



**Australian Government**  

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**Commonwealth Grants Commission**

**HISTORY OF THE ADMINISTRATIVE SCALE  
ASSESSMENT**

**INFORMATION PAPER  
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## OVERVIEW

- 1 Since its beginning, the Commission has taken into account the impact of administrative scale on State spending in determining grants to be paid to States to equalise their fiscal positions. However, the concept of administrative scale has not remained constant over time.
- 2 In its 1936 Report, administrative scale referred to the concept of fixed cost. By the 1970s, scale was defined more generally in terms of economies of scale that large operations can achieve. Discussions at the time referred to gains in efficiency of operations through large scale rather than the spread of fixed costs over a large population base. In the 1999 Review, the Commission reverted to the concept of fixed costs, which it has retained ever since. It also measured scale-affected variable costs, but dropped this component in the 2004 Review.
- 3 Over the years, the main issues with the administrative scale assessment have related to:
  - the conceptual case and definition
  - the measurement of administrative scale impacts on State spending
  - increasing or decreasing scale costs
    - piggy backing
    - regional offices
    - change in spending patterns
    - departmental restructuring.
- 4 Attachment A provides a review by review history of the administrative scale assessment, starting with the 1981 Review.

## THE CONCEPTUAL CASE AND DEFINITION

- 5 The Commission has always recognised States face an administrative scale disability in providing services. This has always related to the cost of administering the various departments of government, not the delivery of services. The Commission has also accepted since its origin that the scale disability would be greater for agencies such as Treasury (called Statewide services) than service delivery agencies such as health departments.
- 6 What has varied over time is the precise nature of the disability. Two main types have been recognised at different times, consistent with economic theory.

- Economies of scale arise as fixed costs or overhead costs are spread over an increasing output. That is, the average cost per unit of output will tend to decrease with increasing scale as fixed costs, including capital costs, are spread out over more units of output.
- Separately from economies of scale arising from fixed costs, economies of scale can typically be obtained through more efficient use of resources as the output increases.

7 At times, both types have been recognised. The Commission has not always been clear about which of the two types it sought to assess. In relation to this, we have identified four distinct periods.

- In the 1930s, when the scale assessment was introduced, the concept referred to fixed costs (it was called cost of administration). In its 1936 report, the Commission said States would incur overhead costs of administration, which will of necessity be greater in proportion to population for a small State than for a large State.
- By the 1970s, the concept was defined as that of economies of scale in the provision of government services. What those economies of scale referred to was never defined clearly. However, discussions in reports referred more to the efficient use of resources rather than to the concept of fixed costs.
- In the 1999 Review, the Commission set out clearly that there were different types of economies of scale (called fixed costs and scale-affected variable costs) and set out to measure them separately.
- In the 2004 Review onwards, the Commission retained the fixed costs assessment but dropped the scale-affected variable costs assessment because the evidence of such economies of scale was weak.

## Early days

- 8 The Commission became responsible for making recommendations in relation to special financial assistance for claimant States in 1933. The needs of the claimant States were assessed by comparing their finances with those of the standard States (usually New South Wales and Victoria). To ensure that a State's policies did not influence its grants, the Commission adjusted the claimant State's budget result by replacing its actual revenues and expenses with its assessed revenues and expenses. Thus, the special grant recommended by the Commission was equal to the excess of the claimant State's *assessed* budget deficit over the *average* budget deficit of the standard States.
- 9 In the early days, the administrative scale disability was accepted as a cost of administration. In its 1936 report, the Commission said States would incur overhead costs of administration, which would of necessity be greater in proportion to population for a small State than a large State. It referred to the costs of

administering the various departments of government, not the delivery of services. This is similar to the current fixed cost approach.

- 10 However, the Commission did not allow the full difference between what the claimant States and the standard States spend to be reflected in their grants. It sought to remove any ‘extravagance of administration’ by adjusting actual spending to accord with the size of each State population.
- 11 The service delivery model implied by that approach is one where head offices of services delivery departments and Statewide services, such as Treasury and the legislature face a minimum fixed cost and the expenses above that minimum have a constant return to scale.
- 12 The conceptual case was supported by evidence of differences in per capita costs across the following departments: Premier and Chief Secretary, Auditor-General, Public Service Commissioner, Treasury, Taxation, Agent-General and Governor. Table 1 shows the per capita costs of these functions. Per capita costs were generally greater in the smaller States.

**Table 1 Per capita costs of selected government functions**

|                  | NSW   | Vic   | Qld   | SA    | WA    | Tas   | Six States |
|------------------|-------|-------|-------|-------|-------|-------|------------|
|                  | Pence | Pence | Pence | Pence | Pence | Pence | Pence      |
| Per capita costs | 26    | 25    | 56    | 41    | 47    | 51    | 34         |

Source: Commonwealth Grants Commission, Third Report (1936).

- 13 By the 1970s, the Commission’s concept of administrative scale disability had become more general. It attempted to measure the diseconomies of scale represented by notional cost per unit in claimant States relative to the standard States. This could mean it wanted to include the original fixed cost element and/or operational efficiency due to increased scale of operation.
- 14 In the 1978 report, the Commission calculated a scale factor, to adjust ‘standard State’ expenses to the level required by claimant States to deliver equivalent services. Claimant State expenses were calculated on a function by function basis using the available data and broad judgment. For example, the Commission decided to increase the performing arts allowance for claimant States from 15% to 50% in 1975-76 because a comparison of notional orchestra strengths, based on the observed relationships between States' populations and the recommended strength of their Australian Broadcasting Commission orchestras, indicated diseconomies of scale much larger than 15%.

## The concept of economies of scale

- 15 By the 1970s, the Commission had changed its view about the service delivery model. During that period and until the 1999 Review, the Commission believed that there

were increasing returns to scale in the provision of head office and State wide services. The idea of fixed costs may have been subsumed into the broader idea of economies of scale. There were no separate statements about the impact of fixed costs.

- 16 This new concept of administrative scale was implemented and maintained despite New South Wales's contention in the 1988 Review that beyond a certain size States start to experience diseconomies of large scale, due to such things as the cost of maintaining multiple offices for central administrative tasks where there are large populations in multiple urban centres.

### **1981 Review**

- 17 In submissions to the 1981 Review, Queensland, South Australia, Western Australia and Tasmania argued that their unit costs of providing most government services were greater than for the more populous States because they experienced diseconomies of small scale. These States argued that there were large indivisibilities associated with administrative services leading to fixed costs.
- 18 At this stage, New South Wales and Victoria rejected the argument that administrative services were indivisible, instead claiming that the public sector was highly labour intensive and that all costs were variable in the long run. The two larger States also argued that the theory of economies of large scale was not very relevant to government service provision because of the difficulty in defining and measuring output.
- 19 The Commission retained a scale factor, which was defined as measuring cost variations due to the existence of economies or diseconomies of large or small scale in the provision of a standard service. It considered that diseconomies of small scale were likely to be important in central and regional offices with policy, supervision, liaison and public relations responsibilities.
- 20 The Commission's case for the assessment was based on the theoretical arguments put forward by the States and empirical studies, including interstate comparisons of Commonwealth and State staffing levels for different administrative functions. The following assumptions were also made in arriving at the judgment based factors.
  - Neither New South Wales nor Victoria suffered a scale disability in relation to the other.
  - Neither Western Australia nor South Australia suffered a scale disability in relation to the other, except in the area of cultural activities.
- 21 There were no scale disabilities assessed for education, health, or law, order and public safety (with minor exceptions) services. Large factors were assessed for categories that involved large policy or legislative functions such as: Legislature,

Premier, Treasurer and Chief Secretary, Auditor-General, Public Service Board, and Taxation. Factors for some of the 1981 categories are shown in Table 2.

**Table 2** Scale factors for selected categories, 1981

|  | NSW  | Vic  | Qld  | WA   | SA   | Tas  |
|--|------|------|------|------|------|------|
| Legislature and Premier, Treasurer and Chief Secretary                                       | 1.00 | 1.00 | 1.50 | 1.80 | 1.80 | 3.00 |
| Auditor-General, Public service board, Taxation  | 1.00 | 1.00 | 1.30 | 1.48 | 1.48 | 2.20 |
| Lands (other than administration), Local government and town planning, Mapping and surveying | 1.00 | 1.00 | 1.10 | 1.16 | 1.16 | 1.40 |
| Agriculture  | 1.00 | 1.00 | 1.00 | 1.16 | 1.16 | 1.40 |

Source: Report on tax sharing entitlements, Commonwealth Grants Commission, 1981.

### 1993 Review

- 22 In the 1993 Review, administrative scale continued to be defined as the extra costs of less populous States not able to take advantage of the economies of scale available to the more populous States; they were said to relate to policy development and administration in central offices and to specialised State-wide services provided centrally.
- 23 In the 1993 Review, States put considerable effort into their investigations of the influence of economies of scale on administrative costs. The most important work was the 1992 report by Coopers and Lybrand, commissioned by New South Wales, and rejoinder submissions responding to that report.
- 24 Coopers and Lybrand analysed literature on economies of scale in the provision of public services and expressed a view that those studies that used up-to-date methods did not, on balance, confirm the existence of such economies.
- 25 Tasmania, the Northern Territory and the ACT employed expert consultants to comment on this work, and these consultants identified major problems with the Coopers and Lybrand report.
- 26 Overall, the statistical analyses undertaken were inconclusive. As Coopers and Lybrand itself observed, successful statistics of this kind required a credible measure of output, and no such measure was available for most public services to which the scale disability applied.
- 27 The Commission's evaluation of the literature did not bear out the Coopers and Lybrand view that overseas studies rejected the existence of economies of scale. The Commission said most commissioned studies of administrative scale were biased, and



that there was ample evidence to support the notion that scale economies provided cost advantages to the more populous States.

## Back to fixed costs

### *1999 Review*

- 28 The 1999 Review marked a major change in the approach to administrative scale.
- 29 Much research was done during the review to improve the conceptual foundation of the administrative scale assessment. The work attempted to clarify the concept of administrative scale and the types of expenses to which the disability applied.
- 30 The end result was that the 1999 Review distinguished between three types of costs associated with providing head office and state-wide services:
- fixed costs of corporate services, policy and planning of service delivery departments, and state-wide services (fixed costs)
  - costs of corporate services and policy and planning of service delivery departments, and state-wide services in excess of the fixed costs but which were still affected by diseconomies of small scale (variable scale-affected costs)
  - costs that varied with the size and complexity of the department's service delivery task (variable costs).
- 31 ***Definition of head office.*** Head office services were defined as relating to centrally provided or regional administrative services and not to the administration component of service delivery institutions. Head office activities included corporate services such as IT, human resources and financial management as well as policy development and planning.
- 32 Every government agency was said to have some element of these services. To provide them, a minimum level or critical mass of expenditure was said to be required regardless of the total size of the agency. Above that minimum, head office services were said to be a function of the population size, population characteristics and population dispersion. It was expected that head office costs would usually be a small proportion of the total expenditure of the agency.
- 33 ***Definition of Statewide services.*** A service was considered a Statewide one if the amount of service provided or the level of expenditure was not a direct function of the size of the population, but rather depended on the availability or flexibility of resources within a State, the State's physical size and policy choice.
- 34 ***State views.*** In their final submissions, States generally supported the fixed and variable costs approach and considered it an improvement on that used in previous reviews. However, they disagreed with some of the judgments, particularly those relating to variable costs.

## **2004 Review and onwards**

- 35 In the 2004 Review, the Commission concluded that the concept of fixed costs was well supported by economic theory. It decided to continue recognising that the less populous States incurred greater per capita fixed costs in providing a basic administrative structure. The estimates of fixed costs for each category were based on judgment, informed by some reasonable data on State staffing of head offices and Statewide services.
- 36 The Commission was not convinced of the need to assess separately scale-affected variable costs. It said that, logically, they varied with the size and complexity of the service being delivered and could reasonably be assessed with other services delivery costs. The Commission considered that, on the basis of judgment, about 10% of the costs previously identified as scale-affected variable costs were in effect fixed costs. The rest, the Commission concluded, were service delivery costs, to be assessed using the relevant service delivery factors, such as the size and composition of the user groups and differences in unit costs.
- 37 For the 2004 Review, the Commission assessed administrative scale needs for fixed costs only, in a fixed cost expense component. Some particular adjustments to the needs of the ACT and the Northern Territory were made. Most of costs previously recognised as scale-affected variable costs were reclassified as service delivery costs.
- 38 The 2004 Review fixed costs concept continued to be used in the 2010 and 2015 Reviews.
- 39 **Definition of fixed costs.** The concept of fixed costs has remained the basis of the administrative scale assessment since the 1999 Review. However, the definition has varied in the last three reviews.
- In the 2004 Review, minimum fixed costs were defined as the costs of the minimum amount of corporate services and basic head office structures required to provide policy and planning for service delivery agencies and Statewide functions, regardless of the size of the task.
  - In the 2010 Review, the definition referred to minimum administrative costs that would be incurred for a State with the population size of the smallest State. This definition was misleading but corrected in the 2015 Review.
  - In the 2015 Review, the definition referred to those costs incurred by a State in delivering services, whilst acting with average efficiency and following average policy, which were independent of the size of the service population. This definition was more policy neutral and better conveyed the intention of capturing unavoidable initial service delivery costs.

### **Independent endorsement of the fixed cost approach**

- 40 During the 2004 Review, New South Wales, Victoria and Western Australia commissioned Ross Garnaut and Vince FitzGerald to review the methods for allocation of Commonwealth grants to the States (*Review of Commonwealth-State Funding Report*).
- 41 The two economists endorsed the fixed costs concepts in their recommendation that the GST be distributed EPC, except that each State would receive a flat amount calculated to cover the irreducible minimum overhead costs of government.

### **MEASUREMENT OF ADMINISTRATIVE SCALE**

- 42 Measuring administrative scale has always been difficult. In the early days, while the Commission had operationalised the concept of administrative scale as fixed costs, the data available to measure them was limited. Later on, administrative scale lost its clear definition and, as consequence, measuring disabilities became more difficult. In the 1999 Review, the Commission again operationalised administrative scale into concepts that could be identified and measured. However, the Commission could not measure the true values. It could only approximate them.
- 43 The 2010 and 2015 Reviews have used the fixed costs derived for the 2004 Review, adjusted for inflation. Similarly, the administrative scale assessment used in the 1993 Review was based on the 1985 Review measurements. Earlier reports noted the need for the use of judgment in measuring scale.
- 44 In the early days, the Commission relied on total per capita spending on administrative services to make judgment based allowances. In the early 1980s, when comprehensive fiscal equalisation was introduced, the Commission mainly used the number of staff in State offices of Commonwealth departments to inform its judgment. A more sophisticated approach to measuring administrative scale was used in the 1999 and 2004 Reviews. This is discussed below. Details of the measurement of administrative scale in reviews prior to the 1999 Review are in Attachment 1.

