Long-Term Investing Report

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Russell Investments is a global asset manager with the core capabilities and expertise to deliver outcome-oriented, multi asset solutions to meet the unique needs of Australian institutional investors, financial advisers and individuals.

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Russell has more than A$135 billion in assets under management (as of 31/12/11) and works with 2,400 institutional clients, over 580 independent distribution partners and millions of individual investors globally.
Executive Summary

This report investigates the performance of various types of investments over the past 10 and 20 years. As part of the performance comparison, the report considers the real-life impact of tax, costs and borrowing on ultimate investment returns. The aim is to provide individual investors with a reasonable insight into how different investments have performed over the medium to long term – in real terms.

In this year’s report we have added an analysis of the impact of currency movements on the returns from overseas shares. This is in response to the large impact that the currency hedging decision has had on the returns received by Australian investors, especially over the past ten years.

Results: Before-tax but After-costs

Residential investment property achieved the highest return of 8.0% p.a. and 9.0% p.a. respectively for the 10 and 20 year periods to 31 December 2011, while Australian shares returned 6.1% p.a. and 8.7% p.a. over the same periods.

› Australian bonds had the second highest return (6.4% p.a.) of those asset classes analysed for the 10 year period and the third highest (7.6% p.a.) for the 20 year period to 31 December 2011.

› Global Real Estate Investment Trusts (REITs) outperformed Australian REITs over 10 and 20 years respectively.

› Overseas shares (unhedged) achieved the lowest return of any asset class over the 10 year period with a return of -3.1% p.a., underperforming cash which returned 3.8% p.a. That said, over 20 years overseas shares (unhedged) outperformed cash (4.8% p.a. vs 4.1% p.a.).

› If an investor had fully hedged their overseas shares investment they would have received 3.7% p.a. and 6.7% p.a. over the past 10 and 20 years. This is an outperformance over unhedged overseas shares of 6.8% p.a. and 1.9% p.a., respectively, over these two time periods.

Results: After-tax and After-costs

› Residential investment property outperformed all other asset classes at the lowest and highest marginal tax rate for the 10 year period with returns of 7.2% p.a. and 5.8% p.a. respectively.

› Australian shares achieved the second highest return of 6.5% p.a. and 4.6% p.a. at the lowest and highest marginal tax rates, respectively, for the 10 year period.

› Over the 20 year period, Australian shares outperformed all other asset classes at both the lowest and highest marginal tax rates returning 9.0% p.a. and 7.0% p.a. respectively.

› Residential investment property achieved the second highest return of 8.1% p.a. and 6.6% p.a. at the lowest and highest marginal tax rates, respectively, for the 20 year period.

› Once gearing is incorporated (i.e. borrowing money to invest), residential investment property continues to outperform Australian shares at both the lowest and highest marginal tax rates over 10 years. In contrast, when extending the data period, Australian shares outperform residential investment property over 20 years once gearing is incorporated. These results are similar to the analysis without gearing.
Australian bonds outperformed Global REITs, Australian REITs, cash and overseas shares (hedged and unhedged) on both the lowest and highest marginal tax rates for the 10 year period. This was also the case at the lowest marginal tax rate over 20 years. However, at the highest marginal tax rate overseas shares (hedged), Australian and global REITs all outperformed Australian bonds due to the concessional taxation of capital gains as opposed to returns distributed as income.

Cash had the lowest returns, under both tax regimes, of all asset classes over 20 years to 31 December 2011.

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Diversified Managed Funds
The sample managed funds will naturally always lie in between the lowest and highest performing asset classes because different proportions of the funds are allocated across different asset classes.

The higher allocation to overseas shares (unhedged) by the growth and balanced managed funds was a major contributor to the relative outperformance of the conservative managed fund. This is because overseas shares (unhedged) had the lowest returns of all asset classes over the 10 year period.

Tax Implications for Investors
The results of this study show that tax makes a significant difference to the final return outcome for various investments. It also shows that the way returns are distributed to investors (i.e. as capital gains or income) can also affect the outcomes.

