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THE PROFITABILITY OF AGED CARE

A REPORT FOR THE AGED CARE ROYAL COMMISSION

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1 INTRODUCTION

1.1 The task

The Royal Commission into Aged Care Quality and Safety has asked Frontier Economics to prepare a report on returns in the aged care sector. This report has been prepared in response to this request.

The original scope of work consisted of two projects:

1. a backward-looking project using secondary sources to report on the financial returns earned by providers of services in the Australian aged care sector over the last five years; and
2. a forward-looking project providing a high-level review of the weighted average cost of capital model and parameter values prepared by staff and advisers of the Royal Commission.

The original scope of work also included a forward-looking element in Project 1 in that Frontier Economics was asked for an opinion on the financial returns that should reasonably be available to providers of services in the Australian aged care sector in order to attract and retain sufficient capital investment in the sector in the basis of various possible policy scenarios.

During the course of the project, Royal Commission staff requested that the second project be expanded to incorporate independent estimation of the parameters in the WACC model and development of a building block model to express return of capital (depreciation) and return on capital (WACC) in terms of a dollars-per-bed-per-day capital charge. [1]

We present our findings in the form of two reports. This is the first of the two reports. It deals with the backward-looking element of Project 1 as outlined in the original Proposed Scope of Work. It provides a top-down analysis of the range of returns (whether described as returns on capital, profit margins or otherwise) that have been earned by aged care providers (analysed according to appropriate segments of the sector in the last five years.

In a separate report, we shall present our opinions of the second part of the original Project 1 and the revised Project 2. That report will:

- present our estimates of the WACC incurred by providers of aged care and present a building block model to express return of capital (depreciation) and return on capital (WACC) in terms of a dollars-per-bed-day capital charge; and
- present our opinion of the ways in which the building block model would need to change contingent upon various possible policy scenarios.

1.2 Overview of conclusions

Appropriate measures of returns require adjustments to financial accounting data (Section 2)

We have considered the range of measures by which to assess the range of financial returns earned by providers of services in the Australian aged care sector over the last five years. In our opinion, comparisons of the returns of providers of aged care services would be greatly facilitated if the following adjustments were made to their financial accounts:

[1] Email from Stephen Gray to Chloe Stoddart dated 4/5/2020.

1. treat Refundable Accommodation Deposits (RADs) as Non-Current Liabilities;
2. include the implicit interest paid on the RAD debt as an expense; and
3. include the implied interest on the RADs as revenue.

Providing these adjustments are made, reasonable comparisons over time can be made using EBITDA or EBIT expressed as a proportion of revenue or residents (in the case of residential aged care).

Three further conclusions follow from our analysis:

- If one wishes to make comparisons of earnings across different forms of ownership, one should use EBIT rather than EBITDA.
- If one wishes to compare returns with the cost of providing services, the most appropriate measure would be EBIT expressed as a proportion of Capital Employed.
- If one does not adjust for the roles of RADs, one will be limited to analysing changes over reasonably short periods of time (such as the five years we have been given) in returns for sectors that have similar capital structures and sources of revenue.

Financial data should be treated with caution, but they appear to give expected results when subjected to analysis (Section 3)

In section 2.1 we point to problems associated with accounting for RADs and certain conceptual issues that arise in analysing the range of returns earned by aged care providers. In addition to these conceptual issues, the BDO Report alerts us to a range of problems one encounters when analysing the data reported to ACFA by providers of aged-care services. These problems arise from:

1. financial flows between Approved Providers and related entities;
2. the provision of services other than aged care by Approved Providers; and
3. issues of allocating costs among Residential Care, Home Care, Home Support and Services other than Aged Care.

We accept that one needs to exercise caution in analysing the data reported to ACFA. However, our analysis indicates that, providing one makes adjustments for the treatment of RADS, the returns appear consistent with those economic theory would lead one to expect. The potential for competition, including entry and exit of providers into residential aged care, indicates that we might expect to see longer-term returns that are, on average, close to the cost of capital for the sector.

Returns in residential care were modest on average, but sufficient to induce investment (Section 4)

Average returns in Residential Aged Care were reasonably constant in FY2015, FY2016 and FY2017. Because these returns are averaged over for-profits, not-for-profits and government entities it is not clear that returns covered the cost of capital for all entities. However, the substantial investment in the sector in FY2015 to FY2017 suggests that returns for many providers did cover their cost of capital in these years. Average returns to the sector have decreased in each of the last two financial years.

For-profit providers were more likely to recover their cost of funds (Section 5)

A clearer picture of returns to Residential Aged Care emerges when one segments the returns by ownership. For-profits make higher returns that not-for-profits, and not-for-profits make higher returns than government providers. It appears that average returns among for-profit providers of Residential

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Aged Care services were close to benchmark returns in FY2018.[2] These average returns reflect the average of a spread of returns that was wide - even among for-profit providers.

Home care returns indicate a downward trend, but questions about reliability (Section 6)

The data suggest that average returns in home care have decreased in the last few years compared with FY2015 and FY2016. However, the sector has yet to adjust fully to the new world of consumer choice.

[2] By benchmark returns we mean returns in line with the cost of capital. Economic theory indicates that returns of this kind will be the outcome of competitive markets in the long run.

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2 THE BEST MEASURES OF FINANCIAL RETURNS

The Royal Commission has provided us with a copy of a report on the overall financial state of the Australian aged care sector produced by BDO after analysis of financial data reported to the Department of Health/ACFA (the Department) by aged care providers (the BDO Report).[3]

As the BDO Report observes, a range of measures can be used to assess the profitability of organisations:[4]

- Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA);
- Earnings Before Interest and Tax (EBIT) Excluding Other Comprehensive Income.[5] This deducts Depreciation and Amortisation from EBITDA. Comprehensive Income is excluded to minimise the impact of one-off events;
- Net Profit Before Tax (NPBT) Including Comprehensive Income. This deducts interest payments from EBIT but includes Comprehensive Income;
- NPBT Excluding Other Comprehensive Income;
- Net Profit After Tax (NPAT) Including Other Comprehensive Income. This deducts Income Tax from NPBT; and
- Operating cash flows.[6]

Profit will vary across entities simply because of variations in the size of entities. In order to remove differences in profit caused simply by differences in size, profit is normally expressed as a proportion (or percentage) of another measure. The BDO Report uses:

- Revenue – profit as a proportion of revenue is referred to as a Profit Margin;
- Total assets – profit as a proportion of total assets is referred to as a Return on Assets; and
- Total equity – profit as a proportion of total shareholder's equity is referred to as a Return on Equity.[7]

Which measure (the numerator and the denominator) is most appropriate will depend on three principal factors:

1. the characteristics of the organisations;
2. the purpose of the comparison; and
3. the data that are available.

In the following sub-sections we assess the usefulness of various measures (numerators and denominators) depending on these factors. However, before we discuss various measures, we have to

[3] BDO, *Report into the Profitability and Viability of the Australian Aged Care Industry*, 21 July 2020.

[4] BDO Report, p 15.

[5] The BDO Report, p 15, states that other comprehensive income, "… consists of items of income and expense such as the gain or loss on the sale of a property that are not part of an organisation's regular day to day business such as gain on revaluation of property" ….

[6] BDO Report, p 15.

[7] BDO Report, p 34.

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deal with the way in which Refundable Accommodation Deposits (RADs) affect the income and the capital structure of providers of residential care.

2.1 RADs

Consumers can pay for accommodation in a Residential Aged Care Facility by means of a Daily Accommodation Payment/Contribution (DAP/DAC) or by means of a Refundable Accommodation Deposit/Contribution (RAD/RAC). We shall refer to the two means of payment as DAPs and RADs. If a consumer chooses to pay by means of a RAD, the payment is in the form of an interest-free loan to the provider.[8]

Interest-free loans in the form of RADs are an important source of capital for Residential Aged-Care Providers. At 30 June 2019, the Balance Sheet of Residential Care Providers showed RADs at $30,183 million, which represented 77 per cent of their total liabilities.[9] However, this percentage can vary among providers. Some are more dependent on interest-free loans in the form of RADs than are others. For example, the extent to which residents choose to pay for accommodation by means of a RAD loan varies by ownership of the provider. The data for FY 2019 are presented in **Table 1.**

Table 1: Method of payment for accommodation in Residential Aged Care facilities by ownership (FY2019)

	NOT FOR PROFITS	FOR PROFITS	GOVERNMENT	AVERAGE
RAD	30%	44%	27%	35%
DAP	46%	34%	51%	41%
Combination	25%	22%	27%	24%

Source: ACFA, Eighth Report on the Funding and Financing of the Aged Care Sector, May 2020, Tables 7.2 and 7.3

The *Eighth Report on the Funding and Financing of the Aged Care Sector* shows that the choices of residents between payments by RAD or DAP also varies by location.[10]

The treatment of RADs in the financial accounts of providers of Residential Aged Care created challenges for us in undertaking a meaningful analysis of the range of financial returns earned by providers of services in the Australian aged care sector. Stewart Brown explains the ways in which the Accounting Standards require RADs to be treated in the financial accounts of providers of Residential Aged Care:

> *Because these refundable contributions are repayable to the resident, their family or estate on the departure of the resident from the facility and the aged care provider does not have an "unconditional right to defer settlement" beyond twelve (12) months from the date of the resident's departure the total of these refundable contributions are required to be presented as a current liability in the statutory financial statements of the aged care*

[8] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector,* July 2019, p x.