### **1999 Review**

- 45 The 1999 Review was the first time the Commission attempted to estimate fixed costs. During that review, the Commission investigated a great number of sources of data and analysed a significant amount of data to estimate the minimum fixed cost for each category of spending. It investigated:
- available information from annual reports, budget papers and other government publications

- government datasets such as the Hospital Utilisation and Costs (HUCS) data
- Commission staff data collections for the education and police assessments, and some administrative scale specific requests
- regression analysis.

46 The information derived from the above sources gave an indication of what the smallest head office expenses were. It helped provide an upper limit to what the fixed cost could be. For example, Table 3 shows head office expenditures of selected ACT and Northern Territory departments.

**Table 3 Expenditure by selected departments, ACT and NT, 1994-95**

| Department                        | Head office expenditure | Total expenditure |
|-----------------------------------|-------------------------|-------------------|
|                                   | \$m                     | \$m               |
| NT - Industries and Development   | 2.6                     | 18.5              |
| NT - Law                          | 1.9                     | 13.8              |
| NT - Chief Minister               | 6.2                     | 22.8              |
| ACT - Chief Minister and Treasury | 6.9                     | 57.8              |
| NT - Treasury                     | 4.5                     | 14.5              |
| NT - Sport and Recreation         | 2.4                     | 9.8               |

Source: Staff paper 97/76, 1999 Review.

47 Further, the Commission built from the ground up a notional minimum size head office and Statewide service. It came up with an average head office skeleton staff for the education and police departments, and for the Treasuries.

48 The average head office structure was said to include corporate services and policy development and planning. More particularly, the head office structure was divided into:

- Human resources:
  - recruitment
  - training
  - leave transaction processing
  - workers' compensation claim processing
  - HR strategy
  - annual reporting
- Financial Management, covering activities such as:
  - ledger posting of account
  - payment processing
  - payroll

- IT, covering activities such as:
  - purchase and development of software
  - maintenance
  - IT support
- policy development and planning.

49 Using data on education and police head office staffing by function collected from the ACT and the Northern Territory, minimum staff numbers were allocated to each function. Assessed expenses were then derived by multiplying the average staffing costs by the notional minimum staffing numbers.

50 Table 4 shows the fixed costs derived for the 1999 Review.

**Table 4 Fixed costs, 1999 Review**

|   | Fixed cost   |
|---|--------------|
|   | \$m          |
| <b>Education</b>                        | <b>12.0</b>  |
| Pre-school education                    | 0.2          |
| Government primary education            | 3.3          |
| Non-government primary education        | 0.8          |
| Government secondary education          | 2.8          |
| Non-government secondary education      | 0.8          |
| TAFE                                    | 4.0          |
| Transport of rural school children      | 0.0          |
| <b>Health (excluding Public Health)</b> | <b>10.0</b>  |
| Hospital services                       | 5.4          |
| Nursing home services                   | 0.3          |
| Mental health services                  | 0.7          |
| Community health services               | 1.7          |
| Public health                           | 2.0          |
| <b>Law and Order</b>                    | <b>13.0</b>  |
| Police                                  | 5.0          |
| Administration of justice               | 4.0          |
| Corrective services                     | 2.0          |
| Public safety and emergency services    | 2.0          |
| <b>Welfare</b>                          | <b>8.0</b>   |
| Family and child welfare                | 1.2          |
| Aged and disabled welfare               | 2.3          |
| Other welfare services                  | 0.5          |
| Housing                                 | 4.0          |
| <b>Culture and Recreation</b>           | <b>9.0</b>   |
| Culture and recreation                  | 7.0          |
| National parks and wildlife             | 2.0          |
| <b>Community Development</b>            | <b>0.4</b>   |
| Aboriginal Community Services           | 0.4          |
| <b>General Public Services</b>          | <b>30.5</b>  |
| Superannuation                          | 0.5          |
| Other general public services           | 30.0         |
| <b>Services to Industry</b>             | <b>11.6</b>  |
| Primary industry                        | 2.8          |
| Mining, fuel and energy                 | 2.8          |
| Tourism                                 | 3.0          |
| Manufacturing and other industry        | 3.0          |
| <b>Road maintenance</b>                 | <b>4.0</b>   |
| <b>Regulatory and other services</b>    | <b>15.0</b>  |
| <b>Total</b>                            | <b>113.5</b> |

Source: Commonwealth Grants Commission, 2001 Update, Working Papers Volume 3, March 2001.

## 2004 Review

51 The Commission put considerable effort into reviewing the 1999 Review estimates. It again examined the structure of education departments and police departments using annual reports and other related material. It also used information from the

Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP) report, such as the out-of-school staffing information.

- 52 The November 2002 Conference agreed to a special data collection to gather information:
- to review whether the 1999 Review minimum fixed costs used in each category were reasonable estimates
  - to investigate whether minimum fixed costs should be modified as a result of changes in the way States provided services since the 1999 Review.
- 53 The Commission concluded that the information collected indicated that the level of fixed costs estimated for the 1999 Review was reasonable. However, in response to State requests, the Commission allocated 10% of the expenses attributed to the scale-affected variable cost component in the 1999 Review (\$103 million) to the fixed cost component. This was because it considered that it had applied a rather strict definition of fixed cost in the previous review. This increased the 1999 Review base expense from \$114 million to \$124 million.
- 54 In addition, the Commission increased the minimum fixed costs for each State by \$10 million to allow for the increased scope of head-office type functions (including the costs of Privately Financed Partnership readiness). It took this decision after re-examining the data provided by the States on their extra functions and responsibilities since 1999 and the cost of those functions. The \$10 million was apportioned across categories, as far as practicable, on the basis of each category's share of total expenses.

### **State views**

- 55 **Fixed costs estimates.** States had different views on the size of fixed costs. New South Wales and Victoria said the 1999 Review minimum fixed costs were overestimated. Queensland said they were about right. Western Australia, South Australia, Tasmania, the ACT and the Northern Territory said they were underestimated.
- 56 New South Wales said fixed costs were overestimated because:
- the 80:20 split between wages and other items overstated the amount of wages expenses; most expense categories were assumed to be less than 80% wage costs
  - including 10% of costs previously classified as variable was not justified – a strong conceptual case had been made that these costs were service delivery related
  - the \$10 million fixed cost increase because of freedom of information (FOI), privately financed projects (PFP) readiness, or national competition policy (NCP)

compliance was not justified because these costs were not fixed, very small or reducing

- States controlled cost increases through efficiency dividends, (but other States said they used targeted approaches to cost control; efficiency dividends were not standard State policy).

57 South Australia said recent increases in head office costs were obvious, for example:

- greater accountability, such as FOI requirements.
- microeconomic reform including National Competition Policy (NCP) demands for legislative reviews
- increased application of technology and the accompanying need for centralisation of IT services to obtain maximum efficiencies, which increased the share of fixed head office costs
- increased demands of intergovernmental liaison (for example, GST administration, COAG and energy market reviews)
- managing outsourcing contracts and PFPs.

58 Tasmania and the ACT agreed with South Australia, saying substantial increases in administrative costs in recent years changed the nature of minimum fixed costs. It said improvements in government services to reduce overall costs shifted many costs from service delivery to head office.

59 The ACT said growth in fixed costs had outstripped growth in total expenses. They argued for an increase of 25% to the fixed costs, based on total wages and changes in prices.

60 The Northern Territory considered it appropriate to update administrative expenses by identifying influences on costs since the 1999 Review. It also said the division of costs into fixed and variable scale-affected costs had been arbitrary and the Commission should take care not to underestimate the size of fixed costs.

61 In addition, the ACT and the Northern Territory conducted detailed reviews of selected departments in their jurisdictions to identify any changes in head offices and Statewide services that may have resulted in changes to the fixed costs estimated in the 1999 Review.

62 **Fixed cost factor.** Queensland and Western Australia suggested the factor should partly relate to the geographic size of the State. Western Australia added that additional costs arose from dispersion and Indigeneity disabilities.

63 The Northern Territory argued it incurred fixed costs in relation to the different types of services provided to its Indigenous and its non-Indigenous population. It had to undertake research, planning and policy development to respond to the service delivery needs of these two very different groups. These were non-uniform fixed



costs. They existed for the Northern Territory because 30% of its population was Indigenous and had very significant needs.

### ***Adjustment for the ACT***

- 64 The Commission decided to assess for the ACT:
- no minimum head office expenses for the Indigenous community services category
  - total minimum fixed costs of one third of other States for the Primary industry and Mining, fuel and energy categories, appropriately updated.
- 65 It also decided that a fixed cost of \$0.1 million for Non-urban transport would be allocated to the ACT for its co-ordination responsibilities for the sub-region.

### ***Adjustment for the Northern Territory***

- 66 The Commission assessed additional fixed costs of \$4.4 million for the Northern Territory. That amount was equally distributed across the education, health, welfare and housing functions. The conceptual case for this allowance was that the very high proportion of Indigenous people in the Northern Territory population necessitated dual planning and administrative structures for those functions.

### **2010 Review**

- 67 The Commission decided not to review the fixed cost estimates in the 2010 Review because the comprehensive work done in the 1999 and 2004 Reviews suggested the estimates were robust, and a full review was likely to produce a similar result.

### ***State views***

- 68 States generally supported basing the 2010 Review assessment on the 2004 Review estimates. However, Western Australia, South Australia, Tasmania, the ACT and the Northern Territory said the quantum should be increased due to increases in intergovernmental workloads, information communications technology (ICT) costs and number of statutory authority positions. These arguments were supported by reviews conducted by the three smaller States of selected departments within their jurisdictions to identify changes in fixed costs.
- 69 Some States argued they employed additional staff to meet the workload stemming from COAG initiatives. But they could not identify the net effect on staffing levels of the increased workload.
- 70 New South Wales disagreed. Instead it argued that, as there were few costs involved in the provision of State services that were not affected by service delivery, the administrative scale factor should be reduced.

- 71 New South Wales provided a lengthy submission, which argued that fixed costs amounts were not the same across jurisdictions, instead they increase with the size of the bureaucracy although at a lesser rate than population.

### **Decision**

- 72 The Commission considered the net cost increases from increased intergovernmental workloads and COAG initiatives, offset by savings from functions no longer required, unlikely to be significant enough to increase the administrative scale factor. It decided not to reintroduce a concept of variable fixed costs as argued by New South Wales as it considered the current split between fixed costs and service delivery costs recognised administrative scale disabilities, not perfectly but adequately.
- 73 It decided to use the 2004 Review estimates as the basis for the 2010 Review assessment, indexed to capture changes in wage levels and the price of goods and services used in administrative tasks.

### **2015 Review**

- 74 In the 2015 Review, New South Wales, Victoria, Tasmania and the Northern Territory argued for the fixed costs estimates to be reviewed. The Commission agreed that revisiting the quantum was a priority issue. It tried a number of approaches but was ultimately unsuccessful in reviewing them.
- 75 A number of options for estimating fixed costs included:
- collecting State departmental data that would allow a re-estimation of the quantum for one or more categories, through the Data Working Party (DWP)
  - a regression approach
  - an examination of publicly available data (Productivity Commission and State annual reports).

### **Collecting State departmental data**

- 76 The DWP process was used to seek detailed State department data. No State could provide (due in part to privacy issues) sufficiently detailed workforce data from which to derive the new quantum.
- 77 Staff also examined the three smallest States' education department annual reports, and encountered considerable difficulties. For example, each State had a different departmental structure and used different staff classifications. Staff could not locate data on comparisons of teaching versus non-teaching staff and concluded these documents were not suitable for updating the quantum.

## A regression approach

- 78 Regression analysis was investigated as a potential way of mathematically deriving a quantum for administrative scale expenses consistent with the proposed definition. Staff investigated two regression approaches.
- Using ABS GFS data: estimated the quantum by regressing GFS school education expenses against students.
  - Using Productivity Commission data: estimated the quantum by regressing out-of-school staff against students.
- 79 The Commission chose schools education because this function was the most homogenous at the State level and therefore likely to be the most policy neutral.
- 80 The regression based on GFS data produced an estimate that the Commission considered too high to be a realistic estimate of the minimum administrative costs for schools education. The dollar estimate derived from the regression was more than what was spent by six out of eight States on out-of-school staff expenses.
- 81 The Commission looked at the Productivity Commission data on out-of-school staff numbers and expenses (Table 5). However, it contained expenses not considered to be administrative scale type expenses (such as regional office staff expenses), which could not be isolated and, therefore, the data could not be used to derive fixed costs estimates.

**Table 5 School education staff and wage data, 2010-11**

|                                    | NSW    | Vic    | Qld    | WA     | SA     | Tas   | ACT   | NT    | Total   |
|------------------------------------|--------|--------|--------|--------|--------|-------|-------|-------|---------|
| In-school staff (No.)              | 69 501 | 53 543 | 48 348 | 26 070 | 16 421 | 6 165 | 3 594 | 3 918 | 227 559 |
| In-school staff expenses (\$m)     | 6 887  | 4 374  | 4 242  | 2 468  | 1 493  | 531   | 376   | 342   | 20 714  |
| Out-of-school staff (No.)          | 2 072  | 1 317  | 2 837  | 1 349  | 1 179  | 301   | 314   | 493   | 9 862   |
| Out-of-school staff expenses (\$m) | 240    | 187    | 265    | 155    | 113    | 27    | 18    | 38    | 1 043   |

Note: The data are for government school staff and students.

Source: Productivity Commission, Report on Government Services, 2013, Chapter 4, Tables 4A.1 and 4A.9.

## Conclusion

- 82 In the end, the Commission based its fixed costs expenses on those of the 2004 Review, mapped to reflect the 2015 Review categories, indexed by the SLGFCE index and adjusted for superannuation. The ACT and Northern Territory adjustments were retained.

## ARE FIXED COSTS INCREASING OR DECREASING?

- 83 In recent reviews but mainly in the 2004 Review, States have argued that a number of influences have either increased or decreased the fixed costs. The main ones are:
- piggybacking
  - regional offices
  - changing spending priorities
  - restructuring of departments.
- 84 This section expands on State views on the more important issues relating to the scale quantum discussed earlier.

