

# Sizing the Australian Property Investment Market

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## Abstract

As there is limited information on the size of the Australian property investment market, it is often overlooked as a significant consideration in major property asset allocation strategies. To overcome this, statistical models based on key economic determinants and aggregated property data can provide a good representation of the Australian property investment market. In acknowledging definition issues and property market assumptions, the estimated December 2004 size of the Australian property investment market on available data is AU\$354 billion with the institutions directly owning approximately AU\$116 billion of core (office, retail and industrial) property and AU\$8 billion of non-core property.

In identifying the Australian property investment market size and institutional coverage, the challenge is to improve the level of quality property market information. Further research on measuring the Australian property investment market could have significant practical implications, both to facilitate non-core property sector opportunities to form part of institutions property portfolios and ultimately to improve the quality of commercial property investment decisions. This will make the Australian property investment market more attractive as a competing asset class and appealing to overseas institutional investors.

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## Introduction

Many commercial property investment decisions lead to major allocation of resources (land, labour and capital). It is therefore critical as part of the decision making process to have good property market knowledge. More often, there is a contrast with well documented risk, return and liquidity information to commonly

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less-than-accurate knowledge of the actual property investment market size. On a national level, this places the property investment community at a distinct disadvantage compared to the better informed alternative bond and equity asset classes.

In the past, these property investment inefficiencies have restricted many cross-border transactions to forays into another country's property markets by predominantly cyclical entrepreneurial investors. On sustained capital market growth, new global institutional investors with multi-billion property portfolios have embraced investment strategies based on diversification. They allocate capital to overseas property markets in search of better return opportunities. An allocation base favoured by large global institutions is to use the property market size as the platform to an international property investment strategy.

In addition, knowing the size of the property market can be a valuable local property community tool, for example:

- (i) The size of the property investment universe can be compared to the known invested property market as owned by institutions etc. The difference between the two figures would indicate the estimated value of government, private and corporate-owned property. This represents a major source of future property investment for institutional investors.
- (ii) An accurate record of property market size (in dollar terms) can form a key measure of a country's national wealth, alongside demonstrating the role of property as a defined component of the domestic investment universe.
- (iii) Knowing the value of the Australian property investment market could have an advocacy role for the property industry in examining government fiscal policies, such as to illustrate the revenue stream

derived from property taxes imposed on investment grade properties.

Sizing the Australian property investment market is a challenging task, as some property sectors and building grades definitions are unclear. In acknowledging the issues and applying broad classifications, statistical models can estimate Australian property investment market size with relationship to key economic determinants, aggregated core property data and known institutionally owned property. In applying local and overseas benchmarks, the size and structure of the property investment market can be verified.

Following this introduction, Section three examines the theory and models to measure the property market size. Section four details the property market measurements, for Section five to highlight the applications for the Australian property investment industry. The final section provides concluding comments to the research.

## Theory

In acknowledging the significance to assess the size of the Australian property investment market, many Australian property professionals depend on subjective evidence to determine overall property market size. The approximate value placed on a speculative view is in contrast to the portrayed sophisticated approach to property investment in the Australian capital markets. The growth in capital markets with international property funds has refocused global property research to estimate the size of countries commercial property markets. Gathering this information on developed countries can lead to an estimate of the worldwide commercial property universe. This in turn can provide a platform to compete with the globalised equity and bond markets.

An indirect approach is necessary to arrive at a value of a nation's property investment market as there is traditionally no central trading place, a variety of ownership structures and a range of different building categories structure. To estimate the value of a country's property investment market there are various models that can be considered. These need to be articulated and measured coherently to offer an assessment of a country's property investment market size.

As property is recognised as an important factor of production, the property investment market of a country can relate to that nation's economic activity (GDP). On USA estimates, Liang and McIntosh (1999) constructed a model for developed countries based on the ratio of commercial property to GDP data. For less developed countries (those with a GDP per capita below US\$20,000) having a smaller commercial property market, a formula based on GDP per capita was added. The Liang and McIntosh (1999) equation is as follows:

$$\text{Real Estate for Country}_i = \text{GDP}_i \times (\text{US Real Estate to GDP Ratio}) \times (\text{GDH}_i / \text{GDH}_{\text{US}})^{1/3} \quad (1)$$

The formula explains real estate as the value of higher-graded commercial real estate,  $\text{GDP}_i$  and  $\text{GDH}_i$  are, respectively, GDP and GDP per

capita for Country<sub>i</sub>. To smooth out volatility, Liang and Gordon (2003) applied a four year weighted average to GDP and GDP per capita figures.

