

Equities

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The City View – AREITs Issue 4

Is the Valuation of Office Property Flawed?

■ Industry Overview

- **Valuations, True Cash Earnings and Growth Impact on REITs** – In this edition we look at the valuation process for office buildings, with and without assumptions of perpetual capex requirements. We attempt to determine the true cash earnings of an office building, and address the impact of potential growth in both face and effective rents on listed REITs.
- **Quoted Office Yields Are Overstated by c.210bp** – A typical A-Grade office building in Sydney capitalized at 7.25% is actually deriving a true cash yield some 210bp lower after allowing for maintenance and leasing capex. As such yields for commercial property are generally overstated.
- **Low Yields Are Fine, as Long as Growth Lifts IRRs to Appropriate Levels** – In our view, over 5% net face rental growth pa is required over a 10-year cash flow to justify a 9% IRR. Based on historical 'through the cycle' growth numbers, this appears excessive, given that net face rental growth has only averaged c.2% pa over the past 25 years in Sydney CBD, with zero growth on a net effective basis.
- **There Are Windows of Strong Growth, However** – Over the past 25 years there have been four periods of above-average growth, being '88/89 with annualized growth of over 20%, '95-98 with growth of 5.1%, '99-01 with growth of 10.1%, and 2005-2008 with growth of 10.3%. This would imply that attempts to time the market may be appropriate, although we note that REITs rarely do this to a meaningful degree.
- **Strong Market Rental Growth, Benign Portfolio Growth** – While market expectations for rental growth are currently strong, we estimate that portfolio income growth is likely to be materially lower (see Figure 11 and Figure 12). In addition, the analysis highlights that income growth is highly dependent on the Sydney CBD, given it contributes 77% of FY12-13 expected rental growth, see Figure 9.
- **Cyclical Upswing Keeps us Positive on Office Markets** – Despite the low cash yields offered by office assets, we remain positive given the potential for above average rental growth through 2012 and 2013 to be reflected in NTAs and REIT unit prices.

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Is the Valuation of Office Properties Flawed?

The three most common questions that are asked regarding office property are: 1) what are the underlying cash earnings?, 2) why is capex not capitalized in perpetuity in the valuation process?, and 3) isn't growth always overstated? The treatment of capex – both maintenance and incentive – is, in our view, the key variable in office given it is opaque and misunderstood.

In this edition we look at the valuation process for office buildings, with and without assumptions of perpetual capex requirements. We attempt to determine the true cash earnings of an office building, and address the impact of potential growth in both face and effective rents on listed REITs.

We have included a glossary of key office market terminology in Appendix A.

The Capitalization Approach for Office Buildings

The valuation of commercial property is generally undertaken with regard to both the capitalization of passing net income and the discounted cash flow approach.

The process of the traditional capitalization approach is summarized as follows:

- Determine a fully leased net face rent. Net face is the rent after deducting outgoings and excluding incentives. It includes the rent that would be achieved on space that is currently vacant.
- Divide the fully leased net face rent by the required yield to derive a capitalized value.
- Deduct from the capitalized value immediate capex required to lease the existing vacant space. This includes leasing incentives, capex requirements, rent free period until the space is anticipated to be occupied and leasing agents fees.
- Deduct leasing up allowance for forthcoming vacancies. Generally this would capture future expiries where the space is expected to be vacated or simply any potential vacancies over the forward 24-36 month period. Adjustments are again made for leasing incentives, capex requirements, rent free period and leasing agent's fees.

Where the argument arises in the valuation process is the treatment of maintenance and incentive capex

Where the argument arises is that maintenance and incentive capex are ongoing costs and should be included in perpetuity. We tend to agree for two main reasons.

- First, the **capital intensive nature of office buildings** requires a considerable amount of maintenance capex on an ongoing basis that is not necessarily recovered from tenants. As a rule of thumb, ~5% of capital value over a 10-year period is generally allowed for maintenance capex.
- Second, **incentives are a structural part of the Australian office market**. As an example, prime Sydney CBD office incentives have averaged just over 20% since 1987 and 18.3% over the past 10 years. As such it is reasonable to assume that incentive capex will remain in some form in the foreseeable future (note the exception to this rule is in periods of severe undersupply such as Perth in the two year period to 2008).

Sydney CBD office incentives have averaged just over 20% since 1987 and 18.3% over the past 10 years

Capitalizing true cash earnings rather than face rents results in a valuation some 22% lower

Figure 2 below we complete a hypothetical valuation of a typical A-grade office building based on the conventional approach of capitalizing face rents. Key assumptions are listed in Figure 1. We model this scenario on a typical Sydney A Grade building with specific assumptions including vacancy of 8%, current incentives of 25% (versus a through-the-cycle level of 15%) and a cap rate of 7.25%. This conventional valuation approach derives a value of \$275m, or just over \$9,200 psm.

Using our alternative approach, we capitalize effective rents with an ongoing allowance for maintenance capex. Put another way, we capitalize what we estimate to be true cash earnings. In this example, instead of capitalising \$21m, we capitalize \$15.9m, with the difference of \$5.1m pa representing annual estimated maintenance capex of \$1.4m pa (50bp of capital value per annum, or \$45psm) and through the cycle incentive capex of \$3.7m pa.

The result of this approach is a valuation of \$214m, some 22% lower than the conventional approach above.

Figure 2: Conventional Capitalisation Approach

Valuation	Conventional Approach	Capex In Perpetuity
Current Passing Income	19,320,000	19,320,000
Add Recoverable Outgoings	3,312,000	3,312,000
Add Estimated Gross Rental Value on Vacant Space	1,968,000	1,968,000
Potential Gross Income Fully Let	24,600,000	24,600,000
Less Vacancy factor / ongoing capex requirements	-	5,065,234
	24,600,000	19,534,766
Less Total Outgoings	3,600,000	3,600,000
NET INCOME	21,000,000	15,934,766
CAPITALISED AT	7.25%	7.25%
CAPITALISED VALUE	289,655,172	219,789,880
Less Lease up Allowance for Existing Vacant Space	984,000	984,000
Less Agents Fees for existing vacant space	246,000	246,000
Less Incentive / Fitout Allowance for existing vacant space	3,444,000	-
Less loss of rent for future expiries	4,920,000	4,920,000
Less leasing agent Fees for future expiries	615,000	-
Less Capital Expenditure Allowance for future expiries	4,399,436	-
Adopted Valuation	275,046,736	213,639,880
	275,000,000	213,600,000

Source: Citi Investment Research and Analysis

Figure 1. Input Table

Building Area (sqm)	30,000
Net face rent psm (\$/sqm)	700
Outgoings (\$/psm)	120
Current Incentives	25.0%
Current Occupancy	92.0%
Perpetual Vacancy Factor	-
Current Market Capitalisation Rate	7.25%
Leasing Agents Fees (% of gross rent)	12.5%
Average Lease Term (yrs)	7
Capex (% Cap Value pa)	0.5%
(E) Incentives (thru cycle)	15.0%

Source: Citi Investment Research and Analysis

We would highlight that we do not believe that the direct property market is about to change the way it values commercial property. Our alternative approach is provided for illustrative purposes.

The contrasting results of the two approaches are detailed in Figure 3 below. As it stands today, the market would value this asset at \$275m. The press release would quote an initial yield of 6.92%, while the valuation for reporting purposes would quote \$275m and the 7.25% cap rate. We see this in itself as misleading, as these figures do not capture any capex in year one.

A 'true' sustainable cash yield would result in the initial yield being some 26% lower than what would be reported. Put another way, conventional pricing suggests a 19.7x cash multiple.

The "true" cash yield in year one would be a lower 6.42% pre acquisition costs, the difference being year one maintenance capex of \$1.36m.

However taking it a step further, a 'true' sustainable cash yield (based on the assumption of ongoing incentive capex requirements) would result in the initial yield falling to a low 5.1%, some 26% lower than what would be reported as the initial yield. Put another way the price represents a 19.7x multiple. Overall the way we should think about this is true yields are much lower than quoted yields.

The alternate valuation approach whereby capex is capitalized in perpetuity would result in a \$214m valuation, some 22% lower than the traditional approach. This results in a high 8.3% year one cash yield and an implied stabilized cash yield of 6.54%. However it is fair to say the yield on this "proper" approach doesn't really matter as you would not be able to buy anything at this price in market in any case.

Figure 3. Output of Capitalization Approaches

Metric	Conventional Approach	Capex In Perpetuity
INITIAL YIELD	6.92%	6.54%
EQUIVALENT INITIAL YIELD	7.25%	7.25%
INITIAL CASH YIELD (pre acquisition costs)	6.42%	8.27%
INITIAL CASH MULTIPLE	15.6x	12.1x
STABILISED IMPLIED CASH YIELD (pre acquisition costs)	5.08%	6.54%
STABILISED IMPLIED CASH MULTIPLE	19.7x	15.3x
RATE PER METRE OF NLA	\$9,168	\$7,120

Source: Citi Investment Research and Analysis

Definitions:

Initial Yield: net rent divided by capital value

Equivalent Initial yield: Net rent add expected rent on vacant space divided by capital value

Initial Cash Yield: Net rent less annual maintenance capex divided by capital value

True cash yield: net rent less annual maintenance and leasing incentive capex divided by capital value

Stabilized implied multiple: inverse of the true cash yield

Rental Growth: Justifying a Low Cash Yield?

Discounted Cash Flow Analysis and Appropriate IRRs

A low yield is fine, as long as there is sufficient growth

We don't believe it totally fair to take a view on what is an appropriate initial yield without understanding what level of growth may be achieved from the asset. For example, the 'cash' yield of 5.1% from the above scenario seems low, although this could be totally acceptable if growth enables an appropriate total return to be achieved.

As such, it is generally accepted that the DCF valuation approach is used in conjunction with the capitalization approach. Arguably, the DCF approach should have a greater weighting.

Given that growth rates are the other major driver of total returns, we turn to look at the historical growth rate of Sydney CBD office rents. Our time series, which starts in 1987, shows that net face rents have grown at a CAGR of just 2%, whilst net effective rents have not grown at all. Notably, this period includes the large run-up in rents in the late 1980s boom as well as the subsequent collapse of the early 1990s.

Net face rents in Sydney have only grown by 2% pa since 1987, and by 3.5% pa over the past 10 years.

