
H The costs and viability of ECEC services

The viability and cost structure of ECEC services is relevant to the design and targeting of government subsidies, particularly the Commission's proposed benchmark rate approach (discussed in chapter 14 and appendix I).

Accordingly, this appendix examines:

- the profitability of childcare and the impact of a range of (often interrelated) factors affecting the cost and viability of services (section H.1)
- the impact of child age on the costs and viability of services (section H.2)
- the extent of any geographic differences in the cost of delivering services (section H.3)
- the effect of wages on service delivery costs (section H.4)
- productive efficiency across providers (section H.5)
- the quality of services across different types of providers (section H.6)
- the effect of scale economies on service provision (section H.7)
- how occupancy rates affect viability (section H.8)
- how competition affects the exit of services (section H.9).

The Commission has attempted to identify the influence of a range of factors in assessing the financial performance of childcare providers. However, any results and conclusions should be interpreted with a high degree of caution, because:

- when assessing the influence of any single factor, it has not been possible to control for the impact of a large range of other factors that also determine profitability
- they relate to 'average effects', which masks significant diversity across individual childcare services. In particular, within any average estimates there is a high degree of variability across individual markets and providers, which could influence the appropriate design of, and outcomes from, any future payment system.

Based on the evidence available, the Commission:

- did not uncover any conclusive or system-wide evidence that:
 - geographic factors or remoteness significantly affect the cost of providing childcare on a per child basis
 - different forms of care result in significantly different costs per child.

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- found that the cost of providing long day care varied significantly depending on the age of the child, with 0 to 2 year olds, on average, more than twice as expensive as children aged 3 to 5 years.

H.1 The profitability of ECEC and the factors affecting profitability

While a range of factors influence the financial performance of ECEC providers (box H.1), the results presented in this section should be interpreted with a high degree of caution, because:

- when assessing the influence of any single factor, it has not been possible to control for the impact of a large range of other factors that also determine profitability
- they relate to ‘average effects’, which mask significant diversity across individual childcare services. In particular, within any average estimates there is a high degree of variability across individual markets and providers, which could influence the appropriate design of, and outcomes from, any future payment system.

Box H.1 Key determinants of the cost and viability of ECEC services

The financial viability of childcare services depends on a wide range of factors, including:

- centre management and operational decisions, such as providers operating non-profitable services for the benefit of local communities or for particular groups
- pricing strategies for children under 2-years-old, who are more expensive to care for, and the age-mix of the children in a centre
- wage costs, access to suitably trained staff, reliance on relief staff and annual rates of staff turnover
- building related expenses and ‘lumpy’ expenditures for one-off repairs, maintenance and capital upgrades
- the impact of competition within a local area
- demographic shifts within a local area and the subsequent impact on the demand for childcare services and occupancy rates
- government policies that affect costs and demand.

Profitability of the ECEC sector appears to be highly variable

The profitability of the ECEC sector is variable, across both providers and from year-to-year. However, it is mostly a low margin activity with relatively stable long-term returns, underpinned by substantial government subsidisation of user fees.

In recent years, the overall profitability¹ of the ECEC sector has been between 2 and 3 per cent (IBISWorld 2013). Over the coming 4 to 5 years, sector profit is expected to remain below 5 per cent overall (IBISWorld 2013). That said:

- many not-for-profit providers operate with very little profit margin after their usual expenses and interest on loans have been paid, either for a single centre or averaged across a network of services. For example, Goodstart is the largest provider in the sector and earned a net-surplus of only 1 per cent of total revenue across its network of not-for-profit centres in 2012 and 0.5 per cent in 2013 (Goodstart Early Learning 2013, p. 25)
- some for-profit providers demonstrate that higher profitability is possible, achieving profits closer to 15 per cent of earnings in some years (IBISWorld 2013, p. 7), including G8 Education who reported a gross margin on its earnings before interest and tax of 17.9 per cent in 2013 and 16.3 per cent in 2012 (G8 Education Ltd 2013)²
- many private single centre owner-operators may be profit motivated, but mainly seek a return on their own labour and a normal return on any capital they have invested. Such providers may perform tasks that a community or large corporate centre would normally pay staff to do (IBISWorld 2014).

Commission analysis of sector-provided data found that compared with lossmaking long day care centres, profitable centres had, on average, around 10 per cent lower costs per place, and around 10 per cent higher revenues per place. This suggests that profitability relies on both cost minimisation and pricing strategies. Underneath these averages, however, there was significant variability in profitability across centres. This was consistent with a survey by the Fair Work Commission,³ which found that approximately two-thirds of preschool and long day care organisations made a profit in 2013 and one-third made a loss (Fair Work Commission 2014).

¹ Measured as revenue less expenses, excluding interest and tax. While for-profit businesses are unrestricted in how they distribute profits, the profits or retained surpluses of not-for-profit organisations cannot be handed to members or individuals. Rather, not-for-profit organisations accumulate reserves, such as to cover contingencies and support their sustainability during lossmaking periods, or re-invest surplus earnings into the organisation, such as to provide more services to the community or to improve the quality of the care and facilities they offer.

² Given the higher gearing ratio than other players in the sector, the requirement for higher profits in some years is necessary in order for such businesses to cover the increased vulnerability to downturns in the demand for their services. However, G8 Education's gearing ratio of 24 per cent is still low compared with what is typical for many well-established businesses in other industries who rely on debt to finance activities.

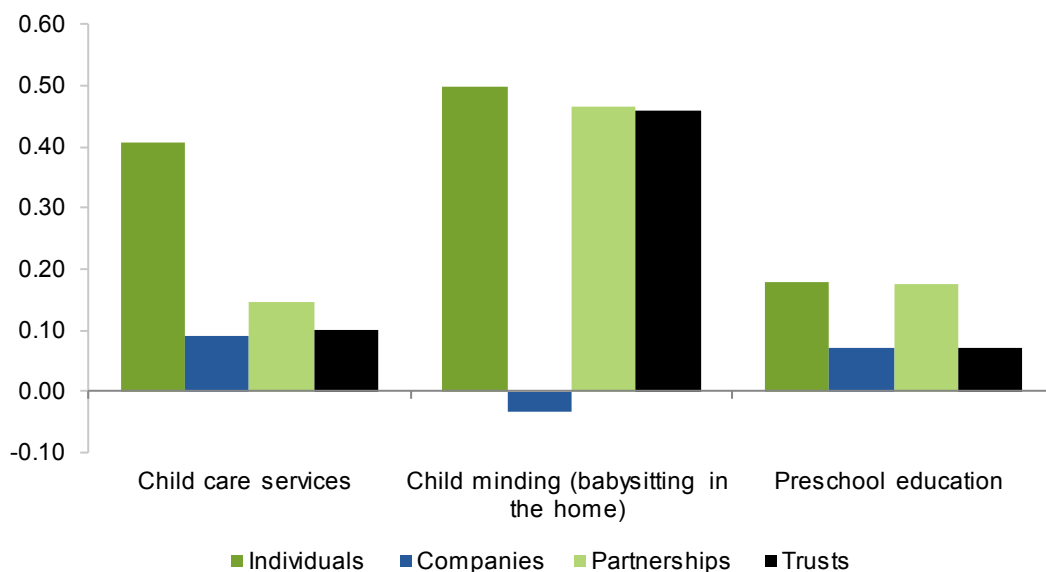
³ The survey included non-government organisations who had at least one employee remunerated under the *Children's Services Award 2010*.

Net-profit ratios⁴ reported by the Australian Taxation Office (ATO) highlight variability in the sector's performance, with a service's legal structure being a large factor (figure H.1). Entities that are 'individuals' for tax purposes typically lodge financial information indicative of higher net-profits, while 'companies' report lower net-profits. However, such distinctions may not be indicative of innate profitability, since 'individuals' must generate a sufficient surplus or net-profit to cover a return on their own labour, which for other entities would be included as an expense.

Likewise, the relative profitability of child minding (or in-home babysitting) services (figure H.1) is likely to reflect:

- that a large share of such providers are 'individuals' and who must generate income as a return on their own labour and any capital invested
- the much smaller impact of regulatory requirements
- lower facility costs for in-home care models.

Figure H.1 **Net profit ratios across different types of childcare services^{ab}**
2010-11



^a net profit ratio = (total business income less total expenses) / total business income; wages to turnover ratio = salary and wages paid/ total business income. ^b Child care services (ANZSIC 87100); Child minding or babysitting in the home (ANZSIC 95393); Preschool education (ANZSIC 80100)

Source: ATO (2013).

⁴ Total business income less total expenses, as a proportion of total business income.

Profitability can vary from year-to-year

The performance of individual long day care centres can vary significantly over time, with some centres making profits in some years and losses in other years. Of course, profits and losses may be relatively small for many centres, so moving from a lossmaking to a profitable position may not be noteworthy. A better indication of any volatility in profitability would be measured by the magnitude of the change in profits (or losses) from one year to the next. Analysis of several years of sector-provided data showed that the change in the overall surplus (or loss) varied by more than 50 per cent from one year to the next for around one in every two centres. The other centres tended to experience more stable surpluses or losses from year-to-year.

By operating a network of centres, providers can manage year-to-year or cyclical volatility in profits and innate differences in profitability across centres. In particular, with a large network of centres, a provider can:

- insure against threats to financial sustainability, such as if an individual centres faces a temporary downturn in performance due to unforeseeable events or unusual volatility in attendances, an unusual reliance on relief staff or lumpy repairs and maintenance expenses
- keep afloat centres that may be independently unviable (either temporarily or permanently) by cross-subsidising fees from other profitable services (chapter 9), which can allow an organisation to operate a larger number of centres with the intention of breaking even across an entire network in the long term.

Which factors affect the profitability of childcare?

Have recent regulatory changes affected profitability?

There was speculation that profit margins may shrink in the ECEC sector as changes in regulatory standards increased wage costs for providers (IBISWorld 2013). If profit margins are eroded, the sector could attract less private capital, the relative presence of not-for-profit providers may increase and growth in supply could slow.

Analysis underpinning the implementation of the National Quality Standard (NQS) indicated that, between 2009 and 2019, the average daily cost per child for long day care was expected to increase by nearly \$10 per hour (in current values). Roughly half of this cost was expected to be induced by NQS requirements and the remainder was attributed to state-based regulations improving service quality (COAG 2009, p. 42). Wage costs are the most sensitive to regulatory changes, and some sector analysts have suggested that such costs could rise by an average of 5.5 per cent per year in the years to 2018-19, reflecting both increased skills and higher employment numbers in the sector (IBISWorld 2013).

