HISTORY OF THE CAPITAL ASSESSMENT

INFORMATION PAPER
CGC 2015-09

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HISTORY OF ASSESSING STATE INFRASTRUCTURE INVESTMENT AND BORROWING

INTRODUCTION

1 This paper sets out how the Commission’s approach to capturing the differential impact of what States need to invest in infrastructure and the debt they need to incur has evolved over time.

2 The main body of this paper comes in two parts.
   • Part A provides an overview of the environment in which States operated and how this impacted the Commission’s assessment of capital.
   • Part B provides an insight into the evolution of assessment methods used by the Commission to assess the impact of capital on the equalising distribution.

3 A detailed chronology of assessment methods is provided in Attachment A. It repeats some of the material in Part B.

PART A: OVERVIEW

4 State Governments have always been significant investors in economic infrastructure such as railways and roads, as well as in assets to support the delivery of human services such as health and education. That investment has primarily been financed through borrowing, but in more recent years much has been funded upfront by State or Commonwealth revenues.

5 Recognising how this function of government affects the relative financial strength of the States has always been important for the Commission, both when it was advising on special grants to bring claimant States’ finances into closer alignment with those of stronger States, and in the post 1981 period when the Commission advised on how to allocate a pool of money to equalise States’ fiscal capacities.

6 However, the approach followed by the Commission has evolved significantly since its first assessment in the early 1930s. That evolution has been shaped by several factors including:
   • the changing nature of Commonwealth-State financial arrangements relating to national debt management
   • the changing nature of State Governments, especially the way they manage functions like rail, electricity and water.
The way the Commission has responded has also been shaped by its own experience and engagement with the States and the Commonwealth. Over time the debate on how State infrastructure and debt should be treated by the Commission has become more sophisticated and at times detailed. The Commission has responded by adapting its methodology.

**The evolving environment**

An understanding how the Commission dealt with infrastructure and debt requires some appreciation of the environment in which States operated and the impact this had on their recorded finances.

**Managing the Nation’s debt**

In the decades after Federation, arrangements for servicing debt and managing new debt had a much higher profile than today. Informal arrangements began to emerge in the early 1920s when the Commonwealth and States competed for funds on capital markets; the Commonwealth was seeking to refinance its war debt and the States wanted to finance infrastructure programs. To avoid this conflict an informal arrangement developed between the Commonwealth and States to coordinate the timing of debt issues and deal with other matters such as interest rates on issues of securities. These arrangements were formalised in 1927 when the Australian Loan Council was made a statutory Commonwealth body. Its role was to regulate and manage Commonwealth and States borrowings. Under these arrangements States lost the ability to determine their own debt.

The relative importance of debt servicing at this time is illustrated by State budgets of the time. For example, in 1933-34 State expenditure on debt servicing exceeded their combined expenditure on police, justice, education and health and welfare. State expenditure by function from 1933-34 to 1968-69 is shown in Table 1.
Table 1  State expenditure by function, 1933-34 to 1968-69

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public debt (a)</td>
<td>36.5</td>
<td>28.6</td>
<td>18.5</td>
<td>13.2</td>
<td>16.2</td>
<td>17.5</td>
<td>16.9</td>
</tr>
<tr>
<td>Railways and tramways</td>
<td>26.2</td>
<td>34.9</td>
<td>38.8</td>
<td>36.6</td>
<td>28.3</td>
<td>23.0</td>
<td>19.2</td>
</tr>
<tr>
<td>Harbours and rivers etc</td>
<td>na</td>
<td>0.5</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Water supply, sewerage, irrigation &amp; drainage</td>
<td>1.4</td>
<td>0.8</td>
<td>1.2</td>
<td>1.4</td>
<td>1.5</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Other business undertakings</td>
<td>na</td>
<td>1.2</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Education</td>
<td>8.3</td>
<td>9.0</td>
<td>12.3</td>
<td>14.4</td>
<td>18.0</td>
<td>21.9</td>
<td>26.0</td>
</tr>
<tr>
<td>Health and charitable</td>
<td>11.6</td>
<td>8.0</td>
<td>9.8</td>
<td>12.6</td>
<td>14.2</td>
<td>13.1</td>
<td>13.8</td>
</tr>
<tr>
<td>Justice</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Police</td>
<td>3.0</td>
<td>2.5</td>
<td>3.1</td>
<td>3.4</td>
<td>3.7</td>
<td>3.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Penal establishments</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Public safety</td>
<td>na</td>
<td>1.2</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>All other expenditure</td>
<td>11.7</td>
<td>12.1</td>
<td>12.6</td>
<td>15.1</td>
<td>14.8</td>
<td>15.9</td>
<td>15.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(a) Includes interest, sinking fund contributions, exchange costs.
Source: ABS Year Book Australia, cat. no. 1301.0, various issues.

11 Not only were the States heavily committed to borrowing to build infrastructure deemed necessary for development, such as railways, but there were significant differences among States in the burden of that debt as seen in Table 2.

Table 2  Public debt expenses, 1933-34 (a)

<table>
<thead>
<tr>
<th>State</th>
<th>£ '000</th>
<th>£ per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>15 734</td>
<td>6.0</td>
</tr>
<tr>
<td>Vic</td>
<td>8 415</td>
<td>4.6</td>
</tr>
<tr>
<td>Qld</td>
<td>6 291</td>
<td>6.6</td>
</tr>
<tr>
<td>WA</td>
<td>4 070</td>
<td>9.3</td>
</tr>
<tr>
<td>SA</td>
<td>5 227</td>
<td>9.0</td>
</tr>
<tr>
<td>Tas</td>
<td>1 214</td>
<td>5.3</td>
</tr>
<tr>
<td>All States</td>
<td>40 951</td>
<td>6.2</td>
</tr>
</tbody>
</table>

(a) Includes interest, sinking fund and exchange expenditure.
Source: ABS Year Book Australia, cat. no. 1301.0, 1935.

12 The differential financial strength of States, reflecting in part this differential debt burden, was the driver for the Commonwealth providing special grants and in turn for the establishment of the Commonwealth Grants Commission (CGC). Providing grants to financially weaker States to alleviate their financial stress, and instituting controls over new debt, were ways of managing the impact on a new federation should one of its members experience difficulties in meeting its commitments to financial markets.

13 Over time, arrangements to coordinate and limit State borrowings changed and in the early 1990s formal controls were lifted, in part due to the growing sophistication of State financial arrangements which had rendered existing controls ineffective. This meant States regained policy control over their debt.
State government operations

14 When the Commission came into existence, the budgets of the States were dominated by the operations of their business undertakings such as railways. For example, the cost of running railways was recorded as a State expenditure and the fares they collected as State revenue. The debt to fund railway infrastructure was recorded as State debt, and the servicing costs were treated as budget outlays, as seen in Table 1.