### Piggybacking

#### *State views*

- 85 In the 1999 Review, the larger States argued that the smaller States could benefit from their product planning and development, which resulted in smaller fixed costs. In addition, New South Wales noted an increase in consortium approaches between States with respect to policy development and data management in recent years.
- 86 Smaller States responded that they were unique and cross-benefits were limited.
- 87 In the 2004 Review, New South Wales, Western Australia, Tasmania and Northern Territory considered that opportunities for piggy backing had not increased since the 1999 Review. However, Victoria and Queensland argued that the recent upsurge in interest in Privately Financed Projects (PFPs) had increased opportunities for piggy backing between States.

#### *Commission's response*

- 88 In the 1999 Review the Commission concluded that it appeared that whatever products were available, States would still need to adapt them to their particular circumstances. It was probable that smaller States would benefit to some degree from the work of the larger States. But the reverse was also likely (larger States could benefit from the work of smaller States).
- 89 The Commission did not think piggy backing should change the level of administrative scale disability for the smaller States.
- 90 In the 2004 Review, the Commission considered the effect of piggy backing unlikely to be significant enough to alter administrative scale disabilities.

## Regional offices

### *State views*

- 91 In the 1999 Review, the Northern Territory argued for the Commission to take account of regional office costs in the administrative scale assessment.
- 92 Queensland said a State with jurisdiction over a large physical area would be expected to incur higher head office costs than a State with a similar population and smaller physical area. It said it was not able to benefit fully from head office economies of scale as a regional administrative presence was required. It noted a number of departments had regional offices that provided region-specific policy advice and administration and said this presence was required due to the heterogeneous nature of geographic regions, which altered the demand for various services in different regions. In the case of Queensland, this was said to be particularly evident in those regions above the Tropic of Capricorn.
- 93 New South Wales argued that diseconomies of large scale were present as a result of large organisations with the additional task of co-ordinating regional offices.

### *Commission's response*

- 94 The Commission accepted that additional regional office needs affected central office administrative functions to some degree but not the minimum fixed costs. The Commission did not change the administrative scale disability to incorporate the additional regional office needs of some States. Minimum fixed costs were defined as relating to activities common to the central offices of all jurisdictions.
- 95 To the extent service delivery required regional offices, this was recognised in the service delivery disabilities, such as regional costs.

## Changes in spending priorities

- 96 In the 2004 Review, Commission staff sought from States information on changes in head office type expenses that affect fixed costs. States provided some of the costs associated with these new functions. They noted that:
- the use of PFPs resulted in an increase of five FTE positions in New South Wales
  - the introduction of the GST resulted in the allocation of an additional four FTE positions in New South Wales, \$600 000 per annum in Victoria and additional five FTE positions in Queensland
  - to deliver a better service by using improved technology, the Western Australia Treasury employed an additional 15 FTE positions
  - the cost of providing data communications to Tasmania's 218 schools and colleges was approximately \$3 million per annum

- technology support to Tasmanian schools involved the provision of technical support services for more than 14 000 PCs and 600 servers in schools at a cost of approximately \$4 million per annum
- the Tasmanian Education Department spent approximately \$380 000 per annum on student record systems and learning management system software
- Tasmania's Treasury and Finance Department had employed at least 10 more full time staff to address increased legislative requirements since the 1999 Review
- the Tasmanian Education Department required \$950 000 for involvement in national reporting requirements
- Tasmania required \$923 000 to comply with national agreements — Gun Law Reform would expand this further with Hand Gun Law Reform, which commenced on 1 July 2003
- the NCP has impacted in the order of five to 10 FTE positions per annum upon the administrative role of South Australia's Department of Treasury and Finance.

### *Commission's response*

- 97 The Commission accepted that the changes increased fixed costs. The increase in fixed costs in the 2004 Review, in part, reflected these changes. However, for the 2010 Review, the Commission chose not to increase fixed costs due to changes in functions performed by States because net costs could not be identified by States.

## **Restructuring of departments**

### *State views*

- 98 In the 2004 Review, Victoria suggested that some savings were achieved due to the abolition of functions. For example, in 2001-02 the Department of Treasury and Finance's Corporate Services Centre was dissolved and its functions absorbed across the department, providing savings in ongoing salary costs.
- 99 Western Australia's Departments of Treasury and State Revenue were merged on 1 July 2001 to form the Department of Treasury and Finance. This was expected to provide some savings over time, but the initial impact had been to increase costs.
- 100 The Western Australian Office of State Revenue was restructured to respond to an increased number of customers and non-compliance. The wages and salaries costs increased by approximately \$1.5 million per annum.
- 101 In the Northern Territory Education Department, reviews and the amalgamation of agencies had created some savings due to centralised finance functions.

### *Commission's response*

- 102 In all States, there had been a degree of restructuring since the 1999 Review. However there is no evidence that restructuring activities had any impact on head office costs. Again, net savings could not be identified by States.

### **CONCLUSION**

- 103 The history of the administrative scale assessment is one about defining the concept and finding a way of measuring it (or not).
- 104 The concept of fixed cost is largely accepted, although its exact size is subject to debate.
- 105 It is possible that there are economies or diseconomies of scale in the provision of head office and Statewide services in addition to the fixed costs, but it has not been possible to measure them reliably in the past.

# ATTACHMENT 1: DETAILED REVIEW BY REVIEW

## HISTORY OF ADMINISTRATIVE SCALE

### 1981 REVIEW

#### The existence of administrative scale

- 1 In submissions to the 1981 Review, Queensland, South Australia, Western Australia and Tasmania argued that their unit costs of providing most government services were greater than the larger States because they experienced diseconomies of small scale. These States argued that there were large indivisibilities associated with administrative services leading to fixed costs. They said indivisibility of production implied that there was a single most efficient size of operation of equipment or rate of output which cannot be changed.
- 2 New South Wales and Victoria rejected the argument that administrative services were indivisible, instead claiming that the public sector was highly labour intensive and that all costs were variable in the long run. The two larger States also argued that the theory of economies of large scale was not very relevant to government service provision because of the difficulty in defining and measuring output.
- 3 Explanations of why the relationship between inputs and outputs varied among the States were proposed by Victoria and Tasmania. Victoria argued that the variation implied differences in efficiency between the States, while Tasmania argued that the variation was due to differences in the scale of operation or differences in the units of service as a proportion of State population.

#### Measuring administrative scale

- 4 All States agreed that there were inherent problems associated with trying to measure the effect of economies of scale on the unit costs of providing government services. Victoria and Tasmania argued that this resulted partly from the difficulties of measuring outputs in the public sector. Despite this, there were some proposals outlining how the impact of economies of scale could be measured.
- 5 Tasmania suggested deriving cost functions, which would measure fixed and variable costs per unit of service, by performing linear regression analysis on the actual costs of providing public services in each State.
- 6 New South Wales, Victoria and other States argued that regression analysis was an inappropriate method of measuring the impact of economies of scale on State



expenditures because it included the influence of other factors such as dispersion and did not allow for policy differences between the States.

- 7 Queensland and Tasmania suggested calculating notional staff establishment numbers for the departments and agencies in each State, and then comparing them to the staff numbers States claimed would be needed to provide the standard services. New South Wales and Victoria criticised this approach because it involved States making judgments about the number of staff needed to provide public services.
- 8 Western Australia and South Australia suggested collecting staff numbers from non-State government agencies, such as Commonwealth departments which have branches in each State; expressing them as a proportion of States' populations; and comparing the results across States.

## Commission's decisions

- 9 The Commission noted that the literature on economies of scale in public service provision related to bodies such as schools or local government agencies. It concluded that these bodies were individual service units and did not have to face the overhead costs associated with providing a service across a region or State. It found very limited research into the effects of scale economies on services provided across a State by a number of regional organisations. The Commission thought that diseconomies of small scale were likely to be important in central and regional offices with policy, supervision, liaison and public relations responsibilities.
- 10 The Commission based its judgment on the theoretical arguments put forward by the States and empirical studies, including interstate comparisons of Commonwealth and State staffing levels for different administrative functions. The following assumptions were also made in arriving at the judgment based factors.
  - Neither New South Wales nor Victoria suffered a scale disability in relation to the other.
  - Neither Western Australia nor South Australia suffered a scale disability in relation to the other, except in the area of cultural activities.
- 11 There were no scale disabilities assessed for education, health, or law, order and public safety (with minor exceptions). Large factors were assessed for categories that involved large policy or legislative functions such as: Legislature, Premier, Treasurer and Chief Secretary, Auditor-General, Public Service Board, and Taxation. Factors for some of the 1981 categories are shown in Table 1.
- 12 Factors were derived by judgment using, for each State, the per capita staff numbers in State offices of Commonwealth agencies. Data from about 30 Commonwealth agencies were provided by the Commonwealth Public Service Board.

**Table 6** Scale factors for selected categories, 1981

|  | NSW  | Vic  | Qld  | WA   | SA   | Tas  |
|--|------|------|------|------|------|------|
| Legislature and Premier, Treasurer and Chief Secretary                                       | 1.00 | 1.00 | 1.50 | 1.80 | 1.80 | 3.00 |
| Auditor-General, Public service board, Taxation  | 1.00 | 1.00 | 1.30 | 1.48 | 1.48 | 2.20 |
| Lands (other than administration), Local government and town planning, Mapping and surveying | 1.00 | 1.00 | 1.10 | 1.16 | 1.16 | 1.40 |
| Agriculture  | 1.00 | 1.00 | 1.00 | 1.16 | 1.16 | 1.40 |

Source: Report on State Tax Sharing Entitlements 1981, Commonwealth Grants Commission.

- 13 **Definition.** In that review, the Commission defined administrative scale as measuring the cost variations due to the existence of economies of scale in the provision of standard services.
- 14 **General medical services.** Judgment based factors were also determined for Western Australia for functions associated with specialist and teaching hospitals, which were deemed necessary because of the State's isolation. An assessment was also made for Tasmania in this category because of the need to provide specialist or teaching hospitals even though it was not economically viable to do so.
- 15 **Education.** The Commission considered that there was not enough evidence that economies of scale had an impact on education costs in most States to warrant the assessment of a scale factor. The Commission did, however, decide to assess a very small scale factor for Tasmania in the categories of Government and Non-Government secondary education. This factor allowed for the additional costs of providing a comprehensive secondary education program to a relatively small user population. The factor was applied to Non-Government secondary education because all States based their grants to non-government schools on a proportion of the government school per capita costs, less the value of Commonwealth grants for government schools.

## 1982 REVIEW

- 16 While some States were dissatisfied with the administrative scale assessment, the Commission did not think they had provided enough new data or arguments to justify altering the assessment method. The Commission made only small revisions to the assessment.

## 1985 REVIEW

### State views

- 17 In a submission for the 1985 Review, New South Wales criticised the method of assessing the scale factor by reference to staffing levels of State offices of selected Commonwealth departments. It argued that this method could lead to double counting because the staffing levels were also affected by factors such as age, sex and dispersion.
- 18 While Western Australia generally supported the Commission's method of assessing scale factors, it commented that the factors were too low for areas such as Auditor-General, Public Service Board, Education and Welfare.
- 19 Western Australia also argued that the method of assessing scale led to an underestimation of the diseconomies faced because State offices of Commonwealth departments did not perform policy, planning and administrative functions.
- 20 Tasmania also argued that the scale factors should be increased, following an analysis of the managerial input required in Commonwealth departments. Tasmania commented that participation in intergovernmental agreements and Commonwealth inquiries and reviews also imposed significant costs on the smaller States. It submitted an empirical analysis of diseconomies of scale in education, and suggested that the same methodology could be used in other categories. The other States rejected this approach to assessing a scale factor.
- 21 Victoria argued that the Commission's scale assessment included an allowance for inefficiency. It also argued that large diseconomies of scale were only experienced by very small administrative organisations, and that the average cost curve fell rapidly for these organisations and then flattened out.
- 22 **General medical services.** New South Wales and Victoria criticised the allowance the Commission made for Tasmania in the 1982 Review, claiming that Tasmania relied on Victoria to provide a considerable proportion of the specialist services required by the Tasmanian population.
- 23 Queensland argued that it should receive an allowance for scale on the same basis as that calculated for Western Australia and Tasmania. South Australia argued that it should have the same factor as Western Australia in respect of super-specialist services, because the two States had approximately the same population.
- 24 **Education.** Tasmania provided a statistical analysis of costs to support its argument that the Commission should increase the scale factors assessed for Primary and Secondary Education. South Australia also argued that the factors were too low and used regression analysis of non-school staff on the size of the school system in each

State to argue that the factors should be increased, and be applied to other States as well as Tasmania.

- 25 Tasmania argued that a scale factor should be assessed for the provision of administrative and support services for TAFE colleges. New South Wales disagreed with the assessment of a scale disability for TAFE head offices for any State.
- 26 New South Wales and Victoria argued that the smaller States were at an advantage because they benefited from access to the larger States' initiatives in TAFE projects of national significance. Tasmania claimed that the larger States had more personnel and could therefore release staff to work on special projects, funded by the TAFE Council, which gave the staff the opportunity to develop additional expertise.

## Commission's decisions

- 27 For the 1985 Review, the Commission decided to revise the scale factors, although they were still based on the staffing of State offices of Commonwealth departments. Similar to the 1981 and 1982 Reviews, the factors were based on data from about 30 Commonwealth agencies provided by the Commonwealth Public Service Board (PSB). The Commission made a number of adjustments to the PSB data to make it more comparable.
- 28 The basic scale factors that were derived were applied to categories in which it was assumed that 20% of expenditure was affected by scale economies. These basic scale factors, from which factors for other groups were derived, are shown in Table 7. The table also shows how the factors were derived.

**Table 7 Basic scale factors, 1985**

|                                       | NSW   | Vic   | Qld   | WA    | SA    | Tas   |
|---------------------------------------|-------|-------|-------|-------|-------|-------|
| <b>1982 data</b>                      |       |       |       |       |       |       |
| Staffing per capita (30 June 1982)    | 4.56  | 4.70  | 4.91  | 5.78  | 5.76  | 6.18  |
| Relativities (a)                      | 1.000 | 1.032 | 1.078 | 1.268 | 1.263 | 1.356 |
| <b>1983 data</b>                      |       |       |       |       |       |       |
| Staffing per capita (30 June 1983)    | 5.157 | 5.134 | 5.365 | 6.227 | 6.100 | 6.947 |
| Relativities (a)                      | 1.000 | 0.995 | 1.040 | 1.208 | 1.196 | 1.351 |
| Average relativities of 1982 and 1983 | 1.000 | 1.014 | 1.059 | 1.238 | 1.229 | 1.352 |
| Basic scale factors (b)               | 1.000 | 1.000 | 1.020 | 1.180 | 1.180 | 1.400 |

(a) State average relativities divided by the New South Wales' average relativities.

