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Evaluating the investment performance of Australian retirement living and aged care assets

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ABSTRACT

In Australia, the Retirement Living and Aged Care (RLAC) sector lacks a historic benchmark performance metric. Institutional investors utilising modern portfolio theory require such benchmarks for making future decisions. It has been considered that this lack of a benchmark has hindered investment in the RLAC sector. This paper evaluates historical investment performance of listed entities in the sector and constructs a market capitalisation weighted return index. From this, the historical performance and diversification potential was analysed from 2004 to 2016. Compared to other investments, RLAC had an inferior risk-adjusted performance. Due to this performance, the inclusion of RLAC in a portfolio did not lead to optimisation. The heterogeneity of the sector coupled with changing business models has implications for drawing conclusions from this historical performance.

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Introduction

In Australia, the Retirement Living and Aged Care (RLAC) sector is an emerging asset class for institutional investors. The sector lacks established (listed or unlisted) benchmarks and/or historic indices on which to measure the investment performance and make asset allocations. This is in contrast to North America where the sector has an established listed market specialisation, Health Care, with a market capitalisation of US$111,061 million[1] and a specialised index since 1992 (NAREIT, 2017). Australia has not achieved commensurate size or historical performance. While there are similarities in the built form, the financial model differs between countries making directly applying overseas benchmarks problematic. To accommodate and care for the growing ageing population further investment in the sector, particularly from institutional investors, is required (Productivity Commission, 2013, 2015). Such investors require analysis to determine risk and return benchmarks enabling comparison with other asset types. To date, there has been no empirical research into the Australian sector and this paper addresses this by establishing historical performance benchmarks on which projected investment returns can be based.

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This local RLAC sector comprises a range of financial models and categorisation from an investment viewpoint is based on how the return is received. The main sectors comprise retirement villages, rental retirement villages, residential land lease communities (LLC)[2] and residential aged care (RAC) (Jacobs, 2014).

- Retirement villages. These provide a longer term return through the deferred management fee (DMF) structure plus some development profits on completion (Hatcher & O'Leary, 1994; Moshione, 1992; Towart, 2009).
- Rental retirement villages. These provide regular rental returns from accommodation and services (Village Life Ltd, 2004).
- Residential land lease communities (LLC). These provide regular site (and sometimes dwelling) rental returns. Some operators incorporate a DMF fee payable on exit (Connor, 2004; Jacobs, 2014).
- Residential aged care (RAC). These provide an income return through operation of a care facility (Japara Healthcare, 2014).

Local industry-based research into the sector has concentrated on individual components and the commercial focus of the researcher. Investor literature has emphasised Australia's ageing demographic as a driver of investment returns (Aevum Limited, 2004; Lend Lease Primelife Group, 2009). Industry analysis has focused on quantifying current supply of retirement villages (Grant Thornton, 2014) and industry groups focusing on advocacy have considered what policy changes are required to increase supply (Property Council of Australia, 2016). Accounting-based industry commentary has concentrated on policy changes impacting upon RAC profitability, in particular funding changes under *The Aged Care Act 1997* and the introduction of the Living Longer, Living Better reforms (Ansell Strategic, 2017). This level of analysis is insufficient for larger investors to make decisions on the value of RLAC assets for inclusion into a portfolio.

This paper analyses the performance of entities, specialising in the RLAC sector, listed on the Australian Securities Exchange (ASX). This is compared with two total return indices which include entities in the sector; the S&P ASX AREIT Cumulative Index (AREIT) and the S&P ASX Health Care Cumulative Index (Health care). A weighted index for the RLAC sector from 2004 is then constructed. This identifies issues in relation to performance benchmarks as the sector is relatively small, lacks sufficient diversity and is dominated by a few large entities. The risk and return characteristics of the RLAC sector are analysed and the contribution to a mixed asset portfolio determined. Despite the positive demographics, these issues are considered to be a constraining factor with regard to investment in the sector.

Literature

Early research into the sector was based in North America and did so from the perspective of the positive demographic demand drivers. Much of this comprised a "how-to" guide for development of individual assets. This research showed the positive relationship between numbers of seniors and demand for RLAC facilities with regional and cohort variations, however, did not consider the investment performance of such facilities (Anikeeff, 1999; Macpherson & Sirmans, 1999). Further analysis outlined the framework for determining the development feasibility. This analysis was at the individual site level and considered projected demand on the basis of existing market take-up (penetration rate). It did not

evaluate longer term investment returns, the assumption being that if demand was sufficient a facility should be profitable (Brecht, 2002; Logan, 2001). This analysis assisted an investor commencing development in the sector; it was of less use in compiling a portfolio of assets as it did not consider whether portfolio inclusion would further impact upon performance.

