

THE ROLE OF AUSTRALIAN REAL ESTATE IN INVESTMENT PORTFOLIOS - RISK OR REWARD?

Dr David Rees, Director of Research, Mirvac Funds Management Mirvac Funds Management

The past twelve months have been disappointing for investors in property trusts listed on the Australian Stock Exchange (now called "real estate investment trusts" or A-REITs). After peaking on 22 February 2007 the S&P/ASX 200 A-REIT index (A-REIT index) slumped by 41.4 percent to a low on 17 March 2008. In comparison the broad market S&P/ASX 200 index fell by 25.5 percent from peak (1 November 2007) to trough (18 March 2008). On a June-to-June basis the fall recorded by the A-REIT sector to 30 June 2008 (36.1 percent) is the largest on record. However, the A-REIT index decline closely matches peak-to-trough declines in the UK (44.0 percent, Jan-07 to May-08), US (37.4 percent, Feb-07 to Jan-08) and Japanese (50.8 percent, May-07 to Mar-08) listed real estate indices.

The decline in A-REITs contrasts with the performance of underlying real estate assets in Australia. Non-residential real estate values, as measured by the IPD/PCA Composite performance index (IPD index), continued to advance in the period up to March 2008 (the latest data available). Capital values in the direct real estate market, according to the IPD Index, are up 11.0 percent in the year to March 2008 although growth slowed to a modest 0.8 percent in the March 2008 quarter.

Recent performance challenges the conventional belief that A-REITs are a low beta, low volatility asset class. The decline in A-REITs is more disturbing for many investors because it comes after a prolonged period of outstanding returns. Between December 2001 and December 2006 the A-REIT index delivered average annual returns (income plus capital growth) of 13.1 percent, returns rising each successive calendar year.

Investors are entitled to ask whether recent performance is a temporary aberration or whether the real estate sector has undergone a structural, and by implication, permanent change in its underlying characteristics. Does the fall in the A-REIT index presage a similar decline in direct asset values and in the value of unlisted funds? What strategies should investors adopt in the future?

This paper argues that non-residential prime real estate values in Australia, at 30 June 2008, were close to "fair" or fundamental valuation. A-REITs now largely reflect these underlying asset values, while the value of corporate activities – development, funds management, offshore exposures – is heavily discounted. So, too, is financial engineering, reflected in high levels of debt. In contrast to prime grade assets, valuation risk attaches to secondary grade, smaller and highly leveraged assets and funds. The low volatility, high yield characteristics of non-residential real estate remain unimpaired. Beyond the current period of adjustment it is expected that returns on both listed and direct real estate investments will revert to long run levels and that the high yield, low capital growth fundamentals of the real estate sector, direct as well as securitised, will be re-established.



Structural or cyclical shift?

Scenarios for real estate investment depend heavily on interpretations of why direct and securitised real estate behaved the way they did during 2007 and 2008. The divergence in performance between A-REITs and the IPD index reflecting direct real estate values is a key question.

In contrast to the A-REIT real time sharemarket index, the Australian IPD index is appraisal-based, published quarterly, with time lags between the valuations of individual assets. Therefore a common explanation for the divergence between the A-REIT index and the IPD index since mid-2007 is that the listed REIT market is a lead indicator for underlying asset values. It follows that sharp falls in underlying asset values can be anticipated over the next twelve months.

The argument that direct real estate values in Australia are about to fall gains added credence from the UK market where the IPD index recorded a 13.6 percent fall in direct real estate values in the six months to 31 March 2008, following the 38.2 percent decline in the UK listed real estate index during 2007. The IPD index for the UK market is published monthly and therefore is likely to react more quickly to market trends than the quarterly Australian index.

Note that the IPD index reflects real estate assets held by institutional investors. The index therefore largely reflects high quality investment grade assets. The distinction between investment grade and secondary grade assets is an important part of this story.

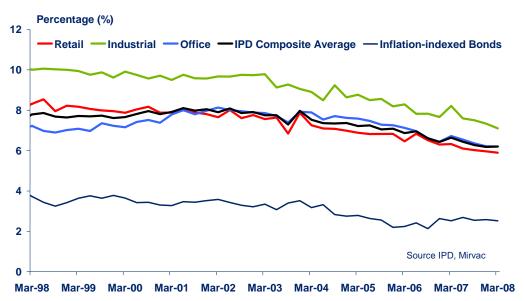
In explaining recent market trends two propositions are advanced:

1. The strong performance of direct real estate markets in recent years is due to growth generated by a one-off and probably permanent decline in yields (or capitalisation rates) that broadly corresponds with a decline in the real cost of capital.