(b) Rounded from the above relativities.

Source: Report on State Tax Sharing Entitlements 1985, Commonwealth Grants Commission, and relevant staff papers.

- 29 The Commission attempted to classify the Commonwealth departments used in the staffing analysis into seven groups so that individual factors could be calculated for each group. The following criteria were used to classify the departments.
- The spatial location of the department, grouped into:
    - capital city only
    - regional (including capital city), or
    - country (including capital city).
  - The size of the department or organisation.
  - Variability of the departments in terms of cost efficiency.
  - Function of the department.
- 30 Group 1 was to contain small departments, which were based in capital cities, while Group 7 was to contain large departments, which were dispersed through country areas as well as having a capital city office. This analysis proved unsuccessful, and individual factors for each of the seven groups could not be calculated. Instead, the basic set of factors was applied to the categories in group 4 and was weighted to derive the factors for the other six groups of categories, as shown in Table 8.

**Table 8 Scale groups and factors, 1985**

| Group | Proportion of expenditure assumed affected by scale (%) | Weight applied to basic factors | Categories included in group  |
|-------|---|---------------------------------|---|
| 1     | 100   | 5                               | Premier & Treasurer<br>Legislature<br>Overseas representation   |
| 2     | 75  | 3.75                            | Auditor General<br>Taxation<br>Valuer General<br>Consumer protection  |
| 3     | 50  | 2.5                             | Public service board<br>Fuel & power<br>Labour & industry - other<br>Industrial training<br>Local government & town planning<br>Mapping & surveying<br>Agriculture - dairy industry<br>Agriculture - horticulture |
| 4     | 20  | 1                               | Libraries - reference<br>Libraries - public<br>Museums<br>Art galleries<br>Other cultural activities  |
| 5     | 10  | 0.5                             | National parks & wildlife<br>Agriculture - plant industry<br>Agriculture - animal industry<br>Saltwater fisheries<br>Vermin & Noxious Weeds<br>Public Health - Other  |
| 6     | 5   | 0.25                            | Police<br>Administration of Justice<br>Corrective Services<br>Fire Protection<br>Maternal & Infant health<br>Child welfare<br>Soil conservation   |
| 7     | 1   | 0.05                            | School medical services<br>School dental services<br>Emergency Welfare Relief & other services  |

Source: Report on State Tax Sharing Entitlements 1985, Commonwealth Grants Commission.

- 31 General medical services and education were the two exceptions to this method of calculating the scale factors.
- 32 **General medical services.** The Commission tested two alternatives for estimating the notional number of beds on which the factor calculation was based. Because the

data used in these analyses were deficient, the Commission decided to retain the method of assessment used in the 1982 Review.

- 33 The Commission did, however, decrease the notional number of beds for super-speciality needs assessed for Western Australia because that State's population was reaching a level at which the provision of most of these services became viable. Western Australia was therefore assessed at the same level as South Australia for the provision of super-speciality services.
- 34 **Education.** The Commission increased the factors assessed for Tasmania for Government primary and secondary education from 1% to 4%. These factors were assessed by the Commission's judgment after reference to the ratio of non-school based staff to school based staff (provided by the States) and general administrative expenditure per student (provided by the Commonwealth Schools Commission). The increase in Tasmania's scale factors was also applied to the Non-government primary and secondary education categories.
- 35 The Commission decided to assess a scale factor for TAFE for Tasmania, but due to the lack of data the factor was assessed by broad judgment. The Commission decided that the disability should be 90% of the disability assessed for the government secondary education sector. This was based on the relative proportions of total expenditure allocated to head offices in the two sectors.

## 1988 REVIEW

- 36 The Northern Territory was included in the relativities calculations for the first time.

## State views

- 37 New South Wales argued that there were no economies of large scale in areas for which the major input was labour. Instead it claimed that there were diseconomies of large scale because of the need to duplicate the administrative structures for government services that were provided to urban and non-urban regional areas.
- 38 New South Wales also argued that the small States could overcome diseconomies of small scale by reorganising departments and sharing technology among departments. New South Wales and Victoria further argued that the other States were able to reduce their costs by taking advantage of some of the policy initiatives of the larger States.
- 39 States made several criticisms of the method of calculating scale factors that was adopted in the 1985 Review.
- New South Wales, Victoria and Western Australia argued that there should be a weighting applied to staffing numbers to account for the more complex tasks

performed by the staff in the larger States and the higher salaries that were paid to such staff.

- Victoria said that a number of adjustments to the PSB data were arbitrary, and that the weights applied to the categories were not based on sufficient data or evidence.
- Tasmania argued that the staffing levels of State offices of Commonwealth departments were likely to be affected by other non-scale factors and differences in administrative arrangements.
- The Northern Territory agreed with Tasmania's argument and claimed that these other influences were even greater in their case. It also submitted that its scale factors should not be assessed in the same way as the States' factors because of differences in activities, geographic areas of administrative responsibility, and lesser autonomy of Territory branch offices of Commonwealth departments.

40 New South Wales, Victoria and Western Australia proposed that the Commission should use actual rather than Commonwealth staffing figures as the basis for calculating the factors. Queensland did not favour the use of actual staffing data; but suggested, along with Victoria and Western Australia, that such data, if used, should be adjusted to account for the influence of policy, functional differences and individual State disabilities.

41 Victoria suggested an alternative method for assessing the scale factor. It used linear regression of Commonwealth Senior Executive Service staff on total staff (in departments present in at least four States) to determine an adjustment to the administrative staff numbers used in the previous assessment. Victoria then estimated that an extra 100 staff should be added for Commonwealth-State negotiations and other intergovernmental functions. Victoria suggested that because the analysis included most Commonwealth departments, the calculated factors were a weighted average which could be applied to all categories.

42 Queensland suggested that the population data used to calculate the factor should be lagged by four years because staffing levels did not respond immediately to population changes. South Australia rejected this proposal as part of their argument that diseconomies or economies of scale arose because of a State's capacity to finance fixed overheads relative to the State's revenue raising capacity. It claimed that the revenue raising capacity should relate to the current period's population rather than those four years prior.

43 Western Australia proposed an alternative method of assessing scale using a fixed cost-variable cost model. This involved making estimates of the fixed and variable costs within Western Australia's government departments, using this information to determine notional total costs for the other States, and then calculating the scale factors. Western Australia considered that only a proportion of fixed costs were



constant over all States and argued that variable costs were likely to be different across the States depending on discounts available to bulk purchasers.

- 44 Queensland supported a fixed cost-variable cost approach and suggested that the Commission should undertake a detailed interstate study to determine these costs.
- 45 To determine its factor, the Northern Territory suggested that the factors be extrapolated from those determined for other States, and then further increased because of the interaction of scale with other factors such as socio-demographic composition and dispersion.
- 46 **Medical services.** The States criticised the previous assessment of scale for this category. Most argued that the allowance for the provision of medical undergraduate training should be revised. The assessment was based on the number of medical undergraduates commencing study, which States claimed may be influenced by State government policy. The Northern Territory argued that the Commission should assess an administrative scale factor for this category in the normal way.
- 47 **Education.** Tasmania argued that the Commission should assess a scale factor for Pre-school Education because of the need to attend interstate conferences; involvement with national projects; and the development of curricula. The Northern Territory supported the assessment of a scale factor for Pre-school Education, and suggested that it should be smaller than that assessed for Primary Education.
- 48 New South Wales, Victoria and Queensland criticised the scale factors assessed for Government Primary Education as being too large. Western Australia and South Australia claimed that they should be assessed to have a scale disability in this area if Tasmania was assessed as having a disability of 4%.
- 49 The three larger States argued against the assessment of a scale factor for TAFE for Tasmania. New South Wales' argument was that Tasmania benefited from the curriculum development of other States. Victoria referred to a Commission discussion paper: *Comparison of State Policies Relating to the Delivery of Selected State Services*, as evidence that Tasmania did not have a scale disability for TAFE. Victoria stated that the paper indicated that Tasmania had an above standard number of enrolments and a greater teaching effort relative to head-office staff.
- 50 Both Tasmania and the Northern Territory argued that the scale factor for TAFE should be larger than previously assessed because the TAFE system was smaller than the secondary education system. These States also argued that diseconomies of small scale were more related to the difficulties in amortising the costs of course development and equipment and to the lower number of students attending each course, than to the levels of administrative staff.

## Commission’s decisions

- 51 The Commission rejected the alternative assessment methods proposed by Victoria and Western Australia. It rejected Victoria’s proposal of including in the analysis all Commonwealth departments that had representation in at least four States, believing that staffing might be affected by Commonwealth policy or other factors that did not exist in all States. Contrary to Victoria’s suggestion, the Commission considered that the factors would still need to be adjusted for different categories.
- 52 The Commission decided that the fixed cost-variable cost model proposed by Western Australia relied too much on States’ opinions as to how costs should be classified. It considered that the underlying assumption of the model — that considerable fixed costs existed — was a matter for debate, particularly by the larger States. The Commission also thought that fixed costs were unlikely to be of the same absolute size in all of the States and that the smaller States would probably have a higher proportion of total costs that were indivisible.
- 53 Data restrictions prevented the Commission from applying a weighting to staffing to account for the larger States’ argument that they paid higher salaries to their Commonwealth staff because of the higher skills required.
- 54 The Commission could not obtain updated Commonwealth staffing numbers and based the 1988 assessment on the factors determined in the 1985 Report, which used 1982 and 1983 data. The factors assessed for the smaller States were reduced slightly to account for the impact of technological change, which the Commission thought reduced the diseconomies of scale experienced by the smaller States.
- 55 The Commission also decided to assess the Northern Territory’s scale factor separately because of its exceptional circumstances. Given that none of the States suggested a method for assessing scale for the Northern Territory, and that the Commission did not want to rely on statistical techniques of extrapolation based on only a few observations, it was decided that the factors be assessed by broad judgment.
- 56 The basic set of factors adopted for the 1988 Review are shown in Table 9. They were slightly lower than in the 1985 Review for Western Australia, South Australia and Tasmania

**Table 9 Basic scale factors, 1988**

|                     | NSW   | Vic   | Qld   | WA    | SA    | Tas   | NT    |
|---------------------|-------|-------|-------|-------|-------|-------|-------|
| Basic scale factors | 1.000 | 1.000 | 1.020 | 1.160 | 1.160 | 1.350 | 2.300 |

Source: Report on State Tax Sharing Entitlements 1988, Commonwealth Grants Commission.

- 57 The Commission continued to assess seven groups of factors with the same weightings; however, it reviewed the classification of some of the categories as follows:
- Legislature was changed from Group 1 to Group 2
  - Consumer Protection Services was changed from Group 2 to Group 3
  - Administration of Justice continued to be assessed as Group 6 for Tasmania and the Northern Territory, but was changed to Group 7 for the other States.
- 58 In response to State submissions, the Commission amended the scale factors for categories that were also assessed using a units of use factor that was not based on population. The reason for this change was that the relationship between units of use and scale was not reflected in the Commonwealth staffing numbers used to derive the scale factors. The change was made by judgment, based on the change implied by increasing or decreasing the State's population in proportion with its units of use factor. The categories affected were:
- Agriculture categories
  - Fisheries - saltwater
  - Mapping and surveying
  - Soil conservation
  - Valuer-General.
- 59 **General medical services.** The Commission revised the assessment for this category and decided to replace the existing scale factor with an administrative scale factor and a super-speciality scale factor (applied only to a sub-group of expenditure). The administrative scale factors were assessed by the Commission's judgment after referring to data on the number of health administration staff in the States and Territory.
- 60 **Education.** In previous reviews, the Commission did not assess a scale factor for Pre-school Education because it considered that States could avoid scale diseconomies by subsidising pre-schools run by non-government organisations. In the 1988 Review, the Commission changed its previous decision and decided to assess a factor, by judgment, to be equivalent to 25% of the disability assessed for Primary School Education. The reason for this was that the Commission considered that the Northern Territory and remote areas of the States would not be able to attract non-government organisations to run pre-schools.
- 61 The Commission used more recent and comparable data to calculate the scale disabilities for Government Primary and Secondary Education categories. The assessment was based on the number of head and regional office executive staff per thousand students in New South Wales, Queensland and Western Australia. Ratios for the remaining States were estimated from these data. The factors were adjusted

by the salary related proportion of State education expenditure. As in the 1985 Review, the Commission applied the scale factors for Government Primary and Secondary Education to the Non-Government Education categories.

- 62 The Commission decided to increase the factors assessed for TAFE to the same level as those assessed for Government Secondary Education. This was done because the Commission considered that the TAFE systems were smaller and their course structures were probably more complex than was the case in Government Secondary Schools.

## 1993 REVIEW

- 63 The ACT was included in the relativities calculations for the first time.

## State views

### *The case for administrative scale*

- 64 Many States were still critical of the assessment and, in that review, put considerable effort into investigating the case for assessing the influences of economies of scale on administrative costs. For example, New South Wales argued that the administrative scale assessment was based on an assumption rather than clear evidence that economies of scale existed in State government administration.
- 65 Victoria said that any attempt to measure the effect of economies of scale on the provision of State services required a measure of the output of public services (though it recognised the difficulties associated with this); an optimal unit size; and an estimate of the unit cost of sub-optimal operation.
- 66 The most important work done in that review to review the case for administrative scale was the 1992 report by Coopers and Lybrand, commissioned by New South Wales, and rejoinder submissions responding to that report. Coopers and Lybrand undertook a study on the existence of economies of scale in State government services. Coopers and Lybrand analysed literature on economies of scale in the provision of public services and expressed a view that those studies did not, on balance, confirm the existence of economies of scale in government administrative services; the literature did not support the small States' views on the existence of scale economies.
- 67 They also applied regression analysis to data on school expenditure and student numbers. They claimed the results proved that economies of scale did not exist.

- 68 Tasmania, the ACT and the Northern Territory employed expert consultants to comment on this work, and these consultants identified problems with the methods and results of the Coopers and Lybrand report.
- 69 Tasmania also made reference to a consultancy on scale economies in education, which it commissioned for its 1984 submission. That consultancy found that Tasmania had a scale disability of 10% relative to New South Wales. Tasmania argued that it should be assessed as having larger scale disabilities in education, health and police.