Personal taxation has a greater impact on Australian bonds and cash investments as returns are predominately distributed as income.

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Superannuation calculations have also been conducted for this report, demonstrating that investing in superannuation can provide significant tax advantages which may increase net returns compared to investments outside of superannuation.

The impact of personal taxation on Australian shares returns has been less significant due to the availability of franking credits.

At the lowest marginal tax rate, the tax credits from dividend imputation results in the after-tax return being greater than the before-tax return.

The impact of personal taxation on residential investment property has also been less significant as a result of the tax deductibility of expenses related to residential investment property.

Lastly, the tax deferral of a portion of REITs distributions has also resulted in a reduced impact of personal taxation on Australian REITs returns.

At the lowest marginal tax rate, the tax credits from dividend imputation results in the after-tax return being greater than the before-tax return.

Effect of Gearing
Borrowing money to invest (i.e. gearing) over the past 10 and 20 years has effectively increased the after-tax return of both Australian shares and residential investment property.

The increase in performance of the two asset classes has more than offset the borrowing costs over these periods. In simplified terms, if returns were higher than borrowing costs, then gearing would have a beneficial effect on performance of a geared asset.
Market Overview for Calendar Year 2011

The continued volatility in equity markets in 2011 was driven mainly by international factors including the ongoing European sovereign debt issues, concerns over the recovery of the US economy as well as the potential for China to suffer a ‘hard-landing’ in terms of GDP growth. The continued evidence of a two-speed economy in Australia has also been a material contributor to the prevailing market volatility domestically. The prevailing market conditions have led to the creation of the terminology, ‘risk-on/risk-off’ to describe the volatile market environment.

It is important to note that volatile short-term return patterns are a normal part of investing in growth type asset classes, such as equities. Investors with long-term horizons should not respond to these short-term market movements with knee-jerk reactions.

The diversity of growth assets and, in particular, the tax advantages from investing in Australian shares to local investors, mean that these assets are an integral and core part of any portfolio for those with a long-term focus and time horizon.

Fair Comparison of Investment Performance

This report is designed to investigate the performance of various investments over the medium and long term. The results are provided on a consistent net basis (i.e. after all costs and taxation) over 10 and 20 year periods ending 31 December 2011.

Eight major sectors are included in this report:

› Australian shares
› Residential investment property
› Australian REITs
› Global REITs (unhedged in AUD)
› Overseas shares (unhedged in AUD)
› Overseas shares (hedged in AUD)
› Australian bonds
› Australian cash

Performance is calculated over these periods for two reasons: (i) to assist those individual investors who invest for the medium and longer term, and (ii) to provide a reasonable comparison between investment sectors. The report considers the tax impact for investors at both the lowest and highest marginal rates as well as at the superannuation tax rate, to provide a more accurate indication of performance for investors at different tax thresholds.

The diversity of growth assets and, in particular, the tax advantages from investing in Australian shares to local investors, mean that these assets are an integral and core part of any portfolio for those with a long-term focus and time horizon.

In addition to these eight sectors, the report includes net of costs returns for three representative diversified indexed managed funds for the 10 year period ending 31 December 2011:

› Conservative (25%–35% allocation to equities and property)
› Balanced (65%–75% allocation to equities and property)
› Growth (75%–85% allocation to equities and property)

Performance Comparison: Before-tax

10 Year Performance

It can be observed from Exhibit 1 (overleaf) that residential investment property (8.0% p.a.) outperformed all other investments over the past 10 years. Australian bonds were the second best performing asset class returning 6.4% p.a. whilst Australian shares were the third highest with a return of 6.1% p.a. over the same period. These asset classes all beat the average rate of inflation over the past 10 years which was measured to be 2.9% p.a.

The sample managed funds are made up of a diversified selection of investments across
Exhibit 1 Investment returns for the 10 years to December 2011.

Returns (%) p.a.