Eliminating these years, and starting the analysis from the trough period in 1992 (net effective rent of only \$55psm, incorporating a 49% incentive) leads to a completely different outcome. Since 1992, face rental growth has averaged 4.2%pa, with net effective growth a strong 11.7% pa.

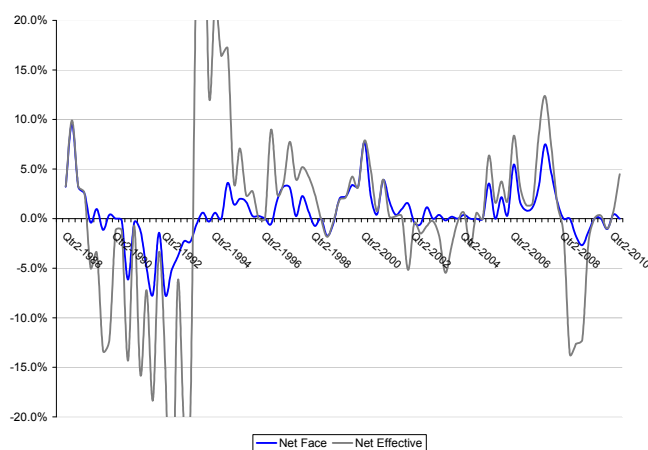
Alternately, looking at the past decade (incorporating the soft patch of the early 2000s), net face rents have grown at 3.5% pa, with zero net effective rental growth.

The dispersion in these outcomes highlights the cyclical nature of office performance, which makes it difficult to generalize about rental growth rates. We would highlight the following, however:

- Face rental growth has moved within a relatively tight band when compared to effective rental growth (see Figure 4). This reflects the high level of variability observed in incentives, with these typically acting as the “lever” driving changes in effective rents.
- There have, however, been periods of strong face and effective rental growth, as Figure 5 illustrates. Over the past 25 years, there have been 4 periods of growth, being ‘88/89, with annualized growth of over 20%, ‘95-98, with growth of 5.1%, ‘99-01 with growth of 10.1%, and 2005-2008 with growth of 10.3%.

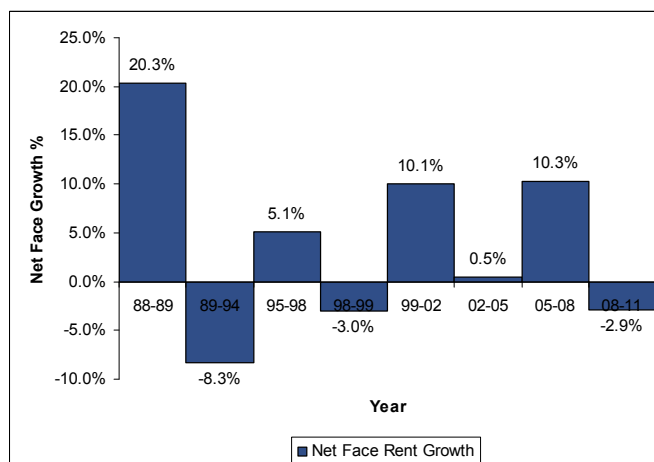
Over the past 25 years there have been four periods of growth above historical averages

Figure 4. Face and Effective Rental Growth – Prime Sydney CBD



Source: Citi Investment Research and Analysis

Figure 5. Face Rental Growth – Prime Sydney CBD



Source: Citi Investment Research and Analysis

Adopting the typical Sydney CBD office building (used in Figure 1 to Figure 3), and bearing in mind historical net rental growth, we complete a DCF analysis and assess the resultant IRRs. Specific assumptions include:

- A terminal cap rate 25bp higher than the initial cap rate;
- A staggered lease expiry profile, with 20% of the building expiring every 2 years; and
- Incentives fall to 15% then remain static throughout the 10 year cash flow period.

The difference between our scenarios is our net rental face growth.

In Figure 6 below we highlight the results of two discounted cash flows with outcomes and rationales summarized as follows:

To achieve 9% IRRs though the cycle would require growth of 5%

In scenario one we attempt to back into a c.9% IRR. Intuitively, an appropriate IRR is higher than the risk free rate and below long terms equity returns. Whilst subjective, a 9% IRR tends to be a level that attracts domestic institutional investors (albeit offshore buyers with a lower cost of capital may accept a lower IRR). The variable we change to set our IRR to c.9% is the rental growth rate. In this example, to achieve a 9% IRR requires just over 5% pa net face growth rate over the 10-year period.

Scenario two reflects growth at long term rates of just 2%. This results in a low IRR of 6%, a figure well below what an investor would be willing to accept. This would suggest that holding office assets through the cycle, based on current pricing and long term average rental growth rates, would not provide investors with appropriate returns.

Figure 6. Discounted Cash Flow

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Scenario 1: Valuation Approach										
Expected Base Rental Growth	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
Expiry Profile	8.0%	20.0%	0.0%	20.0%	0.0%	20.0%	0.0%	20.0%	0.0%	20.0%
Net Income before Cap. Ex.	18.76	18.79	23.26	20.81	25.76	23.04	28.52	25.52	31.58	28.26
Net Income after Cap. Ex.	15.28	11.88	21.81	13.28	24.24	14.85	26.93	16.59	29.91	18.52
Acquisition Price/Terminal Value (post Costs)	(289)									402.4
Running Yield	5.6%	4.3%	7.9%	4.8%	8.8%	5.4%	9.8%	6.0%	10.9%	6.7%
Internal Rate of Return	9.0%									
Scenario 2: Real IRR										
Expected Base Rental Growth	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Expiry Profile	8.0%	20.0%	0.0%	20.0%	0.0%	20.0%	0.0%	20.0%	0.0%	20.0%
Net Income before Cap. Ex.	18.76	18.21	21.85	18.94	22.72	19.70	23.64	20.49	24.59	21.32
Net Income after Cap. Ex.	15.28	11.44	20.40	11.87	21.21	12.33	22.04	12.80	22.92	13.28
Acquisition Price/Terminal Value (post Costs)	(289)									303.1
Running Yield	5.6%	4.2%	7.4%	4.3%	7.7%	4.5%	8.0%	4.7%	8.3%	4.8%
Internal Rate of Return	6.0%									

Source: Citi Investment Research and Analysis

In our view there are two main thematics to come from this analysis.

- True cash yields from commercial property are low, so strong growth is needed to achieve acceptable IRRs.
- Strong through the cycle growth seems unlikely if history is a useful guide.

Other factors to consider, despite not being directly included in our analysis, include the following:

- Given the lack of disclosure the level of capex required for an office building is debatable. This is even more topical today given the increased focus on NABERS and Green Star rating requirements.
- We assume the terminal value cap rate to be 25bp higher than the initial. There are important issues to consider here. Firstly, the level of capex assume may or may not be adequate to justify a yield just 25 bp higher for a building that is 10 years older. Secondly, our analysis is based on the assumption that the direct property market continues to value office buildings in the same way as it does today. Whilst there is no reason to believe that the valuation methodology will

True cash yields from commercial property are low, so strong growth is needed to achieve acceptable IRRs.

Strong through the cycle growth seems unlikely if history is a useful guide

change, the risk is that the market's approach *does* change. Even if there is only a small chance of the market moving to capitalize 'true cash' income, the impact on the expected terminal value, and hence the IRR, could be significant.

- We explicitly assume consistent face rental growth and stable incentives in our cash flow. This rarely happens, with office growth being very cyclical with significant movements in effective rents. Whilst a variety of scenarios could play out, a stable growth number provides a valid methodology for comparison purposes.
- We emphasize that this analysis is not a one fits all approach. For example, a new office building with a long lease duration would have lower capex requirements overall and especially in the early stages of the life cycle of the property. We note however that Australian office REITs have a low proportion of new buildings in their portfolios.
- In terms of incentive capex we make an assumption that this is all in the form of fitout contribution and hence a capital cost not capturing in property level income. However incentives can come in many forms such as rent free that would be captured in the underlying earnings.

Looking Ahead: Rental Growth and Earnings Implications

Given the discussion above on yields and growth we examine market expectations for rental growth and implications for office REITs.

Office Rental Growth – What is the Market Expecting?

We attempt to quantify the expected rental growth an office A-REIT may capture under a hypothetical scenario incorporating the following assumptions:

- The weighted exposure to each Australian geographic location is determined by averaging CPA, CQO, DXS and IOF's allocation to each market, see Figure 7.
- Per annum market effective rental growth inputs are derived by Jones Lang LaSalle forecasts, to 2015, as outlined in Figure 8. We believe these forecasts are representative of market expectations.

Direct office markets are expecting rental growth, what's this mean for A-REITs?

Figure 7. Geographic Exposure (Aust only)

Market	CPA	DXS	IOF	CQO
NSW	51%	68%	54%	64%
VIC	29%	13%	12%	22%
QLD	1%	7%	27%	9%
ACT	3%	2%	3%	2%
WA	8%	10%	4%	3%
SA	8%	-	-	-
Total	100.0%	100%	100.0%	100.0%

Source: CIRA, Company Data

Figure 8. Effective Rental Growth Forecasts by Market

Market	2012	2013	2014	2015
Syd	12%	17%	3%	-1%
Mel	10%	6%	3%	3%
Bris	2%	8%	11%	11%
ACT	-4%	4%	6%	6%
Perth	3%	4%	4%	3%
Adel	5%	1%	0%	0%
Average (Simple)	5%	7%	5%	4%

Source: Citi Investment Research and Analysis, Jones Lang LaSalle

Using the assumptions above Figure 9 outlines the quantum of market effective rental growth a hypothetical office A-REIT could expect to capture on a per annum basis through-out the forecasts period, assuming all expiring leases captured market growth, to 2015.

Expected rental growth in Sydney throughout 2012-13 should ultimately be the main driver of rental growth, representing 72% of FY12 growth.

Given the overweight exposure the sample set of office A-REITs maintain in the Sydney market, (see Figure 7), the analysis highlights Sydney will be the main contributor to earnings growth throughout the coming cycle, representing 77% of FY12-13 expected growth. Perhaps more interesting, although strong rental growth is forecast in other markets, in particular Melbourne, our analysis highlights these markets are unlikely to be meaningful contributors to rental/earnings growth under our hypothetical office A-REIT given the low relative low weightings, see Figure 9.