[9] ACFA*, Eighth Report on the Funding and Financing of the Aged Care Sector,* May 2020, p 115.

[10] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, Table 7.4, p 109.

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provider in accordance with paragraph 69(d) of Australian Accounting Standard AASB 101 'Presentation of Financial Statements'. This requirement has been confirmed by the Institute of Chartered Accountants in Australia and New Zealand.

In practice, because actual resident tenure is usually greater than 12 months a variety of extra disclosures are being made in statutory financial statements to convey to readers of the financial statements the expected timing of the repayments of the resident refundable contributions to departed residents, their family or estate.

Examples of such extra disclosures include splitting the "current" resident contributions liability between estimated settlement within 12 months and longer than 12 months. The accounting policy note is used to describe the basis of the split, normally based on such factors as:

- *Post balance date known refunds – based on actual resident departures*
- *Prior period refund history – what was refunded in the prior financial year(s)*
- *Known facility closures and periods of extended renovation requiring closure*
- *Retirement of bed licences*

An alternative to the "current" versus "non-current" method of financial statement presentation is the liquidity basis of presentation which is permitted by paragraphs 60 and 63 of AASB 101. The liquidity basis of presentation is permitted when its application provides information that is reliable and more relevant than the traditional presentation because the entity is not supplying a services (sic) within a clearly identifiable operating cycle.

When this exception applies, an aged care provider shall present all assets and liabilities in order of liquidity on its statement of financial position (balance sheet). Highly liquid assets such as cash and cash equivalents would be presented at the head of the "asset" disclosures progressing to non-liquid assets such as capitalised bed licences at the foot of the asset disclosures. Similarly, highly liquid liabilities such as bank overdrafts would be presented at the head of the "liability" disclosures progressing to non-liquid liabilities such as refundable accommodation bonds expected to be settled longer than 12 months at the foot of the liability disclosures.[11]

The treatment of RADs in financial accounts provides an example of a classification that is appropriate for the purposes of financial accounting but is inappropriate for the purposes of economic analysis.

There are two direct implications from RADs in the accounting data that need to be assessed to derive economic returns.

[11] Stewart Brown, *Accounting for Incoming Resident Contributions – Financial Statements Presentation Requirements and Alternatives*: https://www.acs.asn.au/wcm/documents/ACS%20Website/Resources/Residential%20Care/Fees%20Charges/Stewart%20Brown%20-%20Accounting%20for%20Incoming%20Resident%20Contributions%20-%20April%202015.pdf.

The first is that RADs are an interest-free source of capital. This means that the sustainable before-tax and before-interest returns of the provider that has access to RADs can be lower than for a provider that did not have access to RADs.

The second is that providers that receive RADs incur the costs of providing services but record no direct revenue for the provision of this service. Revenue derived from RADs would be in the nature of investment returns (if the money is used elsewhere) or from reduced interest payments (if RADs are used to retire debt).

In other words, RADs are both a source of revenue for providers of Residential Aged Care and a source of capital. If providers of Residential Aged Care did not have access to RADs, they would need to find alternative sources of revenue and alternative sources of capital. It is likely that the alternative source of revenue would take the form of DAPs; and the alternative source of capital would take the form of corporate bonds or debt.

If one wishes to compare financial returns across providers, across sectors or with the suppliers' cost of capital, one would need to make adjustments to the financial returns in Residential Aged Care so that RADs were comparable with other sources of both revenue and capital. If one did not make these adjustments, perceived differences in financial returns may be attributable merely to differences in sources of revenue and sources of capital.

To take an example, consider returns to two otherwise identical providers that differ only in funding sources: one is entirely funded by equity and commercial debt and the other uses RADs to some degree. To continue investing in aged care, earnings before interest and tax for the first provider would need to be sufficient to repay debt and provide a return to equity investors consistent with returns (for similar risk assets) available elsewhere. However, the second provider that was funded by a mix of equity, commercial debt *and* RADs could make lower dollar earnings and provide the same return to equity and debt holders because it is under no obligation to pay interest on RADs. Comparisons between two such providers may incorrectly conclude that the former is more profitable than the latter.

Even when comparing financial returns to Providers of Residential Aged Care over time, one has to take into account the continuing gradual shift in the proportion of people choosing to pay their residential accommodation by a DAP rather than a RAD.[12] This gradual shift is likely to cause increased resort to other forms of borrowing and increased resort to other forms of revenue. If one makes comparisons of financial performance over long periods of time one has to adjust the financial accounts to allow for the functions performed by RADs.

2.1.1 RAD adjustments

In section 2.7 of our Report on Project 2 we outline our assumptions as to the form of capital that would be the closest alternative to RADs. These assumptions are made for the purpose of estimating a cost of debt. For that purpose, we assume:

- the debt capital would take the form of corporate bonds;
- the credit rating of these bonds would be BBB;
- the average term at issue would be approximately 10 years; and

[12] ACFA states that from 2014-15 to 2018-19, the proportion of residents paying for their accommodation through a DAP/DAC has risen from 33 per cent to 41 per cent, ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector,* May 2020, p 6.

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- prudence and efficiency would require the debt to be issued on the basis of a 10-year staggered maturity.

This approach allows the presentation of a cost of capital that is reflective of a benchmark provider that uses RADs as a form of long-term debt.

To facilitate economically-sound comparisons of financial returns across providers, across sectors or with the cost of funds, it is necessary to make some adjustments to the financial accounts of providers of Residential Aged Care so that one allows for the twin functions of RADs – as sources of revenue and capital.

Our preferred option is to treat RADs as a form of long-term debt on which an implicit interest is recorded as an expense. The implicit interest that is recorded as an expense would also be recorded as revenue received by the provider in payment for accommodation. This would provide a normalised picture of returns across entities that make different use of RADs and will better reflect the value that RADs offer to providers when using standard measures of economic returns.

That is, comparisons of the returns of providers of aged care services would be greatly facilitated if the following adjustments were made to their financial accounts:

1. treat all RADs as Non-Current Liabilities;
2. include the implicit interest paid on the RAD debt as an expense; and
3. include the implied interest on the RADs as revenue.

Calculating returns in this way will allow both consistent comparisons with providers with varying use of RADs, and also with a benchmark cost of funds which (as we describe in our companion report) can be consistently estimated with the proposed RAD treatment.

An alternative option would be to account for lower required returns on RADs by comparing actual returns with a benchmark cost of capital that specifically accounted for the interest-free RADs.[13]

2.2 EBITDA

EBITDA is widely used to express the range of financial returns earned by providers of services in the Australian aged care sector. It has the advantage of not being affected by the source of capital – debt, RADs, or equity - or different tax arrangements. For this reason, it can be useful for comparisons of profitability among providers of Residential Aged Care.

The ACFA Reports on the Funding and Financing of the Aged Care Sector give prominence to EBITDA. As they explain:

> *When discussing the financial performance of providers in this report, Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) is the main measure used to analyse profitability. This is because EBITDA excludes items such as interest (both income and expense) and tax expenditures, which can vary depending on the financing decisions of an organisation; and non-cash expenses, such as depreciation and amortisation which*

[13] As for the first approach, this again requires further consideration of whether to treat RADs as current or non-current liabilities.

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> *can vary greatly based on the size and age of facilities and other assets, and on ownership type and depreciation methods.*
>
> *EBITDA therefore can be used to compare organisations with each other and against industry averages and is a good measure of core profit trends because it eliminates some of the extraneous factors mentioned above. This is particularly important when analysing aged care given the diversity of ownership and capital structures. EBITDA helps to smooth out these factors.*
>
> *This report also refers to Net Profit Before Tax (NPBT) which also assists in making comparison between organisations subject to different tax treatments.*[14]

The Hogan Report used EBITDA per bed year for much of its financial appraisal of the sector for reasons similar to ACFA. As it explained:

> *EBITDA is the acronym for 'earnings before interest, taxes, depreciation and amortisation'. It is calculated by taking operating income and adding back to it interest, depreciation and amortisation expenses. This measure is used to analyse operating profitability before non-operating expenses (like interest and other non-core expenses) and non-cash charges (depreciation and amortisation).*
>
> *EBITDA has been used for this analysis because it removes the differential impacts of taxation, interest expenses, depreciation and amortisation on the for-profit and not-for-profit sectors. By removing the effect of the various financing and accounting decisions taken by providers due to these impacts it is possible to examine and analyse the profitability of the services in the financial data with a sector neutral technique and obtain a relatively good 'apples to apples' comparison.*[15]

ACFA reports EBITDA per consumer for home care and EBITDA per resident per annum for residential care.[16]

Stewart Brown acknowledges that the aged care sector uses EBITDA as the principal measure of an organisation's operating performance. However, it points out that EBITDA makes no allowance for depreciation; and depreciation is a significant expense for aged care residential facilities.[17]

[14] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector,* May 2020, p 4.

[15] WP Hogan, *Review of Pricing Arrangements in Residential Aged Care*, Aged Care Price Review Taskforce, Commonwealth of Australia, 2004, p 34.

[16] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, pp 1 and 2.

[17] Stewart Brown, *Listed Aged Care Providers Financial Performance Analysis, For Year Ended 30 June 2019*, p 10.

2.3 EBIT

EBIT can be found by deducting depreciation and amortisation from EBITDA. It has the advantage, like EBITDA, of not being affected by the sources of capital used by the provider – debt, RADs, equity.

