The Australian Equity Real Estate Investment Supply Gap

August 2010

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Quadrant Real Estate Advisors

Executive Summary

Superannuation Funds (or Pension Funds) are major contributors to global investment wealth and the Australian industry is no exception. According to the Australian Prudential Regulation Authority (APRA) the Australian superannuation industry had total assets under management of $1.258 trillion as at 31 March 2010[1].

With total superannuation assets projected to grow by in excess of 9.1%[2] per annum, based on the growth in Australian superannuation assets depicted in Exhibit 2 of this report, the forecast new allocation to real estate investments is expected to be in the order of $9.0 billion in 2010, growing to approximately $20 billion per annum by 2019. We believe the prudent investment of this real estate allocation is likely to be a major challenge for super fund managers going forward.

Our research indicates that approximately $7.3 billion[3] of new income producing (non residential or social infrastructure) real estate equity investment opportunities will be constructed in Australia in 2010/11. Accordingly, this creates a current theoretical shortfall for 2010/11 of $1.7 billion.

Quadrant forecasts this current $1.7 billion supply shortfall to grow to be a $7.3 billion per annum gap within the next 10 years. Over the coming decade the challenge to prudently invest in equity real estate will be further compounded as Australian superannuation funds face heightened competition for new real estate investments from offshore capital sources given our economic outlook and as foreign investment rules are simplified.

This undersupply of Australian real estate equity investments means that Super Funds will need to broaden their awareness of other real estate investment types in order to meet their real estate allocation objectives. Some of these strategies include an expansion of offshore strategies or broadening the definition of their real estate investment universe to include healthcare, education, retirement, child-care, residential and commercial real estate debt.

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[1] APRA Quarterly Superannuation Performance 31 March 2010 (released 10 June 2010)
[2] DEXX&R Market Projections Report November 2009
[3] Quadrant Real Estate Advisors / Higgins, D. & DeValence, G. 2000, Australian business cycles and commercial property markets: some evidence over four decades, Pacific Rim Property Research Journal, Vol. 6. No.1, p 57-66.

Given the issues associated with offshore strategies, investment in social infrastructure (i.e. healthcare, education and child-care) and residential assets, we are of the view that the investment by Australian super funds into the domestic commercial real estate debt market is an attractive, logical and inevitable step. Of particular note is that the opportunity shortfall in equity real estate corresponds with an increasing opportunity set in commercial real estate debt.

A few words on the methodology

Implicit in forward looking analysis of this type is a degree of supposition. In determining the growth in the Superannuation savings pool over the course of the next decade we have adopted industry data and extrapolated this to historical real estate portfolio allocations to determine the likely capital base available for investment to this asset class. On the equity real estate supply side we have analysed industry data based upon forward construction estimates to arrive at the potential increase in the available asset pool and then by deduction we arrive at a theoretical shortfall in supply of new assets. What the analysis is unable to address with any high degree of certainty is the year on year total superannuation savings pool given, i) volatility in returns ii) decreasing leverage strategies deployed by investors and, iii) the degree of competition for these assets from offshore buyers. Notwithstanding this we believe the analysis has been constructed so as to provide a conservative estimate of any potential shortfall in the opportunity set.

Historic Growth in Australian Superannuation Funds

Since the introduction of compulsory superannuation contributions in Australia in 1992 (and the gradual increase in the contribution rate to its current rate of 9% from 2002) the growth of superannuation assets in Australia has been substantial. Australia currently has the third largest proportion of super fund assets to gross domestic product (GDP) behind the Netherlands and Switzerland[4].

According to Towers Watson's Global Pension Assets Study 2010, global institutional pension fund assets in the 13 major markets increased by 15% during 2009, from US$20 trillion to over US$23 trillion. This growth is in sharp contrast to a 21% fall in asset values during 2008 which brought assets back to 2006 levels. According to the study, pension assets now amount to 70% of the average global GDP, down from 76% a decade earlier, but substantially higher than the equivalent figure in 2008 of 58%.

In Australia, new member contributions are currently in excess of $110 billion per annum, however, recent poor asset performance during the Global Financial Crisis (GFC) has resulted in declining total assets balances for the superannuation industry for the 2 years to June 2009 (see Exhibit 1). The Australian Prudential Regulation Authority (APRA) calculates that since June 2009, funds have grown substantially from $1.073 trillion to $1.258 trillion as at 31 March 2010[5].

[4] Towers Watson's Global Pension Assets Study 2010
[5] APRA Quarterly Superannuation Performance 31 March 2010 (released 10 June 2010)

Exhibit 1

Growth in Australian Superannuation Assets 1997-2009

APRA Annual Superannuation Report Table 7 Financial performance - trends

($ million)