15 In 1933, when the Commission began comparing the overall financial position of States, it included comparisons of the operating costs and public debt expenses of their business undertakings. At the time, State public works borrowing and debt expenses were dominated by the debt of business undertakings, particularly railways, as seen in Table 3. Although the main reason States borrowed was to fund public infrastructure, about 7% was due to cumulative State deficits.

Table 3 Total State net loan expenditure on public works and services (a)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Railways and tramways</td>
<td>44.5%</td>
<td>41.4%</td>
<td>39.6%</td>
<td>28.1%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Harbours, roads and bridges</td>
<td>10.2%</td>
<td>10.4%</td>
<td>9.7%</td>
<td>6.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Water supply, sewerage, irrigation, drainage</td>
<td>14.6%</td>
<td>15.7%</td>
<td>15.5%</td>
<td>15.9%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Public buildings</td>
<td>3.2%</td>
<td>4.6%</td>
<td>5.9%</td>
<td>13.3%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Housing</td>
<td>1.5%</td>
<td>1.5%</td>
<td>2.0%</td>
<td>3.9%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Electricity and gas</td>
<td>3.0%</td>
<td>3.2%</td>
<td>3.8%</td>
<td>12.6%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Land settlement</td>
<td>11.8%</td>
<td>10.3%</td>
<td>10.5%</td>
<td>7.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Forestry, other primary production</td>
<td>5.1%</td>
<td>5.0%</td>
<td>5.9%</td>
<td>4.4%</td>
<td>1.9%</td>
</tr>
<tr>
<td>All other</td>
<td>6.2%</td>
<td>8.0%</td>
<td>7.2%</td>
<td>8.6%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: ABS Year Book Australia, cat. no. 1301.0, various issues.

16 The Commission’s early comparisons covered debt servicing expenses for most State public works or infrastructure. However, roads and social housing infrastructure were excluded from the Commission’s assessments until the 1993 Review because, prior to this, they were outside States’ revenue budgets and the Commonwealth had special arrangements in place to deal with their funding.

17 Over time as financial practices evolved and a greater operational separation emerged between State business undertakings and their owner governments, the operating costs (including debt servicing) and revenues of most of these businesses moved out of State budgets. Nevertheless, the impacts of these business undertakings on State budgets continue to be considered by the Commission, albeit indirectly, through the operating subsidies provided to them and State government equity in their business assets.
Since the introduction of all State equalisation in 1981, there have been changes at the margin to which infrastructure is directly included in the Commission’s infrastructure assessments and which is considered indirectly through an assessment of subsidies. However, the general principle has been that infrastructure which is largely funded through user charges is excluded. This has meant that electricity, rail freight and metropolitan water business undertakings or public non-financial corporations (PNFCs) have generally been excluded from the infrastructure assessments from the 1960s, although the subsidies provided to these businesses to meet community service obligations and dividends paid into consolidated revenue were assessed.

Urban public transport and housing infrastructure have moved in and out of scope due to the greater reliance on State revenue to fund recurrent and capital costs for these services. For example, in the 2004 and 2010 Reviews the internal operating expenses (including debt charges) and revenue of urban public transport providers were considered out of scope because the Commission determined that the policy of the States was to provide subsidies to these businesses. However, in the 2015 Review concern that the subsidy approach did not allow the Commission to fully recognise the infrastructure disabilities associated with these business undertakings led the Commission to include their internal operations, including the acquisition of infrastructure, in its assessments.

**Accounting for infrastructure investment and debt**

The Commission’s task is to align the fiscal position of weaker and stronger States. Initially the task was to close the gap between claimants and the standard (or stronger) States and since 1981 to equalise the fiscal positions of all States.

The overall fiscal position of States can be measured in several ways. It could be expressed as the difference between revenues and expenditure (the budget deficit or surplus), which was the case in the period to 2010, or it could be expressed in terms of holdings of assets. The holding of financial assets has been the measure since 2010 Review. The choice in part is a reflection of how to account for infrastructure investment and debt in the grants to be provided.

If the decision is to equalise State budget results, the need to undertake different levels of infrastructure investment must be recognised through an assessment of debt charges arising from different accumulated levels of borrowing. If the decision is to equalise holdings of assets, those different investment needs must be recognised by providing the necessary funds to allow a State to acquire the assets in the year the investment occurs. Under the latter approach, debt levels do not diverge due to the

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1 When these PNFCs have been out of scope the Commission has still assessed the net impact of these businesses on State budgets by including the subsidies they received from States.
recognition of different infrastructure needs when assets are acquired. An alternative way of thinking about the difference between the two approaches is that the former creates the capacity for States to meet their differential debt charges associated with infrastructure investment over the life of the debt, while the latter creates the capacity to finance the differential investment upfront when assets are acquired.

23 Debt levels per capita can also diverge due to different rates of population growth and this will lead to a divergence in debt servicing costs per capita. The choice is whether to recognise this through future assessments of debt servicing costs or to simply align the level of debt per capita each year as population changes occur.

24 Early Commissions focussed on what grant would equalise deficits, and gradually incorporated into that how differential infrastructure borrowing would drive fiscal differences through divergent debt service costs. Since 2010, the Commission has recognised those same infrastructure differences when State’s invest in new infrastructure and ensured that the grants provided enable States to hold the same debt per capita meaning that debt servicing costs would not diverge in the future.

The impact of Commonwealth capital grants

25 The Commonwealth has a long history of providing the States with capital grants to help fund the acquisition of infrastructure. In general, the Commission’s approach has been, and continues to be, that Commonwealth capital grants for State investment in infrastructure which is a Commonwealth responsibility, have no impact on what States themselves need to fund and so should not affect States’ grants. Where the infrastructure is a State responsibility and investment is a reflection of its own service needs, for example, the number of schoolchildren and schools, any Commonwealth capital grants to fund this investment should affect State grants.

26 However, when infrastructure investment is a mixture of what is needed for purely State service needs and what the Commonwealth funds for national policy objectives a simple subtraction approach can be inappropriate, unless the assessment of what infrastructure investment a State needs to undertake itself reflects those national policy objectives. Most recently, Commonwealth funding for specific road and rail network infrastructure projects has been treated in such a way that half is treated as meeting national policy objectives and has no impact on State grants.
PART B: ASSESSING CAPITAL

Methods for assessing capital

27 Since 1933 the Commission has adopted 3 different approaches for assessing capital.

- Simple debt charges assessment — 1933 to 1988 Review
- Complex debt charges assessment — 1993 Review to 2005 Update
- Direct assessment of capital transactions — since 2010 Review

28 While there were a number of factors which contributed to Commission decisions to change assessment methods, the primary drivers of change can be summarised briefly.