* Only before-tax return has been calculated

Note: All returns are net of costs. Past performance is not a reliable indicator of future performance.
a range of asset sectors. As a result, the performance of these sample funds will naturally always lie in between the lowest and highest performing asset classes. In this analysis, the Conservative managed funds outperformed both the Balanced and Growth managed funds due to lower weightings to overseas shares (unhedged), which underperformed other asset classes over this period.

Australian shares have again outperformed unhedged overseas shares in part due to the appreciating Australian dollar (hurting unhedged overseas shares investors). That said, it has also outperformed hedged overseas shares over the same period.

20 Year Performance

Exhibit 2 (overleaf) shows that in the past twenty years residential investment property (9.0% p.a.) has outperformed all other investment sectors before taxation but after costs. Australian shares (8.7% p.a.), Australian bonds (7.6% p.a.) and hedged overseas shares (6.7% p.a.) were also strong performers over the period. Global REITs (6.5% p.a.) outperformed their Australian equivalents (6.0% p.a.), unhedged overseas shares (4.8% p.a.) and cash (4.1% p.a.) before tax. All investments performed well above the average rate of inflation (2.6% p.a.).

Performance Comparison: After-tax

This study shows that tax (and its differing effect on capital gains and income) makes a significant difference to the end return for an investor. Overall, for the 20 year period to 31 December 2011, the effective tax rate for top marginal tax payers was:

› Australian shares: 20%
› Australian REITs: 23%
› Residential investment property: 26%
› Overseas shares: 28%
› Global REITs: 36%
› Australian bonds and cash: 49%.

The results highlight the greater impact of personal taxation on Australian bonds and cash investments. The impact of personal taxation on Australian shares returns has been less significant, due to the introduction of dividend imputation in July 1987. Dividend imputation allows investors to offset tax already paid by a company on profits it earns (currently at 30%) against the tax on their dividends. The impact of personal taxation on residential investment property has also been less significant as a result of the tax deductibility of expenses related to residential investment property. Lastly, the tax deferral of a portion of REITs distributions has also resulted in a reduced impact of personal taxation on Australian REITs returns. All three asset classes (Australian shares, residential investment property and Australian REITs) also provide tax deferral benefits and qualify individual and superannuation investors for a capital gains tax discount on liquidation, which contributes to their after-tax attractiveness relative to Australian bonds and cash.

10 Year Performance

When taking the effects of taxation into account, Exhibit 1 shows that, in the past 10 years, residential investment property has outperformed all other investment sectors at the lowest and highest marginal tax rates. For Australian shares, the higher after-tax return for the lowest marginal tax rate and superannuation funds versus the before-tax (or Gross) return is a result of the benefits of dividend imputation (or franking credits).

At the lowest marginal tax rate, the after-tax returns from residential investment property (7.2% p.a.), Australian shares (6.5% p.a.), Australian bonds (5.3% p.a.), cash (3.2%) and hedged overseas shares (3.1% p.a.) were above the average rate of inflation (2.9% p.a.) over the 10 year period. Global REITs (1.5% p.a.), Australian REITs (0.5% p.a.) and unhedged overseas shares (-2.5% p.a.) were the lowest returning asset classes over this 10 year period.

At the top marginal tax rate, the after-tax returns from residential investment property (5.8% p.a.), Australian shares (4.6% p.a.) and Australian bonds (3.3% p.a.) have exceeded inflation. Hedged overseas shares (2.2% p.a.), cash (2.0% p.a.), global REITs (1.0% p.a.), Australian REITs (0.5% p.a.) and overseas shares unhedged (-1.5% p.a.) all have returns below the rate of inflation.
Exhibit 2 Investment returns for the 20 years to December 2011.

Returns (%) p.a.