The BDO Report observes that depreciation, amortisation and interest expenses are proportionately higher in not for profits than for-profits.[18] The difference has a marked effect on the ratio of average returns to for-profit providers to those of not-for-profit providers. The effect is illustrated in **Table 2** below.

Table 2: Comparison of weighted average EBIDTA and EBIT for for-profits and not-for-profits (FY2018)

	FOR PROFITS	NOT FOR PROFITS
$\frac{EBITDA}{TOTAL\ INCOME}$	12.16%	9.02%
$\frac{EBIT}{TOTAL\ INCOME}$	8.32%	2.85%
$\frac{EBITDA}{TOTAL\ ASSETS}$	4.19%	3.06%
$\frac{EBIT}{TOTAL\ ASSETS}$	2.87%	0.97%

Source: BDO Report, p 34.

BDO offers no explanation as to why the difference in depreciation of for-profit providers and of not-for-profit providers should be so large. The difference seems largely to be due to the business structure of the two groups. As BDO observes, for-profit authorised providers report significantly higher related party expenses in the forms of Interest, Management Fees, Rent and Tax expenses, while not-for-profit authorised providers report significantly higher depreciation expenses.[19] It appears that the higher depreciation for the not-for-profits compared with the for-profits is caused by the not-for-profits owning more of their accommodation within the authorised provider. This means the not-for-profits have higher depreciation but pay less rent to related entities than do the for-profits.[20]

The differences in the allocation of rent/depreciation between for-profits and not-for profits suggests that any comparisons between the two should be based on EBIT rather than on EBITDA. Whether EBIT or EBITDA is used, comparisons across types of ownership should also adjust for treatment of RADs. As we observed in section 2.1 above, residents of for-profit providers of residential care are far more likely to pay by means of RADs than are residents of not-for-profit providers of residential care; and residents of not-for-profit residential care are far more likely to pay by means of RADs than are residents of government facilities. Unless one adjusts for the implicit revenue that providers receive by means of the interest earned on RADs, one will understate the EBITDA and EBIT earned by for-profits compared

[18] BDO Report, p 38.

[19] BDO Report, p 2.

[20] In FY 2018, the sum of "Rent for Buildings Related" and "Depreciation" as a proportion of Total Expenses is 8.1% in the case of for-profits and 6.3% in the case of not-for-profits. Numbers derived from BDO Report, p 24.

with not-for-profits and also understate the EBITDA and EBIT earned by not-for-profits compared with Government providers.

Another circumstance in which it is useful to use EBIT is when one wishes to assess whether returns are reasonable and consistent with those that would be earned in the long run in competitive markets. EBIT is the pre-tax return to the providers of funds – debt, RADs and equity. Regulators often try to constrain returns so that they just compensate the enterprise for the reasonable or efficient cost of funds. EBIT is a useful measure for a regulator to compare with the cost of funds. As with comparisons across different means of ownership, comparisons of EBIT with the cost of funds need to make adjustment for the implicit revenue that providers of residential care earn from RADs.

As we observed above, profit will vary across entities simply because of variations in the size of entities. In order to remove differences in profit caused simply by differences in size, profit is normally expressed as a proportion (or percentage) of another measure.

2.4 Measures of net profit

As we observed above, the BDO Report states that a range of measures can be used to assess the profitability of organisations. In addition to EBITDA and EBIT, it mentions:

- Net Profit Before Tax (NPBT) Including Comprehensive Income;
- NPBT Excluding Other Comprehensive Income;
- Net Profit After Tax (NPAT); and
- Operating cash flows.

Th various measures of net profit indicate returns to shareholders. The returns are earned by shareholders for their funding of the company through their provision of share capital and retained earnings. Because profits are returns to shareholders, measures of profit are usually normalised by expressing them with equity as the denominator.

In the case of Aged Care businesses, the principal problem with these measures lies in the measures of equity. As we explain further in section 2.9 below, because the businesses are funded overwhelmingly by RADs, the companies are heavily dependent on debt financing. This make returns on equity highly volatile and unreliable as indicators of earnings.

2.5 Output as denominator

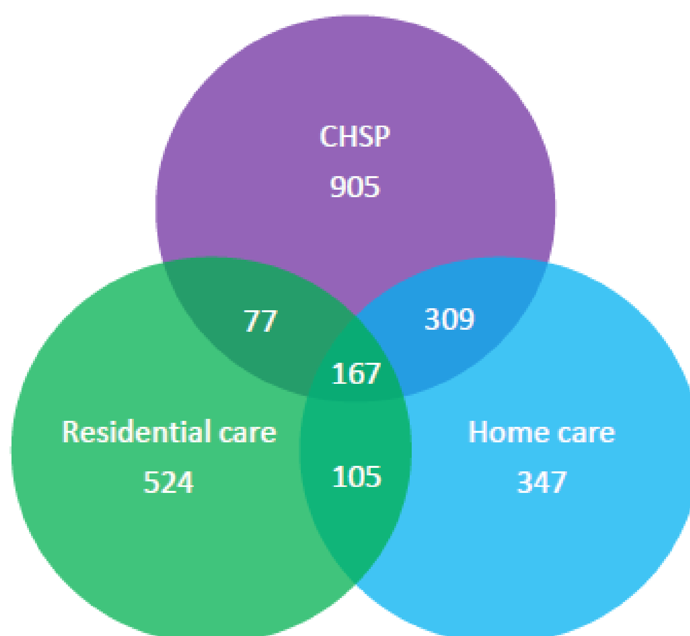
Output can be used as a denominator to control for differences in size; but only if the enterprises produce only one kind of output and output is uniform across enterprises. Providers of aged care services produce output of three principal kinds:

- Home Support via the Commonwealth Home Support Programme (CHSP) provides services for those who require basic services to assist with remaining in their own homes.
- Home Care Packages Program provides services for those who have greater care needs and wish to remain living at home. Care and support are provided through a package of home care services.
- Residential Care provides accommodation and 24-hour care for those who have greater care needs and choose or need to be cared for in an aged care facility.[21]

[21] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 9.

ACFA observes that there is a high degree of specialisation in terms of service types offered by providers.[22] This specialisation is represented in **Figure 1** below.

Figure 1: Extent to which providers of Aged Care operate in multiple segments (2018-19)



Source: Chart 2.3, p 14, ACFA, Eighth Report on the Funding and Financing of the Aged Care Sector, May 2020.

Because of this high degree of specialisation, it is appropriate to undertake a separate analysis of the returns to the providers of each of the three principal different kinds of services. The ACFA Reports on the Funding and Financing of the Aged Care Sector undertake their analysis of financial performance separately for Residential Care and Home Care.

A very large range of services is available under the Home Support Programme;[23] that is, there is no single measure of output. For this reason, it would be impossible to use output as a denominator for returns in the Home Support sector.

Similar problems arise when measuring output in the Home Care sector. However, ACFA uses the number of consumers as a measure of output; and it presents data on EBITDA per consumer of Home Care.[24] The difficulty with this approach is that the amount of service provided to consumers of Home Care Packages varies markedly with the level of the Package – from $8,810 for Level 1 to $51,130 for Level 4.[25]

[22] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 14.

[23] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 42.

[24] See ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, pp 61-62.

[25] 2019-20 numbers. See ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 53.

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Output is most-readily measured for Residential Aged Care. Industry statistics tend to use resident years as an output measure.[26]

2.6 Revenue as denominator

Profit expressed as a proportion of revenue is referred to as a "profit margin". It has certain advantages as a denominator:

- it is indifferent to the services from which the revenue is derived; and
- it is transparent and easy to measure.

However, it is only useful for comparisons among service providers who are undertaking a reasonably-similar group of activities. Enterprises that have a rapid turnover of products with profit margins of a few percentage points (such as supermarkets) can be just as profitable from the point of view of shareholders as enterprises that have a slow turnover of products with profit margins of around 50 per cent (such as antique shops). To the extent that the range of activities is similar within service providers, profit margins can be relied on to give information about the range of returns.[27]

The BDO Report presents international comparisons which suggest that the profits of the Approved Providers are roughly consistent with providers in other jurisdictions.[28] The BDO Report also presents comparisons of profit margins with a group of other Australian industries.[29] In our opinion, the latter comparisons are not valid. We say this for two reasons.

1. The data selected do not show a range of profit margins across providers **within** an industry (as does the range of profit margins for Approved Providers). Rather, they show the range of average profit margins **across** industries. For each of the industries chosen as comparators, there will be a range of profit margins shown by the providers within that industry.
2. The 11 industries in the range vary greatly in the activities undertaken. As we observe above, profit margins can vary greatly depending on the activities undertaken.

2.7 Total Assets as denominator

The BDO Report presents ranges of financial returns with Total Assets as the denominator.[30]

Estimating returns using total assets provides an indication of the ability of the firm to produce profits from assets employed. That is, a 5% return on assets indicates that the firm produces 5 cents in profits for each dollar it holds in assets. However, using assets as the denominator is not as widely used by economists as capital employed. This is because capital employed includes total assets, but also takes account of the firm's ability to manage short term liabilities to increase returns. Two firms may earn the same return on assets, but one may have higher current liabilities[31] which means it earns more per

[26] See ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 95; Stewart Brown, *Aged Care Financial Performance Survey Sector Report* (September 2019) p 31; and WP Hogan, *Review of Pricing Arrangements in Residential Aged Care*, Aged Care Price Review Taskforce, Commonwealth of Australia, 2004, p 34.