Figure 1





Distribution yields(or capitalisation rates) provide a reasonable measure of real long-term investment returns for real estate because in contrast to the broader equity market, real estate assets are valued on a 100 percent equity basis and payout ratios are close to 100 percent compared to around 66 percent for the equity market overall. Therefore real growth in real estate assets is close to zero. For example, over the long term, from March 1985 to March 2008 the IPD index recorded capital growth of 3.3 percent pa while inflation averaged 3.9 percent pa. Over the long term the real value of non-residential real estate assets has been reasonably stable; the income yield or capitalisation rate represents a convenient benchmark for anticipated real return.

Figure 1 shows that capitalisation rates for the three major real estate asset classes declined over the period 1997 to 2008. The IPD Composite weighted average capitalisation rate declined from 8.0 to 6.2 percent or 180bp through the period. This decline, with its associated rise in capital values, has been the engine of growth for the direct property sector because it facilitated the raising of debt and equity capital. Easy access to capital fuelled ancillary activities, for example the boom in development spending, the rise in REIT debt/assets ratios and expansion of funds management businesses and offshore investment.

However, Figure 1 also shows the steady decline the real (inflation indexed) bond yield. The net effect is that the risk premium, the gap between (real) real estate cap rates and real bond yields, has been relatively stable over the decadeⁱⁱ. The Composite weighted average index shows a risk premium of 342bp in December 1995 and 368bp in March 2008. Individual market sectors have diverged rather more. The risk premium for retail assets narrowed by 56bp; the industrial premium narrowed by 194bp,

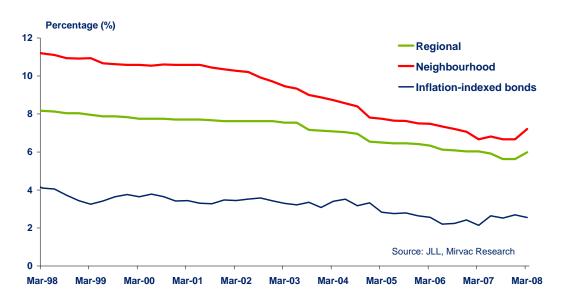


and the office premium widened by 70bp over this period. It is worth noting that a similar exercise applied to the UK and US shows a much sharper narrowing of the risk premium in those marketsⁱⁱⁱ.

In contrast to the relatively stable risk premiums across prime asset markets, risk premiums declined sharply in the case of smaller or secondary grade assets.

Figure 2

NATIONAL RETAIL YIELDS



On a national basis the yield on neighbourhood centres, for example, declined more sharply than for regional centres^{iv}. Yield compression, not rental growth, accounts for the superior performance of neighbourhood centres (15.4 percent pa) relative to regional centres (12.5 percent pa) between March 1998 and March 2008.

Therefore the decline in yields for prime grade assets can be largely accounted for by a fall in the underlying (real) cost of capital, suggesting that the value of these assets is sustainable as long as the real cost of capital remains low. In contrast, yield compression for smaller or secondary grade assets is harder to justify in fundamental financial terms and it is in these market sectors that values are likely to come under pressure during 2009 and 2010.



2. The sharp decline in the A-REIT sector can be in large part explained as a reflection of activities extraneous to passive ownership, not as a predictor of the domestic real estate asset values.

Table 1: Valuation comparison - 26 major REITs, market medians

	Discount to NAV		Premium/Discount to NTA		Price change
	Dec-07	Jun-08	Dec-07	Jun-08	Dec 07 to Jun 08
Internal	-2.9%	-24.3%	45.4%	-12.5%	-40.9%
Domestic	-1.4%	-31.8%	90.0%	-7.8%	-40.9%
Offshore	-2.9%	-19.3%	16.7%	-23.5%	-32.2%
External	-3.7%	-25.8%	-6.3%	-41.1%	-37.8%
Domestic	-3.7%	-20.0%	-3.4%	-22.4%	-17.0%
Offshore	-9.9%	-41.2%	-9.5%	-49.0%	-40.9%
Total	-3.6%	-25.8%	-3.4%	-31.3%	-38.2%
Debt/assets >40%	-10.6%	-42.8%	-9.4%	-47.9%	-43.0%
Debt/assets <40%	-3.4%	-24.3%	11.6%	-22.3%	-34.8%

Note: Internal- Stapled entity where investor has equal share in trust and management firm External- Separate management firm employed

Net Tangible Assets (NTA)- the value of underlying assets/passive income.

Net Asset Value (NAV)- value includes corporate activities e.g. Development, Funds Management.

Source: UBS, Mirvac Research

While there is a perception that A-REITs have been sold down indiscriminately, the decline has in fact been quite selective. Table 1^{v} shows that in mid-December 2007 internally managed (or stapled) REITs were trading at a modest, 2.9 percent discount to net asset value (NAV) and at a substantial (45.4 percent) premium to net tangible asset value (NTA). The difference reflects the value attributed to corporate activities such as funds management and development at that time. By mid-June 2008 internally managed REITs with domestic exposure were trading close to NTA (-7.8 percent) and at a sharp discount to NAV (-31.8 percent). The market is now pricing in the passive ownership income of these REITs close to current market values but heavily discounting the corporate activities.