- Australian shares
- Residential investment property
- Australian REITs
- Australian Bonds
- Cash
- Overseas shares (hedged)
- Overseas shares (unhedged)
- Global REITs (unhedged)

Note: All returns are net of costs. Past performance is not a reliable indicator of future performance.
As the superannuation tax rate of 15% is slightly below that of the lowest marginal tax rate, and well below the highest marginal rate, we observe that these are the highest of the ‘taxed’ group of returns. This is because the effects of a greater capital gains discount for personal investors (50%) as compared to that of superannuation investments (33%) is more than offset by the difference between the superannuation and personal tax rates.

At the superannuation tax rate, residential investment property was again the top performing asset class, producing returns of 7.2% p.a. This was followed by Australian shares (6.6% p.a.), Australian bonds (5.4% p.a.), cash (3.3% p.a.), hedged overseas shares (3.2% p.a.), unhedged global REITs (1.6% p.a.), Australian REITs (0.5% p.a.) and unhedged overseas shares (-2.5% p.a.).

**20 Year Performance**

The returns presented in Exhibit 2 show that in the past 20 years, the Australian shares sector has outperformed all other investment sectors once taxation and expenses have been accounted for. All asset classes (except cash at the top marginal rate) have outperformed inflation (2.6% p.a.) over the past 20 years.

At the lowest marginal tax rate, the after-tax and expenses return of Australian shares (9.0% p.a.) outperformed residential investment property (8.1% p.a.), Australian bonds (6.1% p.a.), hedged overseas shares (6.1% p.a.), unhedged global REITs (5.6% p.a.), Australian REITs (5.4% p.a.), overseas shares unhedged (4.3% p.a.) and cash (3.3% p.a.).

At the lowest marginal tax rate, the after-tax returns of Australian shares (7.0% p.a.), residential investment property (6.6% p.a.), hedged overseas shares (4.9% p.a.), Australian REITs (4.6% p.a.), unhedged global REITs (4.2% p.a.), Australian bonds (3.9% p.a.) and overseas shares unhedged (3.4% p.a.) have exceeded inflation. Returns from cash (2.1% p.a.) fell below the average rate of inflation.

At the superannuation tax rate, returns were slightly higher than those of the lowest marginal tax rate and exceeded those at the top marginal rate. Australian shares were again the top performing sector, producing returns of 9.2% p.a. This was followed by residential investment property (8.2% p.a.), Australian bonds (6.5% p.a.), hedged overseas shares (6.1% p.a.), unhedged global REITs (5.8% p.a.), Australian REITs (5.6% p.a.), overseas shares unhedged (4.4% p.a.) and cash (3.5% p.a.).

**Effects of Gearing**

The effect of borrowing on investment performance has also been considered. Of the asset classes under analysis, gearing (borrowing money to invest) is most common amongst investments in Australian shares and residential investment property.

Exhibit 3 (overleaf) compares the 10 and 20 year investment returns of Australian shares and residential investment property, on an after-tax basis, with and without gearing. In calculating the after-tax returns with gearing, the following assumptions have been applied:

› 50% of initial investment is borrowed (i.e. initial gearing ratio of 0.5). Although higher gearing levels are usually seen with residential investment property, there are usually limits with gearing levels on Australian shares.

› Gearing arrangements involve interest-only loans.

› Indicative home loan interest rates (for residential property) are, on average, 1.1% p.a. lower than margin lending rates (for Australian shares). In calculating the after-tax returns, allowance has been made for the tax deductibility of interest costs.

The exhibit shows that the use of leverage over the past 10 and 20 years has increased the after-tax return of both Australian shares and residential investment property (increase was modest over 10 year period and more significant over 20 periods). The results reflect that the performance of the two asset classes has more than offset the borrowing costs over the 10 and 20 year periods. At both the lowest and highest marginal tax rates, Australian shares has outperformed residential investment property over 20 years, with the opposite being true over 10 years.
Exhibit 3 Investment returns for the 10 years to December 2011.

Returns (%) p.a.