- The Commission’s decision after the 1988 Review to move from a simple debt charges assessment to a more complex assessment was prompted by concerns about the influence of State policies on the assessment results. The change was significant because for first time the Commission explicitly measured the assessed capital stock of States, and this has remained a feature of the Commission’s infrastructure assessments since then.
- The decision in the 2010 Review to move from a debt charges assessment to a direct assessment of capital transactions (that is, investment and net borrowing) was prompted by a desire to recognise capital needs upfront when assets and liabilities are acquired, instead of over time and to clearly distinguish between infrastructure needs and needs associated with the financing transactions of States.

Simple debt charges assessment – 1933 to 1988

29 **Special grants era.** During the special grants era, the approach of the Commission was to base its grant recommendations on the amount of assistance needed by a claimant State to give it the same budget deficit as the standard States. The Commission compared the claimant State’s actual budget deficit to the average budget deficit of the standard States. If the actual deficit reflected its specific policies, the Commission made adjustments for these policy differences. The recommended grant was the difference between the claimant State’s assessed deficit and the average deficit of the standard States.

30 For the most part, during the special grants era the Commission considered that State policies had little influence on the level of borrowing because they were determined by the Australian Loan Council. Consequently, no adjustments were made to the actual debt charges of the claimants in arriving at their assessed deficits. Any differences between the actual debt charges of a State and the standard debt charges were fully reflected in the recommended grant and considered what the State needed to incur to operate at a standard close to the stronger States. No view was
taken by the Commission on what infrastructure a State would need to provide the standard level of service.

31 Although the Commission was of the view that debt charges were not significantly affected by State policies, it did make minor adjustments from time to time to recognise the impacts of State policy. For example, during the early part of the special grants era the Commission indirectly recognised the influence of past borrowing policies of the claimant States on their deficits through a ‘penalty for past mistakes’ which was expressed in terms of a higher taxation effort. The relatively high levels of debt in the claimant States were considered partly the result of more reckless and extravagant loan expenditure policies. The penalties were maintained until 1944 when the Commission decided to drop them because it considered there was no scope for States to make a greater effort.

32 By the 1960s, while the Commission still considered that the overall level of borrowings was beyond State control, there was growing concern that how States chose to allocate their borrowing could influence debt servicing costs. For example, if a State favoured investment in assets where cost recovery was not possible, it would record a higher budget deficit. Similarly, if a State adopted below standard revenue raising policies or above standard expenditure policies, this would be reflected in its actual deficit. Towards the end of the special grants era, the Commission moved away from an APC assessment of all debt charges by making small adjustments:

- to debt charges of in-scope business undertakings not recovered from user charges
- to debt charges arising from deficit funding of non-standard expenditure and revenue policies.

33 **1981 to 1988.** In the 1980s when the Commission’s task changed to equalising the fiscal capacities of all States, it continued to assess most debt charges on an APC basis due to practical difficulties in assessing the State distribution of loan funds and the absence of evidence that there were substantial policy differences. As an exception, debt charges for business undertakings which remained in scope (for example, metropolitan transport and country water) were assessed in the same way as other spending on those functions. This was a prelude to what happened from the 1988 Review when the Commission began to recognise that State infrastructure needs varied in line with recurrent spending needs across all State government functions. In addition, the Commission made a special adjustment to Victoria’s debt charges because it considered its debt allocation policies had affected its level of debt charges for tax funded infrastructure.

34 Ongoing concerns about the influence of State policy decisions on the level of debt charges resulted in the introduction of a new assessment in the 1988 Review. By making this change the Commission sought to form a view on what level of debt a State would have if it had borrowed to acquire the infrastructure needed to deliver
the average suite of services and met average past deficits. The Commission related the stock of infrastructure a State would need to its recurrent service delivery needs.

However, the actual assessment was a blend which reflected that part of accumulated debt came from historical Australian Loan Council allocations, part from infrastructure required for service delivery and part from deficits which had been equalised by grants in the past. Under this blended approach the Commission decided to assess one third of debt charges APC, one third based on expenditure disabilities and one third of debt charges equal per capita (EPC).

This was a significant shift in the Commission’s approach although it is clear the Commission was struggling to identify a systematic and policy neutral approach to the assessment of capital.

**Complex debt charges assessment – 1993 to 2005**

In the 1993 Review, after considering a number of different approaches to address policy neutrality concerns, the Commission decided to adopt a new debt charges assessment. The approach aimed to reflect the main influences on a State’s net borrowing, and consequently its interest expenses — the infrastructure it needed to deliver the average suite of State services, cumulative capital grants from the Commonwealth and cumulative recurrent budget results.

The main influence on a State’s assessed net borrowing was the assessed stock of infrastructure. No capital stock data were available so the Commission estimated the total capital stock by accumulating capital expenditure over a long period. To form a view on what share of State education infrastructure each State needed, the Commission used that State’s share of recurrent education expenses. So if a State accounted for 40% of recurrent expenditure, by virtue of its student population among other things, it was assessed to need 40% of total State education infrastructure. The same approach was used for all State infrastructure investment.

Other transactions that affected a State’s net borrowing were also included in the debt charges model as follows.

- Actual capital grants received from the Commonwealth and other capital receipts from the disposal of land and equity investments. These receipts reduced State borrowing requirements.
- The average budget result increased (in the case of a deficit) or reduced (in the case of a surplus) State borrowing requirements. Since State budget results had been equalised the average budget result was included in the calculation of assessed net borrowing because actual budget results could be affected by non-standard expense or revenue policies.
- From the 1999 Review, following the introduction of accrual accounting, assessed depreciation expenses were included in the calculation of assessed net
borrowing as a source of funds which reduced State net borrowing requirements.

40 The 1993 Review was the first time the Commission measured the assessed capital stock of the States and used it in the calculation of State capital needs. However, the assessment aggregated borrowings for infrastructure and to fund average deficits and made no distinction between the debt charges each would generate. It made no provision for States borrowing for other reasons, for example, for the accumulation of financial assets.

41 Changes in State finances required the Commission to modify the assessment in subsequent years. Rather than borrowing to finance infrastructure or deficits, States also increasingly borrowed to reinvest in financial assets. This meant that part of observed debt charges — that relating to these purely money market operations, could not be assessed using the debt charges methodology which reflected infrastructure and deficit financing requirements. After consulting with the States in the 2004 Review the Commission decided to offset interest earnings against interest expenses so that it assessed net debt charges, which more closely reflected the charges relating to infrastructure and deficit financing. This ensured that State decisions to borrow and reinvest, which were viewed as being determined largely by individual State policy had no impact on the distribution of grants.

42 In the years after the 2004 Review, States moved from a position of net debt to one where on average they held net financial assets, and rather than recording net interest expenses, States began to record net interest earnings. The existing assessment method, which for data reasons had been based on a constructed proxy of the differential stock of debt of individual States, could not track the turning points of individual States as they moved from being indebted to becoming lenders. Further, allowances for differential interest rates borne by States on their debt could not be applied to their net lending positions, although they would still have been relevant to their historical borrowings. These problems made the existing method inappropriate and in the 2006 Update, with the concurrence of the States, the Commission concluded that it should not use the existing assessment, it was impractical to develop a new method and the best course was to ensure that net interest earnings had no impact on the GST distribution.