	Jun 1997	Jun 1998	Jun 1999	Jun 2000	Jun 2001	Jun 2002	Jun 2003	Jun 2004	Jun 2005	Jun 2006	Jun 2007	Jun 2008	Jun 2009
Total assets at the beginning of the financial year	245,257	321,052	360,280	411,411	484,223	519,030	518,100	546,719	638,981	756,040	910,901	1,186,970	1,139,716
Contributions													
Employer	19,122	21,642	31,299	25,960	27,430	28,584	34,641	40,285	43,265	49,293	67,092	67,909	71,125
Member	9,976	13,767	17,759	20,318	22,653	23,020	18,839	18,486	24,606	33,584	96,458	48,441	39,946
Other								1,858	605	1,156	1,618	1,313	1,085
Total contributions	**29,098**	**35,409**	**49,059**	**46,278**	**50,083**	**51,604**	**53,480**	**60,630**	**68,477**	**84,034**	**165,168**	**117,663**	**112,157**
Rollovers [a]													
Inward	28,046	31,352	26,536	48,809	44,042	44,000	40,762	42,558	49,325	86,613	70,379	84,577	59,901
Outward	21,832	24,508	19,281	38,579	37,940	29,993	28,234	30,237	44,027	75,093	61,763	76,279	48,325
Net rollovers	**6,213**	**6,844**	**7,256**	**10,230**	**6,102**	**14,007**	**12,529**	**12,322**	**5,298**	**11,520**	**8,616**	**8,298**	**11,577**
Benefit payments													
Lump sum	14,534	17,625	18,705	22,298	24,157	25,720	26,101	20,950	19,141	18,404	19,369	38,090	29,784
Pensions	3,976	4,529	4,989	5,049	6,440	6,849	7,098	9,718	7,788	11,677	13,735	27,305	32,077
Total benefit payments	**18,511**	**22,154**	**23,693**	**27,347**	**30,597**	**32,569**	**33,199**	**30,669**	**26,929**	**30,081**	**33,104**	**65,395**	**61,861**
Net contribution flows	**16,801**	**20,099**	**32,621**	**29,161**	**25,588**	**33,043**	**32,810**	**42,283**	**46,846**	**65,473**	**140,680**	**60,566**	**61,873**
Net investment income [b]	**32,525**	**22,572**	**25,265**	**40,825**	**19,041**	**-9,149**	**3,272**	**82,784**	**86,604**	**107,825**	**158,854**	**-86,543**	**-112,194**
Total operating expenses	**2,092**	**2,271**	**2,587**	**3,274**	**3,512**	**3,865**	**4,075**	**4,420**	**5,215**	**6,178**	**8,337**	**8,725**	**8,864**
Other changes [c]	**9,673**	**-760**	**3,993**	**-6,710**	**1,727**	**-11,908**	**-6,095**	**-25,105**	**-13,119**	**-13,461**	**-14,535**	**-8,097**	**-4,259**
Change in the balance of life office statutory funds	2,235	-412	-8,163	12,809	-8,037	-9,051	2,709	-3,281	1,943	1,203	-592	-4,455	-2,931
Net growth	**75,792**	**39,228**	**51,130**	**72,812**	**34,807**	**-930**	**28,619**	**92,261**	**117,059**	**154,861**	**276,069**	**-47,254**	**-66,375**
Total assets at the end of the financial year	321,049	360,280	411,411	484,223	519,030	518,100	546,719	638,981	756,040	910,901	1,186,970	1,139,716	1,073,342

This table does not include pooled superannuation trusts as their assets are captured by other superannuation entity categories.

[a] Inward and outward rollovers are not equal as balance of life office statutory funds and RSAs are not reported in this table. This table therefore does not represent the entire superannuation industry.

[b] The net investment income figure for self-managed superannuation funds is an estimate supplied by the ATO and is net of all expenses.

[c] Other changes is calculated as the residual of net growth, net contribution flows, net investment income and operating expenses. Tax expenses and other items not included in this table are included in other changes.

Forecast Growth

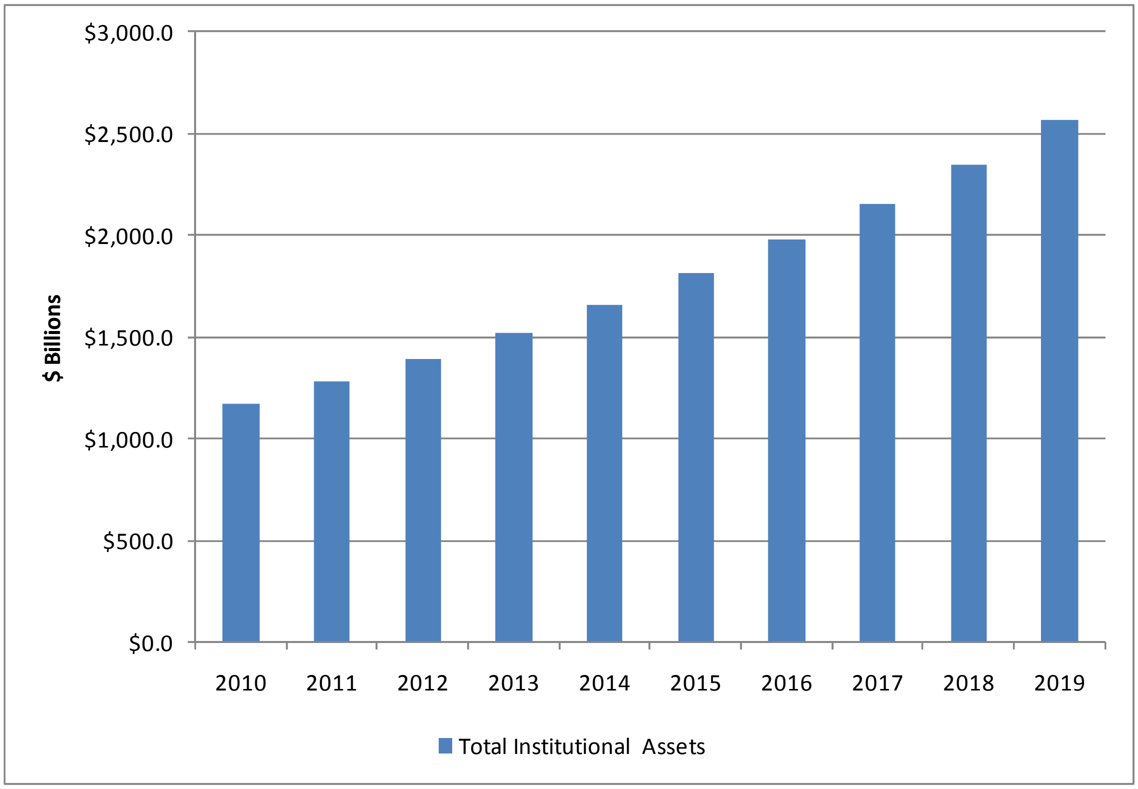
Forecasting the growth in total Australian superannuation assets is difficult due to the complexities in predicting not only the new superannuation contributions but also the more volatile fund investment returns, fund roll-overs and distributions. The latest DEXX&R Market Projections Report released in November 2009, attempts to identify growth opportunities in each of the key market segments in the superannuation industry over the 10 years to 2019.