[27] Further, if one is interested in whether returns are consistent with those that might be found in competitive markets, then it is important that returns are compared against those of providers in competitive markets.

[28] BDO Report, p 36.

[29] BDO Report, p 36

[30] BDO Report, pp 34 and 51.

[31] Perhaps due to generous terms from creditors.

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dollar of capital invested. As we now discuss, the computation of capital employed is complicated by the use of RADs by aged care providers.

2.8 Capital employed as denominator

Capital employed is the total amount of capital invested by a firm in one year for the acquisition of profits.

The Return on Capital Employed is used by an enterprise to compensate providers of funds. This capital has an opportunity cost that must be recovered the firm to be sustainable in the long run. For this reason, EBIT divided by capital employed is the return most commonly used by regulators and competition authorities to compare with the WACC when assessing the reasonableness of profits.[32]

Capital employed is calculated by subtracting Current Liabilities[33] from Total Assets. Alternatively, Capital Employed may be expressed as: Non-current assets + (Current assets less Current liabilities). The latter term is (net) working capital, and it represents the firm's ability to deal with short term obligations.

2.8.1 Illustration of effects

ACFA presents an aggregated balance sheet for providers of Residential Aged Care. This illustrates the extent to which the recording of RADs affects the estimation of Capital Employed. Elements of the ACFA aggregated balance sheet for providers of Residential Aged Care are recorded in Table 3 below.

[32] See for example, Office of Fair Trading (UK), *Assessing profitability in competition policy analysis: Economic Discussion Paper* 6 July 2003, at p. 10. This paper also provides a lengthy discussion of the issues that may arise in estimating returns on capital employed and similar profit measures.

[33] Those liabilities due within one year.

Table 3: Elements from the Balance Sheet of Providers of Residential Aged Care, 30 June 2019 ($m)

	CALCULATIONS	NOT-FOR-PROFIT	FOR-PROFIT	GOVT	ALL PROVIDERS
Current Assets	(1)	$8,362	$5,380	$625	$14,367
Non-current Assets	(2)	$19,812	$17,036	$1,354	$38,202
Total Assets	*(3)=(1)+(2)*	*$28,174*	*$22,416*	*$1,979*	*$52,569*
Accommodation Deposits (incl bonds)	(4)	$15,490	$14,003	$690	$30,183
Total Current Liabilities	(5)	$17,545	$16,960	$846	$35,351
Total Non-current Liabilities		$840	$2,741	$117	$3,698
Total Liabilities	*(6)*	*$18,385*	*$19,701*	*$962*	*$39,049*
Current Liabilities excluding RADs	(7)=(5)-(4)	$2,055	$2,957	$156	$5,168
Adjusted Capital Employed	(8)=(2)+(7)	**$26,119**	**$19,459**	**$1,823**	**$47,401**

Source: ACFA, Eighth Report on the Funding and Financing of the Aged Care Sector, 2020, p 115 and Frontier Economics calculations

The most striking features of Table 3 are:

(a) the ratio of Accommodation Deposits to Total Current Liabilities (85 per cent) and

(b) the ratio of Accommodation Deposits to Total Assets (57 per cent).

The size of Accommodation Deposits relative to Total Current Liabilities and to Total Assets means that any estimate of Capital Employed (by deducting Current Liabilities from Total Assets) will depend critically on how Accommodation Deposits are treated.

With the adjustments that we propose, the adjusted capital employed is identified in the final line of the table. This takes Total Assets and deducts Current Liabilities without RADs.

2.9 Total equity as denominator

The BDO Report presents ranges of financial returns with Equity as the denominator.[34] These numbers are in stark contrast with the rates of return recorded in the BDO Report expressed with Total Income or Total Assets as the denominator. Rates of return on capital employed and return on equity are related[35], but returns on equity are higher than returns to other kinds of finance such as debt as

[34] BDO Report, pp 34 and 51.

[35] The different concepts are related as highlighted in this figure.

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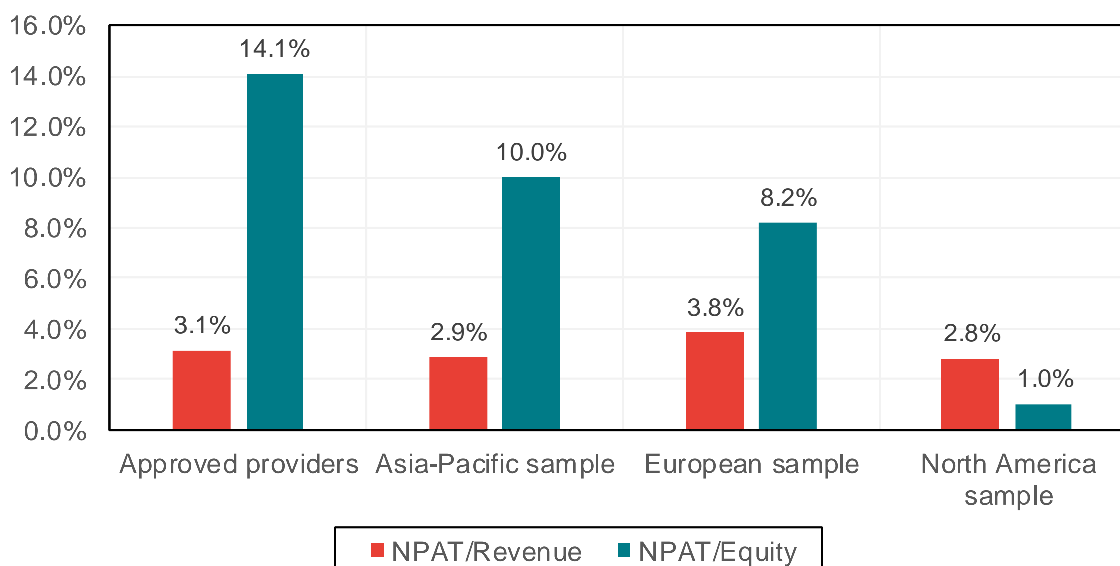
compensation for the fact that equity investors rank behind debt holders in the event of insolvency. But rates of return on equity are reported as many times larger than rates of return with other denominators. The contrast between the international comparisons of NPAT/Revenue with the international comparisons of NPAT/Equity is striking. The differences in the median data are recorded in **Figure 2** below. While NPAT/Revenue is reasonably consistent across the sample, the Return on Equity recorded for the Approved Providers in the BDO Report is more than four times the Return on Revenue - significantly higher than the other samples.

Figure 2: Comparisons of median returns of Approved Providers in BDO Report



Source: Data from BDO Report, Table 4, p 36.

The reason for the very high Return on Equity for the approved providers appears to be the very low numbers recorded as the value of equity in the balance sheets of the providers of residential aged care. Equity is recorded as issued capital, plus retained earnings, plus reserves. Because of the reliance on RADs for funding compared with retained earnings, equity recorded in balance sheets is very small compared with debt and RADs. For example, the capital structure of the four listed providers of residential aged care is summarised in **Table 4** below.

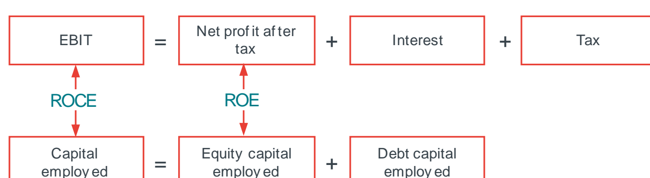


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Table 4: Capital Structure of Listed Providers of Residential Aged Care (30 June 2019) $ millions

	AVEO	ESTIA HEALTH	JAPARA HEALTHCARE	REGIS HEALTHCARE
RADS	$3,029	$805	$554	$1,126
TOTAL LIABILITIES	$4,527	$1,133	$846	$1,614
TOTAL ASSETS	$6,577	$1,894	$1,378	$1,792
EQUITY	$2,050	$761	$532	$178

Source: 2019 Annual Reports of the Companies

Notes: The figures reported here indicate that the proportion of debt financing (gearing) is around 70 per cent. This is different from our benchmark WACC model that uses gearing of 45 per cent. The benchmark WACC approach uses a broader set of providers and for a 10-year period; and it uses the market value of equity (rather than the book value as reported above). See the companion WACC report for further details.

The ratio of Equity to total sources of long-term funding is lower among for-profits than not-for-profits. ACFA attributes this difference to a combination of their greater reliance on RADs, their greater reliance on debt to fund investment and their greater distribution of profits.[36] Because of differences in sources of funding among Approved Providers and between Approved Providers and providers in other jurisdictions, we have formed the opinion that cross-jurisdictional comparisons of returns on equity are of little use, and in fact may be quite misleading.

2.10 Conclusions

We have considered the range of measures by which to assess the range of financial returns earned by providers of services in the Australian aged care sector over the last five years. In our opinion, comparisons of the returns of providers of aged care services would be greatly facilitated if the following adjustments were made to their financial accounts:

1. treat RADs as Non-Current Liabilities;
2. include the implicit interest paid on the RAD debt as an expense; and
3. include the implied interest on the RADs as revenue.

Providing these adjustments are made, reasonable comparisons over time can be made using EBITDA or EBIT expressed as a proportion of revenue or resident (in the case of residential aged care).