Over 10 years

- After-tax lowest marginal tax rate
- After-tax top marginal tax rate
- 50% gearing on initial investment

Over 20 years

- After-tax lowest marginal tax rate
- After-tax top marginal tax rate
- 50% gearing on initial investment

Note: All returns are net of costs. Past performance is not a reliable indicator of future performance.
Conclusion

Australian and overseas equity markets again produced negative returns over the 2011 calendar year. This performance was not as severe as that experienced in 2008 but has resulted in two of the last four years being negative for Australian equities. However, Australian equities have performed strongly over longer timeframes which is where a long-term investor should focus. Moreover, while there have been shorter periods of time in history when cash and bonds have outperformed shares, over the long run, history has shown that equities have delivered superior returns, especially taking into account the relative impact of tax. This is discussed further in the accompanying “After-tax Perspectives”.

The importance of currency exposures has been highlighted by the 6.8% and 1.9% outperformance of hedged relative to unhedged overseas equities over 10 and 20 years to 31 December 2011 respectively. While there can be large differences in returns of international asset classes year-on-year due to currency movements, this analysis shows the importance of the hedging decision for Australian investors over time. Moreover, currency’s contribution to a diversified portfolio’s risk (or volatility) level is also an important consideration that will be discussed in the accompanying “Risk Perspectives”.

This report presents a review of medium- to long-term investment performance. It must be noted that it is not indicative of how asset classes might perform in the next 10 or 20 years. The accompanying “SMSF Perspectives” explores this issue further.
Appendix

This analysis has been conducted on the following basis:

**Investment Comparison**

- All investment returns are determined after taking into account expenses relating to the acquisition, management and disposal of the asset. **Gross returns** are calculated before tax but after costs. **Net returns** allow for the taxation treatment of each investment over the period of analysis. This aims to represent a realistic method of comparing the different asset classes for an investor.

- **Compound returns** are calculated over a 10 year period from 1 January 2002 to 31 December 2011 and over a 20 year period from 1 January 1992 to 31 December 2011. The returns are equivalent to the per annum compound returns that investors would have received for an investment in the particular asset class if they invested in an equivalent portfolio over the two periods.

**Income Tax**

- The lowest and highest **marginal tax rates** are currently 16.5% and 46.5%, respectively. These rates have varied slightly over the 10 and 20 years due to changes in **taxation policy** and the **Medicare levy**. These variations have been taken into account in the calculation of after-tax returns. Both bottom and top marginal rates include the Medicare levy of 1.5%.

- These variations have been taken into account, including the impact on the calculation of franking credits, which have an impact on after-tax returns for Australian shares.

**Capital Gains**

- Generally, assets acquired on or after 20 September 1985 are subject to the capital gains tax provisions. For the calculation of 10 and 20 year returns, capital gains tax is calculated on both the initial investment and any subsequent reinvestment of income. Cash is not subject to capital gains tax as all gains are taxed as income and, therefore, subject to marginal rates. For ease of calculations and lack of Australian bonds coupon and capital data, the report assumes returns from Australian bonds are treated as income.

- Assets acquired prior to 21 September 1999 and held for over 12 months can be assessed for capital gains tax in one of two ways. Private investors can choose to pay capital gains tax (at their marginal tax rate) on either 100% of the capital gain (with indexation of the tax cost) or 50% of their capital gain (with no indexation). In this report, we have presented sector returns based upon the calculation method that provides the higher after-tax returns. The discounted capital gain method (as opposed to indexation) has provided the higher after-tax returns in all cases.

**Capital Losses**

- **Capital losses** may be carried forward indefinitely and offset against other capital gains in future periods. An assumption has been made that the investor has other investments, either today or in the future that have, or will, produce capital gains to which capital losses may be offset.

**Imputation Credits**

- Since July 2000, low tax rate investors with imputation credits remaining after offsetting all tax have been able to claim back the excess as a refund from the Tax Office. Previous to this, the excess could only be offset against income tax from other sources. An assumption has been made that previous to July 2000, the investor had other sources of income to offset this excess against.