In the 2000s, institutional investors became more focused on the sector, resulting in research considering the attractiveness of RLAC assets at a portfolio level to this group. North American analysis focused on quantifying and explaining and considered the sector on the basis of demographics, subcategories and investment criteria at an individual property level; however, did not include historical investment performance (Wang & Lynn, 2009). Australian analysis considered the entry of listed investors into the sector. It acknowledged that the local retirement village financial structure (DMF) added an additional layer of complexity as listed investors preferred a cash return. This research quoted market reported discount rates used in property valuation and recent share trading prices but did not empirically analyse performance over time (Kriska, 2008).

Research has identified issues holding back institutional investment including consistent and comparable historical data, consistency in reporting across the sector, subsector definition and differentiation and the requirement for regular metrics (Mueller, Fisher, & Wincott, 2013; Mueller & Laposa, 1998; Newell & Peng, 2008; Worzala, Karofsky, & Davis, 2009).

While much of the research has focused on the North American market, the similarities with Australia include a model which comprises both an operational business and real estate which influences the investment performance. This inclusion of operational and rental income increases the volatility in comparison to assets deriving returns solely from rental income (Mueller & Anikeef, 2001). The operational business and the real estate component are inextricably connected which improves investment performance in comparison to a pure real estate investment (Eichholtz, Kok, & Wolnicki, 2007; Laposa & Singer, 1999; Newell & Peng, 2006).

Australian analysis of the sector is limited with a single study undertaken in 2006 (with one RLAC asset) and industry research which has not detailed the data-sets. To date there has been no published research focussing on RLAC entities. Researchers have considered the sector as a component of emerging asset markets which included health care, retirement, leisure, self storage and childcare. (Newell & Peng, 2006). This itemised funds (listed and unlisted) focusing on the retirement living sector. This analysis amalgamated all emerging assets and concluded that the annual average return (2002–2005) was 47.6% with annualised risk of 14.78%. This time period coincides with considerable market buoyancy and included only one RLAC entity, ING Real Estate Community Living which had listed in 2004. Australian industry research focused on real property assets concluded that established (not development) retirement villages (proxy for RLAC assets) showed an annual return of 12.55% but did not quantify the level of risk instead placing it between commercial investment and commercial development (Stockland, 2009). Further analysis of retirement villages concluded that for the 15-year period ending 30 September 2010 the annual return was 15.5% with a volatility of 10.0% (Atchison, 2011).[3] This published research has not considered the performance of the RLAC sector as a separate asset class nor has it considered the performance of operating entities as opposed to physical assets. This paper addresses this by analysing the historical performance of RLAC entities.

Analysis of real estate indices has considered index construction and ways of comparing investment performance for both physical property and entities traded on the listed

markets (Geltner & Kluger, 1998; Horrigan, Case, Geltner, & Pollakowski, 2009). The North American approach of index construction for listed real estate entities is to remove debt from the calculations (Geltner, 2013). This is not the convention in Australia (S&P Dow Jones Indices, 2015) and it is proposed to follow the Australian convention in this analysis.

Data and method

This research concentrates on entities currently listed on the ASX that are predominantly focused on at least one of the identified RLAC sectors. These are listed in Table 1.

This comprises 8 ASX listed entities; this excludes Lendlease Group and Stockland which are both large entities active in the sector. RLAC activities comprise a small proportion (<10%) of their total portfolio by asset value which makes it difficult to determine the component of performance attributable to this sector. Also excluded are entities which delisted during this period. This overcomes concerns about the investment performance effect for entities that delist; many do so because of merger, acquisition or financial distress (Chan, Erickson, & Wang, 2003). This includes listings which have occurred since 2014, Estia, Gateway, Japara and Regis as these represent previously unlisted portfolios in the sector. The analysis excludes partial years following listing as there is evidence that such entities perform differently; short- to medium-term underperformance has been shown in analysis of US REIT performance following listing (Chan et al., 2003).