The size of the Australia property investment market can also be extrapolated by measuring the "core" and "non-core" property sector. Core property embraces office, retail and industrial markets with non-core representing all other property types, including hotels and health-care facilities etc. Non-core property that is excluded related to specialised property which has limited value outside the current use, for example: steelworks (Roulac 2003).

In the first instance, the core property sector floor areas can be estimated by examining the Property Council of Australia data on the main Australian office markets and retail shopping centres. In Australia, predominately the institutions invest in metropolitan locations and outside these areas there is limited investment grade property and reporting thereof. Details on collection, methodology and reporting process can be sourced from the regular Property Council publications (Property Council of Australia 2005a,b).

Measuring the Australian industrial floor area needs a separate approach, as property data is limited to specific locations in major metropolitan regions. To overcome this, Higgins (2005) calculated the industrial floor areas on adjusted ABS 2001 industrial employment census data and 1997 UK industrial workplace density figures. The industrial floor area estimates should

## Many Australian property professionals depend on subjective evidence to determine overall property market size

Table 1: Summary of Australian Property Funds Under Management

	No. of Funds	No. of Properties	Total Assets AU\$ m	Net Assets AU\$ m	No. of Investors
Securitized Property					
Listed Property Trusts	50	1,719	103,800	62,500	619,500
Property Securities Funds	108	116	24,900	24,800	102,000
Debt Market					
Mortgage Funds/Schemes	130	-	23,700	23,700	278,000
Unlisted Indirect Property					
Wholesale Property Funds	83	611	42,200	36,600	8,400
Unlisted Retail Funds	448	1,176	14,600	7,900	127,000
Property Investment Scheme	8	9	100	50	1,100
<b>Totals</b>	<b>827</b>	<b>3,631</b>	<b>209,300</b>	<b>155,550</b>	<b>1,136,000</b>

Source: PIR 2004

be viewed with caution, as a number of assumptions are made in this approach and the floor area rate is dated and from the UK.

On estimating the core property sector floor areas, the Property Council of Australia benchmark quarterly Investment Performance Index series (Property Council of Australia 2005c) can provide the average capital value per square metre for each core property sector based on collected property data from the respective property indices. The aggregated value of core property sectors can be determined on the following equation:

#### Core Property

$$= \text{Floor Area} \times \left( \frac{\text{Total value of index}}{\text{Total floor area of index}} \right) \text{ Sector Values} \quad (2)$$

The relationship of core and non-core investment property can be based on Roulac (2003) corporate real estate research, which suggests that 40% of aggregated corporate real estate, is in core business real estate and would be appropriate for institutional investors. Similarly, Higgins and Vamvakoulis (2004) unpublished report on the Parramatta local government area recorded institutional ownership of investment grade property of approximately 44% of the recorded property investment market.

The Australian investment market value can also be assessed by examining property owned by institutions. For the past four years, Property Investment Research (PIR) has published their annual Australian Property Funds Industry Survey which provides the most detailed information on Australian property funds under management. Table 1 provides a summary of the PIR (2004) survey of property investment vehicles.

Table 1 illustrates the composition of the Australian property fund industry. Generally, as Property Securities Funds and Mortgage Funds/Schemes are financial property instruments and are backed by the underlying property investment, the total property assets are in the region of AU\$160billion. On itemising and omitting both the overseas owned properties and development/residential properties, the core and non-core property sectors can be revealed. As there is limited publicly available information on unlisted diversified property funds, the allocation to the property sectors is based on the aggregated major diversified Listed Property Trusts distribution (less the overseas and property development allocations).

**Table 2: Estimated Size of the Australian Property Investment Market**

	GDP AU\$B	GDP per Capita AU\$	Property AU\$B
Australian Property Investment Market	838	41,600	354

Source: Author

## The Australian investment market value can also be assessed by examining property owned by institutions

The Australian investment market owned by institutions can be compared to the property investment market, as according to overseas research (Henderson Investors 2000) there are two main estimates, one from the UK (Callender and Key, 1996) and the other from the US (PriceWaterhouseCoopers and Lend Lease 1999). The research implies grossing up the size of the invested institutional property market by around two and a half to three times.