### *The assessment of administrative scale*

- 70 In addition to the debate about the existence of administrative scale, States criticised the way it was assessed by the Commission.
- 71 New South Wales said:
- the Commonwealth staffing data were outdated
  - the factors should be reduced because most States' head offices were larger than State offices of Commonwealth departments (because the Commonwealth's administration was centred in the ACT)
  - the level of parliamentary representation in the smaller States was not a diseconomy of scale but a higher level of service, and flowing from this, the bureaucracy in small States was relatively larger
  - population growth and technological change, particularly in the field of communications, was likely to have reduced the minimum efficient size of States and therefore placed Queensland, Western Australia and South Australia at or near optimal size.
- 72 Victoria suggested:
- including semi-government or national private sector organisations in the analysis of staffing data
  - examining what States did, and provided analyses of staffing in Premier's offices — which it concluded required a minimum of 200 staff to provide an equivalent level of service — and the Auditors-General offices, which it concluded exhibited only a very minor degree of economies of scale.
- 73 Queensland argued it still suffered from an administrative scale disability, and fitted a curve to the Commonwealth data to support its point. It criticised the use of Commonwealth staffing data because of the choice of departments used in the analysis, and the fact that the data were out of date. Queensland also said that the adjustments made to the assessment, and the grouping of categories, were arbitrary.
- 74 Western Australia argued for an increase in the administrative scale factors because of:
- an increase in the range of services provided, which increased the need for specialist skills

- a greater need for accountability and scrutiny of policy leading to more research, policy development and planning
- the introduction of new technology, which has increased the relative importance of fixed costs.

75 Tasmania criticised the use of Commonwealth data because there were several Commonwealth departments in Tasmania administered from Victoria, and there were fewer functions performed in the Tasmanian offices. Tasmania also argued that an increased need for technical expertise and specialist staff had increased the proportion of total fixed costs.

76 The Northern Territory claimed that it incurred additional administrative scale disabilities because:

- fixed costs were not affected by population size
- it had lesser purchasing power than the larger States
- it experienced higher per unit costs in employing specialist skills
- it experienced reduced flexibility of smaller units
- its social composition imposed higher scale costs.

77 South Australia however, supported the 1988 Review assessment method.

## Commission decisions

78 The Commission's evaluation of the literature did not bear out the Coopers and Lybrand view that overseas studies rejected the existence of economies of scale. It said most commissioned studies of administrative scale were biased, and that there was ample evidence to support the notion that scale economies provided cost advantages to the more populous States.

79 Overall, the Commission concluded that the statistical analyses undertaken were inconclusive. As Coopers and Lybrand itself observed, successful statistics of this kind required a credible measure of output, and no such measure was available for most public services to which the scale disability applied.

80 In the end, most States supported the conceptual case for an administrative scale assessment but had different views on the scope and method of determining the disability factors.

## *How were needs measured?*

81 The Commission agreed with the States that measuring economies of scale in government administrative services was difficult.

82 The Commission requested information from Commonwealth departments about staffing and workloads in State offices. The data received were of questionable

reliability and the Commission gained limited insight into State differences in institutional arrangements. Many Commonwealth departments amalgamated after 1988, leading to fewer observations of staffing data and wide variations in staff-population ratios. The Commission decided to base the factors on those derived in the 1988 Review because the pre-1988 data was much more reliable.

83 The 1993 Review assessment method saw only a few changes from the 1988 Review method.

- In the interest of simplicity, the number of groups of factors was reduced from seven to five and the classification of categories to groups was reviewed. The new groups of factors, High, Medium-High, Medium and Medium-Low corresponded with the former groups 3, 4, 5 and 6. A new group, Low, was created, and used for some education and health categories which were not previously assessed by the general method, resulting in an increase in the factors for these categories.
- Queensland was no longer assessed as incurring a scale disability relative to New South Wales or Victoria.
- The disabilities assessed for the smaller States were reduced because of increases in their populations.

84 The factors assessed for the five groups are shown in Table 10, and the grouping of categories is shown in Table 11.

**Table 10 Administrative scale factors, 1993**

|             | NSW    | Vic    | Qld    | WA     | SA     | Tas    | ACT    | NT     |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| High        | 1.0000 | 1.0000 | 1.0000 | 1.3000 | 1.3700 | 1.8700 | 2.2900 | 4.0500 |
| Medium-High | 1.0000 | 1.0000 | 1.0000 | 1.1200 | 1.1500 | 1.3500 | 1.5200 | 2.2200 |
| Medium      | 1.0000 | 1.0000 | 1.0000 | 1.0600 | 1.0800 | 1.1800 | 1.2600 | 1.6100 |
| Medium-Low  | 1.0000 | 1.0000 | 1.0000 | 1.0300 | 1.0400 | 1.0900 | 1.1300 | 1.3000 |
| Low         | 1.0000 | 1.0000 | 1.0000 | 1.0120 | 1.0160 | 1.0360 | 1.0520 | 1.1200 |

Source: Report on State Tax Sharing Entitlements 1993, Commonwealth Grants Commission.

**Table 11** Category groupings for scale factors, 1993

| Level of administrative scale disability | Category  |
|--|---|
| High                                     | Other general public services<br>Tourism<br>Other services  |
| Medium-High                              | Culture and recreation<br>Planning and environment  |
| Medium                                   | National parks and wildlife<br>Other transport<br>Agriculture and fisheries   |
| Medium-Low                               | Community health services<br>Police<br>Administration of justice<br>Corrective services<br>Family and child welfare<br>Other welfare services<br>Housing  |
| Low                                      | Government primary education<br>Non-government primary education<br>Government secondary education<br>Non-government secondary education<br>TAFE<br>Hospital services<br>Public safety and emergency services<br>Road maintenance<br>Aged and disabled welfare  |
| No administrative scale factor assessed  | Pre-school education<br>Transport of rural school children<br>Nursing home services<br>Mental health services<br>Aboriginal community services<br>Superannuation<br>Brucellosis eradication<br>Mining, fuel and energy<br>Soil conservation<br>Other services to industry<br>Debt charges<br>Urban transit<br>Non-urban transit - freight<br>Non-urban transit - passengers<br>Country water supply and sewerage<br>Other trading enterprises |

Source: Report on State Tax Sharing Entitlements 1993, Working papers, Commonwealth Grants Commission.

## 1999 REVIEW

- 85 The 1999 Review marked a major change in the approach to administrative scale.
- 86 Much research was done to clarify the conceptual foundation of the administrative scale assessment and the types of expenses to which the disability applied.



- 87 The end result was that the 1999 Review distinguished between three types of cost associated with providing head office and state-wide services:
- fixed costs of corporate services, policy and planning services, and state-wide services (fixed costs)
  - costs of corporate services and policy and planning in excess of the fixed costs but which were still affected by diseconomies of small scale (scale-affected variable costs)
  - costs that varied with the size and complexity of the department's service delivery task (variable costs).
- 88 Fixed cost scale disability factors were applied to the first type of costs and variable cost scale disabilities to the second type. No administrative scale disabilities were applied to the third type, although other disabilities associated with service delivery tasks were applied to it as appropriate. The main effect of this approach was to narrow the definition of costs affected by scale factors. Its main advantage was that deliberate decisions were made for each category about the extent of scale-affected expenses.
- 89 The Commission also clarified the definition of head office and Statewide services.
- 90 **Definition of head office services.** The Commission said head office services related to centrally provided or regional administrative services and not to the administration component of service delivery institutions. Head office activities included corporate services such as IT, human resources and financial management as well as policy development and planning.
- 91 It said every government agency had some element of these services. To provide them, a minimum level or critical mass of expenditure was required regardless of the total size of the agency. Above that minimum, head office services would be a function of the population size, population characteristics and population dispersion. It could be expected that head office costs would usually be a small proportion of the total expenditure of the agency.
- 92 **Definition of Statewide services.** The Commission said a service could be considered a Statewide service if the amount of service provided or the level of expenditure was not a direct function of the size of the population, but rather depended on the availability or flexibility of resources within a State, the State's physical size and policy choice.
- 93 The minimum level of expenditure required to operate a Statewide service could be large, and all States had to meet this minimum fixed cost if they chose to provide the service.
- 94 Importantly, Statewide services contained elements of head office services. However, for Statewide services, neither the head office nor the service delivery expenditures

were directly related to population size and thus it was not necessary to estimate them separately.

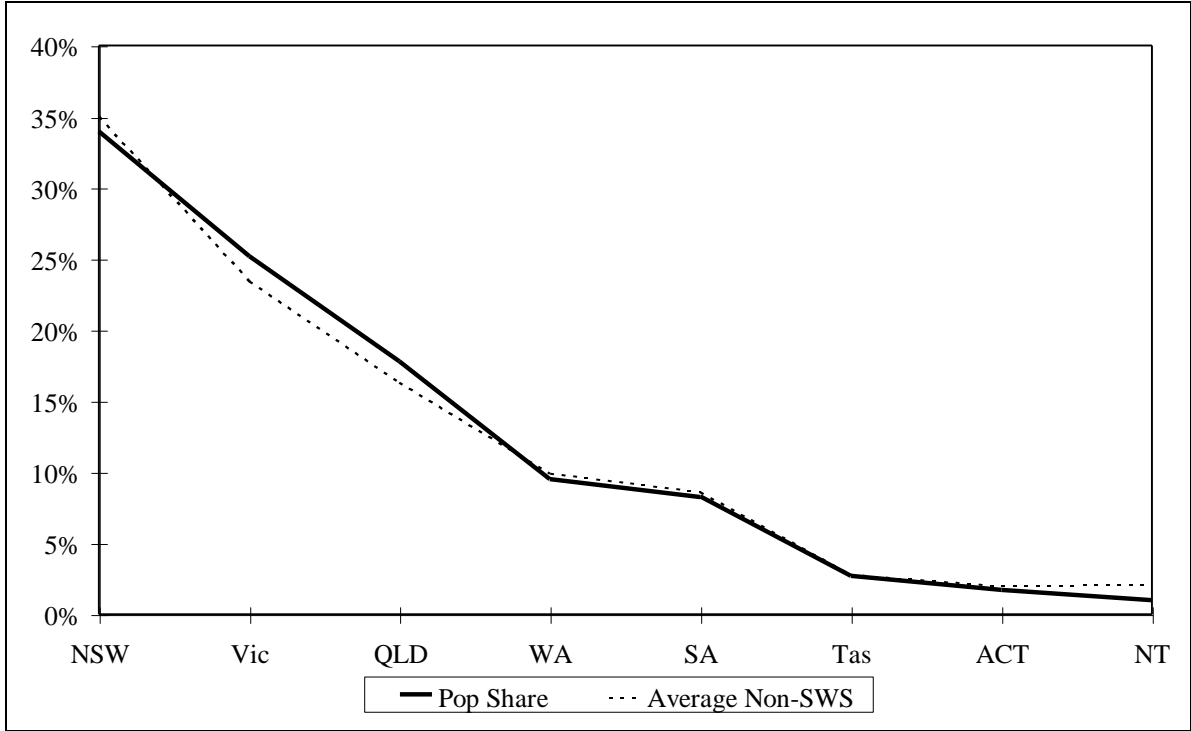
- 95 The main difference between Statewide services and non-Statewide services was that expenditures on non-Statewide services, such as hospitals, police and schools, were closely linked to population size or the size of particular sectors within State economies (such as agriculture), whereas expenditures on Statewide services were not a direct function of population size.
- 96 In providing head office and Statewide services, the Commission recognised two types of administrative scale disability.
- The differences in per capita cost of providing the minimum fixed costs of head office and State-wide services may differ between States. Smaller States would need to spend more per capita than the larger States.
  - In addition, due to the smaller size of their head offices and Statewide services, the smaller States could be unable to access structures, technology and so on to improve their efficiency.
    - Smaller States' head offices and Statewide services would most likely be smaller than larger States' head offices and State-wide services. The smaller States may not be able to achieve the same unit costs as the larger States.
- 97 Table 12 classified expenditure categories according to whether or not they contained significant Statewide services. A category classified as Statewide may contain some services which were not Statewide services - for example, Culture and Recreation included expenditures on local libraries, sport and recreation activities.

**Table 12 Classification of 1993 Review categories as Statewide or non-Statewide services**

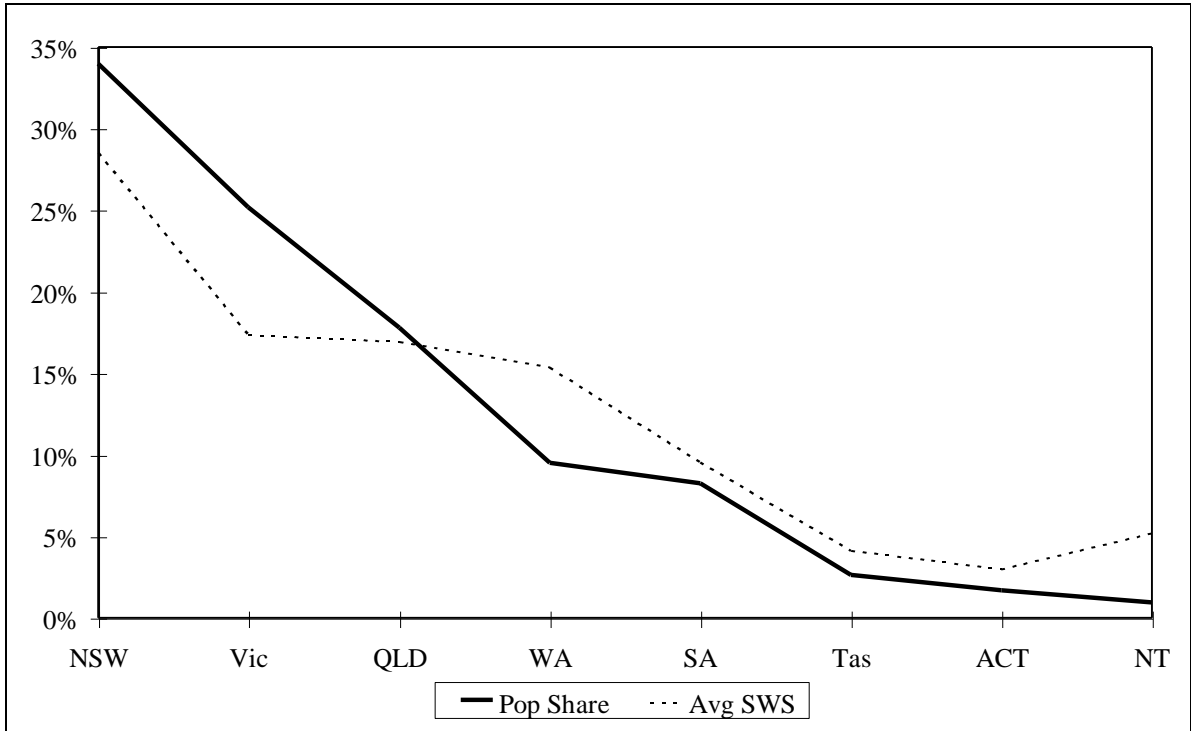
| Category  | Classification        |
|---|-----------------------|
| All education, health, law and order and welfare categories | Non-Statewide service |
| <b>Culture and recreation</b>                               |                       |
| Culture and recreation                                      | Statewide service     |
| National parks and Wildlife                                 | Statewide service     |
| <b>Community development</b>                                |                       |
| Planning and environment                                    | Statewide service     |
| Aboriginal community services                               | Non-Statewide service |
| <b>General public services</b>                              |                       |
| Superannuation  | Neither               |
| Other general public services                               | Statewide service     |
| <b>Services to industry</b>                                 |                       |
| Agriculture and fisheries                                   | Statewide service     |
| Brucellosis eradication                                     | Statewide service     |
| Mining, fuel and energy                                     | Statewide service     |
| Tourism   | Statewide service     |
| Soil conservation   | Statewide service     |
| Other services to industry                                  | Statewide service     |
| Transport   |                       |
| Road maintenance  | Non-Statewide service |
| Other transport   | Non-Statewide service |
| <b>Economic affairs and other purposes</b>                  |                       |
| Debt charges  | Neither               |
| Other services  | Statewide service     |
| <b>Trading enterprises</b>                                  |                       |
| Urban transit   | Non-Statewide service |
| Non-urban transit - Freight                                 | Non-Statewide service |
| Non-urban transit - Passengers                              | Non-Statewide service |
| Country water supply and sewerage                           | Non-Statewide service |
| Housing   | Non-Statewide service |
| Other trading enterprises                                   | Non-Statewide service |

- 98 The Commission compared State distribution of Statewide services expenditure and non-Statewide services expenditure with population. The comparisons provided further evidence of the appropriateness of including state-wide services but excluding non-state-wide services from the administrative scale assessment.
- 99 Figure 1 suggested a strong correlation between States' shares of expenditure on all non-State-wide service categories and State population shares. Figure 2 indicated a significant proportion of State expenditure on State-wide services did not vary with population size.