The data comprise monthly total returns of the RLAC entities, ASX Indicies and the Bloomberg AusBond Index (AusBond), these were accessed from Morningstar and Bloomberg subscription services. From these monthly total returns, compound annual returns were calculated for individual years and the two study periods. The analysis is from 31 December 2004 to 31 December 2016. Ingenia and Eureka listed in 2004; Aveo was the only entity trading prior to 2004 and comprised approximately 30% RLAC assets. The period of analysis has been divided into two (calendar year) study periods 2010–2016 (6 years) and 2004–2010 (6 years). Using these two time periods allows the impact of the financial turmoil which commenced in late 2007 to be considered, particularly for the three entities that have been listed for the full duration.

The RLAC index was constructed using the following formulas.

Total return to entity j in time period t was defined as follows.

$$r_{j,t} = \frac{\left(p_{j,t} - p_{j,t-1}\right) + d_{j,t}}{p_{j,t-1}} \tag{1}$$

where $p_{j,t}$ is the security price at the end of the period, $p_{j,t-1}$ is the security price at the beginning of the period and $d_{j,t}$ is the dividends paid during the period for entity j during period t.

An Australian market capitalisation weighted RLAC index has been created by adjusting the annual performance of individual entities by their respective market capitalisations.

$$W_{j,t} = \frac{MC_{j,t}}{\sum_{j=1}^{N} MC_{j,t}, \ldots MC_{n,t}} \tag{2}$$

Table 1. Listed investment entities (alphabetical).

Entity[a] & ASX listing date	Operations & comments
Aveo Group (Aveo) Listed 13/12/1993	Originally, a diversified developer and owner of residential, retail, commercial and industrial property with a specialisation of development and management of DMF villages. In 2013, announced intention to become solely a retirement operator. Now an owner and operator of DMF villages, RAC & care services
Estia Health Limited (Estia) Listed 5/12/2014	RAC owner and operator
Eureka Group (Eureka) Listed 1/7/2004	Rental village owner and operator and asset/fund manager
Gateway Lifestyle Group (Gateway) Listed 11/6/2015	LLC owner and operator
Ingenia Communities Group (Ingenia) Listed1/7/2004	Originally, a rental village owner and operator; with international seniors housing and student accommodation. Currently, DMF and rental village owner and operator and LLC developer, owner and operator
Japara Healthcare Limited (Japara) Listed 17/4/2014	RAC operator and owner
Lifestyle Communities Ltd (Lifestyle) Listed 15/12/1998	LLC owner and operator, commenced these operations following the purchase of Lifestyle Communities Group in June 2007. Analysis commences 2007
Regis Healthcare Limited (Regis) Listed 7/10/2014	RAC operator and owner

[a]A number of operators have changed their name; the current name has been used throughout.

where $MC_{j,t}$ is the market capitalisation of security j in period t, this uses the market capitalisation as at the end of each period is this reflects activities including capital raisings which happened during the period. The return for the RLAC sector in period t was defined as follows.

$$\text{RLAC}_t \sum_{j=1}^{N} W_{j,t} r_{j,t} \ldots W_{n,tr_{n,t}} \tag{3}$$

This process is replicated for each year utilising entities that had achieved a full one year return to generate a time series of indexed returns for the sector.

Results and discussion

Investment performance has been varied across the sector and over time which can be attributed to market, sector and company specific factors. Performance data are contained in Table 2.

Investment performance

The two time periods show differences in performance which can predominantly be attributed to the influence of the financial turmoil which commenced in late 2007. In November 2007, the S&P ASX 200 peaked at 6829, by March 2009 it had fallen by 54% to 3146. All entities experienced a negative annual return for the 2004–2010 period and higher standard deviations, showing greater volatility. During this period financiers and investors in the RLAC sector repriced their return requirements following a reappraisal of risk criteria. This period was noted for asset impairments and valuation write-downs coupled with the slowing of the residential property market which impacted on the financial performance of retirement villages (Stockland, 2009). Some entities experienced difficulties when renegotiating debt facilities resulting in divestment of assets and/or entering into new financial arrangements (Becton Property Group, 2010). A number of entities in the sector experienced financial difficulties resulting in their eventual delisting including Becton Property Group, Lend Lease PrimeLife Corporation and Prime Retirement & Aged Care Property Trust.