### Information

The selected property models measure different parts of the Australian property investment market. There are assumptions made in the calculations and so reasonable caution should be undertaken with this study. Nevertheless, on

the available data, the outcomes of the individual models can be analysed in conjunction with relevant local and overseas research into the relationship between the different property investment market components.

#### Economic Activity Model

The size of the Australian property investment market can be based on recorded economic activity. As at December 2004, Table 2 details the calculated Australian property investment market using a GDP-based approach.

Table 2 provides an estimated Australian property investment market of AU\$354 billion. The economic activity formula can also demonstrate the movement in the property universe over time. For the year to December 2004, the Australian property investment market grew by 7%, with a long term 10 year annual growth rate of around 6%.

This approach has created considerable interest, as the size of the global property investment market is now a relatively straightforward calculation. The most recent report by Liang and Gordon (2003) calculated on 2002 GDP values, estimated a global property investment universe of US\$12,479 billion. Allowing for two years of world growth, the Australian property investment market represents less than 2% of the global property investment market.

Table 3 shows Australia's investment grade property market to that of the global property investment universe.

**Table 3: Global Distribution of Investment Grade Property**

	Real Estate (US\$B)	% of Total
Australiana (inc New Zealand)	192	2
Asia (inc Japan)	2,749	22
Europe	4,233	34
North America	5,043	40
South America	262	2
<b>Totals</b>	<b>12,479</b>	<b>100</b>

Source: Liang and Gordon 2003

## Core Property Sector Model

As at December 2004, Table 4 exhibits the size of Australian core property investment market based on known office and retail property data and assessed industrial property data.

Table 4 shows the Australian core property investment market value at AU\$170 billion and by sector represents, office 39%, retail 38% and industrial 23%. By comparison, the industrial

property sector occupies the most space with 54% of the core property sector floor area.

The recorded AU\$170 billion core Australian property market represents approximately 48% of the GDP based AU\$354 billion Australian property investment universe. This appears slightly high compared to the US estimated 40% market coverage (Roulac 2003). A case could be made that the Australian property investment market is more mature and defined

in concentrated locations. This would equate to better property data market coverage.

## Institutional Property Investment Model

On the analysis of the PIR (2004) survey data, the size of the Australian core and non-core property market owned by institutions can be determined and is shown in Table 5.

Table 5 illustrates the significant institutional ownership of the core Australian property sector. Of the AU\$116 billion, institutions ownership comprises: office 37%, retail 50% and industrial 13%. The institutions preference to owning shopping centres can relate to key retail characteristics, for example: generally consistent consumer demand, anchor tenants long lease structures and limited new supply opportunities. Alternatively, the AU\$8 billion of non-core property owned by institutions is relatively low, being less than 6% of the recorded institutional ownership of Australian property.

In subdividing the Australian property owned by institutions into core and non-core sectors, the overseas components represented AU\$27 billion being approximately 17% of Australian institutionally owned property. Similarly, about AU\$7 billion (5%) of Australian institutionally owned property is allocated to property development and residential projects. This can indicate how institutions scope new property opportunities within the recognised risk adverse label that the capital markets have placed on property as a competing asset class.

The institutionally owned property in Table 5 represents about 35% of the estimates Australian property investment market. This scaling factor of just below three times agrees with Henderson Investors (2000) paper detailing equivalent UK and US benchmarks. However the relationship between different country benchmarks needs to be viewed with caution, as methodologies and time periods may vary.