Figure 9. Hypothetical Office A-REIT Expected Effective Rental Growth (weighted by market)

Market	2012	2013	2014	2015	Average
Syd	7.2%	9.9%	1.9%	-0.8%	4.6%
Mel	2.4%	1.1%	0.6%	0.5%	1.2%
Bris	0.2%	0.9%	1.3%	1.3%	0.9%
ACT	-0.1%	0.1%	0.1%	0.1%	0.1%
Perth	0.2%	0.3%	0.2%	0.2%	0.2%
Adel	0.1%	0.0%	0.0%	0.0%	0.0%
Total	10.0%	12.2%	4.2%	1.3%	7.0%

Source: Citi Investment Research and Analysis, Jones Lang LaSalle

The Impact of Expected Rental Growth on Portfolios

It is widely expected rental growth will be generated via a combination of face rental growth and a reduction in incentive. However, without knowing what the exact mix is likely to be, we analyze the impact on portfolio income using a hypothetical office A-REIT under two scenarios: 1) effective rental growth is achieved via face rents, and 2) effective rental growth is achieved via a reduction in incentives, incorporating the following assumptions:

- Australian CBD office portfolio measuring 500K sqm with contracted fixed rental growth of 3.5% per annum.
- Effective rental growth assumptions as Figure 9 above.
- Starting net face rent of A\$519 per sqm, the national CBD market current weighted average net face rent.
- Starting market incentive of 19%, the national CBD market current weighted average.
- A lease expiry profile matching the average expiry profile of CPA, CQO, IOF and DXS Australian office portfolios.
- We use Funds from Operation (FFO) as the reporting methodology, given an increasing number of A-REITs are reporting earnings on this basis.

Scenario 1 - Rental Growth via Increase in Face Rents

We have maintained a market incentive of 19% throughout the forecast period, growing net face rents guided by rates as per Figure 9. The balance of the portfolios annual rent roll is grown at 3.5% per annum. Portfolio level income growth derived under scenario 1 is outlined in Figure 11, growing at an average of 3.9% throughout the forecast period, relative to the average market net effective rental growth of 7.0% (Figure 9).

Figure 10. Sector & Geographic Allocation

Company	Aus Office	US Office	Euro Office	Industrial
CPA	100%			
DXS	54%			46%
IOF	63%	18%	19%	
CQO	52%	45%	3%	

Source: CIRA, Company Data

Figure 11 illustrates portfolio income growth from increase in face rents.

Figure 11. Property Level Growth - Effective Rental Growth via Face Rents

	Base Year/2011	2012	2013	2014	2015
Portfolio Income (A\$m)	260	271	283	293	303
Portfolio Level Growth		4.1%	4.7%	3.6%	3.4%

Source: Citi Investment Research and Analysis

Scenario 2 - Rental Growth via Reduction in Incentives

Figure 13 illustrates portfolio income growth from a reduction in incentives.

We now run the same analysis as scenario 1, however, assume the effective rental growth is captured via a reduction in incentives, whilst maintaining face rents throughout the forecast period. Portfolio level growth derived under scenario 2 is outlined in Figure 12, growing at an average of 5.1% relative to the average market net effective rental growth of 7.0% (see Figure 9).

Figure 12. Property Level Growth – Effective Rental Growth via Reduction in Incentives

	Base Year/2011	2012	2013	2014	2015
Portfolio Income (A\$m)	235	244	256	271	287
Portfolio Level Growth		3.4%	4.9%	6.1%	5.9%

Source: Citi Investment Research and Analysis

Market Rental Growth vs. Portfolio Income Growth

Significant rental growth is expected in the Australian office market.

Australian CBD rental growth is expected to be quite strong over the medium term on an effective basis, as Figure 8 highlights. Analysis of the data does highlight that a significant proportion of the growth in 2012 and 2013 will be derived from the Sydney CBD, given the large weighting office A-REITs maintain in Sydney, see Figure 7 and Figure 9

Sydney will likely be the main driver of rental growth for office A-REITs.

With rental growth expected, we then considered the potential impact on a portfolio under a hypothetical A-REIT. However, not knowing what the ultimate combination of face rental growth or reduced incentives is likely to be, we analyzed portfolio income growth impacts under both. In addition, we have outlined the expected portfolio income growth including amortization which is effectively how the majority of office A-REITs report; however, a number of A-REITs have moved to a FFO based reporting metric, including DXS.

Rental growth via net face produces the greatest portfolio level growth including amortization.

Portfolio income growth is the strongest under scenario 2 where effective rental growth is captured via a reduction in incentives, relative to scenario 1, where face rents are increase but incentives remain elevated, see Figure 13. However, in reality, effective rental growth is likely to stem from a combination of both a reduction of incentives and growth in face rents, with the former occurring initially. Scenario 2 produces higher income growth as effective growth reduces the amortization of incentives, as apposed to increasing face rents and maintaining a high level of incentives payable to tenant.

Figure 13. Portfolio Income Comparison

Portfolio Income (A\$m) - Including Amortisation	2012	2013	2014	2015	Average
Scenario 1	4.1%	4.7%	3.6%	3.4%	3.9%
Scenario 2	3.4%	4.9%	6.1%	5.9%	5.1%
Variance (%)	0.6%	-0.2%	-2.6%	-2.5%	-1.2%

Source: Citi Investment Research and Analysis

It is worth acknowledging the differing reporting metrics currently being used by office A-REITs as reported 'core earnings', on which payout ratios are generally based, do vary, (see Figure 14). We have included amortization of incentives in our example which does under-state earnings relative to FFO, however, lower payout ratios are generally adopted under a FFO metric to compensate for the overstating of earnings.

For further reading on this topic please see [Reported Earnings Inconsistencies](#) dated 12 September 2010.

Figure 14. Office A-REIT Reporting Metrics

Company Ticker	Dexus DXS	C'wealth Prop CPA	ING Office IOF	Charter Hall Office CQO
Methodology	FFO includes amortisation add-back	Distributable income does not include amortisation add-back	Operating income does not include amortisation add-back	Core earnings does not include amortisation add-back
Payout Policy	70% of FFO	Distribution of 70% to 80% of distributable income, or taxable income	70% to 80% of operating income or 100% taxable income	~70% of core earnings

Source: Citi Investment Research and Analysis, Company Data

Portfolio over/under rented positions may impact the ability to capture rental growth.

Importantly, although strong medium-term effective rental growth is expected on a market basis, office A-REIT portfolios are highly dependent on the Sydney CBD achieving expected returns given the overweight allocation. However, we do see portfolio over/under rented positions influencing the ability to capture this growth.

The concern would be whether portfolios are over rented post the recent weakness in office markets. CQO and IOF stated a slight over-renting position in their office portfolios in February results (3.0% and 1.0% respectively), see Figure 15.

Figure 15. Office Portfolio Over/(Under) Renting

Ticker	%	Over/(Under)
DXS	3.50%	Under-rented
IOF	1.00%	Over-rented
CPA	1.50%	Under-rented
CQO	3.00%	Over-rented

Source: Citi Investment Research and Analysis, Company Data

Figure 16. Consensus Forecast EPS CAGR

Ticker	CAGR (2yr)
CPA.AU	2.8%
CQO.AU	5.4%
DXS.AU	2.7%
IOF.AU	1.9%

Source: CIRA, IBES

Additional considerations such as pending make-good provisions within leases, feasible accommodation alternatives and whether a tenant has market rental review caps within an existing lease may all impact the level of growth an A-REIT manager may be able to extract from expiring leases. Potentially further reducing the ability to extract full market rental growth on expiring leases.

Office A-REIT earnings are likely to be benign, when contrast against expected direct market rental growth.

In summary, the outlook for the Australian office market remains positive, supporting the strong forecast rental growth. However, the ability for office A-REITs to capture the broader markets expected rental growth is highly contingent on the Sydney CBD, given the over weight exposures. In addition, assuming this growth is captured, the overall resulting earnings growth expected from office A-REITs is benign when contract against market rental growth, see Figure 16 and Figure 8.

Appendix 1

Glossary

Office Market Definitions

Below we provide definitions to commonly used phrases that apply to the Australian office market, as provided by Jones Lang LaSalle.

Market Rents

This is the rent that could be assumed for a standard unit of vacant space in the market being monitored. Market rents will differ from *passing rents*, which are those being paid by existing tenants.

Face Rentals

Nominal gross market rentals as represented on leases.

Effective Rentals

Effective rentals allow for the value of concessions or incentives used in the leasing of office space. Incentives are converted to a present value based on prevailing market investment yields. The present value of incentives are amortised over the term of the lease which is assumed to be 10 years. The amortised value of incentives are deducted from the face rent to establish the effective rental.

Outgoings

Represent the difference between net and gross rents. Outgoings relate to regular occupancy costs which will typically include local & state taxes/rates, insurance, property management charges, as well as security, cleaning and utility changes relating to common areas.

Investment Yields

The percentage return on sale price derived from the net rental income.

Net Absorption

Measures the change in occupied space between two points in time.

Incentives

Landlords may offer incentives to a prospective tenant to enter into a lease. Incentives usually come in two forms, fitout contribution or rent-free period. The dollar quantum of incentives is usually quoted as a percentage of the total value of the lease.

Cash earnings

In the context of this report cash earnings represent net property income less maintenance capex and leasing incentives.

Maintenance capex

Money spent on existing property assets to maintain their current value or keep them running at their existing levels

Incentive (Leasing) Capex

A concession given by a landlord (often in the form fitout of the tenants occupied space) to entice a tenant to sign a lease.

Passing rents

The rent which is currently payable under the terms of a lease or tenancy agreement.

Net rents

Income from property after deduction of all outgoings, including repairs, insurance and management costs to be met by the recipient but excluding taxes payable by the recipient.

Fully leased

A property whose usable/rentable space is fully let to one or more tenants under a lease agreement.

Rent free

A concession/incentive by landlord regarding a period of time during which the tenant will not have to pay any rent

Leasing agent's fees

Commission paid to agents for finding tenants for vacant space and handling all aspect of the lease. Calculated as a % of the gross annual rent.

Capital value

The market value of an asset.

Prime grade

Descriptive of a property which is regarded as the best in its class, location or sector

Gross rents

Actual or estimated/ potential rent before deduction of outgoings

Vacancy (by area/income)

Proportion of unlet rental premises measured by area or by rental income

Cap rate

The yield at which the net operating income from a property is capitalised to ascertain its capital value at a given date

PSM

Per Square Meter

Recoverable outgoings

The expenditures paid in connection with operating a property, which are properly charged to tenants in accordance with the lease

NLA

Net Lettable Area is Gross Lettable Area minus space covered by external walls, building cores and standard service areas such as toilets, access passageways, storerooms etc

Net operating income

Gross rental income from a property less vacancy and collection losses, duties and taxes and other operating expenses directly associated with the property.