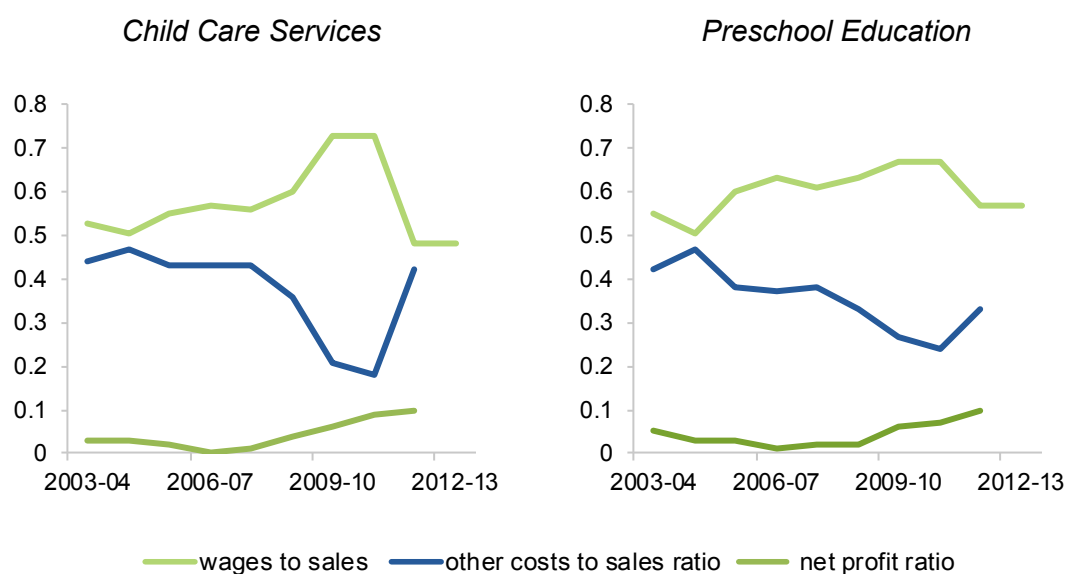
Fundamentally, any tightening of profit margins and associated impacts on growth in the supply of services depends on the ability of providers to pass on any regulatory-induced cost increases. This is likely to vary across local markets, however, the regulatory impact statement associated with the proposed implementation of NQS concluded that:

... services' ability to pass on increased costs without a significant impact on demand is high. ... While at the service level, changes to staff-to-child ratios will see some reconfiguration of places offered, in aggregate, it is not anticipated that supply will be impacted. (COAG 2009, p. 40)

In part, this assessment was based on the mitigating effect of government subsidies in the sector, which partially offset expected cost increases. Analysis of ATO data for companies providing childcare or preschool services revealed that wage costs as a proportion of revenues from fees have not risen over time and profit margins have not been adversely affected (figure H.2).

Figure H.2 The revenue share of wages and profits over time

Ratio to business income, 2003 to 2013



a Data represents providers who, for tax purposes, are companies. **b** net profit ratio = (total business income less total expenses) / total business income; wages to sales ratio = salary and wages paid / total business income; other costs to sales ratio = (1 - wages to sales ratio - net profit ratio). **c** Childcare services (ANZSIC 87100); Preschool education (ANZSIC 80100)

Source: ATO (2013; 2012; 2011; 2010; 2009; 2008; 2007; 2006; 2005; 2004)

Some providers indicated that they already operated in a way that was approaching or was broadly compatible with new regulatory requirements, and therefore had not significantly altered their staffing practices. These were mainly not-for-profit providers, who also may be less affected because of concessions (in the form of special tax treatment and access to non-commercial rent or other in-kind benefits), which may have cushioned any cost pressures (chapter 9).

It is likely that experiences differ, however, with some providers reporting difficulties attracting suitably qualified staff (chapter 8). The Commission estimates that, since the inception of the NQS in 2012, approximately 8 per cent of providers have applied to the Australian Children's Education and Care Quality Authority (ACECQA) for an exemption from staff-related regulatory requirements. However, disproportionately represented among these are long day care providers and services in more remote areas (figure H.14).

Successive changes to regulated staff-to-child ratios and qualification requirements applying to family day care (chapter 7) affected the return on labour for such providers and forced fees to increase. As was noted by many parents, 'recent changes to family day care ratios have made our previously preferred option more costly, as our carer was forced to increase fees to cover losses' (comment no. 227, users of ECEC services). In part, such changes may have stagnated growth in the number of licensed places. However, following the injection of various sources of government assistance to such services (appendix B), the number of services has increased dramatically from 512 services in 2012-13 to now over 700 services (chapter 9).

Services in disadvantaged communities are generally less profitable

Commission analysis of data from a variety of long day care providers suggested profitability was generally lower for centres located in areas of relative socioeconomic disadvantage, as measured by the socioeconomic index for areas disadvantaged (SEIFA). Though the relationship between socioeconomic status and profit⁵ was generally positive, the data was based on a sample of centres, which may not have been representative of the sector.

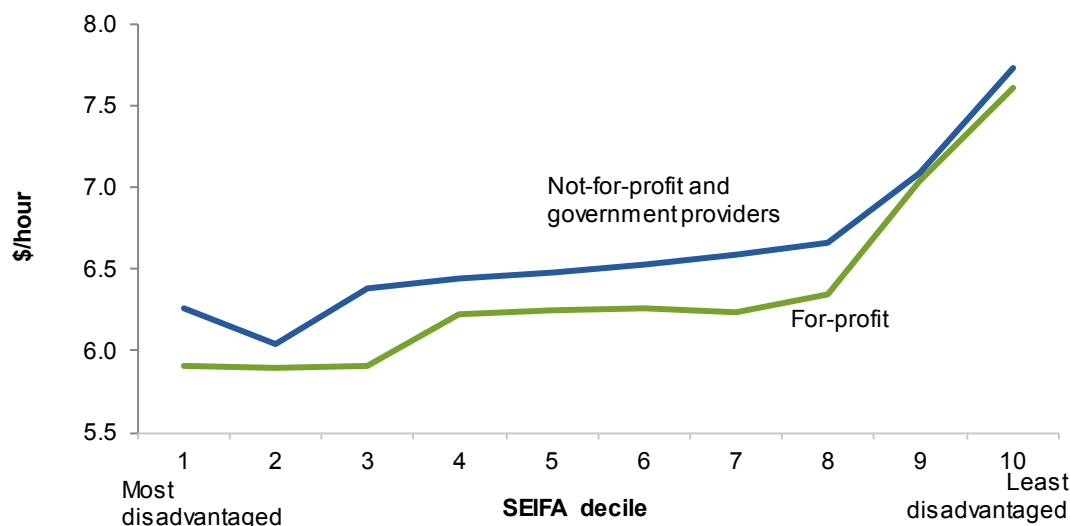
In addition, the averaging of profits across a large number of centres within each SEIFA decile can mask significant variability between individual centres. For example, many centres demonstrated an ability to make a reasonable surplus in low socioeconomic areas and some centres made losses in higher SEIFA decile areas.

Fees for long day care services were also slightly lower in more disadvantaged areas and, by a small margin, for-profit providers charged lower fees in such areas (figure H.3).

⁵ Profits included surpluses generated by not-for-profit providers.

Figure H.3 **Childcare fees are lower in disadvantaged communities^a**

Mean hourly fee for 3-year old long day care services, by SEIFA decile (socioeconomic index of areas disadvantaged 2011)



^a The same relationship held for long day care services for 2 year olds, 4 year olds and 5 year olds.

Source: Productivity Commission calculations based on Department of Education administrative data (2011-12).

How do different types of providers manage their business risks?

How do for-profit providers manage business risks?

For-profit providers can reduce financial viability risks by:

- ensuring they pay prudent prices to acquire childcare assets
- accessing capital with sufficiently low debt or equity financing costs
- tightly controlling their costs, particularly labour costs
- setting prices that match demand for services, including through lifting fees, where doing so would not negatively impact demand and profits.

A profit-motivated provider could attempt to limit their exposure to factors that might reduce the profitability of a service, including by ‘operating in locations where demographic and competitive factors are particularly favourable’ (IBISWorld 2013, p. 8). As Community Connection Solutions Australia suggested:

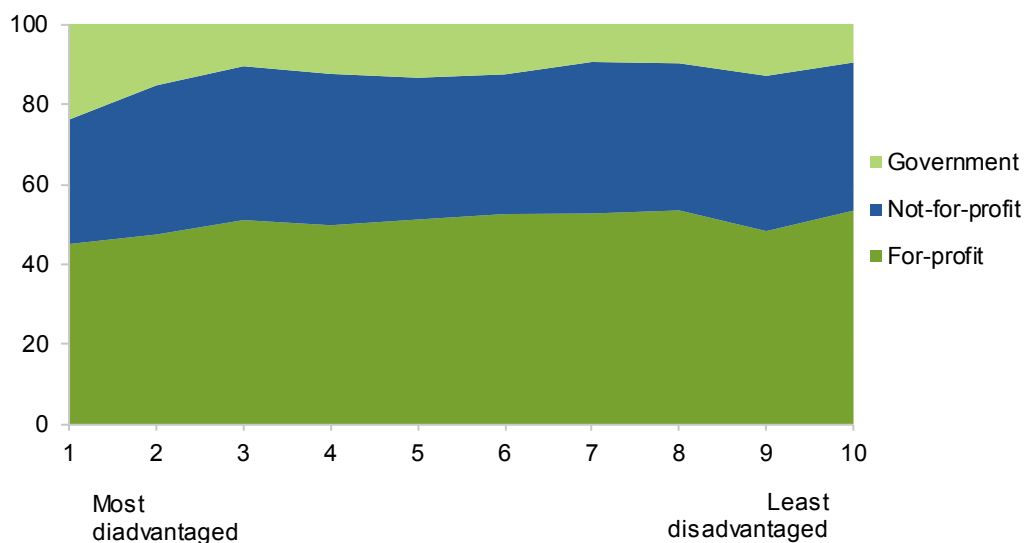
The commercial market is not able to supply to the most disadvantaged areas. ... nor to isolated and vulnerable communities (sub. 305, p. 8)

And as was similarly suggested by the OECD Starting Strong II report, which cautioned that market providers are reluctant to invest in poor neighbourhoods (2006, p. 117).

