addressed through anti-trust and other general competition laws.

As noted in chapter 5, the use of specific-purpose securitised borrowing on appropriate projects can overcome the limitations of centralised borrowing by providing exposure to capital market disciplines and greater transparency.

Project bondholders have an incentive to ensure that the projects supporting the debt have commercial merit when the repayment of revenue bonds is not backed by taxpayers — increasing the likelihood of efficient investment and financing decisions by GTE managers. These market-based disciplines can also improve the overall financial performance of GTEs by compensating for the weak external limits on managerial discretion. Moreover, governments would be required to make explicit any non-commercial objectives and fully fund the cost of achieving them.

Specific-purpose securitised borrowing undertaken through centralised borrowing agencies, as it is by US state governments, avoids any loss of the scale economies discussed above. There is no impact on general-purpose borrowing because the overall level of public borrowing remains the same. Indeed, the offering of a wider range of debt instruments is potentially advantageous to governments.

Equity withdrawal policies

Governments can influence the capital structure of GTEs through equity injections or withdrawals. Governments withdraw equity to:

- facilitate the restructuring of a GTE's capital and debt levels with the objective of better aligning the capital structure with those of similar GTEs within a sector or with similar businesses in the private sector
- allow governments to utilise capital in a way that maximises its overall returns to the community
- bolster the general government sector's budget position, by increasing on-budget revenue at the expense of off-budget debt
- realise a return from its investment (PC 2006c).

The manner in which equity is returned to government can vary. It can be in the form of direct capital repayments from a GTE to the shareholder, a transfer of an entity's equity that is directly financed through an increase in debt (debt-for-equity swaps), the payment of special dividends, and the use of share buyback schemes or interest-free loans provided by the GTE to the government (PC 2006c).

Alternatively, equity can be returned indirectly by GTEs through dividends that exceed profits (after tax) over a sustained period of time. When this occurs, the GTE is required to fund the dividend payment from borrowing as well as retained earnings, increasing their capital leverage.

In practice, the level of dividends varies across countries and individual GTEs, depending on the dividend policy of owner governments. In Australia, governments generally insist that GTEs provide an acceptable stream of dividends. However, for some GTEs — such as a number of regional water authorities — governments forgo their dividend entitlement (PC 2007a).

Dividend payments also vary over time. For example, GTEs in the Australian electricity sector as a whole recorded a dividend payout ratio of over 100 per cent in 2004-05 — implying that dividends paid, or provided for, exceeded after-tax operating profit. However, in 2005-06, the ratio fell to below 100 per cent.

The amount of dividend payments made by GTEs overseas has also been substantial. In New Zealand, the GTE sector returned approximately NZ\$1 billion (0.6 per cent of GDP) in dividends to the government in 2005-06 (including NZ\$878 million from Meridian Energy) (New Zealand Treasury 2007). GTEs in Sweden returned dividends in the order of SEK 9 billion (0.4 per cent of GDP) in

2001, with electricity utility Vattenfall accounting for over 11 per cent of total GTE sector dividends to the Swedish national government.

Concerns have been raised about a parent–subsidiary relationship existing between governments and GTEs where governments behave like a head office. The main manifestation of these concerns is withdrawal of equity that appears excessive at times. Extracting dividends from GTEs in excess of their profits potentially deprives the GTEs of finance that otherwise could have been utilised for capital projects:

... there are serious concerns where equity is stripped out of the GOCs [government owned corporations], and the funds are channelled into recurrent expenditure. This equity stripping is not sustainable. (Commerce Queensland 2003, p. 2)

Similar concerns have been raised with respect to GTE dividend payments in Canada and other countries.

In Australia, dividend payout ratios for GTEs do not appear to be unduly high relative to those prevailing in the private sector. For example:

- although GTEs generally reported higher dividend payout ratios than that of the top 50 Australian Stock Exchange (ASX) listed businesses between 1999-2000 and 2003-04 (PC 2005a),¹¹ research suggests that this and other forms of equity withdrawal have not significantly affected their financial performance (PC 2006c)
- payment of special dividends by Queensland electricity distribution businesses was found to have not affected their ability to undertake infrastructure network expenditure (PC 2005b).

Non-commercial objectives

Governments require some GTEs to provide services to address regional and income distribution concerns, among other things. These objectives are generally specified by government in the form of explicit or implicit community service obligations (CSOs). In some cases, these obligations are legislative requirements. Activities that potentially qualify as CSOs are:

- the delivery, at no charge or below cost, of services or service levels which would not be provided on purely commercial grounds — for example, some suburban off-peak rail and bus services

¹¹ The average dividend payout ratios for the public and the private sector were around 79 per cent and 66 per cent respectively between 1999-2000 and 2003-04 (PC 2005a, p. 21).