Externally managed REITs were trading close to NAV and NTA in December 2007, the two measures being closely aligned in the absence of corporate activity. By June 2008 the externally managed REITs were trading at a discount to NAV and NTA, although it is noticeable that the median decline in the trusts with offshore exposure (defined as exposure of > 10% of portfolios) recorded a steeper decline in price (40.9 percent) than purely domestic REITs (17.0 percent). Apparently the sharemarket has been discriminating between REITs with offshore exposure, where real estate markets are weak, and those with domestic exposure, where real estate markets are expected to remain relatively strong.



Debt to assets ratios also influenced performance. The relationship between price declines over the six months to June 2008 and debt/assets ratios is statistically significant.

The fall in the A-REIT index during the first half of 2008 was influenced by many factors, including risk aversion and rising interest rates. However the factors associated with the steepest price falls are:

- high debt/assets ratios
- exposure to offshore markets
- exposure to activities outside of passive ownership

Overall, the fall in the A-REIT index is more a vote of no-confidence in these factors rather than a prelude to sharp falls in domestic real estate asset values.

Which real estate asset classes will perform best over the next five to seven years?

Economic drivers rather than rental growth dictate investment performance in real estate. As a reality check, BIS Shrapnel reported that real prime net effective rents in the Sydney and Melbourne office markets grew by 0.0 and fell by 0.1 percent pa respectively (1970 to 2007), real regional shopping centre specialty rents grew by 0.0 percent pa in Sydney and fell by 0.1 percent pa in S.E. Queensland (1989 to 2006). In sub-regional centres real growth in both these markets was zero. Thus while rents exhibit cyclical fluctuations, their long-term stability in real terms is impressive.

Economic drivers point to differences in investment performance. Real retail turnover has grown at 3.4 percent pa on average for the past twenty years, in line with real GDP growth (ABS, Cat 8501.0). White collar employment, in contrast, grew at 2.6 percent pa from 1988 to 2008 (ABS, Cat 6291.0). Adjusting for a gradual decline in workspace ratios, this indicates that underlying demand for office space lags the overall economic growth rate. Merchandise import plus export volume growth in contrast has averaged 6.5 percent pa from 1988 to 2008 (ABS, Cat 5206.0) pointing to strong long-term demand for industrial facilities. These relative growth rates provide, perhaps, a broad indication of the relative returns from the three major real estate sectors over the next few years.

These long-term growth statistics support the case for investment in retail and industrial assets, particularly in locations of strong population and economic growth. Against these long-term themes, a cyclical case can be made for the office market over the next few years. Australia's office stock is ageing after a twenty-year gap in construction; tenant are seeking higher quality accommodation; nationally the office vacancy rate (3.9 percent in January 2008) is at a twenty year low (PCA, 2008); within CBD areas office development competes with growing demand for inner-city residential and hotel use.

Will listed or unlisted vehicles perform best?

Between March 1985 and March 2008 the IPD index delivered an average annual return of 10.6 percent; the A-REIT index, 11.2 percent. The close correspondence over the long term accords with prior expectations: assets are easily arbitraged between funds; consistent out-performance by either listed or unlisted vehicles would trigger portfolio switches and asset repricing. The fact that real estate assets are



distributed across listed and unlisted vehicles is evidence that neither vehicle systematically dominates performance.

Year-to-year, however, divergences between listed and unlisted vehicles may offer arbitrage and trading opportunities, as is probably the case now with the heavily discounted A-REIT sector. Corporate activities within internally managed REITs may have been over-valued in recent years, but the heavy discount currently applied to these businesses is unlikely to persist. In the short term (12 months) the listed market will likely stage a recovery.

We expect that cash will flow to both listed and unlisted sectors but for different purposes – long-term and risk-averse investors will be attracted to unlisted vehicles; listed vehicles will be used for portfolio re-weighting and trading. If so, the listed sector may show greater levels of volatility going forward.

Opportunities: debt and non-core assets

Debt and non-core real estate markets are likely to grow in size and liquidity over the next decade. Australia has closely matched the US in the REIT space but real estate debt markets are much smaller in relative terms. In the US the ratio of real estate (non-residential) debt to equity assets is around 2:1; in Australia the ratio is approximately reversed (Rees, 2006).