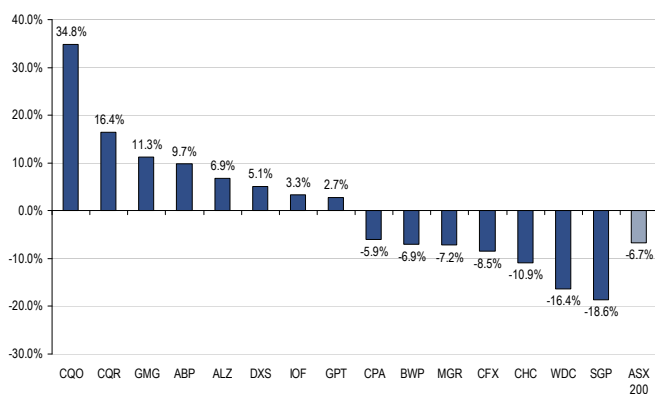
Appendix A-1

Australian REIT and Property Sector Overview

Share Price Performance

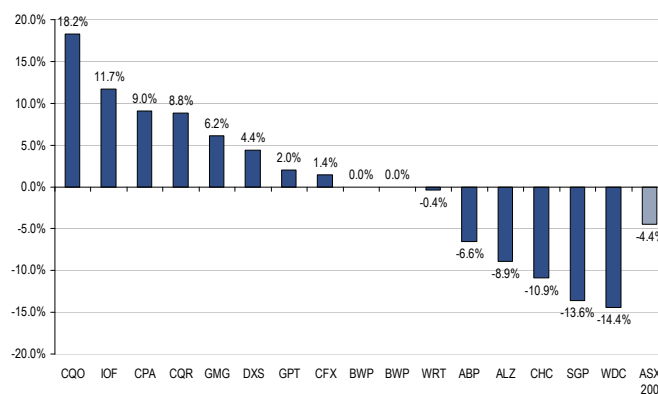
The ASX 200 REIT Index (XPJ) yesterday closed at 802.5 pts, its lowest in last close to two years (it closed at 780.2 on 21 Aug 2009). In Figure 17 and Figure 18 we show the 12-month rolling and YTD share price performance of listed Australian REITs. In Figure 19 and Figure 20 we show the YTD and 12-month rolling share price performance of the XPJ (ASX 200 A-REIT) against Global REITs.

Figure 17. A-REIT Performance last 12 months



Source: Thomson Reuters Datastream, Citi Investment Research and Analysis

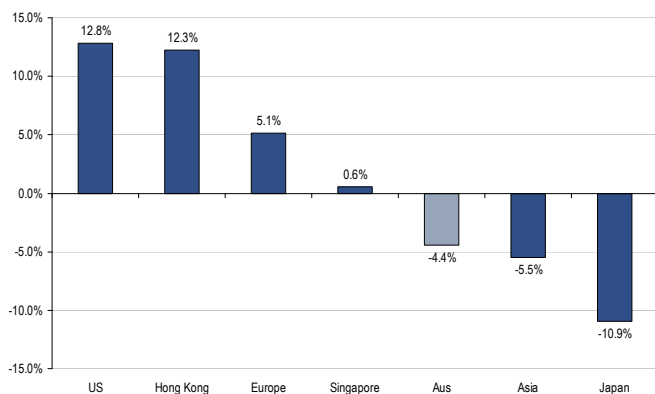
Figure 18. YTD A-REIT Performance Jan 11 - Current



Source: Thomson Reuters Datastream, Citi Investment Research and Analysis

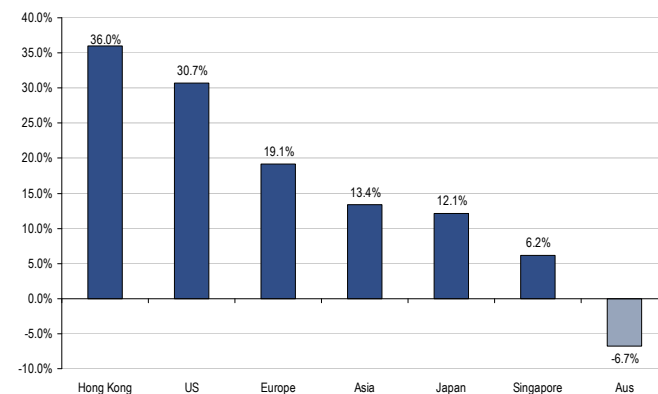
Against global REITs the Australian REIT sector has underperformed on a rolling 12-months as well as YTD basis as depicted below.

Figure 19. A-REITs YTD Performance against Global REITs



Source: Thomson Reuters Datastream, Citi Investment Research and Analysis

Figure 20. A-REITs last 12 months performance against Global REITs



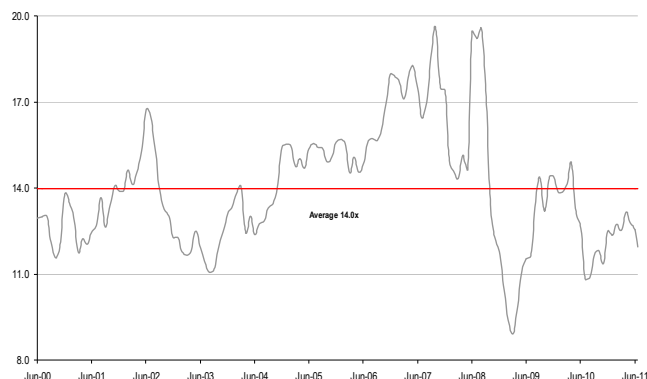
Source: Thomson Reuters Datastream, Citi Investment Research and Analysis

A-REIT Sector Valuation

The XPJ is currently trading on a 11.9x PE which is 2.1x below its 10-year average of 14.0x (Figure 21). The A-REIT sector is trading at a 2.4% premium against the ASX200 (Figure 22), versus its long run average of 3.0% discount.

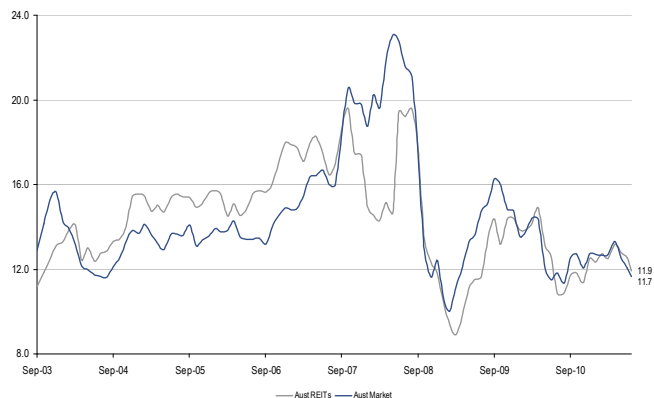
In Figure 23 and Figure 24, we show the PE ratio and Price to NTA of listed Australian REITs, highlighting most of the REITs are still trading at large discounts to valuation.

Figure 21. A-REIT Historical PE



Source: IBES, Citi Investment Research and Analysis

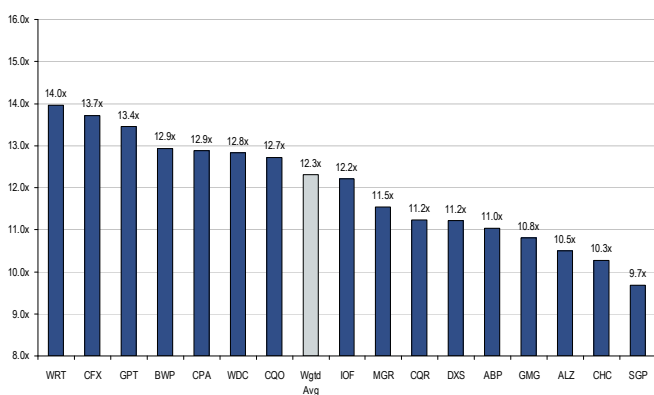
Figure 22. A-REIT PE versus ASX200



Source: IBES, Citi Investment Research and Analysis

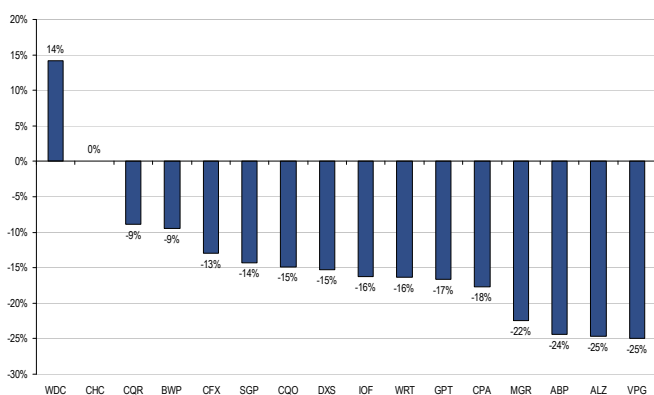
Most REITs still trade at a large discount to NTA with REITs with active earnings streams trading at a premium.