DEXX&R forecast that the total superannuation market is projected to increase by an average annual growth rate of 9.1% to $2.501 trillion by June 2019 (slightly lower than the Department of Treasury predictions of $2.815 trillion by 2020[6]).

Within the superannuation industry; the employer super, industry funds and personal super (including self managed super funds) segments are projected to have the strongest growth[7]. We have represented this forecast annual growth in Exhibit 2.

[6] Department of Treasury, Budget Overview 2009/10

Exhibit 2
Growth in Australian Superannuation Assets 2010 - 2019



Source: DEXX&R Market Projections Report November 2009

While we have illustrated a linear growth pattern supported by compulsory contributions from employers and member contributions, the influence of asset returns on the growth of overall assets under management will result in a highly variable year on year total assets growth pattern.

Based on the growth numbers outlined in Exhibit 2, we would expect to see total *additional superannuation funds available* for new investment of approximately $100 billion in 2010, growing to in excess of $200 billion in the year 2019. These additional funds are then in turn allocated or (re allocated as the case may be) to the various asset classes (shares, fixed interest, property, cash, alternatives, etc) with asset allocation strategies varied from fund to fund.

Real Estate Allocation

Within these new funds available for investment a certain percentage will be allocated to real estate based on the funds strategic asset allocation policy. This allocation can vary widely from fund to fund and even for the same fund this allocation can often change from year to year as the fund seeks to maximise the return to its investors and rebalance their portfolios.

[7] DEXX&R Market Projections Report November 2009

According to APRA figures contained in the Annual Superannuation Report 2009, the average allocation to real estate assets (both listed and unlisted) within an Australian super fund default investment strategy portfolio is approximately 10% for the year ended 30 June 2009 (see Exhibit 3).

Exhibit 3
Australian Superannuation Asset Allocations Year End June 2009

APRA Annual Superannuation Report Table 18 Asset allocation of default investment strategy

Year end June 2009
Entities with more than four members

	Corporate	Industry	Public sector	Retail	Total
($ million)					
Australian shares	7,936	37,544	25,911	17,547	88,938
International shares	6,579	28,300	22,754	13,275	70,907
Listed property	874	4,227	2,725	2,832	10,658
Unlisted property	1,595	12,643	6,134	2,232	22,605
Australian fixed interest	3,348	8,913	4,118	8,445	24,824
International fixed interest	1,642	5,970	7,216	3,344	18,171
Cash	2,022	8,018	11,500	16,935	38,475
Other assets	1,588	26,917	11,472	5,547	45,523
Total default strategy assets [a]	**25,583**	**132,532**	**91,830**	**70,157**	**320,101**
Total assets	**54,009**	**191,782**	**153,019**	**304,737**	**703,547**

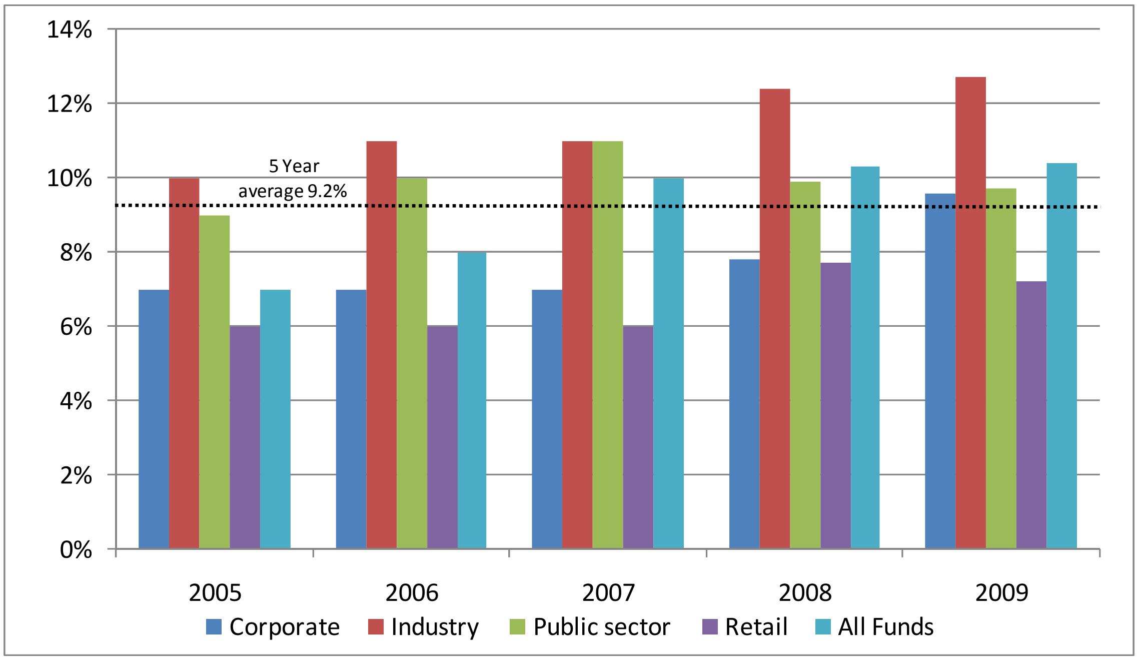
	Corporate	Industry	Public sector	Retail	Total
Proportion of assets					
Australian shares	31%	28%	28%	25%	28%
International shares	26%	21%	25%	19%	22%
Listed property	3%	3%	3%	4%	3%
Unlisted property	6%	10%	7%	3%	7%
Australian fixed interest	13%	7%	5%	12%	8%
International fixed interest	6%	5%	8%	5%	6%
Cash	8%	6%	13%	24%	12%
Other assets	6%	20%	13%	8%	14%
Total	100%	100%	100%	100%	100%