Three further conclusions follow from our analysis:

- If one wishes to make comparisons of earnings across different forms of ownership, one should use EBIT rather than EBITDA.
- If one wishes to compare returns with the cost of providing services, the most appropriate measure would be EBIT expressed as a proportion of Capital Employed.

[36] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p 97.

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- If one does not make adjustments for the roles of RADs, one will be limited to analysing changes over reasonably short periods of time (such as the five years we have been given) in returns for sectors that have similar capital structures and sources of revenue.

3 RELIABILITY OF DATA

In the preceding section of this report, we discussed some of the conceptual issues that arise when assessing the range of financial returns earned by providers of services in the Australian aged care sector over the last five years. The BDO Report alerts us to issues concerned with the reliability of the financial data reported to the Department of Health/ACFA by aged care providers. The BDO Report set about analysing those data and cautioned about the reliability of the data. These challenges were of three principal kinds:

1. the challenge of discovering the profits earned by the Approved Provider;
2. the challenge of expressing these profits as a rate of return; and
3. the challenge of discovering the profitability of the two relevant segments of the Approved Provider – the aged care service and home care.

3.1 The challenge of discovering the profits earned by the Approved Provider

The principal barrier to discovering the profitability of the Approved Provider is that some of the Approved Providers are part of larger groups of related entities; and there are financial flows between related entities within these groups. These flows between related entities are more common among for-profits than among not-for-profits.[37] The BDO Report indicates a range of possible financial flows between the reporting entity and related entities:

1. lease payments by an Approved Provider to a related entity which owns the property asset;[38]
2. a loan by the Approved Provider to a related entity of refundable accommodation deposits (RADs) and the payment of interest on that loan from the related entity to the Approved Provider;[39]
3. a loan by a related entity to an Approved Provider and the payment of interest on that loan from the Approved Provider to the related entity;[40] and
4. the payment of management fees or other expenses by the Approved Provider to a related entity.[41]

Even if one can be sure that the reported accounts fairly reflect the profits of the Approved Provider, that does not imply that the reported profits reflect the profits the Approved Provider generates from Aged Care – because the Approved Provider may undertake activities in addition to Aged Care. The BDO Report states that:

- activities other than aged care represent 26.9 per cent of Approved Provider income;
- activities other than aged care represent 26.0 per cent of Approved Provider expenses; and

[37] BDO Report, p 32...

[38] BDO Report, p 11, states that an Approved Provider can own the property asset under a different entity (most likely without recourse).

[39] BDO Report, p 1.

[40] BDO Report, p 35.

[41] BDO Report, p 1.

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- activities other than aged care represent 55.4 per cent of Approved Provider profits.[42]

The BDO Report states: "… we have outlined the challenges of measuring the total return on investment in the Aged Care sector. These challenges primarily stem from the limited transparency in relation to how group structures and related parties are used by providers to generate returns. This makes it difficult to distinguish returns generated by the group from those generated as a result of funding received from the Aged Care sector."[43]

3.2 The challenge of expressing these profits as a rate of return

The first objective of this part of the project is to provide expert opinion evidence to the Royal Commissioners of the range of returns that have been earned by aged care providers (analysed according to appropriate segments) in the last five years.

As we observed in section 2.1 above, if one wishes to compare returns with the cost of providing services, the most appropriate measure would be EBIT expressed as a proportion of Capital Employed. In section 2.1, we pointed to one problem associated with estimating Capital Employed: in order to estimate Capital Employed, one must subtract Current Liabilities from Total Assets; and the numbers for Current Liabilities in the financial accounts of the Approved Providers treat all RADs as Current Liabilities.

The BDO Report alerts us to another potential problem with estimating Capital Employed. This is that the value of assets reported by the Approved Provider may not be a fair reflection of the value of the assets used to provide the Aged-Care Services. As with the profits of the Approved Providers, the basis of this problem is the relationship between Approved Providers and their related companies. For example, RADs lent by Approved Providers to related companies may be used to invest in property, plant and equipment which is then owned by the related company.[44] The effect of these transactions on the balance sheets of the Approved Providers is not clear.

3.3 The challenge of discovering the profitability of relevant segments

The principal problem with financial reporting by segment is that it requires the Approved Providers to allocate costs between Residential Care, Home Care, Home Support and Services other than Aged Care. This is a standard problem associated with examining the profitability of particular product lines produced by a multi-product enterprise. In this case, the published data give no idea of the extent to which Approved Providers have had to allocate joint costs in order to report returns by sector. The BDO Report observes that: "The ability to report on the return of each division is dependent on the quality of its financial information and how well an entity allocates items."[45] Although incremental costs should be allocated in particular ways, there is no correct way to allocate costs that have been jointly incurred.

The problem of allocating joint costs may not be so great in this industry as in some others. As we observed in section 2.5 above, the ACFA Reports on the Funding and Financing of the Aged Care Sector suggest there is a high degree of specialisation in terms of service types offered by providers.

[42] BDO Report, pp 23-24.

[43] BDO Report, p 69.

[44] BDO Report, p 1.

[45] BDO Report, p 70.

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3.4 Conclusions

In section 2.1 we pointed to problems associated with accounting for RADs and certain conceptual issues that arise in analysing the range of returns earned by aged care providers. In addition to these conceptual issues, the BDO Report alerts us to a range of problems one encounters when analysing the data reported to ACFA by providers of aged-care services. These problems arise from:

1. financial flows between Approved Providers and related entities;
2. the provision of services other than aged care by Approved Providers; and
3. issues of allocating costs among Residential Care, Home Care, Home Support and Services other than Aged Care.

We accept that one needs to exercise caution in analysing the data reported to ACFA. However, as we show below, providing one makes the adjustments we suggested in section 2 above, the returns are consistent with those economic theory would lead one to expect.

4 ANALYSIS OF AVERAGE RETURNS TO AGED CARE OVER LAST FIVE YEARS

We have been asked for our opinion on the range of returns (whether described as returns on capital, profit margins or otherwise) that have been earned by aged care providers (analysed according to appropriate segments of the sector) in the last five years.

For the reasons we have discussed in section 2 of this report, we have formed the opinion that certain adjustments need to be made to the reported accounting data before useful analysis can be undertaken. The reported accounting data might be satisfactory for comparisons over relatively-short periods of time (for example, a few years) for the same entity or group of entities. However, reported financial data are not very useful for comparisons across entities that differ in their capital structure, kind of care or location.

Problems of comparability are particularly acute if there are differences in the kind of care: Residential Aged Care, Home Care and Home Support. The published data indicate important differences in the capital structure of these kinds of care; the most-obvious difference is that only Residential Aged Care has access to RADs. For this reason, most commentators analyse financial performance separately for each of these sectors. We shall follow this practice.[46]

Reports by equity analysts are exceptions to this proposition. Such reports address the needs of investors who are interested in the performance or potential performance of the company as a whole over time. For this purpose, it is appropriate to consider the financial performance across the range of activities the company undertakes.

In the comparisons below, we summarise the secondary literature on the range of returns earned by providers first in Residential Care and then in Home Care. We could find no analysis of financial returns in Home Support.

4.1 Published data showing trends in average returns to aged care over the last 5 years

Survey data collected by Stewart Brown shows that returns in Residential Aged Care facilities measured as EBITDAR per bed per annum have decreased over the last five years.[47] The data are summarised in **Table 5** below. The survey data suggest that the dispersion of these returns (indicated by dividing the average returns in the top 25 per cent of facilities by the average over all facilities) has increased markedly.

[46] Failure to do so encounters the difficulty of changes in composition: one might perceive a difference; but the difference is merely one of the mix of activities that is being undertaken.

[47] Earnings before interest, tax, depreciation, amortisation and rent. Stewart Brown prefers EBITDAR over EBITDA because rent is paid if the facility is owned by another entity

Table 5: Returns in Residential Aged Care Facilities over last five years (EBITDAR per bed per annum)

	SEPT 2015	SEPT 2016	SEPT 2017	SEPT 2018	SEPT 2019
Facility average	$9,764	$9,809	$8,891	$7,737	$5,829
Average of top 25% of facilities	$19,518	$19,486	$19,255	$17,810	$17,816
Top 25%/facility average	1.99	1.98	2.16	2.30	3.05

Source: Stewart Brown, Aged Care Financial Performance Survey, September 2019, p 11 and Frontier Economics.

ACFA Reports on the Funding and Financing of the Aged Care Sector do not publish such recent data and their data are presented in a slightly different form. Although the trend over time of the ACFA data of average EBITDA per bed is similar to that of the Stewart Brown data, the ACFA data summarised in Table 6 below shows little indication of increased dispersion.

Table 6: Returns to Residential Aged Care Providers over last five years (EBITDA per resident p.a.)

	FY2015	FY2016	FY2017	FY2018	FY2019
Average over all providers	$10,222	$11,134	$11,481	$8,746	$8,523
Average over top quartile	$23,687	$25,254	$24,751	$21,812	$22,319
Top quartile/all providers	2.31	2.26	2.15	2.49	2.61

Source: AFCA Reports on the Funding and Financing of the Aged Care Sector, various years

4.2 Adjusting for RADs

As we observed in section 2 of this report, all comparisons of earnings of aged care providers are problematic unless one makes adjustments for the treatment of RADs. These adjustments require that we estimate the implicit interest that would be paid on the RADs as if they were commercial debt; and that this implicit interest also be counted as implicit revenue that providers are receiving from residents in payment for their accommodation.