Figure 23. A-REIT PE Ratio FY2012E



Source: Citi Investment Research and Analysis

Figure 24. A-REIT Price to NTA



Source: Citi Investment Research and Analysis

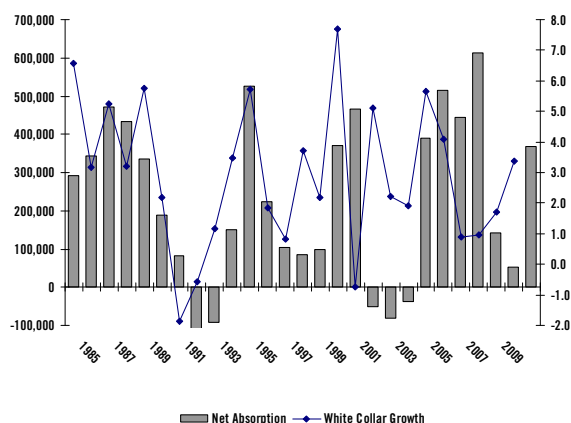
Asset Class Review

National Office Market

National office market fundamentals remain sound, with demand measured by net absorption turning positive, inline with improving white collar employment growth, see Figure 25. National vacancy appears to have peaked at 8%, however, incentives remain elevated, particularly in Sydney, see Figure 28

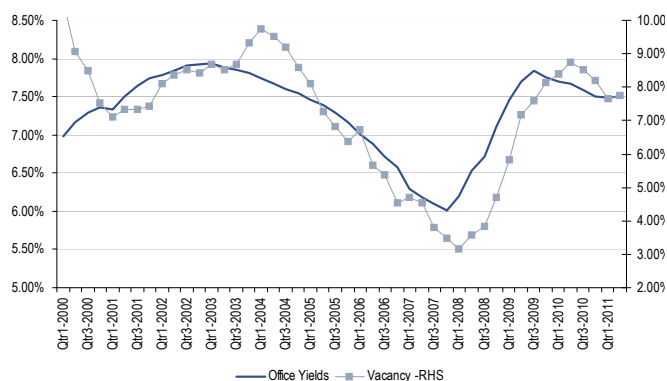
Investment yields are expected to tighten, over the next 12 months, supported by the relationship to vacancy illustrated in Figure 27 and recent transactional activity. With the historically low level of new supply coupled with improving demand, rents are in the early upturn stage of the cycle, with effective and face rental growth expected in Melbourne and Sydney by mid 2011.

Figure 25. White Collar Employment Growth vs Net Absorption



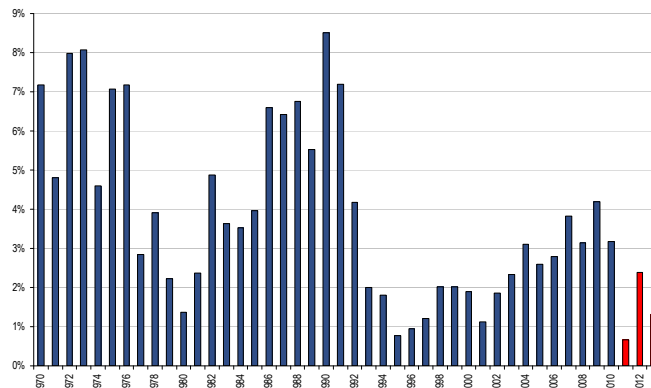
Source: JLL, Citi Investment Research and Analysis

Figure 27. Vacancy vs. Investment Yields



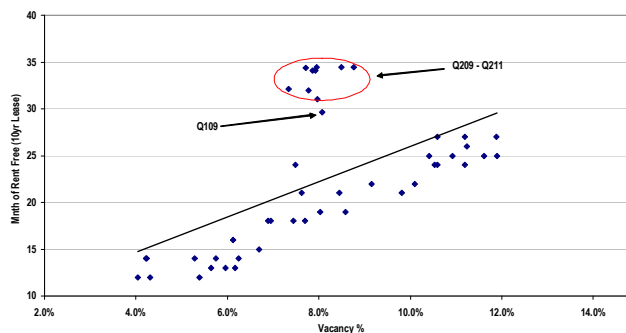
Source: JLL, Citi Investment Research and Analysis

Figure 26. National Office Supply 1970 - Current



Source: JLL, Citi Investment Research and Analysis

Figure 28. Vacancy vs. Incentives (Syd)



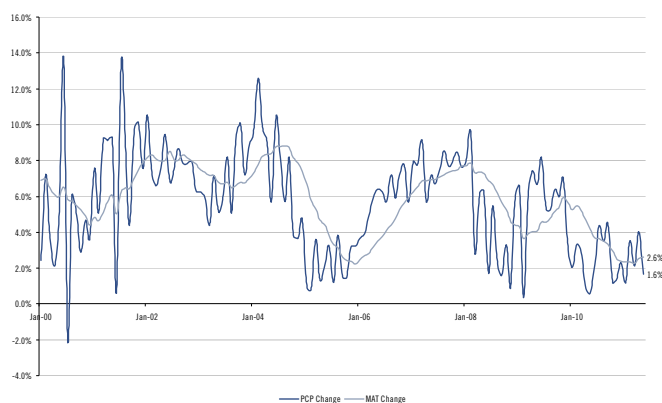
Source: JLL, Citi Investment Research and Analysis

National Retail Market

Retail sales growth remains slow, as Figure 29 illustrates. Clothing and footwear, as well as department stores, remain the weakest categories, while cafes and restaurants have posted strong sales growth (see Figure 30).

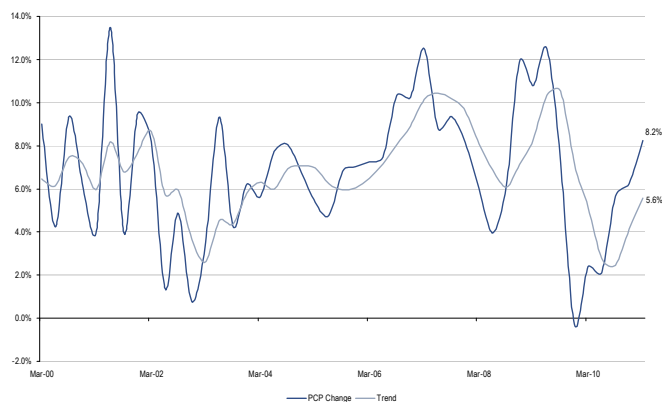
Figure 31 highlights that household disposable income is recovering rapidly, and approaching historical growth rates. The household savings rate remains at very high levels, however (see Figure 32), with consumers showing an increased preference for saving rather than spending. We believe that continued strength in disposable income growth, and a decline in the savings rate, represent two key sources of potential additional retail spending.

Figure 29. Retail Sales Growth, 2000-Present



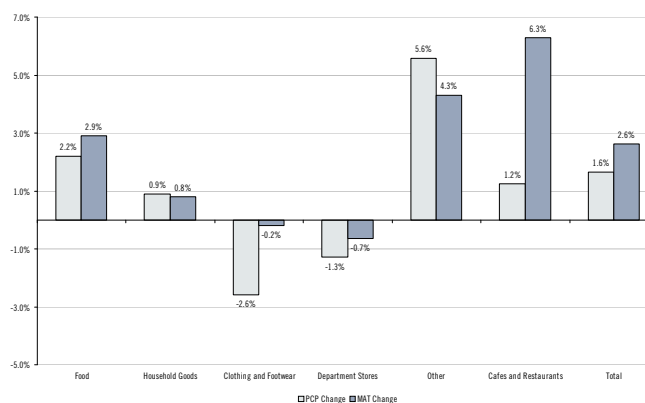
Source: ABS, Citi Investment Research and Analysis

Figure 31. Household Disposable Income, 2000-Present



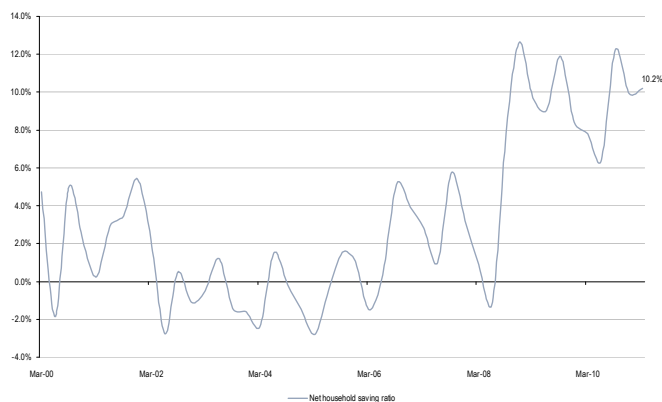
Source: ABS, Citi Investment Research and Analysis

Figure 30. Retail Sales Growth by Category



Source: ABS, Citi Investment Research and Analysis

Figure 32. Household Saving Ratio, 2000-Present

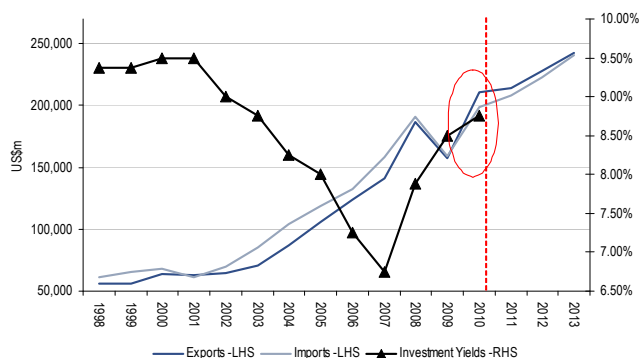


Source: ABS, Citi Investment Research and Analysis

National Industrial Market

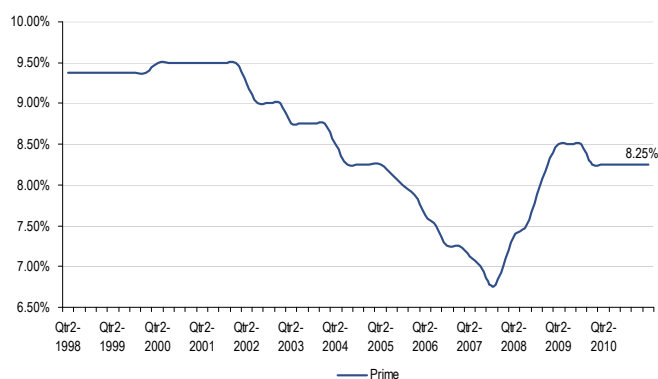
National average industrial yields appear to have peaked, after experiencing a severe correction, see Figure 33. With improving import/export volumes coupled with historically low new supply, investment yields and rental levels are expected to be well supported, see Figure 34. Supply chain efficiencies are driving consolidation into new larger facilities, supported by national container movements, see Figure 36.