**Direct assessment of capital transactions**

43 In the 2010 Review, a majority of the Heads of Treasuries agreed that it was not desirable to redevelop the debt charges approach to capture the growing complexity of State financial arrangements. Doing so would have required a separation of the debt accumulated to fund infrastructure, money market transactions and their overall financial position. To capture differential interest costs would also have required a separate treatment of gross debt and State investment in financial assets.
Rather than attempt to calculate the impact of a State’s past need to borrow or lend on its net interest expenses — the heart of the debt charges approach — the Commission decided to provide grants which meant that going forward States would neither need to borrow different amounts for infrastructure nor have different levels of interest earning on financial assets.

Thus the 2010 Review saw the introduction of a direct assessment of capital transactions and a consequential change in the Commission’s interpretation of equalisation. Infrastructure needs were recognised through assessments of net investment and depreciation while capital needs relating to State holdings of financial assets and liabilities were recognised through an assessment of net borrowing/lending. Since State capital needs were assessed upfront net debt charges were assessed on an EPC basis.

At least two features of a direct assessment approach distinguish it from a debt charges approach. First, the direct assessment approach recognises capital needs upfront when new assets and debt are acquired instead of over time as the consequences of prior investment and financing decisions impact State expenses and revenue. Importantly the direct approach allows the Commission to immediately recognise the impact of population growth on State asset holdings, thereby moving GST revenue from the slower growing States to the faster growing. Second, the direct assessment clearly delineates needs relating to State non-financial assets (or infrastructure) from those relating to net financial assets (including debt). In the debt charges model the Commission had employed after the 1993 Review, these needs had been considered together and it was not possible to isolate all the effects of infrastructure on State fiscal capacities.

In other ways the two approaches are similar. Both explicitly recognise that States have differential infrastructure needs which require the Commission to estimate the assessed stock of State infrastructure. Both approaches also use the expenditure disabilities as a proxy for capital stock disabilities.

Prior to the 2010 Review, the equalisation process provided States with capacity to have the same net operating result (deficit or surplus) per capita. After the 2010 Review, States were given the capacity to hold the same net financial worth per capita. This change to the interpretation of equalisation resulted in the Commission adopting a new definition of the principle of horizontal fiscal equalisation:

State governments should receive funding from the pool of goods and services tax such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency.
The Commission retained the same basic approach to the capital assessments in the 2015 Review.

The 2010 Review was not the first time the Commission had considered making a direct assessment of capital transactions. This option had been floated prior to the 1993 Review and again in the 2004 Review. Prior to the 1993 Review, data constraints and conceptual difficulties were identified as the main obstacles. In any case the approach was ruled out in the terms of reference for the 1993 Review. In the 2004 Review, a direct assessment approach was examined in some detail along with a number of other options including a holding cost approach. The Commission acknowledged it would be easier to take of account of population changes if a direct assessment of capital transactions were to be adopted but decided against this due to data, volatility and transition concerns.
ATTACHMENT A: THE CAPITAL ASSESSMENT

OVERVIEW

1 This attachment provides a more detailed chronology of the Commission’s capital assessments. It repeats some of the material covered in Part B.

2 The Commission’s capital assessments may be broadly grouped into three periods:
   • **Simple debt charges assessment.** From 1933 until the 1988 Review the capital assessment focused on the recurrent effects of capital on State fiscal capacities through an assessment of debt charges. Throughout this period the effects of State policy decisions on State borrowings were not considered significant and debt charges were assessed on an APC basis. It was assumed that the debt charges States actually incurred reflected their needs.
   • **Complex debt charges assessment.** In the 1993 Review, motivated by changes to State borrowing policies and concerns about policy neutrality, the Commission adopted a more sophisticated debt charges assessment based on assessed levels of State net borrowing. From the 1999 Review, following the adoption of accrual accounting in State general government accounts, the Commission began to assess State government depreciation expenses.
   • **Direct assessment of capital transactions.** In the 2010 Review, the Commission adopted an approach which provided upfront recognition of State capital needs through assessments of net investment and net borrowing while retaining an assessment of depreciation expenses. The direct assessment of capital transactions necessitated changes to the Commission’s distribution model and what is being equalised.

SIMPLE DEBT CHARGES ASSESSMENT – 1933 TO 1988

Special grants era

3 The Commission was created during a period in the history of the federation when the smaller States were experiencing financial difficulties due to unfavourable economic conditions and relatively large public debt expenditure. Table A-1 shows deficits and loan losses per head for the six States in 1934-35.
Table A-1  Deficits and interest and sinking fund per head on dead weight debt, 1934-35

<table>
<thead>
<tr>
<th></th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>WA</th>
<th>SA</th>
<th>Tas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficit after “correction” (£) (a)</td>
<td>1,393</td>
<td>457</td>
<td>271</td>
<td>2,042</td>
<td>2,412</td>
<td>2,745</td>
</tr>
<tr>
<td>Interest and sinking fund on dead weight debt (£ s. d.)</td>
<td>2 4 0</td>
<td>1 15 7</td>
<td>3 6 0</td>
<td>4 11 7</td>
<td>4 13 8</td>
<td>4 2 9</td>
</tr>
</tbody>
</table>

(a) Corrections were made to improve the comparability of State data.

4  During this period, the Commission’s assessments were hampered by the lack of comparability of State budgets including how the activities of government businesses were treated. There were differences in the type of business undertakings in each State, the conditions in which they operated and the extent to which their operations were brought within State budgets. The diversity in the business undertakings was one of the main difficulties for the Commission in making comparisons of State debt charges. In addition, much of the data needed for interstate comparisons were not available.

**Debt charges**

5  From 1933 until the 1988 Review the capital assessment focused on the recurrent effects of capital on State fiscal capacities through an assessment of debt charges. Throughout this period the effects of State policy decisions on State borrowings were not considered significant and debt charges were assessed on an actual per capita (APC) basis. It was assumed that the debt charges States actually incurred reflected their needs.

6  However, during the early part of the special grants era the Commission recognised indirectly the influence of past borrowing policies of the claimant States on their budgetary position through a ‘penalty for past mistakes’. The Commission considered that the relatively high levels of unproductive debt in the claimant States were partly the result of their more reckless and extravagant loan expenditure policies, and the penalty was a judgment based adjustment which was expressed in terms of a higher level of taxation effort required of the claimant States. In 1936, these penalties were set at 10% for Western Australia and 7% for South Australia. No penalty was imposed on Tasmania. These penalties were maintained until 1944 when the Commission decided to drop them because they considered there was no scope for States to make a greater effort.