[a] Funds may have more than one default investment strategy, in which instance the largest default strategy is generally reported. Where there is no default strategy, funds may report the strategy of the largest option or the strategy of the whole fund.

We have compared the 10% allocation for 2009 to the allocations reported in previous years in order to ascertain if this figure is an accurate representation of real estate asset allocations over the longer term.

The 2009 figure of 10% is slightly higher than the 5 year average from 2005 to 2009 which was 9.2% as shown in Exhibit 4. Due to the volatility in asset values during the 2009 year we have elected to adopt the 5 year average real estate asset allocation figure of 9.2% for the purposes of our forecast calculations.

Exhibit 4
Australian Superannuation Real Estate Asset Allocations 2005 - 2009



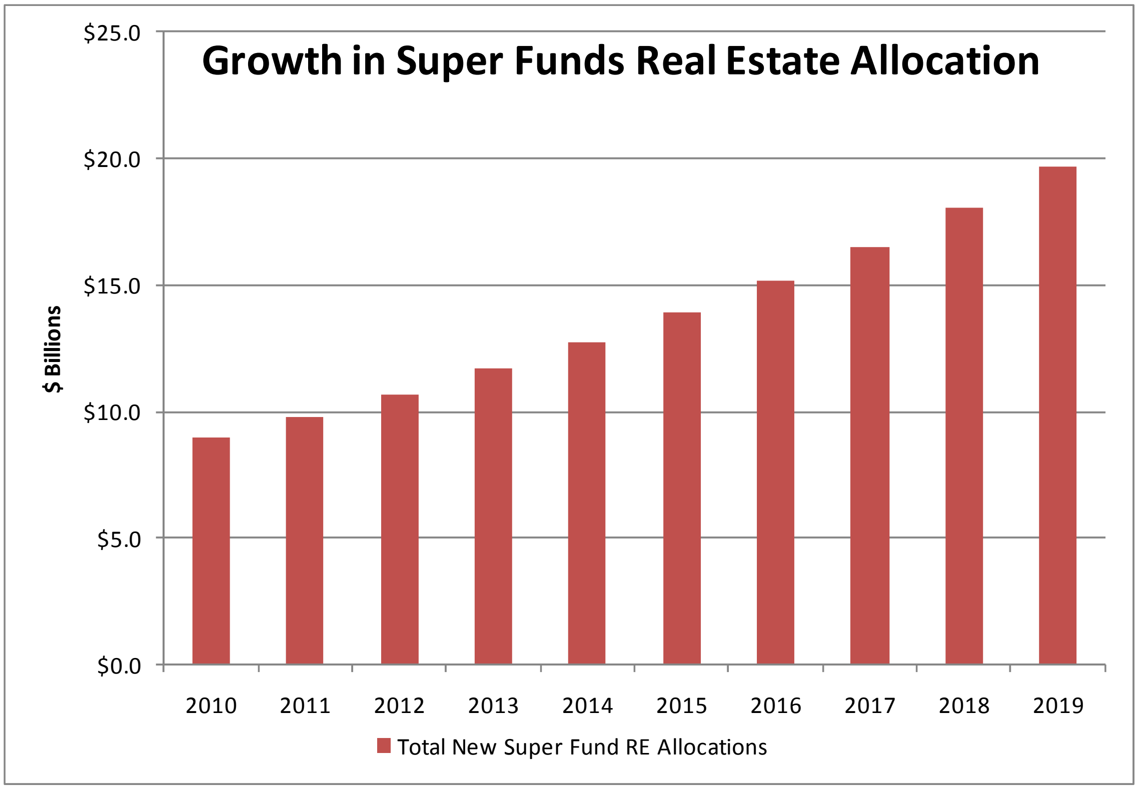
Source: APRA Annual Superannuation Reports 2005 - 2009

In order to forecast the demand from Australian superannuation funds for new real estate investments we have applied this average 9.2% allocation to the forecast growth in superannuation assets (see Exhibit 5).