Figure 33. Aust. Imports/Exports Versus Industrial Yields



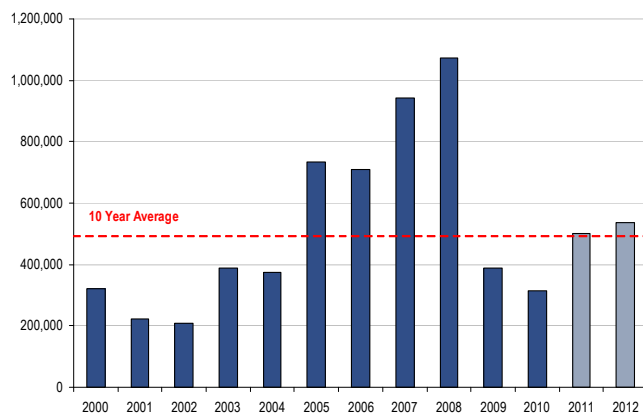
Source: JLL Citi Investment Research and Analysis

Figure 34. Prime Industrial Yields 1998 - Current



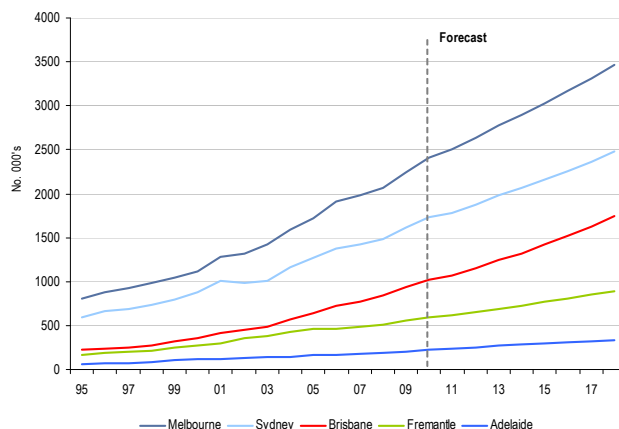
Source: JLL, Citi Investment Research and Analysis

Figure 35. Industrial Supply (sqm) Syd, Melb, Bris



Source: JLL, Citi Investment Research and Analysis

Figure 36. National Container Movements



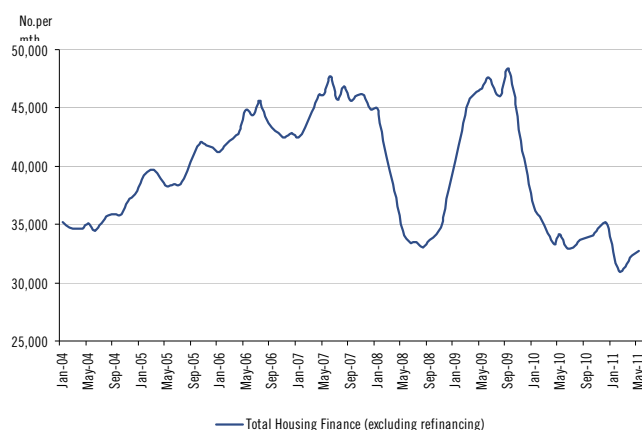
Source: BITRE, Citi Investment Research and Analysis

National Residential Market

Housing finance commitments have taken a hit post the floods which impacted Qld, Vic and WA in early 2011, after a period of stabilisation post the withdrawal of the first home owner's boost (Figure 37). The flow on effect has also impacted building approvals (Figure 38), which are weaker though recent falls have predominantly been in the volatile multi-unit market.

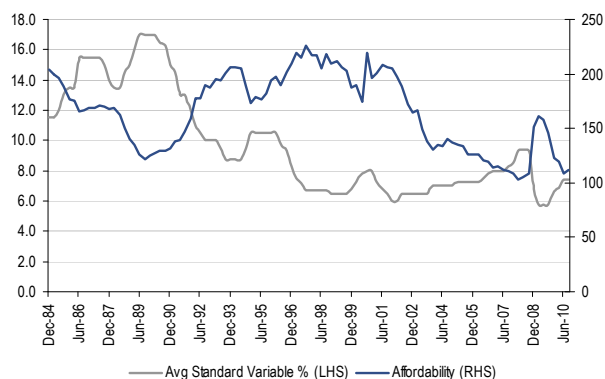
Affordability remains constrained (Figure 39) but will likely improve from a combination of income growth, peaking interest rates, and house price softening (Figure 40).

Figure 37. Australian Housing Finance Commitments



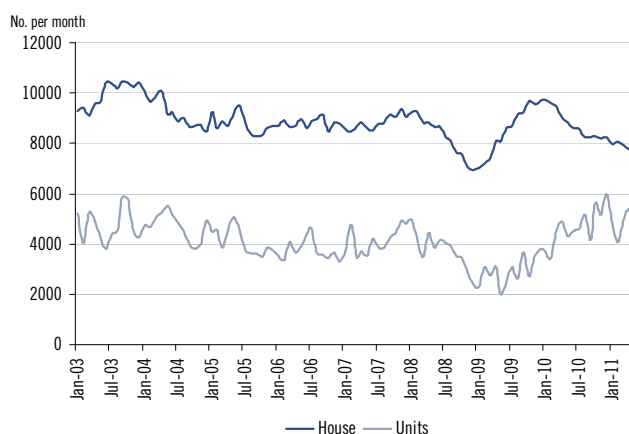
Source: ABS, Citi Investment Research and Analysis

Figure 39. Average Variable Interest Rate and Affordability



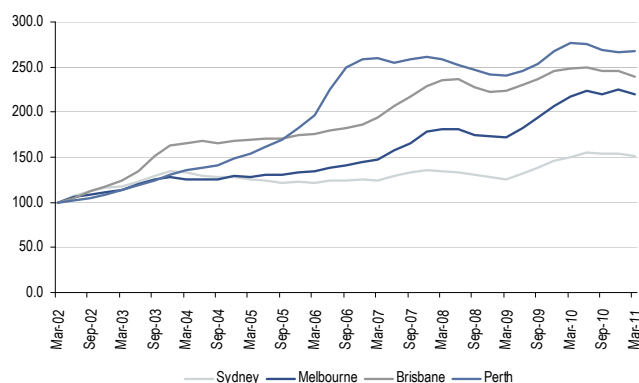
Source: RBA, HIA/CBA, Citi Investment Research and Analysis

Figure 38. Australian Building Approvals



Source: ABS, Citi Investment Research and Analysis

Figure 40. Australian House Price Index



Source: ABS, Citi Investment Research and Analysis

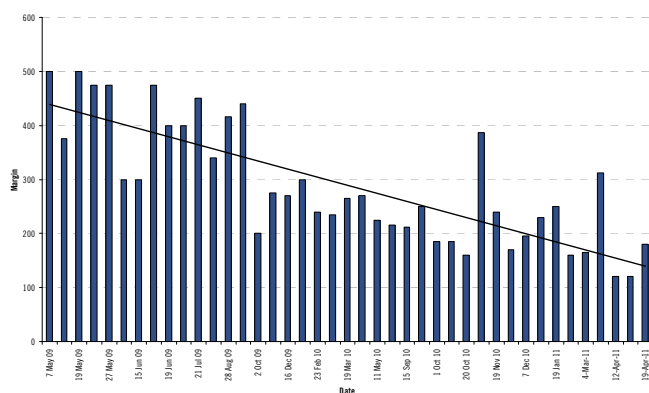
Financial

Debt pricing continues to improve with margins for A- (and better) rated REITs now consistently below 200bps (Figure 41) for typically 3-5 year durations. The forward yield curve has flattened over the course of the last year as a result of the significant rise in the short end of the curve (Figure 42).

Specifically WDC, GPT and SGP CDS spreads have remained consistently within a tight band since late 2009 (Figure 43) and have stabilized over the last 6 months.

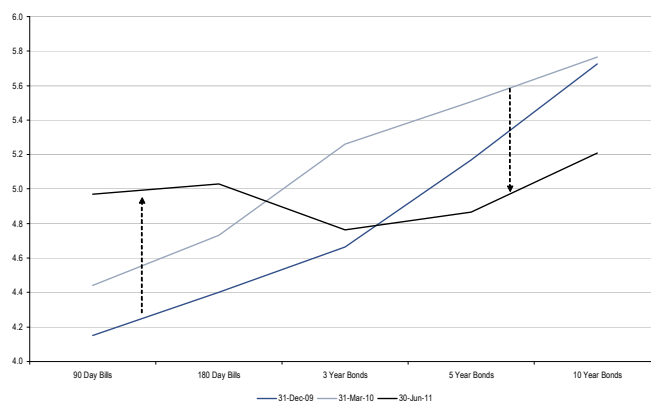
An improvement in swap spreads (Figure 44) has seen spreads revert to levels previously seen during the more stable period of 2004-2006.

Figure 41. Actual Australian Property Debt Margins May 09 - Current



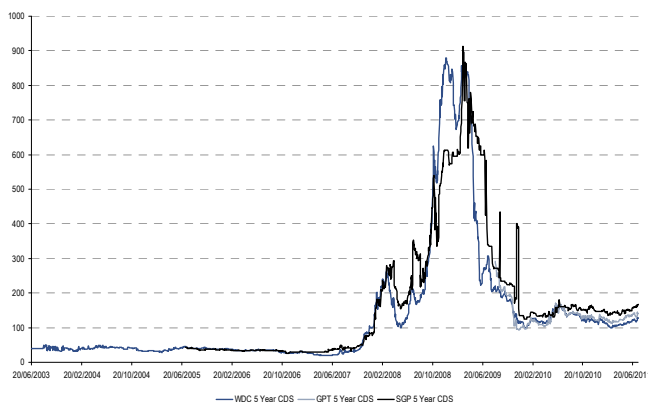
Source: Company data, Citi Investment Research and Analysis

Figure 42. AUD Yield Curve



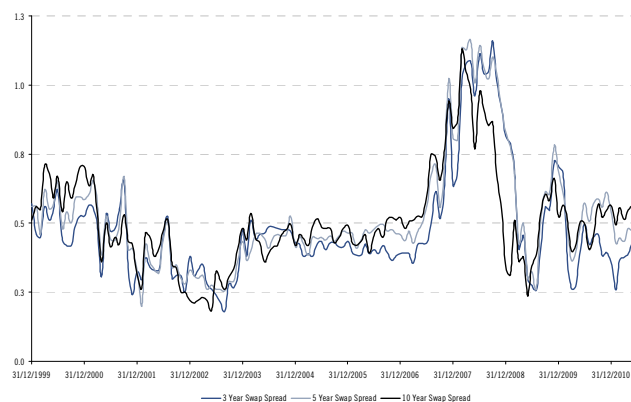
Source: IRESS, Citi Investment Research and Analysis