Lack of liquidity in domestic debt markets has discouraged investment and trading. Recently, narrow credit spreads were a disincentive to investment in debt instruments; alternatively some investors and managers chose to seek higher returns from debt by travelling up the risk curve, often with disappointing results. Over the next few years debt financing opportunities in construction and development will be scarce because funding costs will he higher and the volume fo private sector construction is likely to decline from the current cyclical peak. But with wider credit spreads the rewards from construction lending will be greater. As in equity space, specialist and skilled credit market practitioners and investors can look forward to generous rewards.

As returns from core assets fall back to benchmarks, interest in non-core assets is likely to increase. The hotel sector is one possible area where synergies remain unexploited the sector remains largely in he hands of small operators who are unable to extract the benefits of economies of scale in marketing, operating and vertical integration with airlines, travel agents and other service providers. Real estate derivatives markets are emerging in the UK and US. It remains to be seen whether they can prosper as asset values stabilise. Sectors such as retirement housing and infrastructure can demonstrate strong underlying growth opportunities. Retirement housing is supported by the demographics of an ageing population. Infrastructure investment opportunities will continue to arise as the private sector is increasingly involved in financing a range of assets – toll roads, transport and utilities – previously in the public domain. Robust financial models for these long duration investments are all-important.

The superannuation "safety-net" and left-of-field risks

Hopes that superannuation funds would provide underlying support for real estate values in Australia have been dashed by the events of the past six months. "Weight-of-funds" theories never survive market



downturns. In a small open economy such as Australia long-term interest rates and risk premiums are largely determined offshore.

"Left-of-field" risks exist for real estate as for all asset classes. A brief, but not definitive, list is:

Tax and regulatory shifts: real estate is immobile (although capital is highly mobile) and is therefore always vulnerable to ambitious policy makers with short time horizons

Obsolescence: Higher hurdle rates imply contracting time horizons and shorter asset duration. Little is known about the rate of depreciation of real estate assets outside of the tax office's arbitrary criteria. As returns fall and interest rates rise, this knowledge gap must be addressed if valuations are to be accurate.

Unlisted (syndicate) market: Around \$3.1 billion in 41 closed end syndicates are due to mature over the next two years (PIR, 2008). Typically these funds offered leveraged exposure to secondary grade assets. Rewards have often been generous but refinancing will be difficult because credit is now scarce and expensive. Some of these funds have rolled back their maturity dates. However, this is only a band-aid solution.

Technology: IT changes have long been predicted to increase the elasticity of demand for office and retail accommodation – working from home, on-line shopping, for example. So far the impact seems minimal – but the risks remain, particularly if transport costs rise permanently.

Supply: The supply pipeline of new real estate product is well-provisioned. Overall there seems to be no systemic risk to any market comparable with the office supply boom of the early 1990s. But in some locations new supply may temporarily depress rents and investment returns.

Conclusion

In summary, the low volatility, high yield characteristics of non-residential real estate remain unimpaired. Beyond the current period of adjustment it is expected that returns on both listed and direct real estate investments will revert to long run levels and that the high yield, low capital growth fundamentals of the real estate sector, direct as well as securitised, will be re-established.



REFERENCES

IPD, 2008, "IPD Property Investors Digest," Website: www.ipd.com

JLL, 2008, "Real Estate Intelligence Service March 2008 data", Jones Lang La Salle Research and Consulting, Australia.

PCA, 2008, "Office Market Report – January 2008", Property Council of Australia, Sydney.

PIR, 2008, "Australian Property Funds Industry Survey 2008," Property Investment Research, Melbourne.

RBA, 2008, "Statistics Bulletin Tables," Website: www.rba.gov.au/Statistics/Bulletin/index.html.

Rees D.J., 2006, "The Four Quadrant Real Estate Investment Model," Mirvac Research, 3rd Quarter, Sydney.

Rees D.J., 2007, "Yield Compression and Risk Premia: A Cross-Country Comparison of Selected Real Estate Markets," a paper delivered to the European Real Estate Society, London.

UBS, 2007, 2008, "UBS Australian REIT Weekly," Various publications by UBS, Sydney.

ENDNOTES

ⁱ By asset class, capital growth between Mar-1985 and Mar-2008 averaged 2.2 percent (office), 5.3 percent (retail), 2.4 percent (industrial).

Real estate yields are sometimes compared with ten-year bond yields as a measure of relative value. This approach is theoretically unsound and (from a purely pragmatic viewpoint) the correlation between real estate yields and inflation indexed bonds is consistently higher than with ten-year bond yields in Australia and in major offshore markets (Rees, 2007).

iii Risk premiums of real estate assets to real bond yields declined by 153bp in the UK between December 2000 and December 2006, by 111bp in the US and by 31bp in Australia (Rees, 2007).

iv JLL (2008); National data is a simple average across metropolitan markets.

^v UBS (2007, 2008); market medians are used to reflect broad trends. Data based on market average data would be heavily influenced by performances of individual REITs.