Eureka and Ingenia were operating rental retirement villages; this was a relatively new enterprise for commercial operators. At the time of listing, it had not yet been fully ascertained that this could be a commercial success. Issues with required levels of occupancy at individual villages to break even became apparent impacting on returns (SCV Group Limited, 2009). Ingenia also had exposure to the US property market which impacted on returns to that entity (ING Real Estate Community Living Group, 2009).

The period 2010–2016 presents a different risk and return profile, for the entities which had been listed since 2004 all had lower standard deviations and improved (or less negative) returns. During this period, Aveo undertook equity raisings in 2012 and 2013 to reduce debt, provide liquidity and improve the capital position. In 2013, Aveo announced the strategy of divesting all nonretirement assets and becoming a pure play, plus adopting the new name. The purchase of Retirement Villages Group, a wholesale vehicle in which Aveo already had a significant holding, was funded with equity raisings in 2015 and 2016. Eureka grew incrementally by annually (except 2013) issuing equity to improve the capital position

Table 2. Performance 2004–2016.

	Aveo	Estia	Eureka	Gateway	Ingenia	Japara	Lifestyle	Regis	AREIT	Health care
31/12/2016	9.1%	−59.8%	14.0%	−25.5%	−6.8%	−25.9%	59.5%	−19.1%	13.2%	12.2%
31/12/2015	48.6%	56.8%	101.7%	Listed June 2015	13.1%	61.5%	37.2%	48.6%	14.3%	8.2%
31/12/2014	6.9%	Listed December 2014	233.3%		−14.7%	Listed April 2014	67.3%	Listed October 2014	27.0%	20.9%
31/12/2013	111.3%		80.0%		96.0%		29.4%		7.1%	24.2%
31/12/2012	−56.6%		19.0%		75.6%		−13.2%		33.0%	31.8%
31/12/2011	−43.3%		−61.8%		79.7%		50.6%		−1.5%	−4.7%
31/12/2010	8.9%		−21.4%		−10.9%		.0%		−.4%	−1.9%
31/12/2009	135.2%		40.0%		99.6%		74.9%		7.9%	17.8%
31/12/2008	−93.4%		−98.5%		−95.8%		−80.0%		−54.0%	−15.5%
31/12/2007	−2.3%		−11.2%		−1.3%		Purchased RLAC assets		−8.4%	.2%
31/12/2006	29.7%		14.3%		9.6%				34.0%	10.5%
31/12/2005	36.5%		−42.6%		3.7%				12.5%	42.6%
31/12/2004	RLAC comprised 30% of activities		Listed July 2004		Listed July 2004				32.0%	37.5%
Compound annual return 2010–2016	−1.7%	−20.6%*	35.8%	−25.5%*	33.1%	9.4%*	35.5%	9.7%*	14.9%	14.8%
Standard deviation 2010–2016	44.4%	39.5%*	71.6%	24.9%*	27.1%	31.4%*	33.0%	32.1%*	12.6%	13.7%
Sharpe index 2010–2016	−.12	−.61*	.45	−1.17*	1.09	.18*	.97	.19*	.89	.81
Compound annual return 2004–2010	−18.5%		−54.0%		−33.8%		−29.5%*		−6.2%	7.5%
Standard deviation 2004–2010	88.1%		293.7%		61.6%		56.3%*		21.6%	16.2%
Sharpe index 2004–2010	−0.26		−.20		−.62		−.61*		−.50	.18
Market cap $ million	1947	595	159	647	476	599	414	1376		

*Since listing or commencement (full years)

and raise working capital; purchases were funded by issuing shares to vendors. An original investor in Eureka following listing in 2004 would still have achieved negative performance despite the impressive returns since 2013. In 2012, Ingenia undertook a change of name and in 2013 raised the first equity capital since 2008/2009 to fund acquisitions, notably the new strategy of LLC investment. This new strategy included divestments of non-core assets including US seniors' accommodation and New Zealand student accommodation. Ingenia undertook equity raisings in 2014 and 2016 which funded acquisitions and strengthened the balance sheet. Lifestyle has grown since 2010 through individual purchases, predominantly of development sites. In 2012, equity was raised to reduce debt and increase working capital.