To estimate the implicit interest, we estimated the appropriate return on debt using a ten-year trailing average as we did when estimating the benchmark return on debt in section 2.7 of the WACC report. As we observe in that report, this method makes no allowance for the reduction in the cost of debt caused by the Government guarantee. To the extent that this guarantee decreases the cost of debt, our adjustments to the implicit revenue from the RADs will be too large.

The results for each of the last five years are shown in **Table 7** below.

Table 7: Adjustments for RADs for time series analysis of earnings of Residential Aged Care Providers, FY2015 to FY2020

	FY2015	FY2016	FY2017	FY2018	FY2019
Value of RADs	$18,213m	$21,872m	$24,710m	$27,523m	$30,183m
Return on Debt	7.84%	7.70%	7.48%	7.14%	6.54%
Implicit interest on RADs	$1,427m	$1,684m	$1,848m	$1,965m	$1,973m

Source: AFCA Reports on the Funding and Financing of the Aged Care Sector and Frontier Economics

As we observed in section 2 of this report, comparisons of financial returns generally require that they be expressed as a ratio with respect to a denominator. We shall express the adjusted returns as a ratio to Total Assets, Capital Employed and per resident per annum. Consistent with the adjustments we make when dealing with RADs, we estimate Capital Employed by subtracting Current Liabilities other than RADs from Total Assets. In order to be consistent with the ACFA data, we use the estimates for residents per annum used by ACFA when converting EBITDA to EBITDA per resident per annum. The denominators used are presented in **Table 8** below.

Table 8: Denominators for time series analysis of earnings for Residential Aged Care Providers, FY2015 to FY2020

	FY2015	FY2016	FY2017	FY2018	FY2019
Total Assets	$36,586m	$40,694m	$45,017m	$48,400m	$52,568m
EBITDA	$1,776m	$1,985m	$2,072m	$1,591m	$1,590m
EBITDA per resident per annum	$10,222	$11,134	$11,481	$8,746	$8,523
Implicit residents per annum	173,742	178,282	180,472	181,911	186,554
Capital Employed[48]	$32,850m	$36,755m	$39,378m	$42,734m	$47,400m

Source: ACFA Reports on the Funding and Financing of the Aged Care Sector and Frontier Economics

If we allow for the implicit revenue from RADs received by providers of residential aged care, EBITDA will increase substantially; that is, adjusted EBITDA (AEBITDA) will be substantially higher than EBITDA. The trend over time of AEBITDA per resident per annum is not nearly so pronounced as the Stewart Brown estimates and is even less pronounced than the ACFA estimates. The adjusted estimates are presented in **Table 9** below.

[48] We could not discover a breakdown of liabilities into current/non-current for FY2015 and FY2016, so we assumed that 50% of all liabilities (other than RADs) were current liabilities. This percentage is similar to that in subsequent years.

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Table 9: Adjusted EBITDA for Residential Aged Care Providers, FY2015 to FY2020

	FY2015	FY2016	FY2017	FY2018	FY2019
EBITDA	$1,776m	$1,985m	$2,072m	$1,591m	$1,590m
Implicit revenue	$1,427m	$1,684m	$1,848m	$1,965m	$1,973m
AEBITDA	$3,203m	$3,669m	$3,920m	$3,556m	$3,563m
AEBITDA/Total Assets	8.7%	9.0%	8.7%	7.3%	6.7%
AEBITDA/Capital employed	9.7%	9.9%	9.9%	8.3%	7.5%
AEBITDA/prpa	$18,435	$20,579	$21,720	$19,548	$19,099

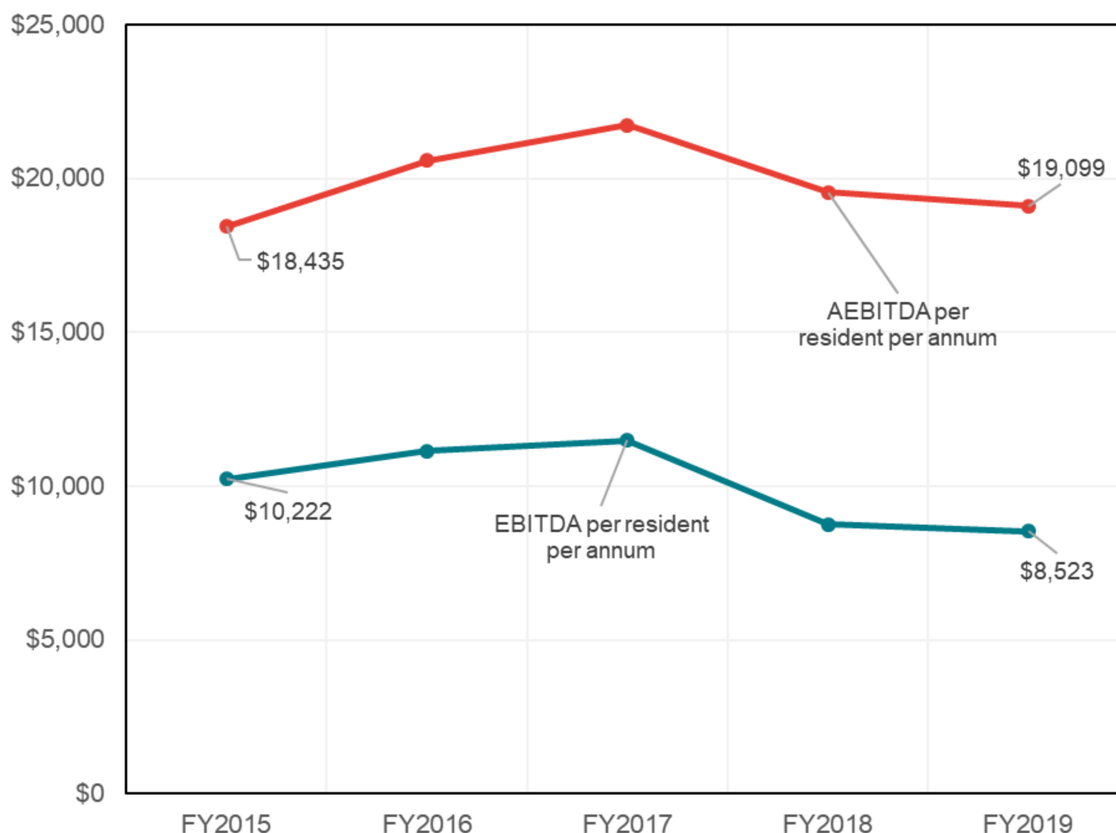
Source: ACFA Reports on the Funding and Financing of the Aged Care Sector and Frontier Economics

The difference in adjusted and unadjusted measures on a per resident per annum basis is highlighted in **Figure 3**. The adjustment makes a substantial difference to measures of returns. We are aware that this adjustment is based on the key assumptions we made in section 2 as to the economic role played by the RADs – both as a form of capital and as a provider of income.

As with any assumptions, alternatives are available. For instance, one could assume that, if RADs were not available, 90 per cent of the replacement funding would be by means of the long-term debt and 10 per cent would be by means of short-term loans. As a rough guide, this would mean that the gap between the red and the blue lines in Figure 3 would be reduced by 10 per cent.

We justify the assumptions we have made on the grounds we provided in section 2. As we show in section 5 below, the resulting comparison between returns and the estimated WACC is consistent with that which economic theory would lead one to expect.

Figure 3: Comparison of EBITDA measures



Source: ACFA Reports on the Funding and Financing of the Aged Care Sector and Frontier Economics

As we observed in section 2 of this report, one problem with EBITDA as a measure of earnings is that it makes no allowance for depreciation and amortisation; and these two categories of expense are substantial for providers of residential aged care. **Table 10** presents the estimates of adjusted EBIT.

Table 10: Adjusted EBIT for Residential Aged Care Providers, FY2015 to FY2020

	FY2015	FY2016	FY2017	FY2018	FY2019
EBIT	$1,047m	$1,212m	$1,177m	$621m	$469m
Implicit revenue	$1,427m	$1,684m	$1,848m	$1,965m	$1,973m
AEBIT	$2,474m	$2,896m	$3,025m	$2,568m	$2,442m
AEBIT/Total Assets	5.8%	7.1%	6.7%	5.3%	4.6%
AEBIT/Capital employed	**7.5%**	**7.8%**	**7.6%**	**6.0%**	**5.1%**
AEBIT/prpa	$14,239	$16,243	$16,761	$14,116	$13,090

Source: ACFA Reports on the Funding and Financing of the Aged Care Sector and Frontier Economics

For the reasons we gave in section 2 of this report, it is our opinion that the series bolded in **Table 10** for AEBIT/CAPITAL EMPLOYED give a reasonable guide to the average rate of return that one can compare with a benchmark cost of capital for a residential aged care provider.