7  The Commission’s decision to accept the recorded debt charges of the claimant States as a reflection of their need was based on the borrowing arrangements which existed at that time. During most of the special grants era the level of State borrowing was determined by the Australian Loan Council and the Australian government through the granting of specific purpose loans which the States had to match.
Nevertheless the Commission constantly monitored the budgetary impacts of State borrowing.

8 In the 1958 Report, the Commission made a special examination of loan incidence in the claimant States. Table A-2 shows a breakdown of total accumulated net loan expenditure on public works up to June 1958, as well as for 1957-58. The main items of State loan expenditure were for the provision of basic services and facilities such as transport, power and water. Net loan expenditure per capita was much higher in the claimant States but the Commission attributed this to their high rates of population growth and developmental works.

Table A-2 Net loan expenditure by States on works and services to 30 June 1958

<table>
<thead>
<tr>
<th></th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>WA</th>
<th>SA</th>
<th>Tas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railways</td>
<td>35.0</td>
<td>24.0</td>
<td>38.0</td>
<td>27.0</td>
<td>18.0</td>
<td>10.0</td>
<td>28.1</td>
</tr>
<tr>
<td>Roads and harbours</td>
<td>7.0</td>
<td>4.0</td>
<td>4.0</td>
<td>8.0</td>
<td>7.0</td>
<td>9.0</td>
<td>6.1</td>
</tr>
<tr>
<td>Water supply</td>
<td>15.0</td>
<td>18.0</td>
<td>8.0</td>
<td>19.0</td>
<td>26.0</td>
<td>1.0</td>
<td>15.9</td>
</tr>
<tr>
<td>Public buildings</td>
<td>14.0</td>
<td>17.0</td>
<td>11.0</td>
<td>9.0</td>
<td>10.0</td>
<td>12.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Housing</td>
<td>1.0</td>
<td>2.0</td>
<td>4.0</td>
<td>4.0</td>
<td>12.0</td>
<td>10.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Electricity</td>
<td>15.0</td>
<td>8.0</td>
<td>(a)</td>
<td>8.0</td>
<td>14.0</td>
<td>48.0</td>
<td>12.6</td>
</tr>
<tr>
<td>Land settlement</td>
<td>5.0</td>
<td>16.0</td>
<td>4.0</td>
<td>6.0</td>
<td>3.0</td>
<td>2.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Other primary</td>
<td>2.0</td>
<td>4.0</td>
<td>10.0</td>
<td>7.0</td>
<td>5.0</td>
<td>2.0</td>
<td>4.4</td>
</tr>
<tr>
<td>All other</td>
<td>6.0</td>
<td>7.0</td>
<td>21.0</td>
<td>12.0</td>
<td>5.0</td>
<td>6.0</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total net loan expenditure (£m)</td>
<td>828</td>
<td>615</td>
<td>304</td>
<td>236</td>
<td>321</td>
<td>148</td>
<td>2452</td>
</tr>
<tr>
<td>Per capita (£)</td>
<td>225</td>
<td>225</td>
<td>214</td>
<td>334</td>
<td>359</td>
<td>441</td>
<td>250</td>
</tr>
</tbody>
</table>

Net loan expenditure 1957-58 (£m) 53 38 20 14 22 10 157
Per capita (£) 14 14 14 20 25 30 16


9 Nevertheless there were repeated calls for the Commission to expand the field of expenditure subject to adjustment to include debt charges on the basis that it was affected by State policies. The Commonwealth Treasury outlined an approach to assessing debt charges which involved different treatments based on the reason funds were borrowed. Treasury proposed the following treatments.

- Debt charges related to business undertakings should be allocated to those undertakings and considered as part of their net impacts on State budgets.
- Debt charges relating to the provision of social services should be allocated to social services and included in the assessment of expenditure on social services.
- Debt charges relating to funding budget deficits should be isolated and subject to a separate assessment reflecting the effects of non-standard policies on budget deficits.
• The assessment of other debt charges should recognise the differential proportions of unrecouped debt charges.

10 During the 1960s the Commonwealth Treasury maintained pressure on the Commission to make adjustments to recognise debt arising from deficit funding of non-standard policies and differential levels of loan expenditure on development projects from which debt charges were not directly recoverable.

11 In the 1972 inquiry, the Commission adopted the view that debt charges could no longer be taken as given because the States had greater capacity to influence the total funds available for capital expenditure. Consequently adjustments were made to actual debt charges to reflect non-standard policies. Only unrecouped debt charges for business undertakings included in the Commission’s comparisons, and those which were the result of above average expenditure policies or below average revenue effort, were considered. Debt charges related to loans to finance capital expenditure for other purposes — particularly social services or general administration for which recovery of debt charges was not practicable, and business undertakings not included in the Commission’s comparisons, were assessed APC.²

Roads

12 The 1941 recommendations included unfavourable adjustments for Tasmania and Western Australia for loan expenditure on roads. The Commission observed that the standard States were meeting a substantial proportion of their interest and debt servicing costs on road debt from motor taxes, but Tasmania and Western Australia were not making a comparable effort to offset their expenses. No adjustments were considered necessary in later years as the policies of the claimant States fell into line with those of the standard States.

13 Starting in the 1957 Report, the Commission excluded the impact of road finances from the budgets of both the standard and claimant States, on the basis that expenditure on roads was of a special character and financed in all States from the proceeds of motor taxation, which the Commission excluded from the calculation of tax effort, and from funds provided by the Commonwealth Government.³ The Commission re-iterated its position on roads in the early 1970s by stating that its general approach to road finance was to regard it as the subject of special financial arrangements between the Commonwealth and the States, and State own expenditure required to attract the maximum amount of Commonwealth matching grants was accepted as indicative of relative needs.

Business undertakings

14 In 1933 when the Commission was given the task of making recommendations to the Commonwealth on special grants to the less populous States the activities of State business undertakings were a major part of State activities. Charges for State transport and utility services, such as railways, tramways, harbours, electricity, water supply, sewerage and irrigation played a significant part in the finances of the States, and from the earliest reviews had been included among the revenue considered by the Commission. Furthermore, a significant proportion of State loan expenditure was related to development of economic infrastructure by State business undertakings. Despite the significance of State business undertakings, the Commission was hampered in making comparisons in these areas of State activity by the diversity of undertakings, and differences across States in institutional arrangements, conditions in which the businesses operated and the extent to which their operations were included in State budgets. Much of the data needed for interstate comparisons were not available. There were more data available for railways but the Commission’s early comparisons of State railway charges led it to conclude that there was not enough evidence of disparities in State policies to justify adjustments to revenue from railway charges.

15 State circumstances changed in late 1940s when the standard States increased their railway charges. After considering the evidence the Commission made an assessment of railway charges to reflect the below average effort of the claimant States. Offsetting adjustments based on broad judgment were made for what appeared to be above average effort in the claimant States for other business undertakings. Adjustments for the differential impacts of State business undertakings on the budget were made each year from 1949.