**Figure 1** Distribution of expenditure on non-Statewide services (SWS) compared with population distribution, 1994-95



**Figure 2** Distribution of expenditure on Statewide services (SWS) compared with population distribution, 1994-95



## The administrative scale assessment

100 The administrative scale assessment now depended on obtaining fixed and variable scale-affected cost estimates, and determining the fixed and variable scale-affected cost factors, for head office and state-wide services. More specifically, the assessment involved:

- estimating fixed costs affected by administrative scale disabilities for each category
- estimating scale-affected variable costs affected by administrative scale disabilities for each category
- applying the fixed costs disability factor to the estimate of fixed costs for each category to measure how much each State needed to spend non-policy influenced fixed costs
- applying the variable costs factor to the estimate of scale-affected variable costs for each category to measure how much each State needed to spend on non-policy influenced scale-affected variable costs.

### *Fixed cost estimates*

101 The 1999 Review was the first time the Commission attempted estimate fixed costs and it did so using:

- information from annual reports, budget papers and other government publications
- Commonwealth government datasets such as Hospital Utilisation and Costs (HUCS) data
- Commission staff data collection for the education and police assessments, and administrative scale specific requests

102 The information derived from the above sources gave an indication of the smallest head office expenses. It helped provide an upper limit to what the fixed cost could be.

103 For example, Table 13 shows head office expenditures of selected Northern Territory and ACT departments. Table 14 shows the actual expenditure for the categories considered to predominantly contain expenditure on State-wide services.

**Table 13 Expenditure by selected departments, ACT and NT, 1994-95**

| Department                        | Head office expenditure | Total expenditure |
|-----------------------------------|-------------------------|-------------------|
|                                   | \$m                     | \$m               |
| NT - Industries and Development   | 2.6                     | 18.5              |
| NT - Law                          | 1.9                     | 13.8              |
| NT - Chief Minister               | 6.2                     | 22.8              |
| ACT - Chief Minister and Treasury | 6.9                     | 57.8              |
| NT - Treasury                     | 4.5                     | 14.5              |
| NT - Sport and Recreation         | 2.4                     | 9.8               |

Source: Staff paper 97/76, 1999 Review.

**Table 14 Expenditure State-wide services categories, 1994-95**

| Item                                       | NSW   | Vic   | Qld   | WA    | SA   | Tas  | ACT  | NT   |
|--|-------|-------|-------|-------|------|------|------|------|
|  | \$m   | \$m   | \$m   | \$m   | \$m  | \$m  | \$m  | \$m  |
| <b>Culture and recreation</b>              |       |       |       |       |      |      |      |      |
| Culture and recreation                     | 247.1 | 120.1 | 100.6 | 119.1 | 95.0 | 31.0 | 21.5 | 43.9 |
| National parks and wildlife services       | 85.1  | 26.8  | 72.9  | 28.0  | 16.4 | 7.2  | 8.5  | 19.4 |
| <b>Community development</b>               |       |       |       |       |      |      |      |      |
| Planning and environment                   | 119.1 | 65.7  | 3.0   | 41.7  | 47.2 | 9.2  | 8.2  | 10.9 |
| <b>General public services</b>             |       |       |       |       |      |      |      |      |
| Other general public services              | 363.0 | 253.2 | 270.8 | 213.2 | 79.3 | 61.5 | 55.1 | 59.2 |
| <b>Services to industry</b>                |       |       |       |       |      |      |      |      |
| Agriculture and fisheries                  | 362.5 | 207.0 | 259.0 | 114.6 | 64.4 | 28.8 | 2.1  | 36.2 |
| Brucellosis eradication                    | 0.1   | 0.1   | 2.4   | 5.3   | 0.3  | 0.1  | -    | 7.8  |
| Mining, fuel and energy                    | 53.0  | 30.4  | 31.6  | 49.6  | 23.9 | 4.6  | -    | 16.1 |
| Tourism                                    | 33.4  | 44.0  | 35.6  | 31.9  | 18.5 | 16.5 | 5.1  | 23.1 |
| Soil conservation                          | 48.5  | 20.5  | 12.0  | 6.3   | 7.8  | 3.7  | 1.6  | 4.6  |
| Other services to industry                 | 66.3  | 52.0  | 84.1  | 61.9  | 48.7 | 19.0 | 10.9 | 13.1 |
| <b>Economic affairs and other purposes</b> |       |       |       |       |      |      |      |      |
| Other services                             | 214.2 | 134.8 | 119.1 | 111.5 | 74.2 | 25.5 | 17.7 | 32.7 |

Source: Staff paper 97/76, 1999 Review.

104 The Commission also built from the ground up the minimum size head office and Statewide service. First, it came up with an average head office skeleton for the education and police departments.

105 The average head office structure included corporate services and policy development and planning. More particularly, the head office structure could be divided into:

- Human resources
  - recruitment
  - training
  - leave transaction processing
  - workers' compensation claim processing
  - HR strategy
  - annual reporting
- Financial Management covers activities such as:
  - ledger posting of account
  - payment processing
  - payroll
- IT covers activities such as:
  - purchase and development of software
  - maintenance
  - IT support
- Policy development and planning.

106 The Commission used staffing levels of the Education, Police and Treasury departments in the ACT and the Northern Territory, to estimate a minimum staffing level for each function. It derived expenses by multiplying the average staffing costs by the skeleton staffing numbers.

107 The Commission also tried to derive fixed costs through regression analysis. The results were unrealistic and therefore not used.

108 Table 15 shows the fixed cost estimates derived in the 1999 Review.

**Table 15 Fixed costs, 1999 Review**

|                                      | Fixed costs |
|--------------------------------------|-------------|
|                                      | \$m         |
| <b>Education</b>                     | <b>12.0</b> |
| Pre-school education                 | 0.2         |
| Government primary education         | 3.3         |
| Non-government primary education     | 0.8         |
| Government secondary education       | 2.8         |
| Non-government secondary education   | 0.8         |
| TAFE                                 | 4.0         |
| Transport of rural school children   | 0.0         |
| <b>Health</b>                        | <b>10.0</b> |
| Hospital services                    | 5.4         |
| Nursing home services                | 0.3         |
| Mental health services               | 0.7         |
| Community health services            | 1.7         |
| Public health                        | 2.0         |
| <b>Law and order</b>                 | <b>13.0</b> |
| Police                               | 5.0         |
| Administration of justice            | 4.0         |
| Corrective services                  | 2.0         |
| Public safety and emergency services | 2.0         |
| <b>Welfare</b>                       | <b>8.0</b>  |
| Family and child welfare             | 1.2         |
| Aged and disabled welfare            | 2.3         |
| Other welfare services               | 0.5         |
| Housing                              | 4.0         |
| <b>Culture and recreation</b>        | <b>9.0</b>  |
| Culture and recreation               | 7.0         |
| National parks and wildlife          | 2.0         |
| Community development                |             |
| Aboriginal Community Services        | 0.4         |
| <b>General public services</b>       | <b>30.5</b> |
| Superannuation                       | 0.5         |
| Other general public services        | 30.0        |
| <b>Services to industry</b>          | <b>11.6</b> |
| Primary industry                     | 2.8         |
| Mining, fuel and energy              | 2.8         |
| Tourism                              | 3.0         |
| Manufacturing and other industry     | 3.0         |
| <b>Transport</b>                     |             |
| Road maintenance                     | 4.0         |
| <b>Regulatory and other services</b> |             |
| Regulatory and other services        | 15.0        |

Source: Commonwealth Grants Commission, Report on State Revenue Sharing Relativities 2001 Update, Working Papers Volume 3, March 2001.



### ***Fixed cost factor***

109 The fixed cost assessment was designed to give each State the capacity to provide same fixed costs. Assessed expenses were derived by applying the following factor to the average per capita fixed cost expenses.

$$\text{Fixed cost factor}_i = 1/(8 * \text{Population share}_i)$$

### ***Variable cost estimates***

110 The variable scale-affected cost estimates were based on the estimated proportions of category expenses that that were considered central head office and Statewide services. Table 17 shows the scale-affected variable costs.

**Table 16 Scale-affected variable costs, 1999 Review**

|                                      | Variable Cost |
|--------------------------------------|---------------|
|                                      | \$m           |
| <b>Education</b>                     | <b>5</b>      |
| Pre-school education                 | 0.1           |
| Government primary education         | 2.1           |
| Non-government primary education     | 0.5           |
| Government secondary education       | 1.8           |
| Non-government secondary education   | 0.5           |
| VET                                  | 5             |
| Transport of rural school children   |               |
| <b>Health</b>                        | <b>3</b>      |
| Hospital services                    | 2.0           |
| Nursing home services                | 0.1           |
| Mental health services               | 0.3           |
| Community health services            | 0.6           |
| <b>Public health</b>                 | <b>15</b>     |
| Law and Order                        |               |
| Police                               | 5             |
| Administration of justice            | 4             |
| Corrective services                  | 2             |
| Public safety and emergency services | 2             |
| <b>Welfare</b>                       | <b>5</b>      |
| Family and child welfare             | 1.4           |
| Aged and disabled welfare            | 2.9           |
| Other welfare services               | 0.6           |
| Housing                              | 4             |
| <b>Culture and recreation</b>        |               |
| Culture and recreation               | 7             |
| National parks and wildlife          | 2             |
| <b>Community development</b>         |               |
| Aboriginal Community Services        | 0.5           |
| <b>General public services</b>       |               |
| Superannuation                       | 0             |
| Other general public services        | 20            |
| <b>Services to Industry</b>          |               |
| Primary industry                     | 2             |
| Mining, fuel and energy              | 2             |
| Tourism                              | 2             |
| Manufacturing and other industry     | 2             |
| <b>Transport</b>                     |               |
| Road maintenance                     | 5             |
| <b>Regulatory and Other Services</b> |               |
| Regulatory and other services        | 15            |

Source: 1999 Review working papers.

### *Variable cost factor*

111 The variable cost factor compensated States for diseconomies of small scale in providing units of head office and Statewide services. The factor was estimated by:

- establishing a value for the Northern Territory by reference to data on education departments
- setting the factors for New South Wales, Victoria and Queensland to 1.0
- interpolating factors for the other States by reference to their relative population size and the actual expenditures of the States
- rescaling the results so that Australia equalled one.

112 Table 17 shows the variable cost disabilities. The variable cost factor assumed that only the three largest States had achieved full economies of scale in the provision of head office and Statewide services.

**Table 17 Variable cost disabilities**

|                            | NSW     | Vic     | Qld     | WA      | SA      | Tas     | ACT     | NT      |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Variable cost disabilities | 1.00000 | 1.00000 | 1.00000 | 1.15000 | 1.20000 | 1.40000 | 1.60000 | 3.00000 |

Source: 1999 Review working papers.

### *State views*

- 113 New South Wales, although acknowledging that the Commission may have made an informed but subjective judgment that scale disadvantages and disabilities exist, remained firmly of the view that no reliable empirical evidence can be drawn on to support such a judgment.
- 114 Victoria contended that diseconomies of scale said to be encountered by the less populous States could no longer be fully justified because of recent changes in the way services were delivered. These changes focused on achieving efficient and effective delivery of government services.
- 115 Queensland believed that it had a relative scale disadvantage compared with New South Wales and Victoria.
- 116 Western Australia believed the 1993 Review set of factors should have been retained. It argued it was unwarranted to change grant shares as a result of replacing one set of judgments with another, no more plausible, set of judgments.
- 117 Other States thought the factors should be increased.
- South Australia did not support the reduction in its administrative scale disability. It said that, on the contrary, there were reasons justifying an increase in its disability, such as the management cost of contracting out, increased complexity of policy development given technology-led increases in service standards, increased regulatory services following adoption of the National Competition Policy and relative population growth rates.
  - Tasmania believed the factors greatly underestimated the real needs of smaller States.

- The Northern Territory said it differed greatly from the other States in the extent of its scale disabilities because of its extremely small size and the extreme diversity in its culture and income levels.

118 In addition to their general comments on the merits of the new administrative scale assessment, States also discussed the impact on administrative scale disabilities of:

- contracting out
- technological improvement
- adoption of best practices
- population growth
- purchasing power
- regional offices
- socio-demographic composition.

## 2004 REVIEW

### State views

#### *Fixed cost factor*

119 States supported the retention of the 1999 Review assessment method for deriving the fixed cost factor. However, Queensland and Western Australia suggested that the factor should be partly related to the geographic size of the State as well as population size. Western Australia also suggested that additional administrative costs arose from the impact on central offices of Indigeneity and dispersion disabilities.