However, there is no evidence that, as a group, for-profit providers avoid lower socioeconomic areas, being nearly equally represented alongside not-for-profit services across all socioeconomic areas (figure H.4). Further, for-profit providers charge fees that are, on average, slightly lower than not-for-profit and government providers in disadvantaged communities (figure H.3).

Figure H.4 Not-for-profit long day care providers are no more prevalent in disadvantaged communities ^a

Per cent market share, by SEIFA decile



^a While the figure shows market shares as a per cent of total long day care services, similar market shares were found when using long day care places.

Source: Productivity Commission calculations based on Department of Education administrative data (2011-12).

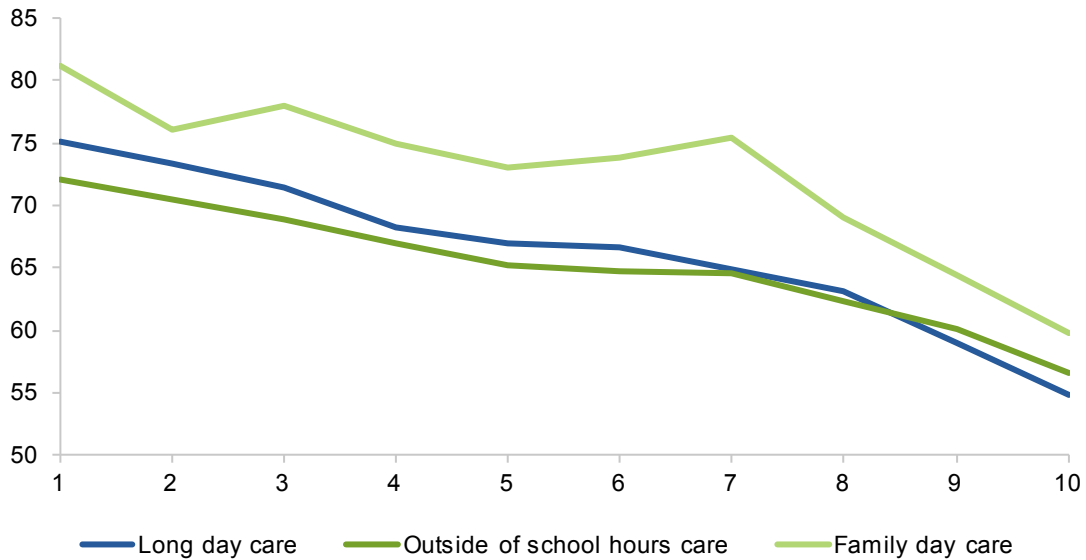
Targeting of subsidies generally provides an incentive for for-profit providers to operate in disadvantaged communities, largely offsetting any lower capacity to pay by parents in those areas. Figure H.5 shows that government subsidisation of fees loosely targets areas of relative socioeconomic disadvantage.

However, reliance on subsidies can introduce a new set of risks for providers, which are largely outside of their control. For example, providers face the risk that taxpayer-funded subsidies are substantially reduced or re-directed (chapter 9), and some providers keenly monitor these risks given the significant sums of money involved (figure H.6).

Profit-driven providers face numerous other risks and have strong incentives to address various market and operational complexities that could impose significant costs on their business (Centre for Market Design, sub. 375, p. 9).

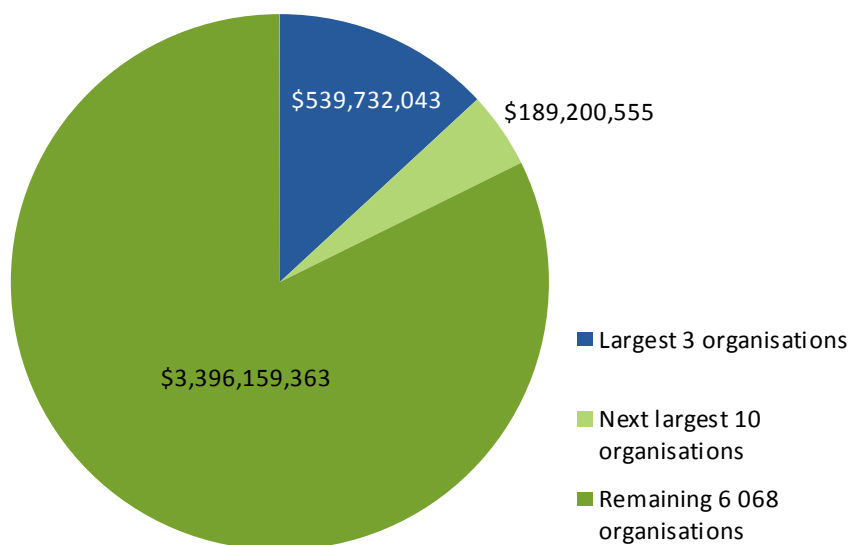
Figure H.5 The subsidisation of fees targets socioeconomic disadvantage

Per cent subsidy in (gross) fees, by SEIFA



Source: Productivity Commission calculations based on Department of Education administrative data (2011-12).

Figure H.6 Three providers together received more than \$0.5 billion in subsidies in 2011-12



Source: Productivity Commission calculations based on Department of Education administrative data (2011-12).

The potential to make a profit has seen considerable private investment in the ECEC sector, with profits of around 15 per cent per year achieved by some entities. However, volatility in financial performance (either cyclically or from year-to-year) may lower the risk-adjusted rate of return, meaning that profits may not be high in comparison with alternative investment opportunities.

Participants frequently refer to the experience of ABC Learning as evidence that for-profit providers — especially publicly listed companies — cannot manage business risks *and* make a sufficient return on their investments. Following the collapse of ABC Learning:

- the Senate Committee on the ‘Provision of Childcare’ recommended that public funds should not be available to ‘corporate companies that are floated on the stock exchange’. In its response of May 2014, the Australian Government did not, however, agree to this recommendation
- the Australian Government legislated to give itself the power to scrutinise the financial viability of large long day care organisations under *The Family Assistance Legislation Amendment (Child Care Financial Viability) Act 2011* (chapter 9).

The particular growth and acquisition model that ABC Learning pursued was unprecedented and subsequently has not been repeated. Although some recent market entrants have grown rapidly and acquired several hundred centres, this represents a small share of the overall market, and may be underpinned by relatively low capital financing costs and prudent assessment of the asset price paid against earnings before interest and tax (Henshaw 2013; chapter 9).

For-profit providers could seek to improve their financial viability by increasing fees. But there is no systemic evidence that for-profit long day care providers charge higher prices than not-for-profit providers (figure 9.15). This may suggest that:

- parents’ demand for childcare services is relatively elastic, which constrains the ability of providers to raise prices
- the quality of for-profit services may be inferior, on average, compared with not-for-profit providers
- efficiently managing costs may be the most feasible means of safeguarding business profitability.

How do not-for-profit providers manage financial risks related to their social goals?

Not-for-profit providers may similarly seek to limit exposure to financial risks and carefully evaluate the continued operation of loss-making services. However, not-for-profit providers may also have social objectives — for example, facilitating community access to services — and these may influence their appetite to manage the financial risks associated with poor performing services, rather than ceasing to operate loss-making services.

One means of managing such financial risks is by operating a network of services. Although user fees can efficiently reflect the full cost of each service, given the varied needs of families and the different capacities of families to afford the full cost of the services they consume, some providers deliberately use the surplus generated from profitable services to operate other unviable services.

Such cross-subsidisation is common among not-for-profit providers and is driven by various social objectives, including ensuring that childcare is both as widely available and as affordable for parents as possible. In effect, cross-subsidisation across a network of services can smooth the:

- financial cost of operating inherently unviable services to support social goals
- largely unpredictable year-to-year or cyclical volatility in financial performance across a network of services. As a form of insurance, this can be a valuable strategy for both for-profit and not-for-profit providers.

In addition, the financial sustainability of a not-for-profit provider's low-margin or loss making services may be bolstered through a reliance on volunteers, donations, subsidised or free rent and tax concessions (chapter 9).

If the delivery of social goals was the primary focus of not-for-profit providers, such services could be expected to be disproportionately represented in lower socioeconomic areas. However, the Commission found no apparent relationship (figure H.4), with market shares being unrelated to the SEIFA within each postal area code, suggesting that:

- targeting socioeconomic disadvantage is not a central focus of not-for-profit providers
- as a group, for-profit providers do not avoid providing services in lower socioeconomic areas.

Further, as shown in figure H.3, not-for-profit and government services are slightly more expensive in more disadvantaged communities compared with average fees set by for-profit providers.

That said, like most measures of relative socioeconomic status, the SEIFA provides an imperfect measure of socioeconomic disadvantage. Even so, these results raise important questions about the nature of the social goals that not-for-profit providers aim to deliver.

If not socioeconomic disadvantage, what social goals do not-for profit providers aim to achieve?

It is possible that not-for-profit providers endeavour to meet social goals other than addressing socioeconomic disadvantage. The Commission analysed local childcare markets to identify characteristics of particular centres and locations that might reveal 'social needs' that not-for-profit providers may target and that for-profit providers may under deliver. For example, the extent to which not-for-profit providers improve access to services for families in relatively remote areas was examined.

There was little evidence that not-for-profit providers systematically achieved lower financial returns in order to support access to services in outer regional or remote areas.⁶

- Although not-for-profit services were slightly more prevalent in outer regional areas, for-profit providers still had a significant market presence in remote and very remote areas, accounting for around one-third of LDC places in such areas (figure H.7).
- The fees of not-for-profit services are slightly higher than for-profit services in such areas (figure H.7).

Not-for-profit providers indicated that they write-off large unpaid debts of a number of low income and disadvantaged families (chapter 9). They may also bridge any funding gaps relating to children with disabilities and developmental vulnerabilities, such as where the Inclusion Support Subsidy is not sufficient to cover the hours of attendance and staff costs to support quality care.