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- requirements to grant price concessions to particular groups of customers — for example, discounts for senior citizens or students that use bus services
 - requirements imposed on GTEs to purchase inputs at levels or types that differ from purely commercial levels in order to achieve other objectives — for example, employment creation goals (Queensland Treasury 1999).

Obligations to deliver services to final consumers or industry at uniform prices, regardless of variations in the cost of supply are also a form of CSO. For example, a uniform electricity tariff rate or postal rate necessitates transfers from some customers to others in cases where it might not be in the commercial interest of a GTE to do so.

In Australia, CSO payments accounted for 37 per cent and 23 per cent of total revenues in the urban transport and rail sectors respectively (PC 2002). Although the relative importance of CSOs varies across the studied countries, the obligations in Canada, France and the United Kingdom are most similar to Australia.

Ideally, CSOs should be directly funded by governments through budget appropriations to ensure transparency and accountability of decisions. In practice, however, many CSOs are funded internally through transfers and cross-subsidies. This involves some consumers meeting the direct cost of providing CSOs through prices that are higher than the (long-run incremental) cost of supplying the service to them (SCNPMGTE 1994).

An alternative method of funding a CSO is for governments to accept lower rates of return on GTE capital investment. In this case, revenues do not cover the full cost of providing the infrastructure service, including the opportunity cost of capital — effectively a transfer from taxpayers to customers (BIE 1995; PC 2002, 2008).¹²

Internal transfers and other failures to transparently fund CSOs can potentially distort prices and consumer behaviour and result in the misallocation of resources. In the case of GTEs, this can divert their resources away from alternative productive infrastructure investment, as well as compromise the pursuit of commercial objectives. Moreover, the non-payment of CSOs can affect the level of investment decisions by individual GTEs, their liquidity levels and short-term borrowing requirements.

The extent to which governments adequately fund CSOs that are imposed on GTEs is difficult to measure. For example, while many Australian GTEs disclose CSO

¹² Other forms of CSO funding include levies on users, direct cash transfers to users, vouchers, contracting out and explicit government reimbursement of losses incurred by the enterprise (SCNPMGTE 1994).

appropriations, several GTEs appear to provide non-commercial services at the direction of government without direct funding (PC 2002, 2005a).

The overall financial performance of Australian GTEs suggests that either CSOs are underfunded, prices regulated below the level required to make a commercial rate of return, or there is substantial inefficiency in the production of services for a significant share of GTEs in Australia. According to the Productivity Commission (PC 2007a), around half of the GTEs monitored did not achieve a return on assets — earnings before interest and tax divided by average total assets — that exceeded the risk-free benchmark return in 2005-06.

Nevertheless, the GTE reforms in Australia are improving productive efficiency and financial performance as GTEs become more commercially focussed. Investment decisions are being made more on a commercial basis, and the choice of financing vehicle reflecting considerations of ideal capital structures. In addition, some GTEs have been either privatised or their activities outsourced for commercial purposes (including in the form of public-private partnership arrangements — chapters 8 and 9).

6.3 Strengths and weaknesses

GTEs continue to play an important role in investing in large-scale infrastructure projects in some countries, especially in communications, energy, transportation and water supply. When operated commercially these businesses can generate adequate revenues to fund specialised infrastructure assets and cover operating costs.

Although the historical, economic and political circumstances that led to their establishment varies across the OECD, GTEs are widely perceived as:

... a pragmatic response to economic problems, such as the need to eliminate, reduce or control a monopoly or to ensure an adequate supply of essential goods and services at reasonable prices when excessive financial or technical risks deter private-sector involvement or in cases where the private sector is not able to deliver what the government feels is required in the public interest. (Aharoni 1986, p. 4)

GTEs have a degree of financial independence from shareholder governments when after-tax and dividend profits can be retained. Thus, they are potentially able to make investment and financing decisions without recourse to the same level of bureaucratic controls, or budgetary constraints, which are typically faced by core government departments.

Moreover, governments have found it advantageous to delegate responsibility for some infrastructure investment decisions to GTEs (Rees 1984). It has been argued that GTEs have a capacity to provide better investment decision-making than the general government sector because they are managed by boards with the necessary financial and technical expertise (Kitchen 2004a).

However, in Australia, unlike in parts of the United States and New Zealand, GTEs do not directly face capital market pressures in financing infrastructure investment. Further, government controls or ad hoc equity withdrawals can dilute the potential benefits of the reform arrangements. Similarly, governments that use their ownership leverage to achieve a variety of non-commercial objectives can create difficult-to-resolve trade-offs that bear on investment, funding and financing decisions unless carefully managed through external governance arrangements (box 6.8)

The use of off-budget financing has raised concerns over the circumvention of budget processes established to ensure financial accountability of capital expenditures and fiscal control. In the absence of transparent external governance decisions, there is reduced exposure of investment performance to parliamentary and broader community scrutiny. Only ratings agencies — such as Standard and Poor’s — are likely to consider the whole-of-government position when determining overall sovereign credit ratings for governments.