Exhibit 5
Australian Superannuation Real Estate Allocation Forecasts

$ Billions	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Increase in Super Fund Assets	$97.7	$106.6	$116.3	$126.8	$138.4	$151.0	$164.7	$179.7	$196.1	$213.9
Real Estate Allocation	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%
Total New Super Fund RE Allocations	**$9.0**	**$9.8**	**$10.7**	**$11.7**	**$12.7**	**$13.9**	**$15.2**	**$16.5**	**$18.0**	**$19.7**

Source: DEXX&R Market Projections Report November 2009, APRA Annual Superannuation Reports 2005 – 2009, Quadrant Real Estate Advisors



Source: DEXX&R Market Projections Report November 2009, APRA Annual Superannuation Reports 2005 – 2009, Quadrant Real Estate Advisors

Based on the analysis above and assuming this 5-year average allocation of 9.2% remains constant going forward, Quadrant forecasts average per annum new super fund real estate allocations appear to be set to grow from approximately $9 billion per annum to approximately $20 billion per annum by 2019.

This is a significant amount of capital in an Australian real estate market context, so the question for super fund managers is - where is this asset allocation likely to be invested?

Real Estate Equity Investment Opportunities

As part of our ongoing analysis we have recently updated our market sizing of the Australian real estate investment universe including public and private markets and equity and debt investments. The size of the various components of the investment market is illustrated in Exhibit 6.

Exhibit 6

The Four Quadrant Australian Investment Universe December 2009

	Equity		**Debt**	
Private	Unlisted wholesale	62	Bank lending	44
	Unlisted retail	11	Mortgage trusts	12
			Mezzanine funds	2
	Total	**73**	**Total**	**58**
Public	LPTs / A-REIT's	42	CMBS	5
			Corporate Bonds	12
	Total	**42**	**Total**	**17**
Total		**115**		**75**

Sources: APRA, Westpac, Fitch, Property Investment Research, Deutsche, AFMA Standard & Poors, Mirvac, Mercer
Note: this data relates to Australian income producing investment grade real estate only and excludes offshore investments by REITs and wholesale funds, properties sub-$5.0 million in value, development projects, residential real estate, rural holdings, etc.

In attempting to forecast the growth of the real estate investment market in Australia we have adopted a growth rate based on research[8] that found that the growth in the universe of real estate assets in Australia over the long run approximates the change in GDP plus annual inflation (CPI).

The Reserve Bank of Australia (RBA)[9] forecasts GDP and CPI over the next 3 years to be 3.5% and 2.5% respectively. Based on these RBA forecasts we have adopted a growth rate of 6% in order to estimate the future annual growth in Australian real estate assets.

With the vast majority of super fund real estate allocations focussed on the equity component of the real estate capital stack, we have then applied this growth rate to the equity component of our four quadrant model above in order to forecast the growth in Australian domiciled equity investments in institutional grade real estate.

Based on our assumptions, Quadrant forecasts available investment opportunity for real estate equity (listed and unlisted) in Australia over the next 10 years is as illustrated in Exhibit 7.