120 The Northern Territory argued that it incurred fixed costs in relation to the different types of services provided to its two population sub-groups – its Indigenous population and its non-Indigenous population. It argued that it had to undertake research, planning and policy development tasks to respond to the service delivery needs of these two very different groups. It argued that these were non-uniform fixed costs. They existed for the Northern Territory because its Indigenous population was 30% of its population and very significant in terms of its needs.

#### *Estimating fixed costs*

121 States had differing views on the amount fixed costs comprised. New South Wales and Victoria said that the 1999 Review minimum fixed costs were overestimated. Queensland said that they were about right and should simply be inflated by wage and salary increases since the 1999 Review. Western Australia, South Australia,

Tasmania, the Australian Capital Territory and the Northern Territory said that they were underestimated.

- 122 New South Wales suggested that the Commission's average policy should take into account the tendency for smaller States to piggyback on larger States in various areas of service delivery. Victoria and Queensland suggested that the recent upsurge in interest in privately financed projects (PFPs) had increased opportunities for piggybacking between States.
- 123 Victoria questioned the suitability of public sector wages and salary data in calculating increases in minimum fixed costs. It suggested that private sector wages and salary data be used instead. The ACT argued that the public sector Wage Cost Index (WCI) should be used because the relevant baseline measure was public sector wages and the Australian average movement in public sector wage levels as measured by the WCI would be policy neutral.
- 124 Western Australia suggested that fixed costs had been generally underestimated. It said that evidence it provided suggested that fixed costs had been understated by a factor of 2.5 in education.
- 125 South Australia said that, from a small State perspective, recent increases in head office costs were obvious. It gave the following examples:
- pressures for greater accountability (such as freedom of information (FOI) requirements)
  - application of microeconomic reform (including the National Competition Policy (NCP) demands for legislative reviews)
  - increased application of technology and the accompanying need for centralisation of IT services to obtain maximum efficiencies, which tend to increase the share of fixed head office costs
  - increased demands of intergovernmental liaison (for example, GST administration, Council of Australian Governments, energy market review)
  - increased head office costs involved in managing outsourcing contracts and PFPs.
- 126 South Australia said that some countervailing savings may have occurred through the application of technology, as suggested in the Victorian workplace discussions (although these seem to relate more to dispersion disabilities). But it concluded that there had been a net increase in head office costs over the last five years.
- 127 Tasmania argued that there had been substantial net increases in administrative costs in recent years, which suggested changes in the underlying nature of the minimum fixed costs. It said that significant improvements had happened in government services to reduce overall costs, but these efficiencies had shifted many costs from service delivery to the head office.

- 128 The ACT said that greater demand on governments for accountability and transparency were examples of greater per capita costs for smaller States. It provided a detailed example of increases in FOI requirements.
- 129 The ACT argued that the growth in fixed costs had in fact outstripped growth in total expenses. It argued for an increase of 25% to the fixed costs, based on total wages bill and general changes in prices rather than the 15% estimated by the Commission.
- 130 The Northern Territory considered that it would be appropriate to update administrative expenses by identifying influences on costs (such as staffing levels) that had occurred since the 1999 Review. It also said that the division of costs at the administrative level into fixed and variable scale-affected costs was arbitrary and the Commission should take care not to underestimate the size of fixed costs.

## Commission decisions

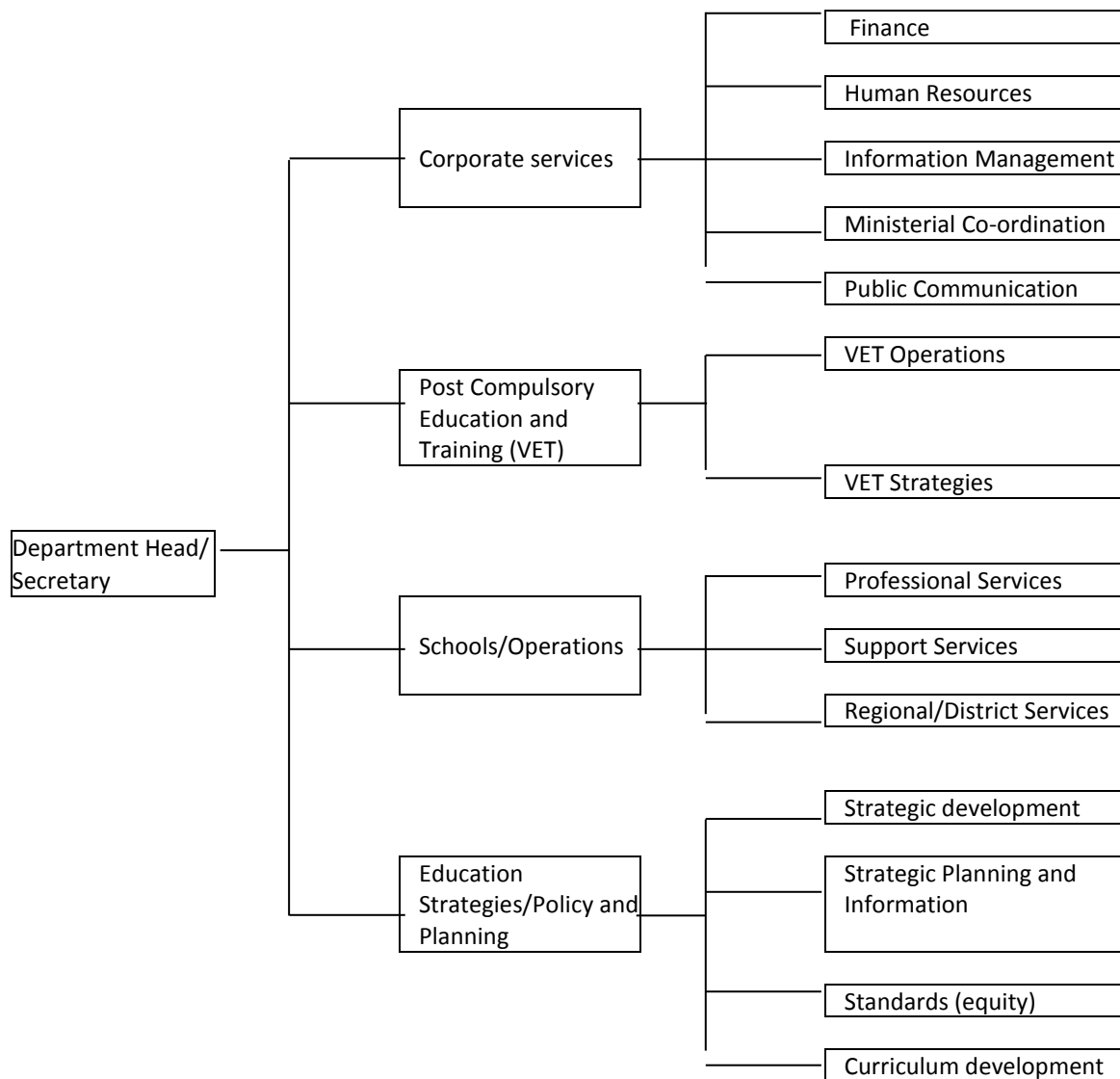
### *Changes from the 1999 Review*

- 131 The Commission noted that the concept of fixed costs was supported by economic theory. It decided to continue recognising that the less populous States incurred greater per capita fixed costs in providing a basic administrative structure. Data were available to measure the population based disability. The estimates of fixed costs for each category were based on judgment, informed by some reasonable data.
- 132 The Commission was not convinced of the conceptual case for scale-affected variable costs. Logically, they varied with the size and complexity of the service being delivered. The Commission considered that, on the basis of judgment, about 10% of these costs were in effect fixed costs. The rest the Commission concluded were service delivery costs, to be assessed using the relevant service delivery factors, such as the size and composition of the user groups and differences in unit costs.
- 133 For the 2004 Review, the Commission assessed administrative scale needs for fixed costs only, in a fixed cost expense component. Some particular adjustments to the needs of the ACT and the Northern Territory were made. Costs previously recognised as scale-affected variable costs were reclassified as service delivery costs.
- 134 **Definition.** Administrative scale disabilities were assessed to recognise that in providing a full range of State-type services to their populations, each State needs to establish a basic administrative structure. That structure needs to cover the costs of core head office functions of departments and services that must be provided for the whole of the State, the costs of which are inevitably greater in per capita terms for less populous States.

### *Re-estimating the fixed costs*

- 135 The Commission put considerable effort into reviewing the 2004 Review estimates. It examined the structure of education departments and police departments using annual reports and other related material. It also used information from the Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP) report.
- 136 More specifically, it re-estimated fixed costs by:
- attempting to build from the ground up the minimum size head office
  - looking at the size of head offices in the smallest States.
- 137 To do this, the Commission set up a special data collection to gather information to:
- review whether the 1999 Review minimum fixed costs used in each category were reasonable estimates
  - investigate whether minimum fixed costs should be modified as a result of changes in the way States provided services since the 1999 Review.
- 138 The data request, sent to the States, sought information and data on changes in head office operations since the 1999 Review. Information and data on organisational structure, and a description of the functions and the staffing of the head offices of Education, Police and Treasury Departments were also requested.
- 139 The Commission analysed the current structures of departments in the States to identify the typical head office structure. Figure 3 illustrates the result for the education function. The 'average' basic structure was assumed to comprise four program areas divided into a number of sub-programs. Estimates of staffing numbers required to provide a basic head office service were made using information provided in State Department of Education Annual reports. It was assumed that the department head/secretary was supported by four program managers and four support staff. The program managers for schools, VET, strategies and corporate services were allocated two support staff and each sub-program, six policy/administrative staff, including the sub-program managers. Post compulsory education and training sub-programs were allocated 15 policy and administrative staff.

**Figure 3 Education function typical head office structure**



Source: Discussion Paper 2001-16, 2004 Review.

140 The basic structure thus required some 120 staff for the education function, as shown in Table 18. At the time, the Commission’s estimate of minimum fixed costs for Education was \$10 million. Thus, the average cost of ‘fixed cost’ staff would be some \$80 000 per staff member. This seems a reasonable figure, if on the low side. It suggested that the existing estimate of fixed costs could be supported.



**Table 18 Staffing structure of typical education function**

| Staff Level                     | Salary Level | Number of Staff | Total Cost |
|---------------------------------|--------------|-----------------|------------|
|                                 | \$           | no.             | \$000      |
| Senior Executive                | 150 000      | 5               | 750        |
| Managers                        | 80 000       | 14              | 1 120      |
| Policy/Admin Officers           | 60 000       | 90              | 5 400      |
| Support Staff                   | 40 000       | 12              | 480        |
| Total Salary                    |              |                 | 7 750      |
| Overheads (20% of salary costs) |              |                 | 1 500      |
| Total                           |              | 121             | 9 250      |

Source: Discussion Paper 2001-16, 2004 Review.

- 141 Secondly, the Commission looked for information that was not available at the time of the 1999 Review. One new source of information identified was the Productivity Commission Report on Government Services 2001. Data from the report suggested that the size of head office services in the three smallest States was about \$12.0 to \$12.5 million for police services and \$25 million for education services.
- 142 The Commission's 1999 Review estimate of fixed costs for police services was \$5 million, and \$10 million for education services.
- 143 Analysis of annual reports suggested that Tasmania and the Northern Territory have organised the provision of head office services for policing in a similar manner. No information was available for the ACT. Tasmania possibly has a lower cost structure than the Northern Territory because of the greater compactness of the State. After discounting for the costs of head office for emergency services, the minimum cost of provision of police head office services was in the order of \$10.5 million, similar to the Commission's estimate, at the time, of \$10.0 million.
- 144 The structures and the responsibilities of the education departments in Tasmania, the ACT and the Northern Territory suggest that the minimum expenditure for the 'head office'/central office functions (including TAFE-VET functions) were around \$25 million. It appeared that Tasmania has the minimum structure for the population level it served.
- 145 It was concluded that the new evidence presented above suggests that the existing minimum fixed costs estimates were reasonable for two functional areas.
- 146 In the 2004 Review, the Commission indexed the scale affected costs by a composite index based on 80% of the labour price index (LPI) and 20% of the consumer price index (CPI) as a means of capturing changes in wage levels and the price of goods and services used in administrative tasks.

- 147 **Cost of additional functions.** States' responses to the 2004 Review special data collection suggested that changes in technology, increased regulation and the need for greater accountability had increased head office costs. All States said that changes since the 1999 Review had not led to a reduction in head office costs but had helped achieve greater efficiency and increased service facility.
- 148 After again critically reviewing data and other information returned by the States against the list of new functions identified, the Commission estimated a total increase of \$9.5 million in minimum fixed costs. This was rounded up to \$10.0 million across all categories. This was apportioned, to each category, using the share of fixed cost, as a proportion of the increased base of \$124.3 million.

### **Adjustment for the ACT**

- 149 The Commission decided to assess for the ACT:
- no minimum head office expenses for the Indigenous community services category
  - total minimum fixed costs of one third of other States for the Primary industry and Mining, fuel and energy categories, appropriately updated.
- 150 It also decided that a fixed cost of \$0.1 million for Non-urban transport would be allocated to the ACT for its co-ordination responsibilities for the sub-region.

### **Adjustment for the Northern Territory**

- 151 The Commission assessed additional fixed costs of \$4.4 million for the Northern Territory. That amount was equally distributed across the education, health, welfare and housing functions. The conceptual case for this allowance was that the very high proportion of Indigenous people in the Northern Territory population necessitated dual planning and administrative structures for those functions. This duplication of head office resources was necessary because there were large differences in the policies that guide service delivery to Indigenous and non-Indigenous people because of the significant socio-economic disadvantages of large proportions of the Indigenous population in the Northern Territory and their consequent dependence on government services.
- 152 Evidence provided by the Northern Territory and examination of Northern Territory government structures and budget documents supported this for education, health, welfare and housing functions. The extra allowance for police services requested by the Northern Territory was not supported. Examination of the departmental structures and budget papers suggested that the dual structure for policing was not as clear as it was for the other functions.

### *Adjustment for the Victoria*

- 153 Examination of departmental structures did not support Victoria's request for an allowance for cultural and linguistic diversity similar to that for the Northern Territory. The Commission concluded the structures of the mainstream departments suggested that the diverse population base had limited effect on the characteristics of the policy and programming functions.
- 154 Table 19 shows the unadjusted administrative scale expenses assessed for each category.