The estimation of a benchmark cost of capital is discussed in our companion report. That report presents a Vanilla WACC for FY2018. However, we can estimate Vanilla WACCs for other years. These are presented in the following table. The table enables comparisons of the adjusted returns with our estimated benchmarks for the years FY15-20.[49]

Table 11: Comparison of actual with benchmark returns, FY2015-2019

	FY2015	FY2016	FY2017	FY2018	FY2019
AEBIT/Capital employed	7.5%	7.8%	7.6%	6.0%	5.1%
Vanilla WACC (benchmark return)	8.5%	8.2%	7.8%	7.8%	7.6%

Source: Frontier Economics

4.2.1 Investment continued with seemingly low returns

On the whole, the returns on capital employed seem low, even for FY2015, FY2016 and FY2017. During those years, providers of Residential Aged Care were undertaking substantial investment:

- In FY2015 an estimated total of $1.7 billion in new building, refurbishment and upgrading work was completed bringing Total Assets to $36.5 billion at the end of the period;[50]
- In FY2016 an estimated total of $2.1 billion in new building, refurbishment and upgrading work was completed bringing Total Assets to $40.7 billion at the end of the period;[51] and
- In FY2017 an estimated total of $1.6 billion in new building, refurbishment and upgrading work was completed bringing Total Assets to $45.0 billion at the end of the period.[52]

That investment is only likely to have been undertaken if returns from that investment were expected to match or exceed the cost of capital. A more-complete picture of rates of return and incentives to invest might emerge if these average rates of return are supplemented with an analysis of returns by segments within Residential Aged Care.

4.3 Conclusions

Average returns in Residential Aged Care were reasonably constant in FY2015, FY2016 and FY2017. Because these returns are averaged over for-profits, not-for-profits and government it is not clear that

[49] This benchmark accounts for the use of commercial debt rather than RADs.

An alternative approach to adjusting the EBIT to produce a measure of returns would be to adjust the WACC to reflect the return to RAD debtholders (being zero).

Using our benchmark approach to WACC, with 45% debt financing, and assuming 90% of all debt is RADs, then the benchmark WACC return for FY2019 would be around 5.3% (compared with 7.8% as above).

[50] ACFA, *Fourth Report on the Funding and Financing of the Aged Care Sector*, July 2016, p 127.

[51] ACFA, *Fifth Report on the Funding and Financing of the Aged Care Sector*, July 2017, p 124.

[52] ACFA, *Sixth Report on the Funding and Financing of the Aged Care Sector*, July 2018, p 119.

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returns covered the cost of capital. However, the substantial investment in the sector in FY2015 to FY2017 suggests that returns for many providers did cover their cost of capital in these years. Average returns to the sector have decreased in each of the last two financial years. A more-complete picture of rates of return and incentives to invest emerges when these average rates of return are supplemented with an analysis of returns by segments within Residential Aged Care.

5 ANALYSING RETURNS OF SEGMENTS OF RESIDENTIAL CARE

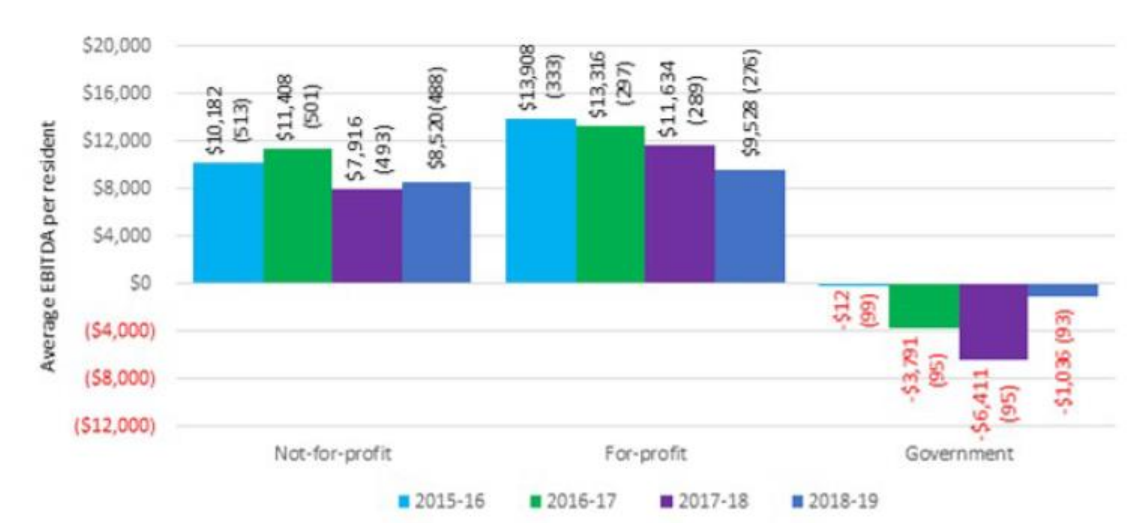
5.1 Segmenting by ownership

Economic theory predicts that in a highly-competitive market, with reasonably free entry and exit of providers, returns will only just cover the cost of capital in the long run. This proposition is not true of all years; and it is not true of all providers. Rather, it is a long-run tendency: if average returns fall well below the cost of capital, economic theory predicts that providers will exit the industry or contract their operations until returns are more like the cost of capital; and if average returns are well above the cost of capital, economic theory predicts that providers will enter the industry or expand their operations until returns are more like the cost of capital.

The potential for competition in the form of entry and exit of providers into residential aged care indicates that we might expect to see longer-term returns that are, on average, close to the cost of capital for the sector.

In this section we segment returns by ownership to see if we can explain why significant investment in Residential Aged Care occurred until quite recently – even though average returns in the sector as a whole (as measured by Adjusted EBIT over Capital Employed) did not cover the cost of capital. The average rates of return for the whole sector are the sum of returns over for-profit providers, not-for-profit providers and government. Data published by ACFA suggests that rates of return are highest for for-profit providers and lowest for government – with not-for-profit providers in the middle. This pattern is shown in Figure 4 below.

Figure 4: EBITDA per resident, by ownership type, 2015-16 to 2018-19



Source: ACFA, Annual Report on the Funding and Financing of the Aged Care Industry – 2020, Chart 6.18.

The pattern is not surprising. Not-for-profit providers and government providers have objectives other than maximizing profits. Not-for-profits are constrained by the availability of funds so they treat those funds as a constraint which restricts their ability to engage in their chosen activities to the extent they would wish. This means that, in markets in which for-profits compete with not-for-profits, the not-for-profit enterprises will generally be prepared to accept somewhat lower rates of return than will their for-profit competitors. Government enterprises may be even less constrained by access to funds than not-for-profits.

For the reasons we gave in section 2 above, it is our opinion that the most appropriate measure of earnings to compare with the WACC is EBIT expressed as a proportion of Capital Employed. We would have liked to present this comparison for the last five years for the for-profit providers of Residential Aged Care. Unfortunately, this cannot be done with data published by ACFA. We utilise the segmented EBIT data from the BDO Report. However, this is available only for FY2018.

In order to make these comparisons for the various sectors, adjustments for the RADs need to be made. **Table 12** below presents the adjustments that need to be made for comparisons across kinds of ownership for FY2018.

Table 12: Adjustments of RADs for segmentation by ownership of Residential Aged Care Providers, FY2018

	FOR PROFTS	NOT FOR PROFITS	GOVT	TOTAL
VALUE OF RADS	$13,318m	$14,403m	$536m	$28,257m
RETURN ON DEBT	7.14%	7.14%	7.14%	7.14%
IMPLICIT INTEREST ON RADS	$950m	$1,028m	$38m	$2,017m

Source: BDO Report, Table 5.2, p 49 and Frontier Economics[53]

Table 13 shows the denominators we employed when analysing by kind of ownership the returns to Residential Aged Care Providers. We derived these denominators in ways similar to those we employed when analysing the time series of returns above. The results are presented in **Table 13** below.

[53] The numbers in the total for RADs is slightly different from the ACFA data used in the time series adjustments.

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Table 13: Denominators for analysis of returns by ownership of Residential Aged Care Providers, FY2018

	FOR PROFITS	NOT FOR PROFITS	GOVT	TOTAL
Total Assets	$20,581m	$26,168m	$1,652m	$48,400m
Capital employed	$17,801m	$24,146m	$1,522m	$43,469m

Source: BDO Report, Table 5.2, p 49 and Frontier Economics

The following table presents our estimates of adjusted EBITDA by kind of ownership of Residential Aged Care Providers.

Table 14: Adjusted EBITDA by kind of ownership of Residential Aged Care Providers, FY2018

	FOR PROFITS	NOT FOR PROFITS	GOVT	TOTAL
EBITDA	$821.7m	$818.9m	($49.9m)	$1,590.7
Implicit revenue	$950m	$1,028m	$38m	$2,016m
AEBITDA	$1,771.7m	$1,846.9m	($11.9)	$3,606.7m
AEBITDA/total assets	8.6%	7.0%	(0.1%)	7.4%
AEBITDA/capital employed	9.9%	7.6%	(0.7%)	8.2%

Source: BDO Report; Table 5.2, p 49; Table 5.3, p 51 and Frontier Economics

As we observed in section 2.3 of this report, comparisons between the earnings of for-profits and not-for-profits are better made using EBIT than using EBITDA because for-profits are likely to rent their facilities whereas not-for-profits are likely to own their facilities. For this reason, much of the depreciation in the financial records of not-for-profits takes the form of rent in the accounts of the for-profits. Our estimates of Adjusted EBIT by kind of ownership are presented in **Table 15** below.