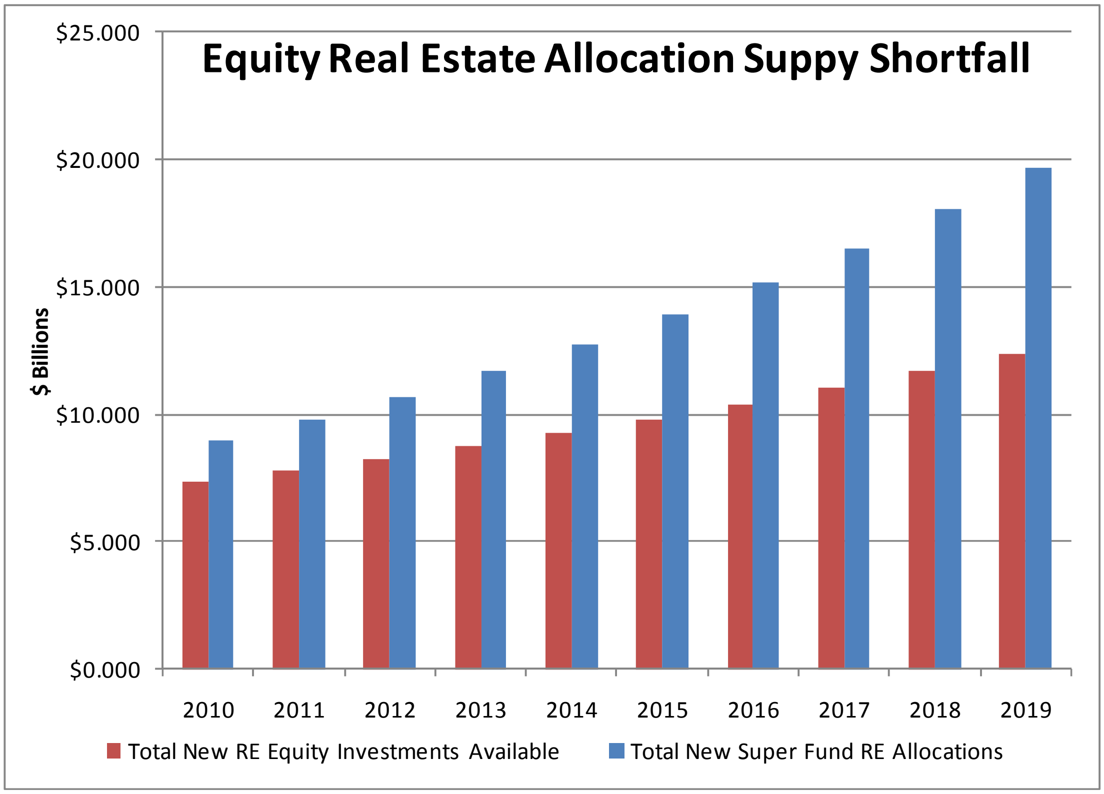
Exhibit 7

Australian Superannuation Real Estate Allocation Equity Investment Shortfall

$ Billions	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Cumulative
Total New Super Fund RE Allocations	$9.0	$9.8	$10.7	$11.7	$12.7	$13.9	$15.2	$16.5	$18.0	$19.7	**$137.2**
Total New RE Equity Investments Available	$7.3	$7.8	$8.2	$8.7	$9.3	$9.8	$10.4	$11.0	$11.7	$12.4	**$96.6**
Total Shortfall	**-$1.7**	**-$2.0**	**-$2.5**	**-$3.0**	**-$3.4**	**-$4.1**	**-$4.8**	**-$5.5**	**-$6.3**	**-$7.3**	**$40.6**

Source: Quadrant Real Estate Advisors

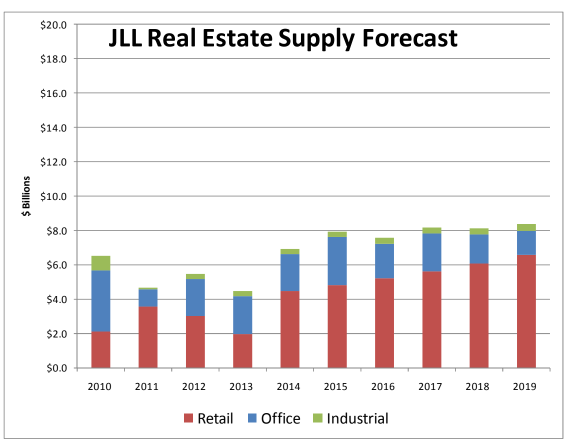
8 Higgins, D. & DeValence, G. 2000, Australian business cycles and commercial property markets: some evidence over four decades, Pacific Rim Property Research Journal, Vol. 6. No.1, p 57-66.
9 RBA Statement on Monetary Policy May 2010

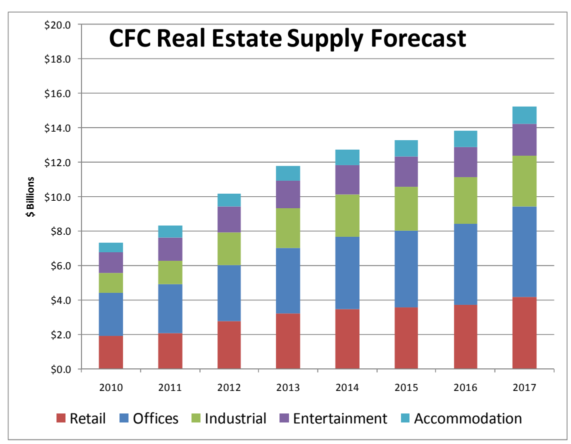


Source: Quadrant Real Estate Advisors

In addition, by way of a check method we have attempted to calculate the size of the new real estate equity investment universe in Australia and the corresponding supply gap by using figures provided by the Construction Forecasting Council of Australia (CFC) and JLL Research forecasts of new supply (note CFC data is only available until 2017) as shown in Exhibit 8.

Exhibit 8
Australian Real Estate Equity Supply 2010 - 2019





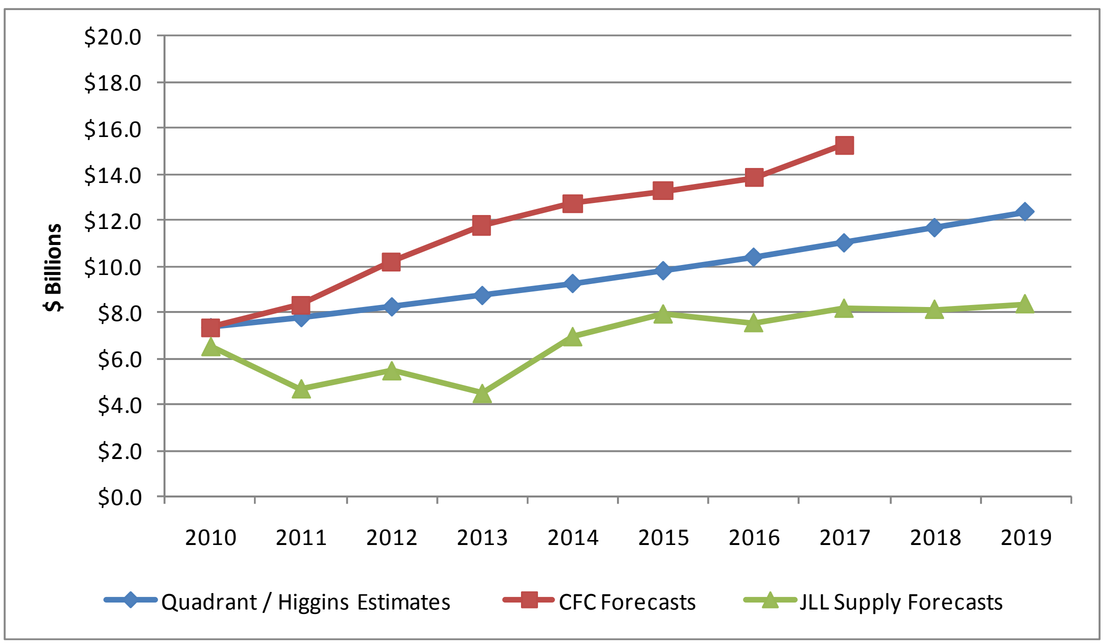
Source: JLL, Research, Construction Forecasting Council of Australia, Quadrant Real Estate Advisors