Figure 43. WDC, SGP, GPT CDS Spreads July 03- Current



Source: Bloomberg, IRESS, Citi Investment Research and Analysis

Figure 44. 3, 5 and 10 Year Swap Spreads Dec 99 - Current



Source: Bloomberg, IRESS, Citi Investment Research and Analysis

Appendix A-2

A-REIT Comparative Valuation

Company Name	Ticker	Rating	Earnings Per Share																				TEV/ Cap	Implied Rate				
			Target Price	NAV	Price 19-Jul	Prem/ (Disc) to NAV	Price Change - AUD					Total Return		Div Yld	Est. '11E (\$/sh)	Citi vs Cons. (\$/sh)	Est. '12E (\$/sh)	Citi vs Cons. (\$/sh)	Growth		Multiple				CAGR 2008- 2011		EBITDA Mult.	
							Day	Wk	Mnth	QTD	YTD	(%)	'11E						'12E	'11E	'12E	'11E			'12E	(%)		(%)
Abacus Property Group	ABP	2H	2.40	2.40	2.14	-10.8	0.0	-0.9	-2.7	-7.4	0.7	10.0	8.0	0.212	0.018	0.196	-0.001	8.8	-7.5	10.1	10.9	-33.4	13.6	9.2				
Australand Property Group	ALZ	1M	3.20	3.20	2.65	-17.2	-1.5	-2.2	-8.9	-7.3	-5.3	21.0	8.4	0.236	0.000	0.253	0.003	6.6	7.5	11.2	10.5	-26.3	9.8	7.8				
BWP Trust	BWP	2M	1.87	1.87	1.73	-7.4	1.8	-2.0	-4.9	-5.5	3.3	0.6	7.8	0.126	-0.006	0.134	0.002	5.4	6.4	13.7	12.9	-0.1	15.3	6.6				
CFS Retail Property Trust	CFX	1M	2.04	2.04	1.79	-12.5	0.3	-0.6	-4.0	-1.7	5.1	-0.7	7.3	0.126	0.000	0.133	0.002	0.7	5.2	14.1	13.4	2.8	15.6	6.3				
Charter Hall Group	CHC	1M	2.78	2.78	2.21	-20.4	2.3	6.2	8.9	2.8	-7.5	-2.4	7.9	0.202	0.000	0.216	0.003	33.3	7.0	10.9	10.2	-25.2	13.3	4.3				
Charter Hall Office REIT	CQO	2M	3.35	3.35	3.37	0.6	-0.6	1.2	-7.4	0.6	22.1	-2.3	6.0	0.259	-0.003	0.269	-0.002	-14.6	4.0	13.0	12.5	-37.7	11.5	10.6				
Charter Hall Retail REIT	CQR	2M	3.30	3.30	3.20	-3.0	1.6	3.6	-4.8	0.0	13.2	8.5	7.8	0.280	0.001	0.288	0.001	-15.3	2.9	11.4	11.1	-27.3	10.8	9.0				
Commonwealth Property Office Fund	CPA	2M	0.99	0.99	0.91	-8.6	-0.5	0.0	-4.7	-3.7	12.3	-8.4	6.3	0.069	-0.001	0.071	-0.001	2.5	2.9	13.0	12.7	-9.3	15.0	7.0				
Dexus Property Group	DXS	1M	0.96	0.96	0.83	-13.5	-2.4	-4.0	-8.3	-5.7	7.7	-0.5	6.3	0.074	0.000	0.075	0.000	1.7	2.1	11.2	11.0	-13.3	13.9	7.4				
Goodman Group	GMG	1M	0.75	0.75	0.69	-8.0	-0.7	-2.8	-6.1	-2.1	9.2	7.7	6.1	0.059	0.002	0.064	0.002	5.1	10.0	11.8	10.7	-41.9	15.2	5.9				
GPT Group	GPT	2M	3.14	3.30	3.00	-9.1	-1.6	-2.6	-4.2	-5.1	5.0	2.7	5.9	0.219	0.000	0.226	0.000	5.5	3.3	13.7	13.3	-32.2	13.7	6.6				
Investa Office Fund	IOF	2M	0.65	0.68	0.62	-8.8	-0.8	0.8	-6.1	-3.9	15.2	-7.2	6.3	0.052	0.000	0.052	-0.001	-6.6	-0.3	11.9	11.9	-18.7	14.4	8.5				
Mirvac Group	MGR	2M	1.40	1.40	1.23	-12.5	-0.4	0.4	-5.4	-2.0	3.4	-16.9	7.2	0.105	-0.001	0.107	0.000	13.2	1.6	11.7	11.5	-20.8	14.3	7.7				
Stockland	SGP	1M	4.06	4.06	3.11	-23.4	-2.8	-0.6	-9.3	-8.8	-10.3	-3.1	8.1	0.316	-0.002	0.328	0.002	8.5	3.8	9.9	9.5	-10.1	11.8	10.0				
Valad Property Group	VPG	2H	1.80	1.80	1.74	-3.3	-0.3	-0.6	-0.9	-0.6	68.9	-57.1	0.0	0.071	-0.001	0.073	-0.023	-7.5	1.7	24.4	24.0	-67.4	12.9	12.7				
Westfield Group	WDC	1M	10.00	10.00	8.20	-18.0	-2.0	-4.9	-5.0	-5.3	-11.1	6.0	6.0	0.626	-0.020	0.648	-0.046	-17.3	3.5	13.1	12.7	-12.4	25.4	8.6				
Westfield Retail Trust	WRT	1M	3.01	3.01	2.56	-14.9	-1.5	-1.9	-1.9	-5.5	-0.2		6.5	0.182	-0.001	0.186	-0.001		2.1	14.0	13.7			35.7				
Weighted Average						-14.3	(1.4)	(2.2)	(5.3)	(4.7)	(0.5)	1.0	6.6					(2.1)	3.7	12.6	12.1	(15.5)	19.4					
Simple Average						-11.2	(0.5)	(0.6)	(4.5)	(3.6)	7.8	(2.6)	6.6					1.9	3.3	12.9	12.5	(23.3)	15.4					

Company Name	Ticker	Adjusted Funds From Operations (AFFO)					EPS Mult Prem				Hist. EPS Multiple			Net Asset Value			Net Tangible Assets			Balance Sheet			
		Est. '11E	Grwth '11E	Grwth '12E	Mult. '11E	Mult. '12E	Sector Avg	Current vs. Sector	High	Low	6 Yr. Avg	Spot NAV 3Q'11	Cap Rate	6 Yr. Avg	NTA	Prem/ (Disc) to NTA	CAGR 2006- 2011	Debt/ GAV	Debt/ EBITDA	Cov Ratio	Fixed Cap	Market Cap	Total Cap
Abacus Property Group	ABP	0.199	10.3	(8.3)	10.7	11.7	(11.8)	(4.9)		13.6	9.5	11.5	2.40	8.3	2.83	-24.4	-14.6	25.5	4.0	2.8		810	859
Australand Property Group	ALZ	0.221	0.0	5.6	12.0	11.3	(20.1)	(15.4)		14.6	4.3	10.6	3.20	8.4	3.52	-24.7	-9.1	37.3	3.8	2.7		1,529	1,622
BWP Trust	BWP	0.121	5.7	6.1	14.3	13.4	15.5	10.1		17.4	12.8	14.6	1.87	7.6	1.96	-13.3	4.2	22.2	3.6	3.9		900	954
CFS Retail Property Trust	CFX	0.119	(0.6)	5.5	15.0	14.3	21.5	10.6		18.5	13.2	15.3	2.04	6.7	2.05	-13.2	3.7	27.2	4.9	3.0		5,069	5,377
Charter Hall Group	CHC	0.202	33.3	7.0	10.9	10.2		(19.6)		22.0	11.9	14.1	2.78	8.0	2.21	-2.3		103.3	0.2	15.1		680	722
Charter Hall Office REIT	CQO	0.182	(12.2)	0.6	18.5	18.4	(11.1)	0.8		15.2	6.9	11.7	3.35	7.8	3.96	-14.9	-25.9	36.6	4.6	2.1		1,662	1,764
Charter Hall Retail REIT	CQR	0.254	(8.4)	2.5	12.6	12.3	(18.2)	(10.3)		13.9	7.3	10.4	3.30	8.3	3.51	-10.3	-18.1	34.1	4.1	2.9		967	1,026
Commonwealth Property Office Fund	CPA	0.065	10.6	(8.2)	14.0	15.3	12.5	6.4		17.9	12.2	14.4	0.99	7.8	1.10	-17.3	-1.1	24.6	3.6	3.3		2,217	2,352
Dexus Property Group	DXS	0.030	(52.3)	106.7	27.9	13.5	0.4	(5.5)		16.5	10.3	12.8	0.96	8.2	0.98	-13.3	-7.5	31.0	4.9	4.4		4,016	4,261
Goodman Group	GMG	0.050	7.3	14.1	13.8	12.1	10.7	(11.6)		19.8	6.0	13.8	0.75	7.0	0.48	44.8	-21.0	36.1	4.0	5.7		5,102	5,412
GPT Group	GPT	0.181	4.1	3.3	16.6	16.0	30.6	7.3		21.0	13.4	16.4	3.30	7.0	3.60	-15.3	-21.0	24.2	4.0	3.7		5,567	5,905
Investa Office Fund	IOF	0.032	(22.6)	19.7	19.1	16.0	(11.1)	0.4		16.2	8.2	10.0	0.68	7.3	0.74	-16.2	-9.1	14.5	1.8	21.0		1,692	1,795
Mirvac Group	MGR	0.088	27.2	(13.8)	13.8	16.1	20.7	(5.1)		24.0	11.5	15.7	1.40	7.7	1.60	-20.9	-12.7	31.3	4.9	3.1		4,186	4,440
Stockland	SGP	0.284	8.1	2.1	11.0	10.7	8.0	(15.8)		17.8	11.0	13.5	4.06	7.0	3.63	-6.1	-3.2	17.8	2.7	5.2		7,411	7,862
Valad Property Group	VPG	0.041	(14.8)	26.4	42.5	33.6	(32.0)	95.0		25.5	-30.0	11.1	1.80	8.0	2.32	-25.0	-33.4	53.5	8.8	1.2		200	212
Westfield Group	WDC	0.526	(14.9)	5.2	15.6	14.8	11.9	2.4		17.6	11.0	14.3	10.00	6.3	7.18	14.2	-11.1	38.2	10.4	2.5		18,934	20,085
Westfield Retail Trust	WRT	0.170		2.0	15.1	14.8		11.2		14.1	14.1	13.9	3.01	6.1	3.14	-18.5		23.7	9.2	2.0		7,819	8,294
Weighted Average			(3.9)	9.4	15.2	13.9								6.9	3.7		(9.1)	30.6	6.3	3.9			
Simple Average			(1.3)	10.7	17.0	15.2								7.5	2.6		(12.0)	34.2	4.7	5.0			