Another goal of not-for-profit providers may be ensuring that any established services continue to operate even when it may be unviable by:

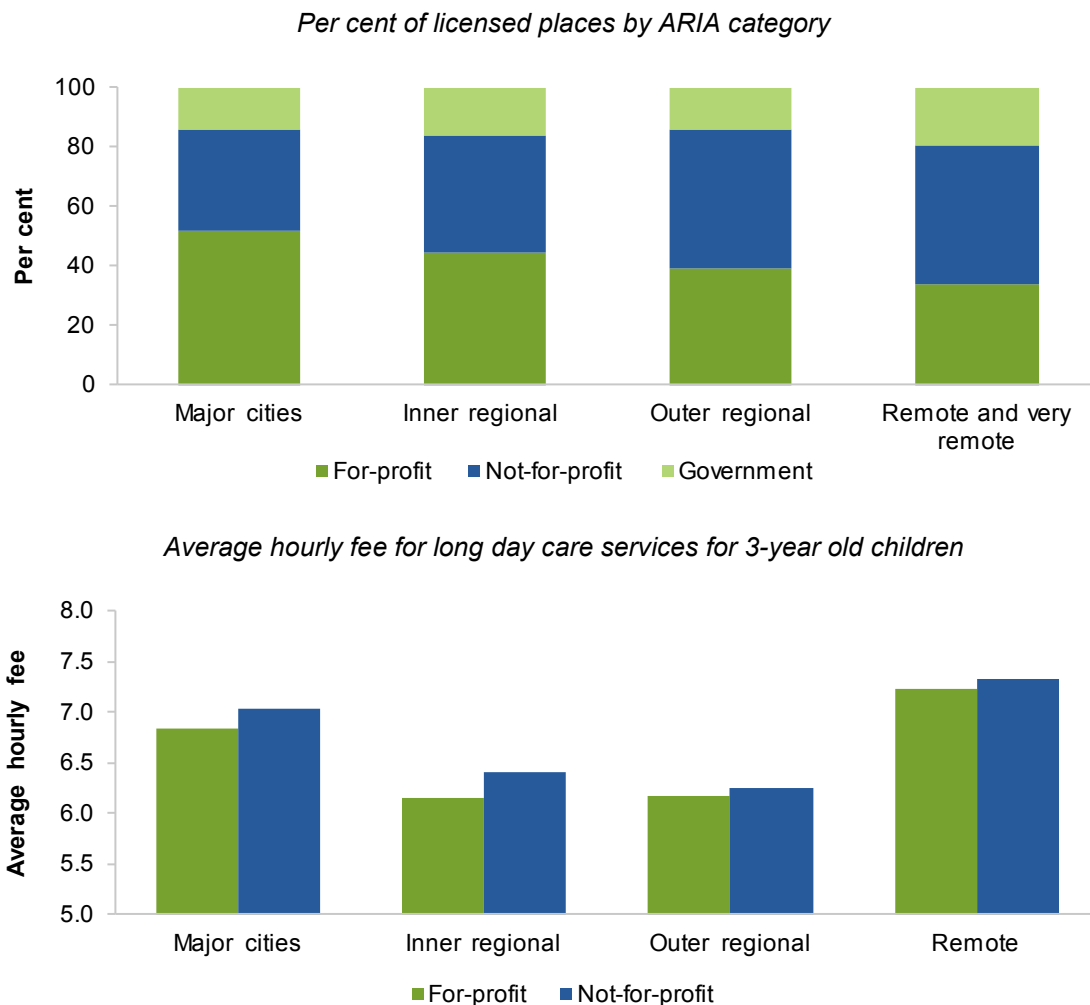
- delivering a standardised level of quality and stable fees for their local community
- weathering any changes to market or operating conditions, including levels of competition within an area, enrolments, regulatory-induced costs, or other factors that either have one-off or ongoing influences on the viability of a service
- providing services for all ages of children, including more expensive centre-based services for 0 to 2 year olds (figure H.8).

However, it does not directly follow that meeting these types of social goals leads to community wide benefits. The reason a service is not viable needs to be evaluated carefully before assuming that its continued operation delivers benefits to the community. For example, poor financial performance could be symptomatic of inefficiencies, including:

- poor management and control of costs
- low occupancy compared with competitors within the same vicinity
- a reluctance to raise fees even when users could afford to pay more for services
- paying staff higher wages than competitors or delivering a higher level of quality than required by regulation or for which parents would be willing to pay.

⁶ Several hundred not-for-profit or government childcare providers are exclusively block funded by Government (such as those under the Budget Based Funding Programme (chapter 4)) and were not included in the Commission's analysis. Block funding generally does not cover full operating costs, which means any gap must be recovered from user fees, other profitable activities of the service provider or community fundraising activity. In such cases, not-for-profit providers may deliver important social benefits to the communities they serve, which would not otherwise be delivered by commercial providers. However, substantiating the nature or size of such benefits was not possible with the information available.

Figure H.7 Not-for-profit provision and remoteness



Source: Productivity Commission calculations based on Department of Education administrative data (2011-12).

H.2 Do long day care costs vary significantly with the age of a child?

The cost of providing services differs with the age of children, reflecting the different care requirements of children at different stages of development. In recognition of this, regulatory standards also vary by age of child

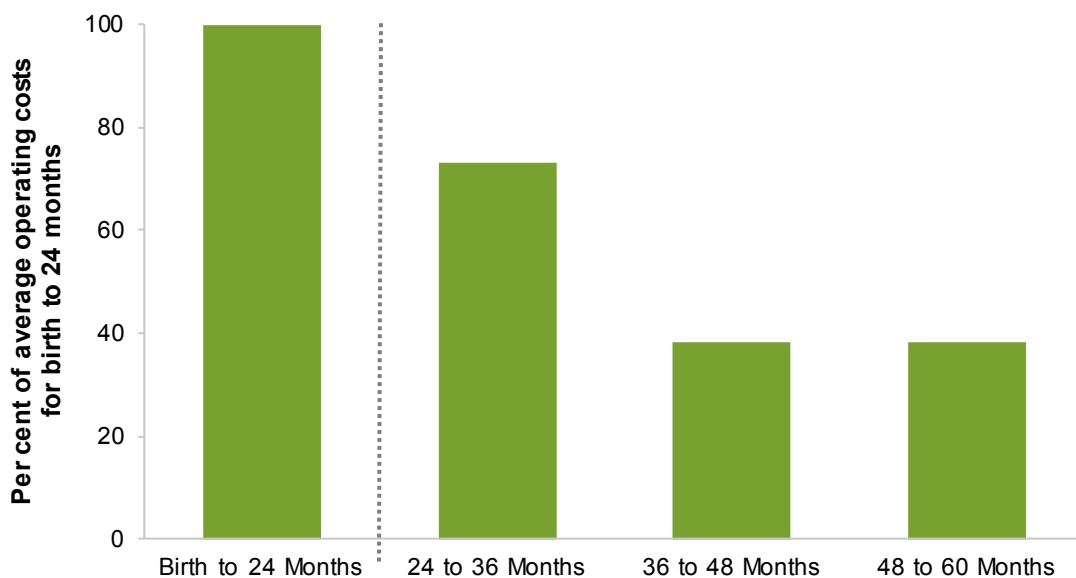
Under the National Quality Framework (NQF), ratio and qualification requirements result in labour costs for the care of a 0 to 2 year old being more than double that of children aged 3 to 5 years old (figure H.8). Hence, average daily fees may not fully recover the cost of services for children in long day care aged under 2 years.

If cross subsidies between different age groups at long day care centres were wound back, the relative price of services is likely to change. In particular, because fees for older children are typically used to cross-subsidise those for younger children, fees could increase for many younger children and decrease for older age groups. In practice, the magnitude of these changes could vary significantly across centres, including depending on:

- whether a centre currently has a flat fee structure
- the age mix of children attending a centre — typically, the greater the share of 0 to 2 year old children at a centre, the higher the cross-subsidy from older children
- the size of the centre and its occupancy levels.

Figure H.8 Children aged 0 to 2 cost roughly double that of 3 to 5 year olds in long day care

Average operating costs per child, by age of child^a



^a Operating costs include centre-based direct staff costs and some non-staff costs (such as nappies), but exclude many fixed costs (such as rent, maintenance, utilities and any non-centre based administrative overhead costs). Factoring in these costs, which are roughly equivalent across age groups, would reduce differences in costs across age groups somewhat. It should be noted that nationally consistent staff-to-child ratio requirements only apply to the 0 to 2 years age group.

Source: Productivity Commission calculations based on sector provided data (2013).

A confidential survey of the finances of long day care services made available to the Commission found that a 1 per cent increase in the average age of children resulted in a 0.35 per cent decrease in average costs. Data from the survey also showed that centres with no children less than 2 years old were, on average, 12 per cent cheaper to operate than those centres with children under 2 years.

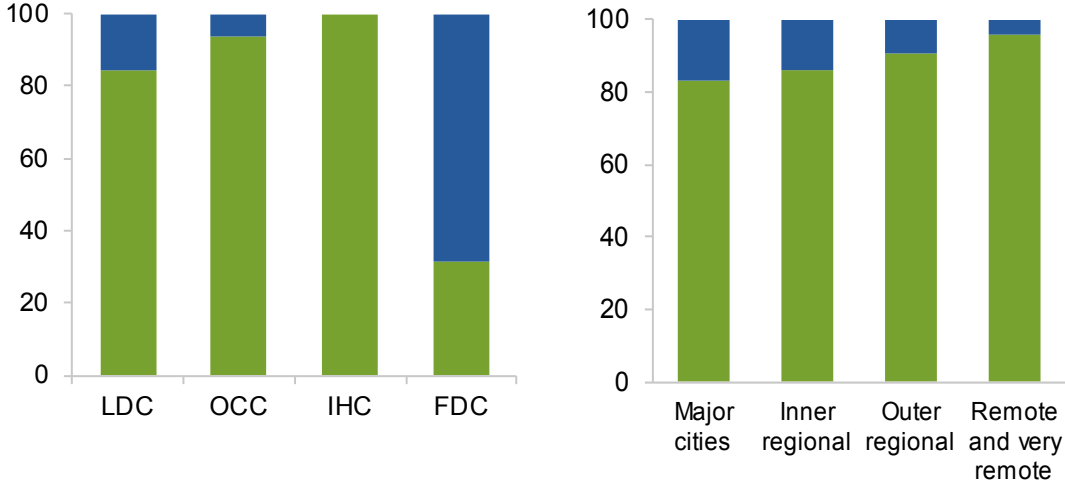
The Commission has been informed that, given the higher costs and potential for lower margins on long day care services for 0 to 2 year old children, many for-profit providers are reluctant to offer such services. In response, the Commission analysed the provision of services to 0 to 2 year old children and found that 10 per cent of not-for-profit providers of long day care services did not provide places for 0 to 2 year old children, while the equivalent figure for a for-profit provider was 20 per cent.

Consistent with feedback from submissions, data shows that long day care services for 0 to 2 year olds may be less available in major cities, with 17 per cent of services not providing care for this age group compared with only 4 per cent in remote and very remote areas (figure H.9).

While family day care is frequently put forward as a care model that can cater for particularly young children in a cost-effective manner, more than two-thirds of such providers do not care for 0 to 2 year olds.