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Table 15: Adjusted EBIT by kind of ownership of Residential Aged Care Providers, FY2018

	FOR PROFITS	NOT FOR PROFITS	GOVT	TOTAL
EBIT	$544m	$178.7m	($100.9m)	$621.8m
Implicit revenue	$950m	$1,028m	$38m	$2,016m
AEBIT	$1,494m	$1,206.7m	($62.9)	$2,637.8m
AEBIT/total assets	7.2%	4.6%	(3.8%)	5.4%
AEBIT/capital employed	**8.3%**	**4.9%**	**(4.1%)**	**6.0%**

Source: BDO Report; Table 5.2, p 49; Table 5.3, p 51 and Frontier Economics

The bolded numbers for AEBIT/CAPITAL EMPLOYED in **Table 15** give a good idea of the average returns the three kinds of owners were earning on average in FY2018. In our opinion, these are the most appropriate numbers to compare with estimates of WACC. The average returns for the for-profit providers exceed the WACC estimated in Project 2; in FY2018 we estimated a benchmark WACC of 7.8%. These numbers are consistent with evidence of continued investment within the Residential Aged Care.

As we showed in the preceding section of this report, rates of return on funds invested in Residential Aged Care were substantially lower in FY2018 than they had been in the preceding three financial years; and rates of return were lower still in FY2019. This decrease in rates of return caused providers to reduce rates of investment in the sector. As ACFA observed in its *Seventh Report on the Funding and Financing of the Aged Care Sector*:

> *A large number of providers, both for-profit and not-for-profit, said their immediate plans would be directed to retirement living rather than residential care. Factors cited in influencing this decision included; the considerable policy and regulatory uncertainty in the aged care sector; the desirability of diversifying income streams given the volatility in residential aged care; and the advantages of establishing an integrated aged care operation than involved retirement living, home care and residential aged care. Many for-profit providers emphasised that the current return on capital employed in aged care was below the cost of capital and, in the absence of any change, this would curtail additional investment in the sector.*[54]

This observation is consistent with the patterns we have observed. Rates of return to providers of Residential Aged Care decreased in FY2018 and again in FY2019. Average rates of return to for-profit providers just covered their cost of capital in FY2018; however, that was only true of the average rate. As is common in a highly-competitive market, there was a substantial spread around this average – with

[54] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector* July 2019, p 104.

some providers earning returns well in excess of their cost of capital and some providers earning returns well below their cost of capital.[55]

5.2 Other ways of segmenting returns

ACFA[56] and Stewart Brown[57] show returns to providers of Residential Aged Care segmented by location. ACFA data show that over the last four years EBITDA per resident in regional areas is around 60 per cent that in metropolitan areas. Stewart Brown indicates a similar relationship; but they subdivide regional providers into (i) inner regional, and (ii) rural and remote. Rural and remote shows far lower returns than inner regional.

It is not easy to explain these differences in returns by location. They appear not to be caused merely by differences in depreciation and amortisation, because Stewart Brown data show similar relationships with NPBT per bed day.[58] One possible explanatory factor is differences in the value of land.

ACFA Reports on the Funding and Financing of the Aged Care Sector also segment returns to providers of Residential Aged Care by what they term ‘scale’. However, ACFA uses the word scale to mean the range of services supplied (in the case of home care) or number of different facilities (in case of residential care) – not the volume.[59] ACFA states:

> *In 2017-18, 17 of the 21 providers who own more than 20 facilities are in the top two quartiles of ranking by EBITDA per resident per annum (Chart 6.25 and Chart 6.26). This high proportion of the larger scale providers being in the top quartiles has also been the case in previous years. This suggests that the largest providers are benefitting from economies of scale.*[60]

The number of providers of Residential Aged Care has been gradually decreasing[61] and the size of Residential Aged Care facilities has been gradually increasing.[62] These changes suggest that there may be economies of scale (defined in terms of the volume of services or number of beds). Such economies of scale may be attributable to:

1. increases in the number of beds served by a provider; and/or
2. increases in the number of beds in a facility.

ACFA data could be used to investigate the existence and magnitude of these economies of scale. The results may have important implications for public policy. For example, if the Government were to

[55] ACFA data for FY2018 show that the average EBITDA per resident per annum in the top quartile of for-profit providers was $23,286 compared with the average for the bottom of for-profit providers of minus $10,029. See ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p 82.

[56] See ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector* , May 2020, p 94.

[57] See Stewart Brown, *Aged Care Sector Report*, December 2019, p 18.

[58]Stewart Brown, Aged Care sector Report, December 2019, p 17.

[59] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 5.

[60] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p 84.

[61] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p xii.

[62] ACFA, *Eighth Report on the Funding and Financing of the Aged Care Sector*, May 2020, p 69.

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introduce caps on the size of providers or facilities, it would be useful to first investigate the cost of such caps in the form of forgone economies of scale.

5.3 Conclusions

A clearer picture of returns to Residential Aged Care emerges when one segments the returns by ownership because not-for-profits are willing to tolerate lower returns than for-profits; and governments are prepared to tolerate lower returns than not-for-profits. It appears that average returns among for-profit providers of Residential Aged Care services were close to benchmark returns in FY2018. These average returns reflect the average of a spread of returns that was wide - even among for-profit providers.

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6 FINANCIAL RETURNS IN HOME CARE

Consumer Directed Care was first introduced to all new Home Care Packages in 2013. Since 1 July 2015, both new and existing Home Care Packages are delivered using the Consumer Directed Care model.

Both ACFA and Stewart Brown express returns to providers of home care with consumers as the denominator. ACFA data (**Table 16**) indicate a large reduction in returns in FY2018.

Table 16: Home care providers average EBITDA per consumer per year, FY2015 to FY2019

	FY2015	FY2016	FY2017	FY2018	FY2019
EBIDTA per consumer per year	$2,854	$3,055	$2,989	$1,217	$1,211

Source: ACFA, Eighth Annual Report on the Funding and Financing of the Aged Care Sector, May 2020, p52.

However, Stewart Brown data (**Table 17**) indicate a recovery since that time.

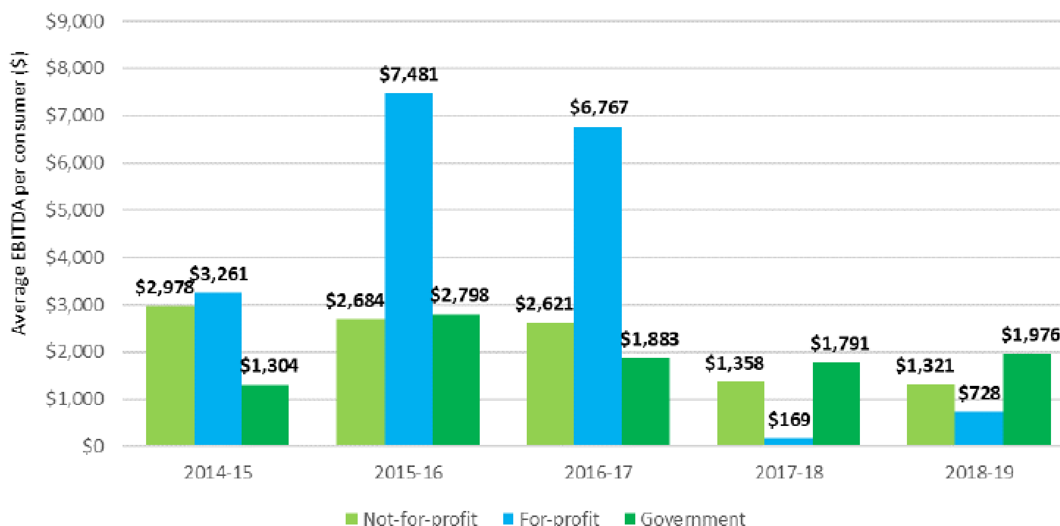
Table 17: Home care providers average EBITDA per consumer per calendar year, 2015 to 2019

	2015	2016	2017	2018	2019
EBITDA per consumer per year	$2,228	$2,444	$1,328	$1,373	$1,887

Source: Stewart Brown, Aged Care Sector Report, December 2019, p 38.

As with their analysis of returns to providers of Residential Aged Care, ACFA present data for returns to providers of Home Care segmented by kind of ownership, location and “scale” (range of services). The data following segmentation by ownership show dramatic changes in the relationship between the earnings of for-profit and not-for-profit providers. The figure is repeated below.

Figure 5: Home Care average EBITDA per consumer per year by ownership type, FY2015 to FY2019



Source: AFCA, Eighth Report on the Funding and Financing of the Aged Care Sector, May 2020, p 61.

ACFA attributes this change in relationships to new entry by for-profit providers:

> *"However the overall significant decline in the profitability of for-profit providers likely reflects that the influx of new providers were largely for-profit and it could be expected that new entrants into a market may make a loss as they seek to establish market presence."*[63]

The number of for-profit providers more than doubled from FY2017 to FY2018.[64] It appears that these returns are not sustainable and that attrition among providers will be necessary before earnings return to more-sustainable levels.

AFCA's comparison of returns to providers of Home Care shows only slight differences between returns to Metropolitan providers and returns to regional providers. In two of the last four years, Metropolitan providers generated higher returns than regional providers and in the other two years regional providers generated higher returns than did Metropolitan providers.[65]

6.1 Conclusions

The data suggest that average returns in home care have decreased in the last few years compared with FY2015 and FY2016. However, the sector has yet to adjust fully to the new world of consumer choice.

[63] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p 53. This point is repeated in the Eighth Report at p 61.

[64] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p 53. This point is repeated in the Eighth Report at p 46.

[65] ACFA, *Seventh Report on the Funding and Financing of the Aged Care Sector*, July 2019, p 55

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