Valuation Summary Company	Forward PE Multiples (x)										Historical Premium/Discount						6 Year Average
	2005	2006	2007	2008	2009	2010	6 Year Average	High	Low	2005	2006	2007	2008	2009	2010		
	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)	(%)	(%)	(%)	(%)		
Abacus Property Group	10.6	10.9	13.5	13.6	9.5	9.7	11.3	13.6	9.5	-10.5	-23.1	-16.3	14.2	-7.7	-27.4	-11.8	
Australand Property Group	8.9	10.2	14.6	4.3	11.6	12.3	10.3	14.6	4.3	-25.4	-28.1	-9.5	-63.7	13.4	-7.2	-20.1	
BWP Trust	15.1	15.4	17.4	12.8	13.4	14.8	14.8	17.4	12.8	27.1	8.9	8.1	7.2	30.9	10.9	15.5	
CFS Retail Property Trust	15.5	16.5	18.5	14.9	13.2	15.0	15.6	18.5	13.2	30.9	16.8	15.0	25.4	28.2	12.6	21.5	
Charter Hall Group		13.7	22.0	14.2	13.2	11.9	15.0	22.0	11.9		-3.5	36.4	19.7	28.3	-10.7		
Charter Hall Office REIT	11.7	12.3	15.2	13.5	6.9	9.7	11.5	15.2	6.9	-1.8	-13.1	-5.6	13.5	-32.5	-27.3	-11.1	
Charter Hall Retail REIT	12.4	12.1	13.9	7.3	8.2	9.8	10.6	13.9	7.3	4.1	-14.5	-13.9	-38.9	-19.8	-26.3	-18.2	
Commonwealth Property Office Fund	13.5	15.4	17.9	14.6	12.2	13.4	14.5	17.9	12.2	13.3	8.6	11.4	22.4	19.1	0.4	12.5	
Dexus Property Group	12.6	12.9	16.5	14.7	10.3	10.4	12.9	16.5	10.3	6.3	-8.9	2.5	23.2	0.6	-21.6	0.4	
Goodman Group	15.3	19.1	19.8	16.4	6.0	10.8	14.6	19.8	6.0	28.8	34.6	22.8	38.1	-41.3	-18.6	10.1	
GPT Group	15.5	21.0	19.4	16.8	14.6	13.4	16.8	21.0	13.4	30.2	48.6	20.7	40.9	42.0	1.0	30.0	
Investa Office Fund	10.2	13.2	16.2	10.8	8.2	11.1	11.6	16.2	8.2	-14.4	-7.1	0.6	-9.4	-19.8	-16.4	-11.1	
Mirvac Group	11.5	14.9	24.0	19.7	11.7	12.5	15.7	24.0	11.5	-3.2	5.2	49.1	65.2	13.5	-5.8	20.0	
Stockland	13.2	16.0	17.8	14.0	11.0	11.8	14.0	17.8	11.0	11.5	12.8	10.2	17.3	7.5	-11.4	8.1	
Valad Property Group	12.4	11.7	17.8	-30.0	17.5	25.5	9.2	25.5	-30.0	4.1	-17.1	10.8	-351.9	70.5	91.6	-32.0	
Westfield Group	13.7	16.1	17.6	11.0	12.9	15.3	14.4	17.6	11.0	15.7	13.6	9.1	-7.7	25.9	15.0	11.1	
Westfield Retail Trust						14.1	14.1	14.1	14.1						5.9		
Weighted Average	11.9	14.2	16.1	11.9	10.3	13.3	12.9	16.1	10.3								
Simple Average	12.8	14.5	17.6	10.5	11.3	13.0	13.3	17.6	10.5								

Footnotes to Comparative Valuation and Performance Table

- **Rating Key:** 1=Buy, 2=Hold, 3=Sell. Risk: H=High, M=Medium, L=Low, S=Speculative.
- **Price Change** — Percentage price changes: Week is from the last closing price seven days prior, Month is from the last closing price one month prior, QTD is from last trading day of the prior quarter, and YTD is from last trading day of the prior year, to the most recent closing price.
- **Total Return** — Stock price change and dividends paid.
- **Dividend Yield** — The return on investment for a stock, or the annual dividend income per share received from a company. Dividend yield is calculated by dividing the 12 month forward dividend Citi forecasts, by the most recent share price.
- **Earnings Per Share (EPS)** — Defined as Reported NPAT adjusted for profit on asset sales, abnormal items and non-cash items including asset revaluations and amortisation, per share.
- **Est '11E** — CIRA's 2011 Core EPS estimates.
- **Est '12E** — CIRA's 2012 Core EPS estimates.
- **Citi vs. Cons** — The difference between our EPS estimate and IBES consensus. Positive numbers represent where our estimates are above consensus.
- **Growth '11E** — Percentage change in EPS per share from 2010 actuals to 2011 estimates.
- **Growth '12E** — Percentage change in EPS per share from 2011 estimates to 2012 estimates.
- **Multiple '11E** — The valuation ratio of the current share price divided by 2011 estimated EPS per share. The valuation ratio of the current share price divided by current year estimated EPS, AFFO, depending on which earnings metric is used.
- **Multiple '12E** — The valuation ratio of the current share price divided by 2012 estimated EPS, AFFO, depending on which earnings metric is used.
- **Implied Cap Rate** — Measures the cap rate or yield on the rental real estate owned by using the next forecast financial year's net operating income divided by the current TEV. Non-rental income assets are valued separately and the TEV is reduced by our estimate for non-income producing assets to arrive at an implied cap rate.
- **Prem (Disc.) to NAV** — The premium or discount of the current share price to our estimate of Net Asset Value per share using our spot cap rate estimate of current market conditions. Spot cap rate is the cap rate at which real estate is currently trading.
- **Adjusted Funds from Operations (AFFO)** — EPS (defined above) adjusted for straight lining of rents, leasing capex, leasing commission, maintenance capex and net capitalised interest after tax (for developers).
- **EPS Mult Prem 6 Yr. Avg** — The 6 year average of the premium or discount forward EPS multiple to the sector weighted average forward EPS multiple from 2005-2010 inclusive.

- **EPS Mult Prem Current vs. Sector** — The premium or discount of the current forward EPS multiple for a stock to the sector weighted average forward EPS multiple.
- **Historical EPS Multiples** — Calculated using year-end stock prices and full year EPS estimates for the following year. The average, high, and low multiples for the past 6 years are shown.
- **Net Asset Value** — Our estimate of the private market value of the company's real estate net of liabilities on a per share basis. We use the current spot cap rate for the net operating income to derive NAV. NAV is calculated using our 12 month forward NOI estimates.
- **NAV Cap Rate** — The rate used to estimate the value of a company's net assets by using 12 month forward NOI estimates.
- **NAV CAGR** — The compounded annual growth rate in NAV per share over a specified time period.
- **Net Tangible Assets** — The value of Total Assets of the company less intangibles and total liabilities per share.
- **NTA Cap Rate** — The current stated cap rate of the company.
- **Debt/GAV** — The measure of a company's leverage and is the ratio of Total Debt including Minority Interests to Total Assets.
- **Net Debt / EBITDA** — The ratio of total net debt to EBITDA produced by the business.
- **Fixed Coverage** — The ratio indicating the ability to satisfy financing costs and is calculated as follows: $\text{EBITDA} / [\text{Interest Expense} + \text{Capitalized Interest}]$.
- **Float** — The market value based on the current share price of all common shares outstanding, but does not include equity operating partnership units.
- **Total Market Capitalization** — The market value based on the current share price of all common shares as of the date of this report.
- **Forward PE Multiple** — Calculated using year-end stock prices and full year EPS estimates for the following year. The average, high, and low multiples for the past 6 years are shown.
- **Historical Premium/Discount** — The premium or discount of the forward EPS multiple for a stock to the sector weighted average forward EPS multiple.
- **Historical Premium/Discount 6 Year Average** — The average of the Forward PE Multiples Historical Premium/Discount from 2005-2010 inclusive.

Previous Research

Retail REITs - Earnings Implications of Retail Weakness

In light of David Jones' earnings guidance downgrade, we thought it timely to highlight our earlier work on earnings sensitivities for the major retail REITs (WDC, WRT, CFX and GPT). In this note, we have included an extract from The City View – AREITs Issue 2, dated 11 May 2011. Please see David Jones Ltd (DJS.AX) - Earnings Clearout, dated 14 July 2011, for details on yesterday's downgrade.

[Link to full note](#)

Australian Residential Developers - Different Strategies in a Soft Market

Fundamentals Drive Outlook – We continue to view the residential developers on fundamentals despite pricing impacted by negative macro concerns. We discuss key issues for each development business following a line up of ALZ, MGR and SGP highlighting each business' different drivers.

[Link to full note](#)

Pan Asian Real Estate - Screening for Value – A Regional Perspective; ;

Quantitative Selection Process for Pan Asian Real Estate Stocks — In this report, we utilize Citi's proprietary database to compare real estate stocks across the region. We then overlay the fundamental views of Citi's real estate analysts to identify stocks that present attractive opportunities for investors.

[Link to full note](#)

The City View – AREITs Issue 3 - Australian Residential Developers: Demographic Implications

We highlight projected population changes and look at how developers ALZ, FKP, MGR, PPC and SGP are positioning themselves to take advantage of demographic trends. Looking through soft housing sentiment in the short-term, we believe long term fundamentals remain sound for developers with a clear, focused strategy.

[Link to full note](#)

Office A-REITs in CIRA Model Portfolio - Office Thematic Continues to Gain Momentum

Citi strategist Tony Brennan has added an additional office A-REIT in his model portfolio. Office A-REIT weightings have been raised. Please read the following report in conjunction with the strategy team's [Australia Equity Strategy - Stock selection across the financial sectors](#) published on 30 May 2011.

[Link to full note](#)

The City View – AREITs Issue 2 - Retail REITs – How Much Downside Risk is There?

In this report, we examine how sensitive retail REIT earnings and cashflow multiples are to a soft retail leasing environment.

[Link to full note](#)

Appendix A-1

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