16 Initially, the main area of comparison was railway charges but detailed investigations were extended during the 1950s to cover the revenues and costs of virtually all business undertakings including debt charges and depreciation. In part this was in response to submissions from the Commonwealth Treasury asking the Commission to measure more comprehensively the impact of business undertakings on State budgets.

17 Although the Commission’s analysis eventually extended to all business undertakings, it was not until the 1961 report that the relationship between the range of services examined and the final adjustment was made clear in the Commission’s reports. In that report the Commission included explicit adjustments for railways and metropolitan transport. The report included detailed discussion about the operations of other business undertakings but the Commission was unable to recommend adjustments because of the differences in operating conditions and the types of services which had to be provided and widely differing financial policies and accounting practices of the States.
By the late 1960s the Commission’s approach to business undertakings had evolved into one based on the net budgetary impact of railways, metropolitan transport and country water services. The assessment involved the systematic analysis of policy differences with respect to the full range of cost and revenue influences for these services. The impacts of other undertakings were removed from the budgets of the standard and claimant States on the basis that they were not significant. Notably expenditure on housing and revenue from rents were not considered by the Commission because they were not usually accounted for in State budgets and they were subject to separate Commonwealth-State arrangements.

**Review era — 1981 to 1985**

In 1980 the claimancy task was replaced by an assessment of per capita relativities that included all States. The range of revenues, expenditures and business undertakings considered by the Commission were similar to those covered in claimancy inquiries.

In the 1981, 1982 and 1985 reviews, the Commission made the following assessments for capital related revenue and expenses.

- In the absence of evidence of large differences in State policies, debt charges which had to be met by State taxes (i.e. unrecouped debt charges) were assessed on an APC basis with an adjustment to Victoria’s interest expenses because it appeared to direct a greater proportion of its Loan Council program to purposes where expenses were not recoverable.

- Needs were not assessed for interest earnings with the Commission noting that this revenue source was mainly determined by State policies.

- Depreciation on tax funded infrastructure continued to be excluded because these expenses were not usually included in State government accounts.

- Assessments were made of the net impact on State budgets of railways, metropolitan transport, coastal shipping services and country water services. The Commission used the modified budgetary impact method (MBIM) for all its assessments of trading enterprises, with policy and efficiency differences among the States being identified wherever possible and removed from the comparisons by modifications to published deficits. The net impact of business undertakings on State budgets took account of depreciation expenses and debt charges as well as employee expenses and user charges.

- There was no assessment of debt charges for roads because they were not usually accounted for in State budgets and they were subject to separate Commonwealth-State arrangements. Debt charges for housing also remained out of scope.
**Review era — 1988 Review**

Improving policy neutrality was a major theme of the 1988 Review. Since the late 1970s the Loan Council’s influence had declined, with Loan Council approved programs falling from 95% of total State and local authority borrowing in 1979-80 to 25% in 1983-84. The assessments responded by explicitly recognising the existence of a broader range of drivers of interest revenues and expenses in the 1988 Review.

**Debt charges**

The Commission was concerned by the year to year volatility and rapid growth in interest expenses. It considered the increasing policy influences on debt charges made the previous assessments inappropriate and it sought a more policy neutral assessment method. State arguments varied between assessing no needs and an APC assessment. To improve the policy neutrality of the assessments, the Commission decided to base them one third on interstate differences in actual per capita expenses, one third on equal per capita and one third on the overall disability factors for all other expenditure. Although an improvement, continued deficiencies led to this assessment being extensively revised in the 1993 Review.

**Interest earnings and other revenue**

The equal per capita assessment was continued. There was a debate, however, on whether payments from business undertakings (including dividends, levies on revenue and payments in lieu of income and other taxes) should be included. The Commission decided coverage should be based on recurrent items which regularly had an impact on the budgets of all or most States. In the end the Commission included only the contributions by electricity authorities which were assessed using the value of electricity and gas sales as the revenue base.

**Business undertakings**

There were changes to the assessments for some business undertakings to make them more policy neutral. The Commission moved away from the MBIM and adopted the factor assessment method for non-metropolitan transport passenger services, country water supply and sewerage, and irrigation and associated drainage, while equal per capita assessments were introduced for non-metropolitan transport freight services and coastal shipping services. Only metropolitan transit continued to be assessed by MBIM. Thus different methods were used to assess needs for different undertakings. As far as possible, depreciation and interest expenses incurred by business undertakings were included in the net expenditure used in the assessments.
COMPLEX DEBT CHARGES ASSESSMENT – 1993 TO 2009

25 A number of changes in Commonwealth-State arrangements and State financial management policies, and continued concern that assessment methods may affect State decision making caused the Commission to reconsider its approach to capital after the 1988 Review. (Refer to Part A.) The Commission considered equalisation would not be achieved unless it included capital transactions or broadened and improved its assessments of the recurrent effects of capital.

26 In the lead up to the 1993 Review the Commission considered if an approach to capital based on an assessment of capital transactions (defined as expenditure on the creation of capital assets and the financing of that expenditure) would be preferable, in particular whether they should be in the scope of equalisation. It concluded there were too many conceptual and practical problems to do so. In any case the terms of reference for the 1993 Review instructed the Commission not to expand the scope of equalisation to include capital transactions.

27 This period was marked by the development of an increasingly sophisticated debt charges assessment and the introduction of the depreciation assessment.

1993 Review

Debt charges

28 The 1993 Review saw the introduction of a more sophisticated approach to capital assessments. The new approach, which was intended to maximise policy neutrality, aimed to reflect the main things affecting a State’s interest expenses — its accumulated capital expenditure, capital grants from the Commonwealth and average budget result. The main element of the model was the assessed capital stock States needed to support service delivery. No capital stock data were available so the Commission calculated it by accumulating capital expenditure over a number of years. The assessed capital stock was obtained by applying recurrent expenditure disabilities to the average stock per capita. The model also included other capital transactions and the average budget result which affected net borrowing. Assessed debt charges were based on the Commission’s policy neutral estimate of the stock of net borrowing States needed to incur.

29 The Commission justified the use of recurrent expenditure disabilities to derive the capital stock factor on the basis that if a State had to spend more to provide comparable recurrent services, it was also likely to need to spend more on capital. It, however, went on to say this approach would only provide a proxy for capital stock disabilities. The Commission acknowledged the importance of population growth as a driver of capital spending. However, it noted the pattern of population growth was similar to that for assessed expenditure which might imply differences in growth
were already reflected in the expenditure disability factor. At the time, no population growth factor was assessed. A cost of borrowing factor was applied to reflect the higher financing costs faced by the small States due to their relatively low quantity of borrowing and lower credit ratings.