Estia, Japara and Regis have all listed in 2014 and are RAC businesses, this model is different to other entities which predominantly provide retirement accommodation. The RAC sector is highly sensitive to government funding and policy interpretations. Following the release of the Productivity Commission's Caring for Older Australians report, in 2012 the Commonwealth government released the Living Longer Living Better reforms for the aged care sector. These reforms changed the sources and quantum of revenue for aged care providers, particularly those providing RAC (KPMG, 2013). Revenue for an individual RAC is from three main sources; government funding based on an Aged Care Funding Instrument (ACFI) schedule based on the level of care; resident funding both means tested and for additional services; and funding for accommodation with Refundable Accommodation Deposits and/or Daily Accommodation Payments (Jacobs, 2014). This ACFI funding exceeded Commonwealth budgeted levels by approximately 2%; in the May 2016 federal budget this funding was reduced, particularly for residents requiring Complex Health Care. This resulted in income declines to RAC operators and declining share prices for listed entities. In September 2016, the Department of Health clarified an interpretation of *The Aged Care Act 1997*; resulting in reduced incomes for RAC operators. Price falls were experienced by Estia, Japara and Regis, between 13 and 30% (Jacobs, 2016).

Excluding Eureka and Ingenia, between 2010 and 2016 all listed entities achieved lower returns and higher volatility when compared with the AREIT and Health care indices. This situation was more pronounced between 2004 and 2010 when all listed RLAC entities achieved comparatively lower returns and higher volatility.

The Sharpe Index shows volatility adjusted performance; Ingenia achieved the highest score of this analysis in the period 2010–2016 closely followed by Lifestyle. During this period Ingenia has restructured and outlined a new investment strategy particularly focusing on LLC investments; Lifestyle specialises in the LLC asset class. This higher index may be an indication of the improved risk-adjusted returns available from LLC investments. This is the one RLAC asset class which is repeatedly referred to by industry practitioners as a "cash cow". All entities and the indices achieved a negative Sharpe Index in the period 2004–2010, indicating that listed market-related factors had a dominant influence on performance during this period.

The taxation treatment of RLAC, AREIT and Health care entities depends upon the individual structure. Aveo and Ingenia have a stapled structure comprising both a company and a trust; all other RLAC entities have a company structure. Ingenia originally listed as a trust and in 2012 internalised management resulting in a stapled structure. In Australia, income and capital gains from a trust investment are taxed in the hands of a unitholder at their marginal rate. Where an entity is operated under a company structure net income and capital gains are taxed in the company at the company tax rate. Shareholders receive

the benefit of this tax paid in the form of dividend imputation. In contrast, 14 of the AREIT entities have a stapled structure, 4 have a trust structure and 4 have a company structure. All entities in Health care have a company structure.

Specialised index

While company specific factors have had a major impact upon historical performance what is of interest to institutional investors is a benchmark against which the sector can be compared. This market capitalisation weighted index since 2004 is shown in Table 3.

In comparison to AREIT and Health care, the RLAC index has a higher standard deviation and a lower overall return. From this it is possible to consider where RLAC assets would be placed on the efficient frontier. Extant research has stated that retirement villages (proxy for RLAC assets) had a return of 12.55% and a higher risk than passive commercial investment and a lower risk than commercial development in 2009; a return of 15.5% and a volatility of 10% for the 15-year period to 30 September 2010 (Atchison, 2011; Stockland, 2009). This analysis coincides with the earlier time period and was for real property retirement village assets; there appear to be aspects of the RLAC sector and the listed market resulting in lower returns and greater volatility.

Problems of constructing a specialised RLAC index of listed entities have been highlighted in this index creation. The sector lacks sufficient size and is dominated by a few entities; this leads to a lack of diversity.

RLAC entities are in two different GICS industry groups; Real Estate is included in the AREIT Index; and Health Care Equipment & Services is included in the Health care Index. During the study period the number of RLAC entities has increased to 8 comprising a market capitalisation of $6213 million (31 December 2016). In comparison, the AREIT Index comprises 22 entities with a market capitalisation of $140,220 million and the Health care Index comprises 14 entities and market capitalisation of $128,844 million (1 May 2017). Of the RLAC entities Aveo, Estia, Gateway, Japara and Regis are in the S&P ASX 200 (at 31 December 2016) and are included in their specialised indices; the remaining three have

Table 3. RLAC index annual performance 2004–2016 and market capitalisation.