Figure H.9 Provision of care for 0-2 year olds varies across care models and locations

Per cent of services within each category



■ Service provides care for 0-2 year olds ■ Service does not provide care for 0-2 year olds

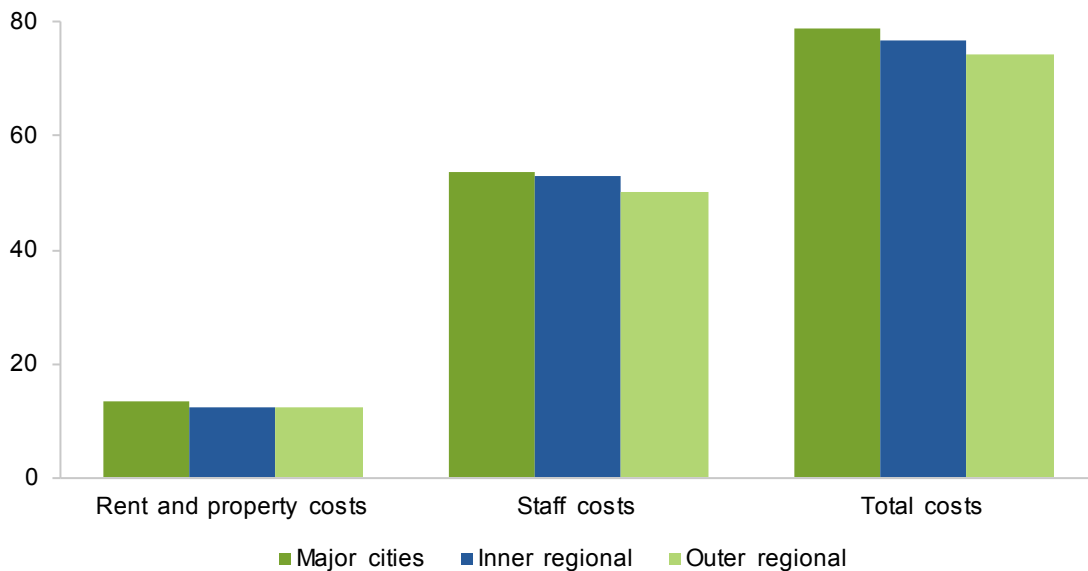
Source: Productivity Commission calculations based on Department of Education administrative data (2011-12).

H.3 How does location and remoteness affect the cost of service delivery?

The Commission found no evidence that costs per attendance at long day care centres varied significantly by remoteness. (Figure H.10 shows average wage, rent and total costs per attendance across ARIA regions for which sufficient data were available.)

These results were consistent with a confidential study of long day care centres provided to the Commission, which found that the median cost per child did not significantly differ by remoteness.

Figure H.10 **Average long day care costs, by remoteness^a**
\$ per attendance within ARIA categories, 2013



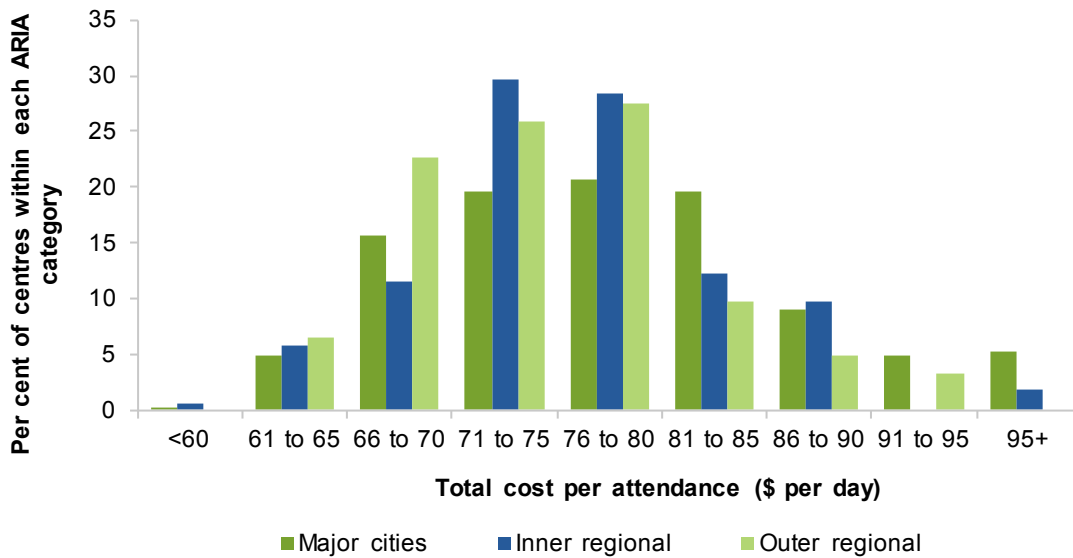
^a 'Rent and property costs' include rent, insurance, repairs and maintenances, gardening costs and utility expenses. Other costs are not shown, but include items such as cleaning expenses, equipment, consumables and administration expenses. As estimates are averages and based on a sample of centres, they may not be representative of all long day care centres.

Source: Productivity Commission calculations based on sector provided data (2013).

In part, the limited variation in costs between ARIA categories — major cities, inner regional areas and outer regional areas — reflects, on average, the low wage dispersion across locations. Providers tend to pay employees similar wages, based on qualifications, experience and the relevant state award (see below).

When assessing long day care centre costs per child in similarly remote areas — that is, within each ARIA category — there was significant variation across centres, although many centres experienced costs per attendance that were close to the average (figures H.11 to H.13).

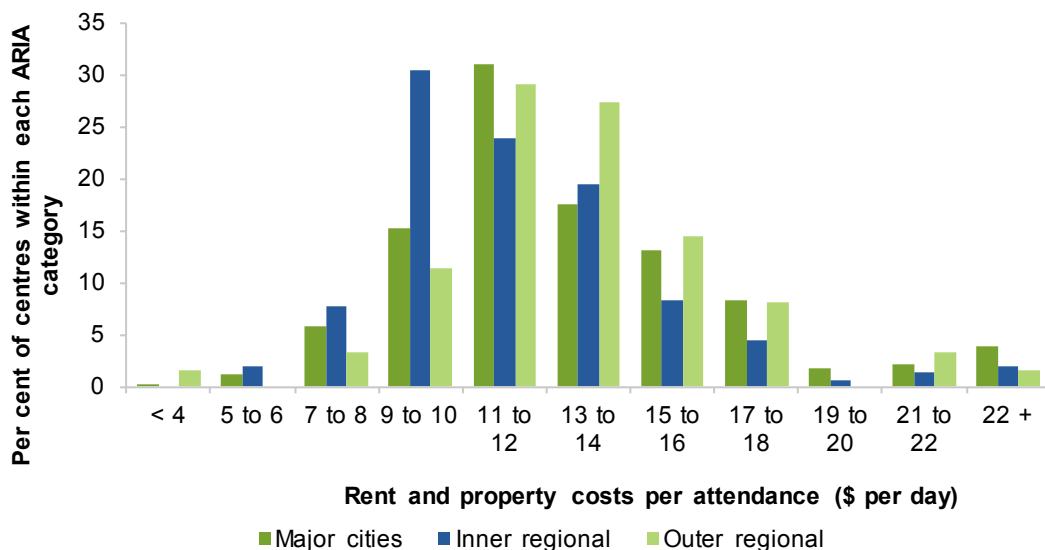
Figure H.11 Distribution of total costs across long day care centres^a



^a Estimates are averages and based on a sample of centres, so may not be representative of all long day care centres.

Source: Productivity Commission calculations based on sector provided data (2013).

Figure H.12 Distribution of rent and property costs across long day care centres^a

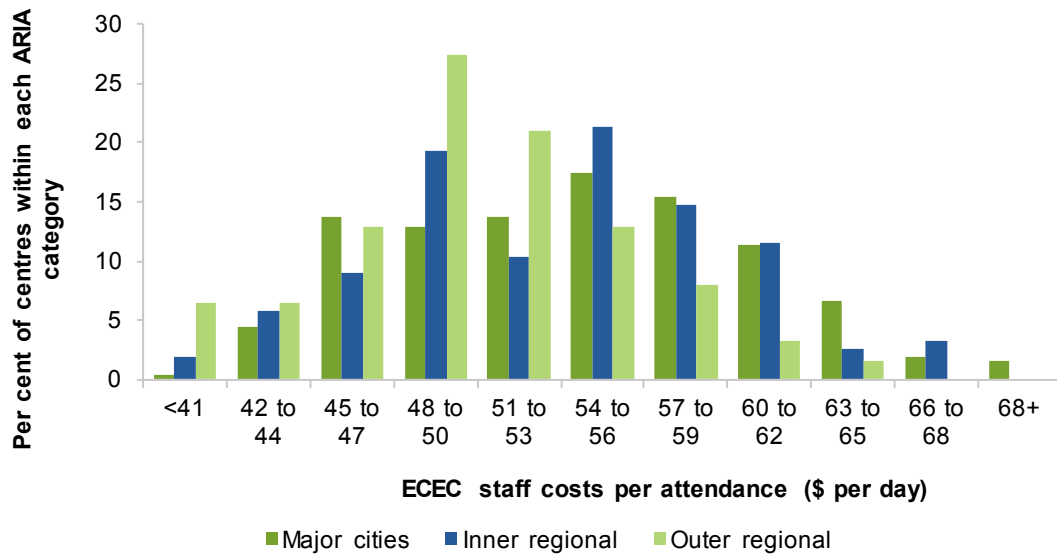


^a 'Rent and property costs' include rent, insurance, repairs and maintenance, gardening costs and utility expenses.. As a fixed cost, rent cost per attendance is influenced by occupancy rates. This will cause rent per attendance to vary between centres with similar rents, but different attendances. As estimates are averages and based on a sample of centres, they may not be representative of all long day care centres.

Source: Productivity Commission calculations based on sector provided data (2013).

Figure H.13 **Distribution of staff costs across long day care centres**

Per cent of centres, by average cost category and ARIA category^a



^a As estimates are averages and based on a sample of centres, they may not be representative of all long day care centres.

Source: Productivity Commission calculations based on sector provided data (2013).