A number of countries have taken measures to improve transparency and promote accountability in the sector. For example, in Australia, investment and borrowing intentions have to be outlined in statements of corporate intent as agreed upon annually between the GTE board and their shareholding Ministers. Moreover, GTE boards are required to obtain ministerial approval before entering into joint ventures or forming subsidiaries. In some jurisdictions — such as Tasmania — parliamentary approval is required for the acquisition or disposal of certain assets.

GTE accountability is further promoted in some jurisdictions through specific parliamentary scrutiny committees — such as those in Tasmania and the Canadian provinces of New Brunswick and Saskatchewan. These provide public transcripts and reports on their deliberations into the infrastructure financing activities of GTEs. Also some countries, such as Australia¹³ and Sweden, produce annual reports that compare the financial performance of GTEs over time, and thus facilitate the potential role of ex post monitoring in enhancing long-term GTE performance.

13 The Productivity Commission (2007a) prepares a Research Paper annually on the financial performance of GTEs.

Box 6.8 Management of conflicting objectives through the external governance of GTEs

The corporatisation model has inherent tensions arising from commercial performance and other public interest objectives being pursued concurrently. Various systems of governance have been developed by governments in Australia to address these tensions. These systems are comprised of a patchwork of arrangements, many of which fall short of best practice.

Best practice external governance — the authority and systems utilised by ministers and government agencies for the control and supervision of public organisations (OECD 2002c) — has the potential to mitigate these tensions by the clarification of government policy objectives and the appropriate role of GTEs. This involves a clear distinction between external and internal governance, with greater transparency and scrutiny of the external governance role played by ministers.

Under best practice external governance, the non-commercial public interest objectives of GTEs would be made explicit and weighed against commercial performance. This would improve the performance of boards, resulting in better customer service, investment decisions and asset management. Further, without such clarification, it is not possible to assess whether the corporatisation model best achieves the public interest.

Other elements of best practice include:

- independence of GTE boards, with board members to be appointed solely on merit
- strong accountability, including the public availability of statements of corporate intent which express objectives as target outcomes
- rigorous reporting of outcomes, with sufficient resources available for substantive performance reporting and for national harmonisation of that reporting
- appointment of CEOs by GTE boards to further reinforce the delineation between external and internal governance, with CEOs subsequently being accountable only to the board.

Finally, governments should be prepared to expose to public scrutiny their rationales for ongoing public ownership. This is important in clarifying the non-commercial objectives of GTEs.

Source: PC (2005a)

Key characteristics of GTE use of financing vehicles

As discussed above, GTEs rely on three types of financing vehicles – retained revenue, borrowing and capital injections from the government as shareholder. In Australia, reflecting broader trends, GTEs are increasing their debt to equity ratio, moving to capital structures that have higher leverage. New infrastructure

investments, consequently, are more likely to be predominantly debt financed, although a mix of instruments is often used. Government largely determines the capacity of GTEs to finance through retained earnings as it sets the dividend requirements, and through other regulations that may limit the scope for revenue to exceed costs. In Australia, the potential for GTEs to conduct their own borrowing is also limited by requirements to borrow from the CBAs. Hence the main financing decision for GTEs once an investment decision has been made is whether to seek capital injections or to borrow from its government's CBA. The relative merits of the two approaches are similar to the government's own direct financing decisions (chapter 2).

The critical issue raised by this chapter is whether it is better for government to invest in infrastructure through a GTE or directly. The relative merits can be assessed against the three criteria for efficiency:

Risk management — Much of the discussion above focused on the greater incentives GTEs have for efficiency in production and potentially for investment decisions. The greater the government commitment to independent and accountable governance the greater incentive the GTE has to manage the project risks of their investment, regardless of the financing arrangements. Debt finance may make the GTE more sensitive to the cash flow implications of the investment, hence to risks posed to outcomes such as timeliness of construction and quality.

Transaction costs — The costs of arranging finance for GTEs depends on their expertise as well as the vehicle chosen. Given their specialisation and commercial focus, GTE expertise could be considerably greater than in a government department. The current arrangements for borrowing to be undertaken through a CBA provide for economies of scale that lower transaction costs, but limit the potential for market disciplines to be imposed.

Market and other disciplines — GTE investments are off-budget for government and hence may attract less political scrutiny than for direct public investment. However, the commercial imperatives facing a GTE should provide incentives for scrutiny of any proposed investments. The role of regulators, where the GTE operates in a regulated market, can impose discipline on the investment decisions where price rises are not justified solely on a cost basis.