30 The calculation used the average budget result of the States on the assumption that the Commission had been equalising budget deficits for some time. While this was the case from the early 1980s, prior to that grants to claimant States had only given them the capacity to have balanced budgets. In years when the standard States recorded a surplus they would have been able to accumulate financial assets to offset future borrowing requirements. However, the grants provided to claimant States did not provide the capacity to accumulate financial assets in those years. When debt charges were being assessed APC this was not an issue. When the Commission moved to the debt charges model this influence was not recognised. However, the impacts on the recommended grants would have been small given borrowing for deficit funding purposes was much less significant than borrowing for investment purposes.

31 Most of the less populous States (except Tasmania) supported a debt charges approach. New South Wales and Tasmania opposed the model because it represented a capital assessment which had been excluded by the terms of reference. The Commonwealth Treasury opposed the model because of its complexity. The Commission did not accept the contention that the method adopted involved a capital assessment, indicating that capital expenditures had been quantified only to determine assessed net borrowing and thereby the appropriate relative levels of debt charges.

32 In the 1993 Review interest expenses used in the debt charges assessment included those related to State general government activities but not those for business undertakings including housing. The debt charges of business undertakings were included in the calculation of the net expenditure on the relevant function which was subject to a differential assessment.

**Interest earnings and contributions from business undertakings**

33 Interest revenue earned on the investment of trust fund balances and other cash continued to be assessed equal per capita. Contributions to State revenue by electricity and gas service providers were assessed using gross domestic product (GDP) at factor cost as the broad measure of the revenue base. In the 1988 Review their contributions were assessed using the value of electricity and gas sales as the revenue base. The Commission considered GDP at factor cost a more policy neutral revenue base for making the assessment.
**Business undertakings**

34 In the 1993 Review, all business undertakings which had an impact on State budgets were considered by the Commission to make explicit their treatment in the equalisation framework. The assessments were made on a net budgetary impact basis using the factor assessment approach. For the first time the same assessment approach was applied to all business undertakings considered to impact State fiscal capacities. Differential assessments were made for urban transit, non-urban passenger transport, country water supply and sewerage services and housing services.

35 During the 1993 Review it was suggested that business undertakings should be excluded altogether from the equalisation process, on the grounds that they were, or could be, commercially viable, if they recouped from State budgets the costs of community service obligations. The Commission noted that where enterprises were generally operating in competitive markets and on commercial principles, their contributions to budgets were treated equal per capita (that is, disabilities were not assessed). However, it considered other enterprises which affected State revenue or expenditure should be differentially assessed.

**Roads**

36 By the early 1990s roads had become a function like any other in State budgets and the Commission decided to include road maintenance expenditure and motor taxes in its assessments. The assessment covered maintenance of State arterial roads, bridge maintenance, maintenance of minor roads in sparsely settled areas and other transport related activities such as road safety. While the roads assessment was concerned with recurrent spending there were always difficulties in distinguishing between recurrent and capital expenditure which had implications for the treatment of Commonwealth payments for roads. The debt charges assessment included interest expense related to road investment.

**1999 Review**

37 An assessment of depreciation expense was introduced in the 1999 Review following the shift to accrual accounting by the Australian public sector and the incorporation of depreciation in State accounts.

**Depreciation**

38 The depreciation assessment aimed to allow all States to fund the annual depreciation on the capital stock required to provide the average level of services, after allowing for factors that affect the costs of the assets and their average lives. Most States agreed that depreciation was a necessary cost of providing services and
there was broad conceptual agreement about the validity of including it in the assessments. The method the Commission adopted for the assessment of depreciation expenses is set out in Box A-1. The assessment included depreciation expenses for all functions in one category. Since urban transit and housing functions were considered a State government function, depreciation expenses for these functions were included in the depreciation category.

**Box A-1 1999 Review method for assessing depreciation**

<table>
<thead>
<tr>
<th>DEPRECIATION EXPENSES ASSESSMENT FRAMEWORK</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Average depreciation</em></td>
</tr>
<tr>
<td>multiplied by</td>
</tr>
<tr>
<td>quantity of stock disability factors</td>
</tr>
<tr>
<td>cost of stock disability factors</td>
</tr>
<tr>
<td>asset life disability factors</td>
</tr>
<tr>
<td>equals</td>
</tr>
<tr>
<td><em>Assessed depreciation</em></td>
</tr>
</tbody>
</table>

Source: 1999 Review Report, Volume 3, Chapter 4, page 94.

39 The Commission’s assessment recognised that States’ depreciation expenses were influenced by a number of disability factors.

- The quantity of stock disabilities took into account differences in the socio-demographic composition of the population, the degree of population concentration and service delivery scale effects.
- The cost disabilities recognise the differences in the costs of providing infrastructure across Australia, as measured by the Rawlinsons construction cost indexes.
- The asset life disability factors took into account differences in the physical environment that result in different asset lives in different parts of Australia.

**Debt charges**

40 The debt charges assessment was refined in the 1999 Review. The assessment included interest charges on loans raised by States for the provision of assets for all services considered by the Commission including urban transit and housing. Now that depreciation estimates were available they were included in the model as a resource from which assessed expenditure on new assets could be financed.

41 The model is set out in Box A-2.
## 1999 Review method for the debt charges assessment

Per capita cumulative *average* expenditure on new fixed assets, second hand assets, land and other capital outlays (a) multiplied by Capital expenditure disability factor equals Per capita cumulative *assessed* expenditure on new fixed assets, second hand assets and other capital outlays minus

- Per capita cumulative *assessed* depreciation (b)
- minus
- Per capita cumulative *actual* capital grants received (c)
- minus
- Per capita cumulative *average* other capital receipts (d)
- minus

Per capita cumulative average recurrent budget result (including depreciation) (e) equals

- **Per capita assessed net borrowings**
- multiplied by
- Cost of borrowing disability
- equals

**Per capita adjusted assessed interest expense**

### Notes:
1. Cumulative amounts used in the framework were from 1961-62. (b) Average depreciation was deducted in all years to 1992-93 and assessed depreciation from 1993-94. (c) Capital grants include both general purpose and specific purpose grants accumulated from 1972-73. While actual amounts are used from 1991-92 inclusive, average amounts are used for earlier years. (d) Other capital receipts excluded capital grants separately identified, and included land and second hand asset sales and receipts from equity disposals, such as of PNFCs. (e) Calculated as in scope GFS recurrent revenue less in scope recurrent expenditure less average depreciation.


### Business undertakings

42. The change in public sector activities resulting from corporatisation and privatisation associated with micro-economic reform and the National Competition Policy raised issues on how to treat PNFCs. The Commission decided that except for urban transit and housing services, only transactions between the State government and PNFCs would be included in the adjusted budget — detailed internal transactions of PNFCs were not included.