Costs of providing services to remote and very remote areas

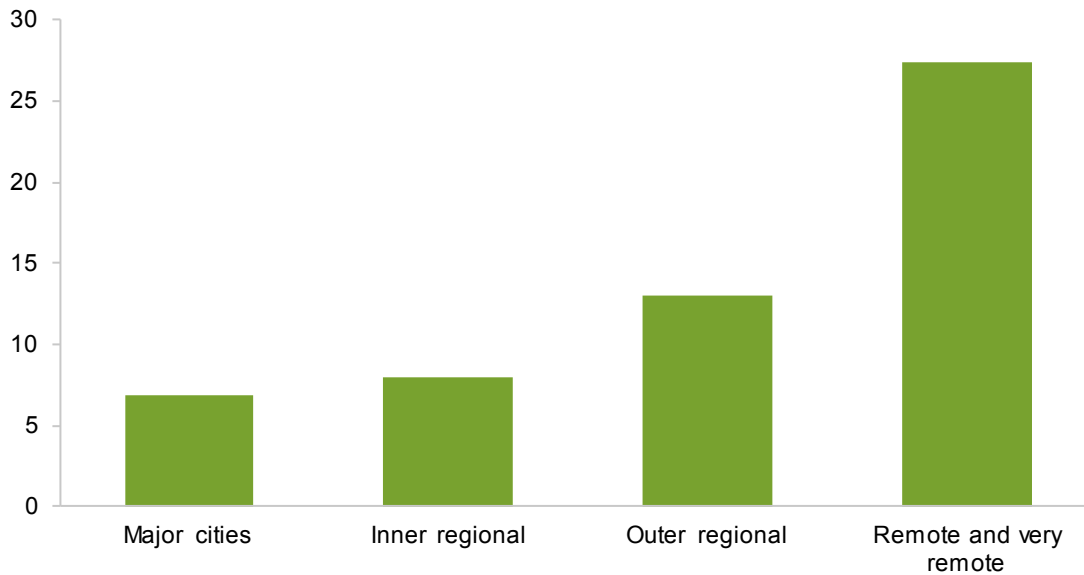
Insufficient data were available to reliably assess the costs of services located in remote and very remote areas. However, many of these services are considered non-mainstream and are currently supported by different funding arrangements (chapter 4). In particular, various sources of supply-side funding are directed at improving service viability in these areas where, due to higher costs and lower enrolments, government subsidies of childcare fees and competition among providers would otherwise be insufficient to ensure adequate provision of services to meet equity and access goals.

Block funding of services operating in remote and very remote areas — usually, when there is no competition — complicates any assessment of the intrinsic viability of services. In part, this reflects the lack of a suitable benchmark to compare efficient costs and an uneven reliance on user fees from parents for many block funded remote and very remote services.

One factor that could add to the costs of more remote centres is attracting and retaining staff. Because the costs of recruitment and training are largely fixed or sunk, a higher rate of staff turnover could reduce profitability. Remote and very remote long day care centres typically had higher rates of staff turnover than centres located in more urban locations and were more likely to have applied for a waiver from staff-related NQS requirements (figure H.14).

Figure H.14 Services applying for a staff-related waiver

Per cent of services applying to ACECQA for a staff-related waiver since the inception of the NQF in 2012, by ARIA



Source: Productivity Commission calculations based on ACECQA data.

Another factor affecting the viability and cost per attendance in many remote and very remote areas is low and variable enrolments at a service. The Commission was unable to establish the significance of this factor on the costs and viability of remote services, on average, since:

- several years of financial data would be required to measure the impact on cost per attendance from fluctuations in enrolments
- isolating any impact from low and variable enrolments requires controlling for a range of determinants of costs and viability.

Providing family day care and in-home care services is slightly more expensive in remote areas

For family day care and in-home care services, a confidential study provided to the Commission found that in remote areas these services were not significantly more expensive on average than in other locations.

That said, the main source of cost variation for remotely located providers derived from an agency's coordination costs, which the Commission estimates comprised roughly 20 per cent of the hourly cost of services in metropolitan areas, rising to around 25 per cent in remote areas. However, to offset the higher cost per attendance associated with coordinator's travel costs to train educators in remote areas, the 2008 (confidential) study

found that coordinators typically made fewer visits to educators and offered less training. The cost of an educator's time did not appear to vary with remoteness.

Recognising such cost differences, current government assistance arrangements provide a specific payment to family day care providers for regional travel (appendix B).

Rent and property costs for long day care vary across locations

IBISWorld (2014) found that property related expenses, such as rent and the costs of owned property, represented 13.5 per cent of sector revenue. However, this varied across locations depending on competition from other land uses or whether providers were paying full commercial rates or had access to free or heavily subsidised facilities.

- The rent, lease or hire cost of childcare facilities is a more significant expense for for-profit organisations, comprising roughly 10 per cent of their total costs, whereas for not-for-profit providers such costs are only about 1 per cent of costs on average (figure H.15(b)).
- Due to competing high-value land uses, rents may be high within an affluent suburb, close to a central business district (CBD), along a central commuter route, near a school or at a transport hub. But because location can be a key determinant of a centre's use, high rent costs can be sustainable for some well-positioned centres. Rent and property costs on a per child basis were broadly similar across locations (figure H.10).
- Commission analysis suggests that services tend to locate in the outer ring of CBDs, with such suburbs having a disproportionately high density of services.

Many not-for-profit centres have access to concessionary building and property costs (potentially counteracting their higher labour costs), with some facilities leased to providers at heavily subsidised rates. In particular, local governments provide free or heavily subsidised rents for premises, or make land available at below cost to many not-for-profit long day care providers. The materiality of such assistance is unknown, although some local governments are believed to be reducing such support.

Similarly, in some jurisdictions, school facilities can be provided at low or no rent to not-for-profit outside school hours care providers. However, with the growth in for-profit providers across all ECEC services, the effect of competitive neutrality principles, along with budgetary pressures, has resulted in a trend away from this type of in-kind support.

'Break costs' associated with commercial leases can be large and leases are typically very long term, reflecting the dedicated nature of such facilities. That said, more flexible building design and fit out could reduce the risks associated with regulatory changes and changes in the age mix of children attending a centre.

When spreading rent and property-related expenses across the number of children attending a centre, locational differences in expenses are less significant.

H.4 The effect of wages on services

Labour costs are the largest item of expenditure for childcare services, accounting for around 60 per cent of total costs (figure H.15).

The fixed nature of a significant share of labour costs, in part due to regulatory restrictions, can be a barrier to profitability. Figure H.15 panel (d) shows that annual ECEC staff costs per occupied place vary across centres. These variations, in part, reflect factors including: the age mix of children, different staff to child ratios across child ages and states, and differences in awards and market wages.

Improvements in labour productivity can arise from tight scheduling of staff rosters around child attendance patterns and ensuring the room configuration and age mix of children can fully utilise the staff onsite at all times. In turn, the ability to harness productivity improvements depends on the ability to configure childcare places per room in order to optimise both building design and staff-to-child ratio and qualification regulations. Such considerations can change from day-to-day and hour-by-hour depending on attendance patterns and staff or child absences. Many centres have indicated they have daily and monthly labour targets to encourage efficient management of wage costs, with an emphasis on minimising reliance on relief staff, which is a higher cost form of labour.

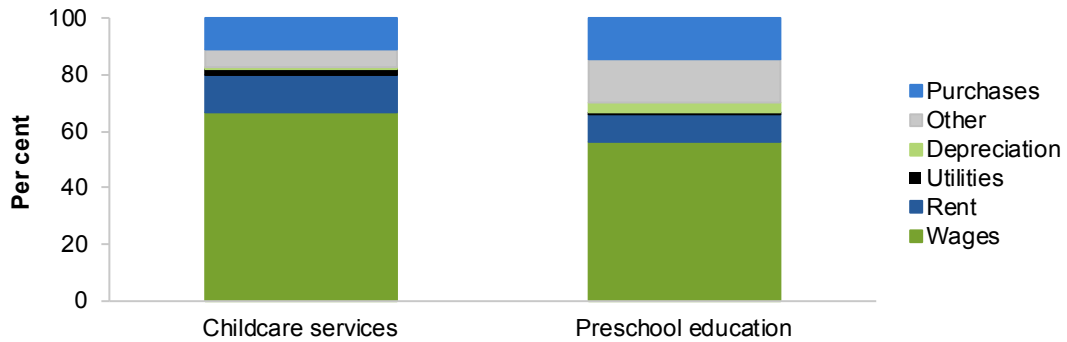
Nevertheless, because labour costs are somewhat fixed due to regulations affecting staff qualification and ratios, improvements in labour productivity may be restricted to increasing the quality of care rather than through increasing the number of children in care.

Wage costs are typically a larger share of total costs for not-for-profit organisations — in 2008-09, they averaged 68 per cent of total costs, compared with 57 per cent for for-profit providers (ABS 2010). Some not-for-profit providers have indicated their wage costs comprise about 80 per cent of operating costs and may be sensitive to fluctuation in enrolments from year to year (Uniting Care Gippsland, sub. 225). This can be for a range of reasons, including that not-for-profit providers tend to:

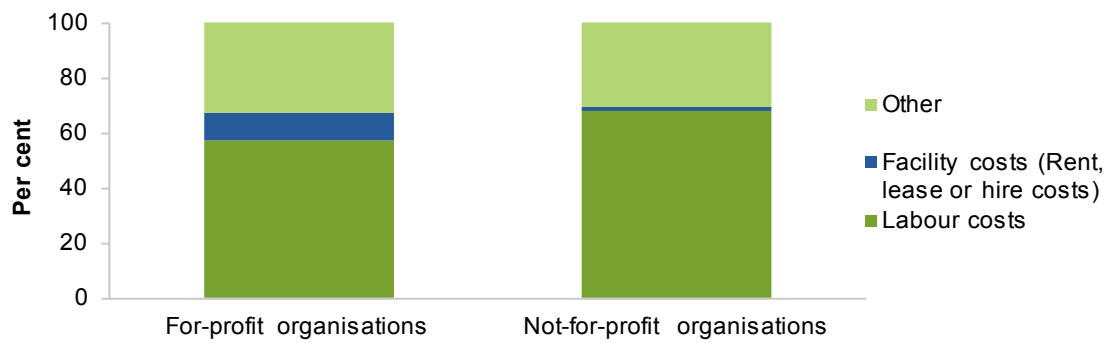
- employ more qualified staff. For example, a confidential financial survey of long day care providers found that 63 and 65 per cent of staff were qualified in not-for-profit and state operated centres, respectively, compared with 59 per cent in for-profit centres.
- care for more children under 2 years, which require more intensive use of labour
- have access to cheaper rents (figure H.15 panel (b)), thus reducing their overall costs.