The JLL data is based on projects under construction, in planning or proposed. This has then been supplemented with average construction rates for 2013 and beyond. JLL only forecast supply additions on a square metre basis. In order to convert this to a dollar value we have applied IPD value rates per square metre for the various asset types and markets and adjusted the resultant overall values by average leverage levels to determine the relevant equity component. Given the difficulties in identifying all future new individual investment grade assets we believe these numbers may understate the levels of new investment available.

The Construction Forecasting Council forecasts are based on a combination of economic modelling and project planning and approvals data. We have then adjusted these figures by average leverage levels to determine the relevant equity component. This data includes all non-residential construction in the categories of retail, office, industrial, entertainment and accommodation and is not restricted to investment grade ($5 million and above) assets. Accordingly, we believe these figures may be overstating the potential new investment universe of interest to us, i.e. institutional grade.

A comparison of the three different forecasting methods used is illustrated in Exhibit 9.

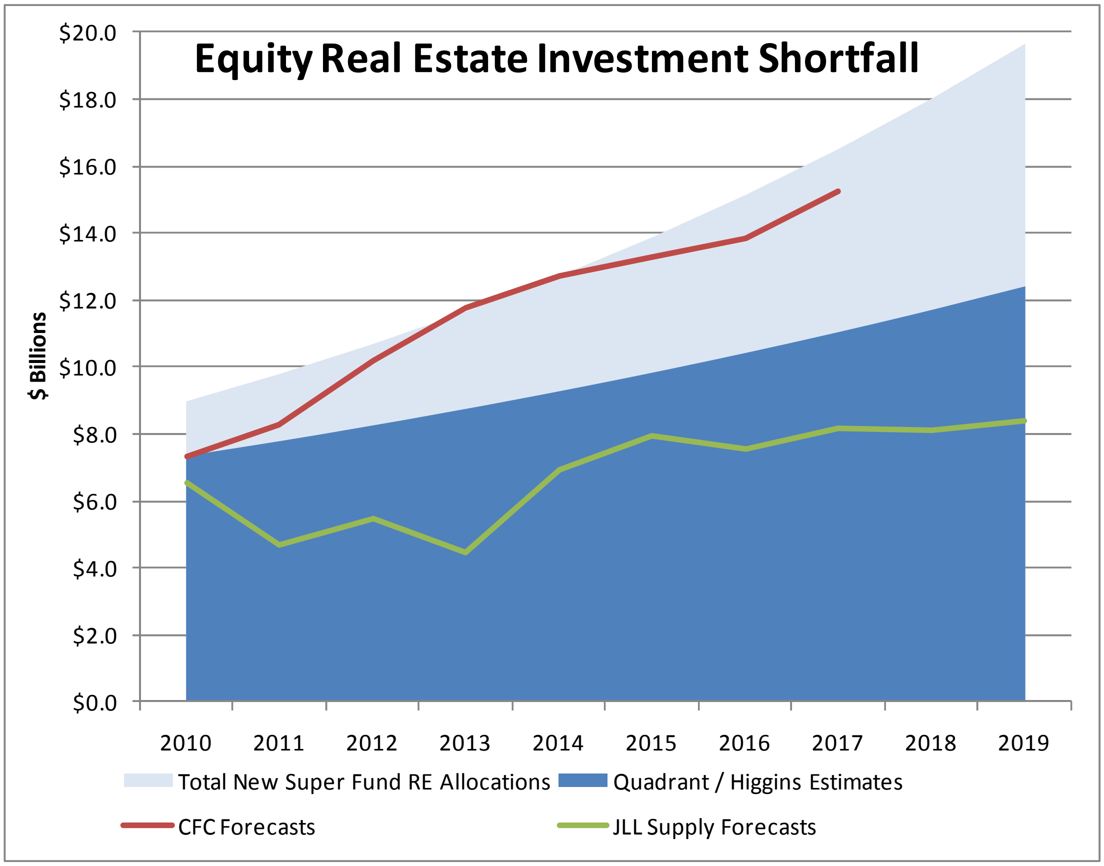
Exhibit 9
Comparison of Real Estate Equity Supply Forecasts



As illustrated in Exhibit 9 (above), the equity real estate supply numbers produced by using the Quadrant/Higgins growth forecast generally represents the mid-point of the three forecasting methodologies. A comparison of the resultant real estate allocation and real estate equity investment supply gap using the three supply forecasting methods is illustrated in Exhibit 10.

Exhibit 10

Australian Superannuation Real Estate Allocation Equity Investment Shortfall



Based on our figures as shown above, Quadrant forecasts the current $1.7 billion supply "gap" to grow to be a $7.3 billion per annum gap within the next 10 years (as shown in Exhibit 7).