**Table 19 Administrative scale, fixed costs, 2004 Review**

|   | Fixed cost   |
|---|--------------|
|   | \$m          |
| <b>Education</b>                                    | <b>16.5</b>  |
| Pre-school education                                | 0.3          |
| Government primary school education                 | 4.5          |
| Non-government primary school education             | 1.1          |
| Government secondary school education               | 3.8          |
| Non-government secondary education                  | 1.1          |
| Vocational education and training                   | 5.7          |
| <b>Health</b>                                       | <b>14.6</b>  |
| Inpatient services                                  | 7.7          |
| Non-inpatient and community health services         | 2.4          |
| Population and preventive health                    | 4.4          |
| <b>Welfare</b>                                      | <b>12.1</b>  |
| Family and child services                           | 1.5          |
| Aged and disabled services                          | 3.7          |
| Homeless and general welfare                        | 0.7          |
| Housing   | 5.6          |
| Services to Indigenous communities                  | 0.6          |
| <b>Law and order</b>                                | <b>18.4</b>  |
| Police  | 7.0          |
| Administration of justice                           | 5.6          |
| corrective services                                 | 3.1          |
| Public safety                                       | 2.8          |
| <b>Culture and recreation</b>                       | <b>12.5</b>  |
| Culture and recreation                              | 9.8          |
| National parks and wildlife services                | 2.8          |
| <b>Economic activities</b>                          | <b>23.7</b>  |
| Electricity and gas                                 | 1.1          |
| Water, sanitation and protection of the environment | 0.8          |
| Non-urban transport                                 | 0.9          |
| Roads   | 2.8          |
| Urban transit                                       | 1.9          |
| Primary industry                                    | 4.1          |
| Mining, fuel and energy                             | 4.1          |
| Tourism   | 4.1          |
| Manufacturing and other industry                    | 4.1          |
| <b>General public services</b>                      | <b>59.8</b>  |
| Superannuation                                      | 0.8          |
| General public services                             | 59.0         |
| <b>Total</b>  | <b>157.6</b> |

Source: 2004 Review, Working papers.

## 2010 REVIEW

155 The Commission did not consider a review of the administrative scale assessment necessary. The work in the 1999 and 2004 Reviews suggested that the estimates were robust and that a full review was unlikely to produce a materially different

assessment. It therefore used the 2004 Review estimates as the basis for the 2010 Review assessment, adjusted to price level changes.

- 156 Some States argued that the fixed costs should be increased to reflect an increase in the number of statutory authority positions, an increase in intergovernmental workloads imposed on some agencies and a substantial increase in the Information Communications Technology (ICT) costs across agencies. However, they were unable to provide supporting evidence. The Commission, therefore, made no adjustments to its fixed costs estimates.
- 157 New South Wales argued that, unlike the Commission's view that fixed costs are the same across States, core State Treasury function sizes – as measured by FTE employees – do increase with population, at least up to populations of around 4 million. The data suggested that for the largely policy core Treasury functions, Treasury size was not divorced from population size or at least that average State policy in this area does not align with the Commission's propositions regarding fixed costs. However, the Commission considered that New South Wales confused head office costs, which it agreed increase with population and administrative scale costs (or minimum fixed costs) which, by definition, do not.

## Updating the fixed costs

- 158 For the 2010 Review, the index chosen to inflate the quantum was the chain price index for State and local government final consumption expenditure from the ABS national account statistics.
- 159 There was no agreement between the States on the best index. The ACT argued for expenses to be updated using only the labour price index because the Commission's preferred measure uses a combined State and local government index. South Australia argued for expenses to be indexed by a combination of the labour price index and consumer price index for the same reason. Western Australia and the Northern Territory preferred to index administrative expenses by the growth in State expenses. Victoria, Queensland and Tasmania supported the Commission's method of indexing.

## 2015 REVIEW

- 160 In the 2015 Review, New South Wales, Victoria, Tasmania and the Northern Territory argued for the fixed costs estimates to be reviewed. The Commission agreed that revisiting the quantum was a priority issue. It tried a number of approaches but was ultimately unsuccessful in reviewing them.

## Re-estimating the fixed costs

- 161 In conjunction with the States, a number of options for establishing the quantum were explored:
- collecting State departmental data that would allow a re-estimation of the quantum for one or more categories
  - a regression approach
  - an examination of publicly available data (Productivity Commission and State annual reports)
  - the status quo, which would involve indexing the existing quantum.

### *Collecting State departmental data*

- 162 The Commission sought details of State department data. Despite some support from smaller States, no State was able to provide (due in part to privacy issues) sufficiently detailed workforce data from which new quantum amounts could be derived.
- 163 As a result the Commission was not able to develop a State data collection that would provide the detailed data allowing it to undertake analysis similar to that done in the 1999 and 2004 Reviews. Therefore alternative options and data sources were investigated for determining the appropriate quantum of administrative scale expenses.
- 164 The Commission also examined State Department of Education annual reports to determine if the information they contain could assist in estimating a reliable administrative scale quantum. Since the concept is a minimum fixed cost, it examined the annual reports of the three smallest States.
- 165 The examination of the Department of Education annual reports for Tasmania, the ACT and the Northern Territory encountered considerable difficulties. For example, each State has a different departmental structure and reports use different staffing classifications. The Commission could not locate data on comparisons of teaching versus non-teaching staff costs in the annual reports or department of education budget documents.
- 166 On balance, the examination of the three smallest States' annual reports and budget documents showed this method would not provide a sound basis for obtaining information on head office staff and costs.

### *A regression approach*

- 167 Regression analysis was investigated as a potential way of mathematically deriving a quantum for administrative scale expenses consistent with the proposed definition. Staff investigated two regression approaches.

- Using ABS GFS data: estimated the quantum by regressing GFS school education expenses against students.
- Using Productivity Commission data: estimated the quantum by regressing out-of-school staff against students.

- 168 The Commission chose schools education because this function was the most homogenous at the State level and therefore likely to be the most policy neutral. This option was not pursued further because the results were not sensible.
- 169 The regression based on GFS data produced an estimate that the Commission considered too high to be a realistic estimate of the minimum administrative costs for schools education. The dollar estimate derived from the regression was more than was spent by six out of eight States on out-of-school staff expenses. It was also much higher than the figure of \$16 million per State used by the Commission in the previous update.
- 170 The regression based on the Productivity Commission produced results that could not be used either because the out-of-school data covered a broader range of fixed costs (for example, regional office staff expenses) than required.

### **Examination of publicly available data (Productivity Commission)**

- 171 The Commission looked at the Productivity Commission data on out-of-school staff numbers and expenses (Table 5). The Productivity Commission data contain expenses not considered to be administrative scale type expenses (such as regional office staff expenses). Therefore, the data could not be used to derive fixed costs estimates.

**Table 20 School education staff and wage data, 2010-11**

|                                    | NSW    | Vic    | Qld    | WA     | SA     | Tas   | ACT   | NT    | Total   |
|------------------------------------|--------|--------|--------|--------|--------|-------|-------|-------|---------|
| In-school staff (No.)              | 69 501 | 53 543 | 48 348 | 26 070 | 16 421 | 6 165 | 3 594 | 3 918 | 227 559 |
| In-school staff expenses (\$m)     | 6 887  | 4 374  | 4 242  | 2 468  | 1 493  | 531   | 376   | 342   | 20 714  |
| Out-of-school staff (No.)          | 2 072  | 1 317  | 2 837  | 1 349  | 1 179  | 301   | 314   | 493   | 9 862   |
| Out-of-school staff expenses (\$m) | 240    | 187    | 265    | 155    | 113    | 27    | 18    | 38    | 1 043   |

Note: The data are for government school staff and students.

Source: Productivity Commission, Report on Government Services, 2013, Chapter 4, Tables 4A.1 and 4A.9.

### **Conclusion**

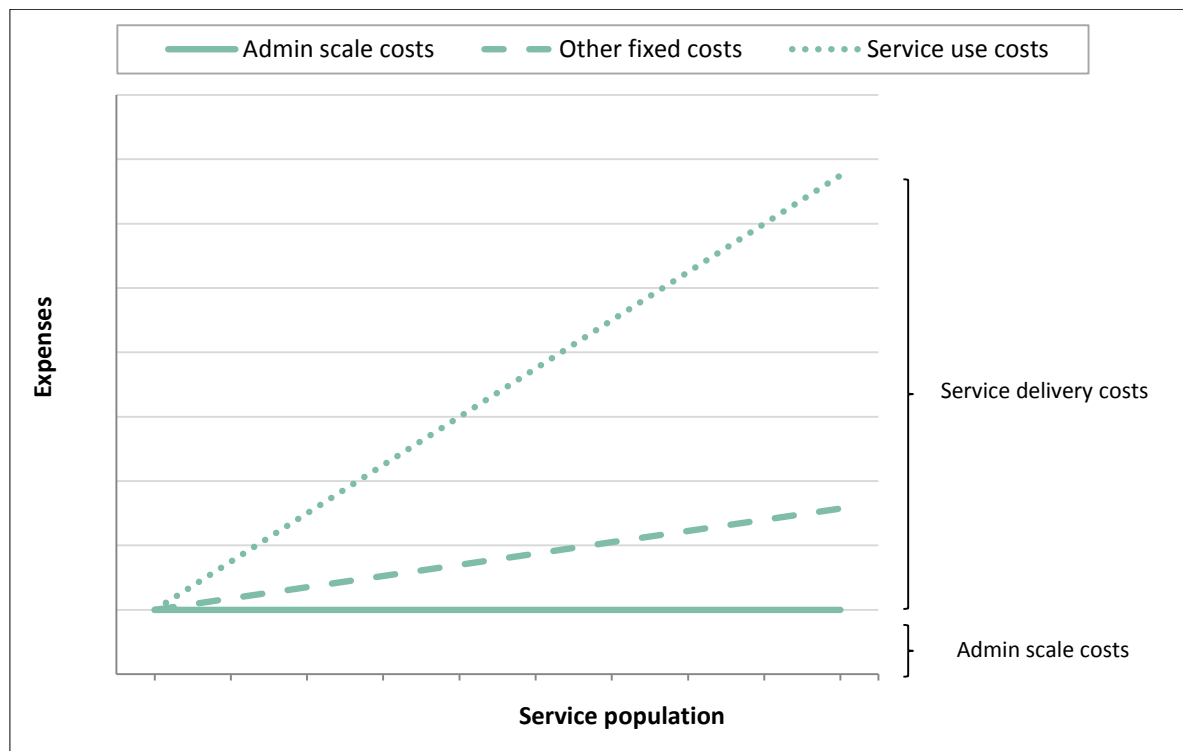
- 172 In the end, the Commission based its fixed costs expenses on those of the 2004 Review, mapped to reflect the 2015 Review categories, indexed by the SLGFCE index and adjusted for superannuation. The ACT and Northern Territory adjustments were retained.

## Definition

- 173 As it has done in every review since the 1999 Review, the Commission revised its definition of administrative scale.
- 174 In the 2015 Review, the Commission said the administrative scale disability assessment recognised those costs incurred by a State in delivering services, whilst acting with average efficiency and following average policy, which are independent of the size of the service population. It includes costs associated with:
- core head office functions of departments (for example, corporate services, policy and planning functions, but not all staffing and other resources delivering them)
  - services that are provided for the whole of the State (for example, the legislature, the judiciary, the Treasury, the revenue office, and a State museum, but not all staffing and other resources delivering them).
- 175 While the underlying concept the Commission was aiming to measure has not changed, this definition differs slightly from that adopted in the 2010 Review. In that review, the definition referred to minimum administrative costs that would be incurred for a State with the population size of the smallest State. It considered the new definition to be more policy neutral, and to better convey the intention of capturing unavoidable initial service delivery set-up costs, incurred prior to the 'first' service user.
- 176 The Commission further clarified the approach by explaining that administrative scale was not an assessment of all fixed costs or 'non-front line services'. It was an assessment of the fixed cost which does not vary with service populations (the minimum cost). Any remaining fixed costs are included in the service delivery component of each expense assessment and assessed according to the disabilities relevant to that component. Figure 4 illustrates the approach graphically.



**Figure 4 Graphical depiction of administrative scale costs**



Source: Commission illustration.

## Updating the fixed costs

- 177 Table 21 shows the non-location adjusted administrative scale expenses for 2013-14 by category. Administrative scale expenses in the table are based on the expenses identified for the 2004 Review, mapped to reflect the 2015 Review categories. They have been indexed by the SLGFCE and adjusted for superannuation.
- 178 As per the 2004 and 2010 Reviews, administrative scale expenses for two States have been adjusted in this review.
- The ACT did not need to provide the average level of service in areas where it had zero or very low needs — services to Indigenous communities, non-urban transport, primary industry and mining, fuel and energy. Accordingly, its assessment in categories where these services are provided in other States lead to a reduction in 2013-14 of \$10 million.
  - The Northern Territory needed to provide an above average level of service in the areas of education, health, welfare and housing. In these areas, it operates dual service delivery models for its Indigenous and non-Indigenous residents. Its assessment in categories where these services are provided lead to an increase of \$6 million in 2013-14.

**Table 21 Assessed expenses, administrative scale, non-location adjusted, 2013-14**

|                          | NSW        | Vic        | Qld        | WA         | SA         | Tas        | ACT        | NT         | Total        |
|--------------------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
|                          | \$m        | \$m        | \$m        | \$m        | \$m        | \$m        | \$m        | \$m        | \$m          |
| Schools education        | 17         | 17         | 17         | 17         | 17         | 17         | 17         | 18         | 134          |
| Post-secondary education | 9          | 9          | 9          | 9          | 9          | 9          | 9          | 9          | 71           |
| Health                   | 22         | 22         | 22         | 22         | 22         | 22         | 22         | 24         | 181          |
| Housing                  | 9          | 9          | 9          | 9          | 9          | 9          | 9          | 10         | 72           |
| Welfare                  | 9          | 9          | 9          | 9          | 9          | 9          | 9          | 10         | 72           |
| Services to communities  | 4          | 4          | 4          | 4          | 4          | 4          | 3          | 4          | 30           |
| Justice                  | 24         | 24         | 24         | 24         | 24         | 24         | 24         | 24         | 193          |
| Roads                    | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 36           |
| Transport                | 4          | 4          | 4          | 4          | 4          | 4          | 3          | 4          | 32           |
| Services to industry     | 25         | 25         | 25         | 25         | 25         | 25         | 17         | 25         | 192          |
| Other expenses           | 116        | 116        | 116        | 116        | 116        | 116        | 116        | 116        | 925          |
| <b>Total</b>             | <b>243</b> | <b>243</b> | <b>243</b> | <b>243</b> | <b>243</b> | <b>243</b> | <b>233</b> | <b>249</b> | <b>1 938</b> |

Note: Administrative scale expenses in the table have been indexed by the SLGFCE, and adjusted for superannuation for the ACT and the Northern Territory.

Source: Commission calculation.