Figure H.15 The cost structure of childcare services

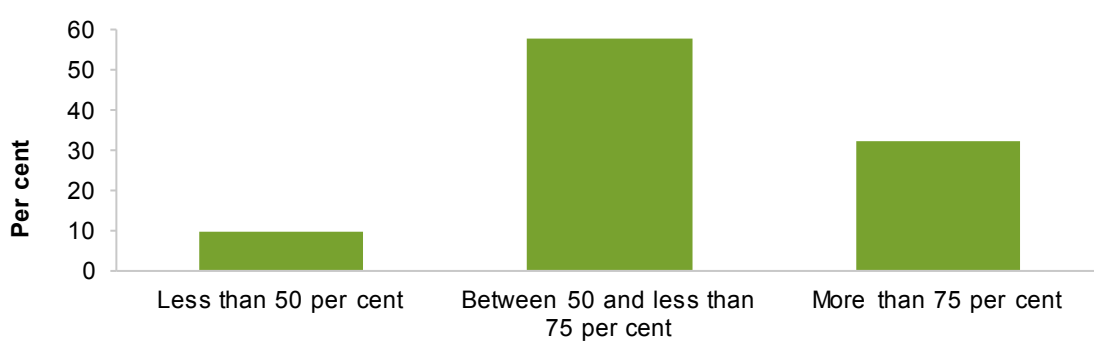
(a) Cost components as a share of sector revenue



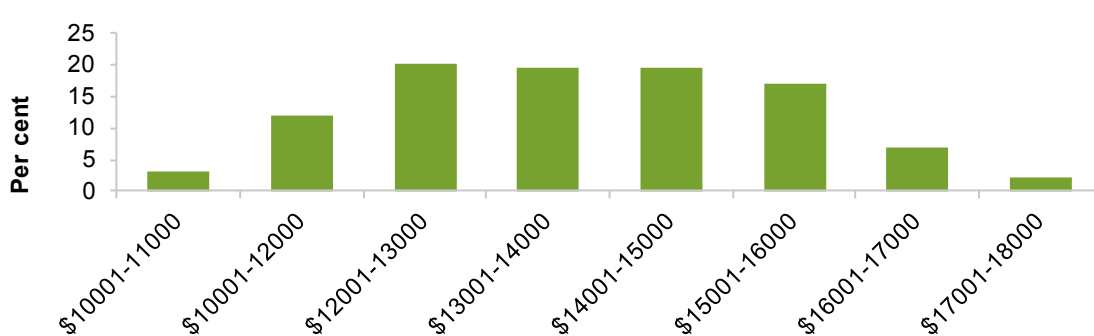
(b) The share of labour costs as a proportion of total costs, by profit status (2008-09)



(c) Distribution of per cent of wages in operating expenses (2013)



(d) Distribution of average annual ECEC staff costs per occupied LDC place



Source: (a) IBISWorld (2010, 2011, 2013, 2014); (b) ABS (2010); (c) Fair Work Commission (2014); (d) Productivity Commission calculations based on sector provided data.

Low staff turnover is important to manage costs and the quality of care

Most providers and parents recognise the benefits of low employee turnover, including reducing fixed recruitment and training costs and improving a child's continuity with carers. For some parents, low staff turnover is a key determinant of care quality (comment nos. 135, 156 and 230, users of ECEC services).

A range of factors may influence rates of staff turnover, but wages and the availability of career progression are typically credited as key drivers.

- For degree-qualified teachers at long day care centres, more attractive pay rates and conditions may be available within preschools and the schools system (chapter 8), which may result in a slightly higher rate of staff turnover compared with specialist preschools
- A 2013 survey by the Fair Work Commission of award-reliant childcare providers found that around 30 per cent would progress employees off award rates in order to retain good employees (Fair Work Commission 2014, p. 40).

Based on a 2009 confidential study, state government owned centres appear to pay relatively higher wages. However, several providers told the Commission that they paid their staff around 5-15 per cent higher than do their competitors (chapter 8).

However, many other providers tended to pay wages consistent with industry benchmarks, including the Children's Services Award.

The (2013) Fair Work Commission survey found that the most common reasons why childcare providers paid award rates were that that they are considered:

- affordable to the organisation (34.5 per cent)
- fair remuneration (26.6 per cent)
- common practice in the industry (19.2 per cent).

Figure H.16 shows that labour costs per attendance at long day care vary across jurisdictions. This is expected given different regulated educator-child ratios, differences in qualification requirements and other state specific regulations, differences in child age mixes, as well as the application of different awards and market wages (chapter 8).

Figure H.16 **ECEC labour costs per attendance in long day care**

Average labour costs (\$) per attendance, by jurisdiction



Source: Productivity Commission calculations based on sector provided data (2013).

H.5 Does productive efficiency vary across providers?

As noted earlier, for-profit providers of long day care services set lower fees on average than not-for-profit or government providers. The lower fees indicate that profit-motivated providers may:

- deliver slightly lower quality services (leading to closer alignment between quality-adjusted prices)
- specialise in the delivery of intrinsically lower cost childcare services, such as for older children
- not cross-subsidise services as extensively as not-for-profit providers
- manage costs more efficiently than not-for-profit providers.

Not-for-profit providers could face a cost disadvantage from having more bureaucratic control mechanisms (Rose-Ackerman 1986) or if they are less inclined, or less able, to adopt innovations that improve the quality and productivity of services. As Penn suggested:

... technology improvement in childcare enterprises are limited to more marginal activities, such as administration and management, ordering supplies and so on. Here the for-profit sector can excel. ... There may be less pressure — and less investment available — to introduce technological change in state or non-profit services ... (2012, p. 27)

Fundamentally, however, childcare is a labour intensive business (section H.4), and labour use is largely determined by regulation, which limits the scope for large differences in productive efficiency across providers. That said:

- it is sometimes argued that not-for-profit providers may have labour productivity advantages if staff are more highly motivated, including if ‘mission-driven’ employees donate their time (Lam et al. 2013, p. 525). However, many owner-operated, for-profit providers may also ‘donate’ their time, undertaking tasks after hours that a not-for-profit organisation would employ people to perform.
- compared with for-profit providers, not-for-profit providers may operate with higher staff to child ratios, employ more staff with higher qualification levels, and pay higher wages accordingly (section H.4).

Although based on information from service providers prior to the introduction of the NQS, one confidential study that was provided to the Commission on centre-based care in Australia found:

- government owned centres were more than 15 per cent more expensive to operate than centres operated by a for-profit agency
- not-for-profit centres were 10 per cent more expensive to operate than centres operated by a for-profit agency.

Another confidential study provided to the Commission on family day care agencies found that the average cost per place in community run not-for-profit services was 12 per cent lower than in government operated services, and lower still among the small number of for-profit providers for which cost information was available.

However, care is required when drawing inferences about the relative productive efficiency of different providers from this (mostly confidential) evidence.

- The evidence is incomplete and draws on overseas studies and data gathered prior to the introduction of the NQF. Reliable findings would require both costs and prices to be quality-adjusted, including controlling for a range of largely unobservable quality dimensions.
- Findings reflect ‘average’ outcomes across a large number of providers, masking variability across individual providers.

H.6 Do not-for-profit providers deliver higher quality services?

It is sometimes argued that not-for-profit providers of childcare services can help to overcome information asymmetries that can frustrate the market-based delivery of high quality childcare services. Specifically, it has been argued that a provider that is not motivated by profit will:

-
- be less likely to compromise quality in order to reduce costs
 - typically garner higher levels of trust, which can reduce search costs for parents (Berner and Gui 1993, p. 8).

In practice, however, it is difficult to discern the extent of any systemic or significant difference between the ‘average’ quality and viability of for-profit and not-for-profit childcare services.

For-profit and not-for-profit providers may operate centres with different cost structures and levels of profitability making it difficult to compare quality. For instance, not-for-profit providers may keep unviable or more marginal services operating in remote areas that a for-profit provider may not.

Australian studies analysing the quality of childcare services are limited and have mixed findings. For example:

- Rush (2006) found that employees in long day care centres perceived that corporate chain providers delivered the lowest quality care when compared with community and independent private centres.
- for OSHC, 29 per cent of staff in community managed services had not received relevant training, compared with less than 25 per cent in privately managed institutions (McNamara and Cassells 2010).

Based on NQS ratings, which are available for about one-third of childcare services, the Commission found that not-for-profit and government providers achieved a slightly higher average quality than for-profit providers (chapter 9). However, a large number of factors influencing childcare quality were not controlled for in this simple analysis, and some aspects of quality valued by parents may not be captured by NQS ratings, including locational convenience.

In other countries, not-for-profit providers are generally found to perform better at delivering quality services when measures of quality are based on observational data (Whitebook, Howes and Phillips 1990) or when regulations to protect quality are considered inadequate (Helburn 1995; Morris and Helburn 2000). In some studies, the effect of not-for-profit status on quality is highly sensitive to model specification (Blau 2000), which reduces the reliability of any inferences about the causal impact of profit motive on quality.

In Canada, Cleveland and Krashinsky (2004) found that, even after a range of variables were controlled for, not-for-profit centres were rated about 10 per cent higher in quality than for-profit centres, which were overrepresented among lower quality centres. Doherty, Friendly and Forer (2002) attributed the lower quality rating of for-profit providers to various behaviours, including a reliance on untrained staff, lower wages, higher staff turnover, lower morale and higher staff to child ratios.

More recently, Cleveland and Krashinsky (2009) found that quality differentiation of services can only occur in dense markets⁷, and only in such markets were not-for-profit providers found to deliver higher quality services. And Lam et al (2013) found that larger not-for-profit centres were more likely to provide better quality services, in part due to their capacity to take advantage of tax privileges.

By contrast, Mocan (2007) found that once corrections were made for the inherent costs of a service, including tax concessions and household income effects, ownership type was not a strong predictor of service quality. Other within- and between-firm factors (some of which may correlate with ownership type) are likely to account more strongly for measured quality, productivity and efficiency differences than ownership type.

H.7 What is the effect of scale economies in service provision?

Exploitation of scale economies may be a source of cost minimisation in the provision of long day care services. Large centres can lower unit costs and optimise overall quality by allowing providers to differentiate and specialise services and tasks and to spread managerial supervision, planning and some regulatory compliance costs across a greater number of places.

Scale economies may be particularly important for long day care centres, since a failure to achieve the minimum efficient scale could mean centre-based care is not competitive when compared with in-home care or family day care arrangements.