	RLAC	Market capitalisation $ millions	Number of entities
31/12/2016	−11.1%	6213.43	8
31/12/2015	60.6%	7126.36	8
31/12/2014	2.7%	4317.65	5
31/12/2013	108.1%	1499.10	4
31/12/2012	−37.1%	575.62	4
31/12/2011	−31.0%	695.70	4
31/12/2010	14.5%	1079.47	4
31/12/2009	202.0%	997.36	4
31/12/2008	−91.8%	219.26	4
31/12/2007	1.3%	2291.30	4
31/12/2006	27.7%	1449.77	3
31/12/2005	34.5%	984.48	3
Compound annual return 2010–2016	4.8%	–	–
Standard deviation 2010–2016	33.3%	–	–
Sharpe index 2010–2016	.03	–	–
Compound annual return 2004–2010	−11.1%	–	–
Standard deviation 2004–2010	81.7%	–	–
Sharpe index 2004–2010	−.19	–	–

insufficient market capitalisation to be included. Creation of a meaningful longitudinal index requires a longer trading history of all the major entities than is currently available.

The RLAC index is dominated by a few entities; on 30 June 2016, the three RAC entities (Estia 13%, Japara 10% and Regis 22%) comprised nearly 50% of the market capitalisation. The inclusion of the other large operator (Aveo 27%) accounts for approximately 70% of the index in these four entities. This domination by a few entities has implications particularly where issues impact on a subsector. The significant price falls in September 2016 following the Department of Health announcement impacted upon the market capitalisations of the three RAC entities further impacting on the RLAC index.

Institutional investment in the RLAC sector is still in its infancy in Australia, the lack of appropriate investment benchmarks may be considered an inhibiting factor, however, the sector may not yet be capable of supporting a listed index based on current entities.

RLAC in an investment portfolio

Institutional investors seek improved performance through diversification across a portfolio. Therefore, the correlation of RLAC with other investments is important despite the lower returns and higher volatility achieved in the sector. The correlation of RLAC with AREIT, Health care, S&P ASX 200 and AusBond is shown in Tables 4 and 5.

RLAC is most correlated with the S&P ASX 200, this indicates that factors influencing the listed market have a notable impact. Correlations with all indices are slightly stronger for the period 2010–2016 compared with the earlier period which experienced significant market turmoil and contagion. While the listed market factors influenced the RLAC sector there were sector specific factors which had a greater impact. The negative correlation with Health care in 2004–2010 during this period is not surprising as the RLAC index did not then contain any entities included in the Health care index (Table 6).

The role of RLAC in a mixed asset portfolio consisting of RLAC, AREITS, Health care, S&P ASX 200 and AusBond was determined for the period 2010–2016. During this period, RLAC achieved a positive annual return in contrast to the earlier period with an annual loss, high volatility and a negative Sharpe index. For this period, S&P ASX 200 had a compound annual return of 7.8%, standard deviation 12.4% and Sharpe index of .33; AusBond had a compound annual return of 5.8%, standard deviation 2.5% and Sharpe index of .83. Health care and Ausbond were dominant over this timeframe and the proportion of AREIT and Health care increased at the higher risk levels. RLAC was not included due to its low return, high risk levels and correlation with AREIT and Health care (Figure 1).

The efficient frontiers show that the inclusion of RLAC into a portfolio does not optimise performance. AREIT and Health care have a greater capacity to optimise portfolio performance compared to RLAC. Based on historical performance the RLAC sector does

Table 4. RLAC index correlation with selected indices 2010–2016.

	RLAC	AREIT	Health care	S&P ASX 200	AusBond
RLAC	1.00				
AREIT	.38	1.00			
Health care	.25	.38	1.00		
S&P ASX 200	.52	.72	.54	1.00	
AusBond	−.02	.27	.17	−.08	1.00

Table 5. RLAC index correlation with selected indices 2004–2010.

	RLAC	AREIT	Health care	S&P ASX 200	AusBond
RLAC	1.00				
AREIT	.36	1.00			
Health care	.08	.47	1.00		
S&P ASX 200	.52	.70	.52	1.00	
AusBond	−.22	.05	−.04	−.36	1.00

Table 6. Asset allocation 2010–2016.