As an aside, for the six months to 30 June 2010, Australian listed property companies and Australian wholesale funds have raised a combined $3.8 billion of new real estate equity, however, a portion of these funds will be directed offshore or used for repayment of debt and the replacing of existing equity. The $3.8 billion is comprised of approximately $1.4[10] billion of new listed property company equity (including $806 million raised by Lend Lease Group) and the Australian wholesale funds have raised approximately $2.4[11] billion of new equity.

It must be noted, that the figures in this analysis assume that all new institutional grade real estate assets are available for investment to Australian super funds and ignores competition from non-superannuation investors, private investors and the impact of foreign investment. Accordingly, depending on the quantum of real estate investment undertaken by these non-superannuation fund investors, this forecast supply gap could be significantly larger.

For a long time superannuation fund investors and managers have invested in real estate as part of their asset allocation because it provides the following attributes:

[10] ASX Company Announcements
[11] JP Morgan Australian Equity Research 5 July 2010

- Relatively stable returns from long dated contractual cash flows
- High current income
- Diversification to stocks and bonds
- Hedge against inflation
- Long term sustainable demand
- Inefficient markets allow superior relative value opportunities

To date a large proportion of real estate investing in Australia has focused on the equity real estate component only, however, going forward we believe investors who are seeking stable income returns with capital protection should be considering alternative investment options. If the forecast real estate investment funds were all to flow into Australian real estate equity investments it would have the effect of bidding up prices until the return on assets became unattractive.

Possible Investments

This significant forecast undersupply of Australian real estate equity investments means that super funds in Australia will need to look beyond the traditional listed and unlisted real estate equity investments and source a broader range of investment products in order to meet their real estate allocation objectives.

There are a number of strategies that have already been implemented or are currently being investigated by super fund managers to fill their existing real estate allocations including:

- expanding offshore strategies,
- social infrastructure asset classes (health, education, child-care, retirement, etc),
- residential investment and/or development (either social or affordable housing or the for-rent multi-family market similar to that in the US), and,
- commercial real estate debt, (i.e. secured against income producing assets).

It is also likely that equity investors may elect to reduce the level of leverage currently used in investment vehicles, thus increasing the scope of equity investment available. This would of course have the effect of diluting equity returns but may assist in dampening volatility.

The advantages and disadvantages of these investment strategies are outlined below.

Expanding Offshore strategies:

Advantages

- Access to deep, liquid markets
- Vast array of asset selection opportunities
- Significant research available

Disadvantages

- Cross-border manager selection and operational management
- Taxation issues relating to direct equity investment
- Currency strategy and hedging costs
- Ability to compete with local investors
- Limited local market knowledge

Social infrastructure investment classes

Advantages

- Vast array of asset selection opportunities
- Some government income support
- Local domestic assets

Disadvantages

- Need to understand operating businesses
- Largely disaggregated markets
- Liquidity issues (pricing duration of assets)
- Lack of performance track record
- Limited number of competent investment managers

Residential (income producing)

Advantages

- Vast array of asset selection opportunities
- Deep, liquid market
- Local domestic assets

Disadvantages

- Largely disaggregated markets
- Super funds unable to undertake development directly
- Development risk
- Low direct income returns for existing housing
- Lack of research for investors and asset consultants
- Lacks high/stable income attributes assumed for mixed asset portfolio modelling

Real Estate Debt

Advantages

- Local domestic assets
- Vast array of asset selection opportunities
- High income, capital preservation investments
- Large, durable investment universe
- Secured by known asset types

Disadvantages

- Lack of understanding by investors and asset consultants
- Liquidity issues
- Limited number of competent investment managers

Conclusions

The high forecast growth of compulsory superannuation investment in Australia will be a major issue for super fund investors, particularly in relation to their real estate allocation. This is due to our forecast undersupply of domestic equity investment opportunities that would be the same as the real estate equity investments that super fund managers largely invest in today.

The challenge of prudently investing this real estate allocation is set to become increasingly difficult as Quadrant forecasts the current $1.7 billion equity investment supply "gap" to grow to be a $7.3 billion per annum gap within the next 10 years (as shown in Exhibit 7).

We believe that this forecast potential undersupply of Australian real estate equity investments means that Super Funds should broaden their awareness of alternative real estate investments (rather than the current focus on domestic real estate equity investment) in order to meet their real estate allocation objectives.

Some of these alternative strategies include offshore strategies, non-traditional asset classes (health, education, child-care, etc), residential assets and commercial real estate debt.

The advantages and disadvantages of these various alternative strategies are many and vary greatly between investment types, however, we are of the view that the investment by Australian super funds into the domestic real estate debt space is an attractive, logical and inevitable step.

To underscore the opportunity in domestic commercial real estate debt our ongoing research[12] into the Australian commercial real estate capital markets has identified the emerging gap in the real estate equity opportunity set is more than offset by a corresponding multibillion dollar gap in the availability of commercial real estate debt. The opportunity is therefore for Institutional investors, including superannuation funds, to achieve excellent risk adjusted returns from like underlying assets with capital being deployed more conservatively up the capital stack. If Australian superannuation funds were to capture 37% of the forecasted annual growth in the Australian institutional grade debt market, this would solve for the entire predicted investment shortfall of $1.7 billion.

For further information

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Important Notes

[12] "The Australian commercial real estate capital markets – is there an emerging gap?" Published at CIE Major Markets Players Conference September 2009 and "The Australian Real Estate Capital Markets" published at CIE Real Estate Conference May 2010.