Cost reductions from larger scaled operations may extend beyond an individual centre. Strategic clustering of centres with centralised management and payroll systems can minimise costs across a chain or large network of centres.⁸ Such approaches also allow greater flexibility in staffing practices and defray management, marketing, IT system and regulatory compliance costs.

As described by Petra Capital when reviewing the investment potential for G8 Education (GEM):

GEM has developed systems, people and structures that have made it operationally scalable. The rising burden of curriculum and regulatory oversight is increasing the barriers to entry and increases the competitive advantage of scale. (Henshaw 2013, p. 3)

Centres with a smaller number of licensed places or family day care providers with a smaller number of educators may be less competitive. During the period of the Global

⁷ Dense markets have a large number of buyers, which increases the range of quality attributes that providers can specialise in offering while still achieving efficient scale.

⁸ For a network of centres, it is suggested a 'critical mass' of centres is needed to warrant investing in an additional layer of overheads, such as to establish centralised payroll systems and ensure adequate quality control across centres.

Financial Crisis, when Britain's formal childcare market started to contract, small scale providers were the first to exit, with the average capacity of deregistered establishments being significantly below the average capacity of remaining providers (OFSTED 2009, 2011).

Based on ABS data, the rate of exit by childcare providers over the period from 2008 to 2012 was highest among those providers with relatively low turnover levels — less than \$50 000 per year — leading to an overall decline in the number of services (ABS 2013).

However, smaller centres are not always less viable, with some providing services at considerably lower cost and achieving greater profitability per place than larger centres. It is unclear what characteristics might explain how such providers are able to realise this, but factors may include the quality of services they provide, access to cheaper labour, rent or other expenses, or specialising in the care of less costly older children.

Depending on the age distribution of children, scale economies may be exhausted at somewhere between 30 and 70 full-time equivalent children (Cleveland and Krashinsky 2009). The narrower the range of child ages, the greater the scope for scale advantages, particularly when providing specialist services to 3 to 5 year olds.

When investing in new facilities or expanding capacity, economies of scale in investments will only be achieved if capacity increases are 'stepped' — that is, expand in lumpy increments. As such, many providers told the Commission that an increase of generally no less than 30 places, but preferably 60 places, is required to justify expanding a centre or entering a new market.

The density of demand for services within a geographic area may constrain the ability to exploit scale advantages, and the impact of this factor is more pronounced for centre-based care than for other care models. The reason for this result is that a high concentration of demand within a relatively small geographic area can optimise both a provider's need for scale economies and a parent's need for proximity.

However, based on information from childcare providers made available to the Commission, it was not clear that scale economies had a significant impact on the costs of delivering services. This suggests other factors also driving average costs may be hiding the influence of scale economies — factors which were not controlled for in the Commission's analysis. For example, although occupancy rates can be a key determinant of profitability, this impact is likely to interact closely with the number of licensed places (and, in turn, scale economies).

Previous studies⁹ that have controlled for the impact of other factors on costs found scale economies had a relatively minor influence on profitability, implying that fixed costs are a

⁹ These were econometric studies, undertaken in 2008 and 2009, which were provided to the Commission on a confidential basis.

small proportion of total costs. However, such studies were undertaken prior to the introduction of the NQF, and as such may not be representative of current costs.

The Commission was unable to obtain detailed information about the coordination and overhead costs of family day care agencies. However, the advantages of scale are likely to be relatively minor in this sector, especially when scale requires coordinators to travel greater distances or stay in a location overnight when visiting educators.

H.8 How do occupancy rates affect costs and viability?

Full occupancy¹⁰ at a centre allows all fixed and sunk costs to be fully utilised, reducing the average costs of delivering services and allowing fees to be lower.

Causes of low occupancy are varied, but once the problem emerges, a downward spiral in profitability can result. With low occupancy, prices must increase to cover fixed costs, which can further reduce occupancy, undermine the capacity to invest in quality improvements and ultimately erode a centre's viability.

Generally, 70 per cent occupancy has been the sector benchmark for long day care centres to be profitable (IBISWorld 2011), but recent regulatory changes may have nudged required occupancy levels closer to 80 per cent (IBISWorld 2013).

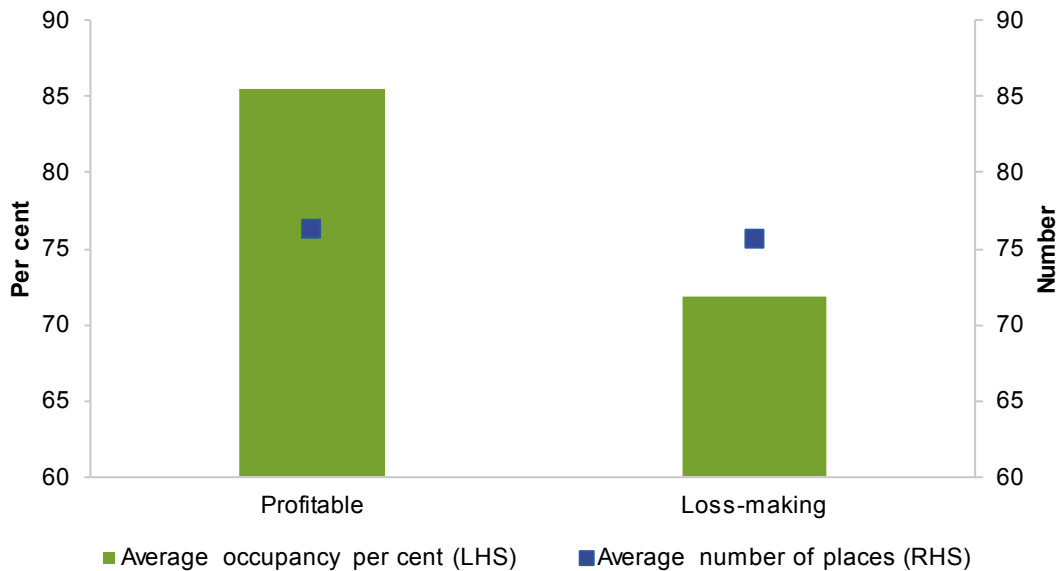
As part of the inquiry, many for-profit providers advised the Commission that viability on a standalone basis required 80 per cent occupancy to break even, but that 90 to 100 per cent was preferred to ensure financial viability. Supporting this notion, G8 Education reported an occupancy rate of 83.8 per cent across 126 centres, noting that:

... occupancy levels represent the key to financial success for the Group given the largely fixed cost-base of child care centres. (2013, p. 66)

The Commission analysed occupancy levels across a range of centres and found that profitability generally improved with occupancy (figure H.17) and centres reporting losses often had occupancy levels below 80 per cent. However, there was significant 'noise' observed around this relationship — for example, some centres achieved a high occupancy rate but still reported a loss.

¹⁰ Occupancy can be interpreted either as a per cent of the number of licensed places or as a per cent of the number of 'configured places', which reflect the capacity at a centre given regulatory requirements and physical room dimensions.

Figure H.17 High occupancy increases profitability
For profitable and loss-making long day care centres



Source: Productivity Commission calculations based on sector provided data.

To explore this relationship further, the Commission classified each centre as profitable (or loss-making). This information was then cross-classified with information on average size (as measured by number of places) and the average occupancy rate (expressed as a per cent of operational places). Large, high-occupancy centres were observed to be more profitable than smaller high-occupancy centres, but the impact of a centre’s size had the reverse effect when occupancy levels were lower. This result suggests the presence of scale economies, which might either improve or worsen profitability depending on occupancy rates.

Providers often attribute low occupancy rates to competition from other providers (see below). Occupancy rates can also fall or rise depending on economic factors outside of a service’s control, such as if a major employer in a town ceases to operate. Similarly, as was discussed in chapter 9, heavily cross-subsidising services for 0 to 2 year old children may contribute to low usage by older children and (although attracting more use from 0 to 2 year olds) lower overall occupancy.

H.9 Competition and new entry can drive exits

Vigorous competition encourages the least efficient (highest cost) service providers to exit a market if there is any excess of childcare places above the level demanded. The lowest

cost providers, or those providing a niche service, persist in the market and may even grow their market share.

These are efficient outcomes from a competitive market, with the minimisation of costs, the charging of cost-reflective prices and the spurring of innovation in service delivery forming key components of economic efficiency.

Entry and exit rates in the ECEC sector range between 10 and 15 per cent in most jurisdictions (chapter 9), which is in line with other sectors.

Based on ATO data, the performance of established providers of childcare services appear to be no better or worse than that of newly commenced services, with profit margins being roughly comparable (ATO 2013). However, there is significant heterogeneity within the broad category of ‘established’ providers, which includes:

- both for-profit and not-for-profit providers
- a mix of growing and more productive services as well as less productive providers with a dwindling market share.

H.10 Summary and conclusions

The profitability of the ECEC sector is variable, across both providers and from year-to-year. On average, the majority of childcare providers make a profit, but around one-third may operate at a loss. High occupancy levels underpin the profitability of centre-based care.

There is no apparent relationship between an organisation’s ownership and a decision to operate in lower socioeconomic areas, with market shares being unrelated to the SEIFA within each postal area code. This suggests that:

- targeting socioeconomic disadvantage is not a central focus of not-for-profit providers
- for-profit providers do not, as a matter of practice, avoid providing services in lower socioeconomic areas.

Average operating costs for the care of 0 to 2 year olds in long day care are more than double that of children aged 3 to 5 years old. However, because fee structures are generally flat across age groups, many services incur losses for the care of such children, which are then cross-subsidised from fees collected for older children.

There was no conclusive evidence that wage, rent or total costs per attendance at long day care centres varied significantly with the remoteness of a centre’s location. Similarly, for family day care and in-home care services, the costs of educators in remote areas were not significantly more expensive on average than other locations. However, there was some variation in a care agency’s coordination costs, which the Commission estimates comprise

roughly 20 per cent of an hourly cost in metropolitan areas, rising to around 25 per cent of the hourly cost in remote areas.

Wages account for about 60 per cent of total costs for long day care centres and are sensitive to regulatory changes affecting the required ratio and training of staff. Because regulatory changes affect most service providers equally, price competition should see regulatory-induced increases in wage costs reflected in higher fees. Because the availability of government subsidies means such cost increases are partially transferred to taxpayers, it does not appear that the profitability of the sector has declined — in fact, there are signs that profits may have increased slightly, which should attract investment in the sector. However, this is likely to vary across local markets and providers.

And finally:

- not-for-profit and government providers achieved a higher average quality than for-profit providers
- not-for-profit and government providers of long day care services set higher fees on average than for-profit providers.