(%)	RLAC (%)	AREIT (%)	Health care (%)	S&P ASX 200 (%)	AusBond (%)	Return (%)	Risk (%)
4.8							
5.8	.35	.00	.00	2.59	97.06	5.81	2.42
6.8	.00	6.18	5.49	.00	88.33	6.83	2.79
7.8	.00	12.62	10.18	.00	77.20	7.84	3.48
8.9	.00	19.06	14.87	.00	66.07	8.86	4.39
9.9	.00	25.50	19.56	.00	54.94	9.87	5.40
10.9	.00	31.94	24.25	.00	43.81	10.89	6.46
11.9	.00	38.38	28.94	.00	32.69	11.90	7.56
12.9	.00	44.81	33.63	.00	21.56	12.92	8.69
13.9	.00	51.25	38.32	.00	10.43	13.93	9.82
14.9	.00	100.00	.00	.00	.00	14.95	12.6%

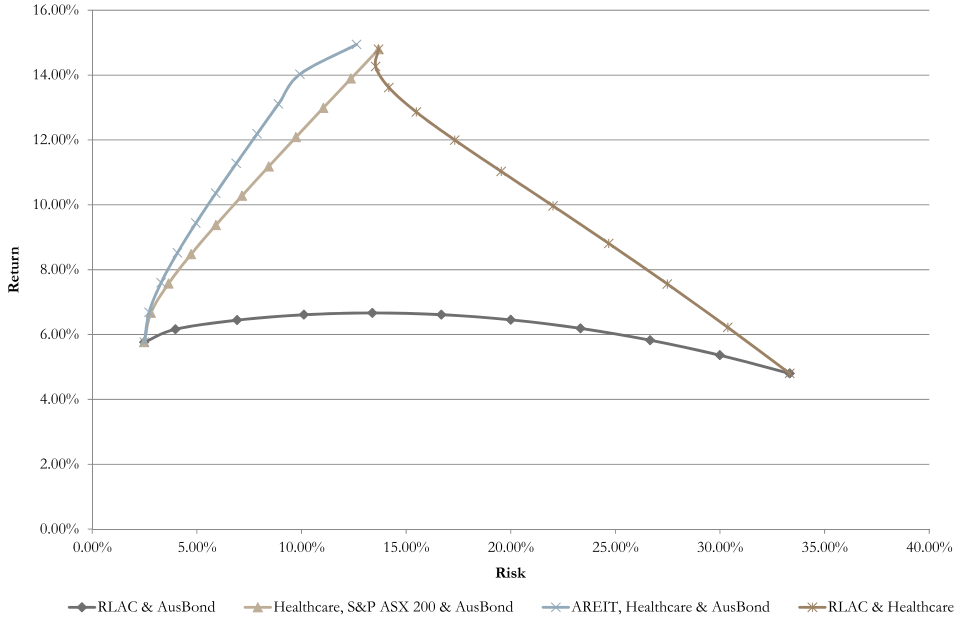

Figure 1. Efficient frontiers 2010–2016.

not offer significantly greater risk-adjusted returns nor does it optimise a portfolio through diversification benefits.

The promotion of investment in the RLAC sector is often on the basis of demographics. Notwithstanding the performance of individual entities, it is difficult to justify investment on the basis of historic performance of the sector or on the basis of diversification with

other listed investments. Unless there are major new impacts on the sector this can be expected to continue.

Conclusion

The RLAC sector has shown that it achieves lower returns and higher volatility when compared to related market sectors across both time periods studied. The industry continues to trial new business models (provision of care and personal services by non-RAC operators) which can influence investment performance. Company specific events have a significant impact on anticipated income and trading prices. The influence of government regulation and policy on RAC entities is substantial and cannot be reliably predicted in the longer term creating a perception of instability.

Both the operational business and the real estate component are intricately connected for RLAC entities. Whether it is this integration of activities, or factors inherent in the sector which results in higher standard deviations of investment performance when compared to AREIT and Health care requires further analysis. These higher standard deviations contradict previous analysis from investors and asset consultants regarding the level of risk in the sector. The RLAC sector is positively correlated with AREIT, Health care and the S&P ASX 200. Based on historical performance the sector does not offer significant diversification benefits.

The sector is dominated by a few large entities and has a smaller number of entities and market capitalisation when compared with AREIT and Health care. The fluctuating number of listed entities over time further inhibits the creation of a meaningful index. While there is a clear demand for a benchmark RLAC index, it requires further trading history of entities within the sector.

Notes

1. 30 June 2017.
2. Also called Rental Parks, Lifestyle Villages and/or Manufactured Home Estates.
3. K Atchison was the principal of Atchison Consultants, a major asset consultant to superannuation funds. Following the conference repeated requests were made as to the dataset and methodology. No further information was forthcoming.

Disclosure statement

No potential conflict of interest was reported by the author.

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