43. PNFC contributions to the budget in the form of returns on equity (dividends) and tax equivalent payments were considered to affect States’ recurrent budgets and were included. Contributions by all PNFCs were assessed in one category on an equal per capita basis because the potential for State policies to influence contributions was considered large.
2004 Review

44 This review saw further refinements to the debt charges assessment and the continuation of the depreciation.

Debt charges

45 The debt charges assessment which had been in place since the 1993 Review was complicated because current period debt charges related to the accumulation of transactions which contributed to State net borrowing. The Commission devoted considerable effort to reviewing the assessment which included convening a working party of Commission staff and State treasury officers. The consensus was that the Commission adopt a modified version of the 1999 Review approach.

46 In the case of interest expenses, most States said the growing differences in their policies on the use of borrowings to purchase financial assets should not affect the assessments. They agreed the simplest approach was to offset interest earnings against interest expenses. Prior to that, interest earnings had been assessed equal per capita. Changes were also made to allow for the effects of higher capital expenses faced by States with higher population growth.

47 Shortly after the conclusion of the 2004 Review, a reconsideration of the debt charges assessment was prompted by changes in State financial circumstances, especially the movement from a position of net debt to one where on average they held net financial assets. These problems made the existing method inappropriate and in the 2006 Update, with the concurrence of States, the Commission concluded that it should not use the existing assessment. An EPC assessment of net interest expenses was introduced in the 2006 Update.

Depreciation

48 In the 2004 Review the depreciation expenses relating to housing, urban transit, and roads were functionalised instead of being included in the Depreciation category.

2010 AND 2015 REVIEWS

The 2010 Review

49 Following the decision to turn off the debt charges assessment in the 2006 Update, a majority of the Heads of Treasuries agreed that it was not desirable to try to redevelop the debt charges approach because of its complexity and the problems of obtaining a meaningful average expense.
The 2010 Review saw the introduction of a more direct and simple assessment of infrastructure needs through an assessment of net investment and net borrowing and a consequential change in the Commission’s interpretation of equalisation.

**Investment**

There was extensive debate about when State needs relating to new infrastructure should be recognised, in particular, the Commission considered whether the assessment should be made when the investment takes place or spread over time as the infrastructure is used.

The Commission considered two main options.
- A direct approach — recognising the financial consequences of differential infrastructure needs in the year new assessed infrastructure needs arise.
- A holding cost approach — recognising the financial consequences of differential infrastructure needs over the life of infrastructure.

Under both approaches depreciation would be assessed but there would be no need to assess debt charges.

The Commission considered that the equalisation outcome was improved by assessing State capital needs upfront when State circumstances change and new assets are acquired, instead of providing States with the capacity to fund their infrastructure requirements over time as the holding cost approach does. Since State infrastructure needs were assessed upfront through an assessment of net investment, debt charges were assessed on an equal per capita basis.

**Depreciation**

The depreciation assessment was retained and based on the same assessed capital stocks used in the net investment assessment.

**Net lending/borrowing**

The new approach to the assessment of capital in the 2010 Review included an assessment of how much States would need to save (or borrow) each year to equalise their per capita net financial worth (NFW). Differential population growth was considered the main influence on State capacities to maintain equal per capita NFW. By making this assessment faster growing States would not have their net financial assets ‘diluted’ in per capita terms and each State would be assessed as having the same capacity to earn income from that per capita financial worth.
GST Distribution Review and the 2015 Review

57 The GST Distribution Review (GSTDR) said ‘the changes to the capital assessment in the 2010 Review — including the population growth needs assessment — were a positive step forward’. Nevertheless, it recommended the Commission consider adopting a ‘simplified and integrated assessment framework’ because it ‘could improve simplicity, transparency and stability while addressing concerns about the treatment of subsidised PNFCs, for example, public transport and social housing PNFCs, in the current framework’.⁴

58 The simplified approach proposed by the GSTDR would equalise net worth and include holding costs and revenues. It would assess similar population growth effects as the 2010 Review method. It would also recognise the implications for infrastructure of differential service use and capital costs, albeit over time rather than up front. The GST Distribution Review approach would have involved moving from the existing direct assessments of investment and net borrowing.

59 The 2015 Review terms of reference instructed the Commission to consider adopting the GSTDR’s simplified and integrated capital assessment. After considering the GSTDR proposal the Commission decided to continue to implement the equalisation objective in the manner adopted in the 2010 Review.

60 The Commission considered that the simplified and integrated approach and other holding cost approaches were:

- less transparent and simple, because they assess differences among States in infrastructure requirements through the holding costs of capital, an artificial construct, rather than an explicit assessment of spending required to acquire extra infrastructure recorded in State budgets
- less reliable, as judgment is required to set the holding cost of capital and that judgment affects the GST distribution
- less contemporary, as the simplified approach suggested by the GST Distribution Review recognises the GST impact of changes in State circumstances (other than population growth) over the life of the infrastructure.

61 The Commission said it considered the approach adopted in the 2010 Review appropriate for the following reasons.

- It is more contemporary as it provides States with the financial capacity to acquire the infrastructure and financial assets they need to provide the average services as their economic and demographic circumstances change.
- It explicitly recognises the effects on State fiscal capacities of population growth in a complete, reliable and simple way.

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• It explicitly recognises factors affecting balance sheets and operating results, which is consistent with recent accounting and economic trends.
• It is consistent with State practices of using recurrent revenue to help fund their infrastructure acquisition.

The 2015 Review has seen the introduction of only minor refinements to the capital assessments:
• Housing and urban transport activities and the associated infrastructure have been treated as general government services and needs have been assessed in the Infrastructure assessments. They were previously treated as public corporations with State equity holdings treated as part of net financial worth. This change means population growth, stock and cost disabilities have been assessed for housing and urban transport investment in this review whereas only population growth disabilities were assessed in the 2010 Review.
• Like roads, the capital stock disabilities used for the assessment of transport infrastructure are not the disabilities used for the assessment of recurrent transport expenditure. Instead a capital specific disability based on population size is used in the transport infrastructure assessment.
• Capital cost disabilities are measured as the average of construction cost indices and recurrent wage and location cost factors, instead of just the recurrent cost disabilities as in the 2010 Review.
• The factors which capture inter-State differences in the per capita infrastructure requirements are now based only on those recurrent service use factors the Commission considers affect infrastructure. In the 2010 Review a 12.5% discount was applied to a capital stock disability based on all recurrent expense disabilities as a simple means of excluding recurrent service use factors which did not affect infrastructure.

In the 2010 and 2015 Reviews, the appropriate treatment of Commonwealth capital grants for transport infrastructure which performs a dual Commonwealth and State function was an issue of considerable interest to the States. In the 2010 Review the Commission decided that only 50% of payments for national network road (NNR) projects should affect the GST distribution because the payments are driven partly by national needs and partly by the needs of the State where the project is located. In the absence of data to weight State and national needs, the Commission used its judgment in deciding each should receive a 50% weighting. In the 2015 Review this treatment was extended to payments for projects on the national rail network.