## Application

As modelling the Australian property investment market depends on different measures of the economy and property market the outcomes can vary considerable. In acknowledging some key assumptions the findings, on available data from the selected three models appear to come together to provide a good

**Table 4: Australian Core Property Sector Investment Market**

Core Property Sector	Sqm	Rate \$/sqm	Total Value AU\$B
<b>Office</b>			
Prime and grade B office	14,627,000	3,500 – 5,500	67
<b>Retail</b>			
Super regional to bulky goods	15,992,000	2,300 – 6,500	64
<b>Industrial</b>			
Investment grade industrial property	35,756,000	800 – 1,900	39
<b>Totals</b>	<b>66,405,000</b>		<b>170</b>

Source: PCA 2005a,b,c and author

**Table 5: Summary of Australian Institutionally Owned Property**

	No. of Properties	Total Value AU\$B
<b>Core Property Sector</b>		
Office Investment Market	874	43
Retail Investment Market	983	58
Industrial Investment Market	535	15
<b>Sub Total</b>	<b>2,391</b>	<b>116</b>
<b>Non Core Property Sector</b>	<b>622</b>	<b>8</b>
<b>Totals</b>	<b>3,013</b>	<b>124</b>

Source: PIR 2004 and author

**Table 6: Summary of the Australian Property Investment Market**

	Property Investment Market Size Total Value AU\$B	Institutionally Owned Property Total Value AU\$B	Market Coverage by Institutional Investors
<b>Core Property Sector</b>			
Office Investment Market	67	43	64%
Retail Investment Market	64	58	91%
Industrial Investment Market	39	15	38%
<b>Sub Total</b>	<b>170</b>	<b>116</b>	<b>68%</b>
<b>Non Core Property Sector</b>	<b>184</b>	<b>8</b>	<b>4%</b>
<b>Totals</b>	<b>354</b>	<b>124</b>	<b>35%</b>

Source: Author

picture of the Australian property investment market. This is outlined in Table 6.

Table 6 outlines the size and the institutional ownership of the Australian property investment market. The institutional AU\$116 billion exposure to the core property sector is dominated by the retail sector (shopping centres). The retail market coverage by institutions would suggest the growth opportunities would centre more on retail transactions between institutions. Alternatively, for institutional investors, a major source of future industrial property investment would be from non-institutional investors, for example: corporate-owned property.

## The Australian property ownership structure can be compared to the recent expansion of the Australian property investment industry

The Australian property ownership structure can be compared to the recent expansion of the Australian property investment industry. Since the first PIR Australian Property Funds Industry survey in 2000, total funds under management have grown on average by 20% annually which contrast to the previously detailed annual 6% growth of the Australian property investment market. As the invested property market expands, leading institutional investors have continued to look for new opportunities and have increasingly purchased core sector property outside Australia. This strategy can provide new prospects to associated risk adverse property policies (PIR 2004).

In identifying the core sector property growth outside Australia, the contrast in the level of institutional ownership between core and non-

core property is considerable, with institutions allocating less than 4% to non-core property. Limited institutional investment may relate less to the opportunities and more to the property industry understanding of the ownership structures and appraisal techniques for alternative property asset classes. Furthermore, the challenge is that the key financial characteristics may not conform to the traditional profile and values displayed in core property assets. New research in identifying and reporting on non-core property could provide a platform for increased investment in alternative property sectors.

Alongside detailing the Australian property investment market structure, comparisons can be made to the size of alternative local and global asset classes. For example, as at December 2004 the market capitalisation of the Australian stockmarket was AU\$991 billion (ASX 2005). An international asset allocation approach could be based on the size of different asset markets.

## Conclusion

There are major benefits in knowing the size of a country's property investment market. It is an important element in global property asset allocation and can identify institutional investors property market coverage alongside identifying current and future property investment opportunities. In acknowledging issues with property definitions and applying broad classifications, statistical models can measure the components that form the Australian property investment market.

On available data the estimated size of the Australian property investment market is AU\$354 billion, with core and non-core property sector in the region of AU\$170 billion and AU\$184 billion respectively. The institutions directly own approximately AU\$124 billion of Australian investment grade property with the institutions accounting for over 90% of the retail investment market compared to less than 40% for the industrial property market.

The contrast in the level of institutional ownership between core and non-core property is considerable, with institutions allocating less than 5% to non-core property. The challenge for the Australian institutional investors is to proactively source properties that may be held

by passive owners. In addition, the property finance characteristics may need to be re-structured to meet capital market demands. On acceptance, non-core property asset sectors will increasingly form part of institutional property portfolios.

More research on the property investment market size and structure could have significant practical implications for the Australian property investment industry. As demonstrating improved Australian property market knowledge could attract overseas investment and facilitate new non-core property submarket sectors. In identifying the Australian property market size and institutional coverage, this study provides a platform for further research on measuring the Australian property investment market.

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