**Gearing**

- After-tax returns with **gearing** have also been calculated for Australian shares and residential investment property over the 10 year period from 1 January 2002 to 31 December 2011 and over the 20 year period from 1 January 1992 to 31 December 2011. Half of the initial investment is assumed to be borrowed and gearing arrangements
are assumed to involve interest-only loans (i.e. periodic payments do not include any repayment of principal). In addition, allowance is made for the deductibility of interest costs.

- **Borrowing costs** are based on data from the Reserve Bank of Australia (“RBA”) bulletin. For residential investment property the standard variable rate for housing loans is used while, for Australian shares, the margin loans rate is used.

**Superannuation**

- The investment earnings of a complying superannuation fund or retirement savings account are taxed at a rate of 15% as of 1 July 1988. Prior to this, there was no tax on superannuation earnings. The capital gains tax discount for superannuation funds is one third of the capital gains included in a superannuation fund’s assessable income. The tax that a superannuation fund pays on its assessable income (earnings and taxable contributions) can be reduced through the use of imputation credits.

- In the Superannuation example, it is assumed the investor is over the age of 60 when redemption of assets occur, thus no tax is payable on a superannuation lump sum or income stream benefit payments.

**Currency Gains and Losses**

- Tax on currency gains and losses in the overseas shares (hedged) asset class has been calculated on the assumption that the hedging election under the Taxation of Financial Arrangements rules has been made. Broadly, this ascribes to the currency gains and losses the same tax timing and character as gains and losses on the hedged portfolio of overseas equities.

**Investment Measures**

- The **residential property** measure is a population weighted average return across major capital cities. Increases in value are based on median house prices obtained from the Real Estate Institute of Australia. Data from the Australian Bureau of Statistics are used to make adjustments for capital improvements. Net rental income allows for vacancy rates, maintenance expenses, management fees, government charges, land tax and insurance. Acquisition and disposal costs include conveyancing, stamp duty and agent’s fees.

- The **cash** measure assumes an investment of $50,000 in Cash Management Accounts at banks (averages of the five largest banks’ rates) sourced from the RBA.

- The **Australian shares** measure is based on investment in listed shares with price movements and dividend reinvestment consistent with the S&P/ASX All Ordinaries Accumulation Index. Allowance is made for brokerage and stamp duty (where applicable) on acquisition and disposal. Stamp duty ceased to apply from 1 July 2001 to transfers of marketable securities quoted on the Australian Stock Exchange. Dividend franking is taken into account in determining the impact of tax on dividends.

- The **Australian bonds** measure is based on investment in Australian Government and corporate bonds. Returns are derived from the UBS Australia Composite Bond Index. For ease of calculation and lack of available data, price movements and coupon payments are both taxed as income.

- The **Australian REITs** measure is based on the returns implied by the S&P/ASX 200 Property Trust (Accumulation) Index. Acquisition and disposal costs, such as brokerage and stamp duty (where applicable), have been factored into the return calculations. Assumptions have been made with respect to the tax treatment of REITs income, including the component of tax-free (abolished in July 2002) and tax-deferred income.

- The **overseas shares (unhedged)** measure is based on investment in listed shares with price movements and dividend reinvestment consistent with the Russell Developed Large Cap Index (unhedged) in AUD from 1997 onwards and the MSCI World ex-Australia Gross Dividends Accumulation Index (unhedged) in AUD prior to then. Allowance is made for brokerage on acquisition and
disposal. Withholding taxes are used to offset Australian taxes in the year the dividends are received.

- The **overseas shares (hedged)** measure is based on investment in listed shares with price movements and dividend reinvestment consistent with the Russell Developed Large Cap Index (hedged) in AUD from 2000 onwards and the MSCI World ex-Australia Gross Dividends Accumulation Index (hedged) in AUD prior to then. Allowance is made for brokerage on acquisition and disposal. Withholding taxes are used to offset Australian taxes in the year the dividends are received.

- The **global REITs** measure is based on investment in REITs securities with price movements and dividend reinvestment consistent with the FTSE EPRA/NAREIT Developed Index in AUD (unhedged). Allowance is made for brokerage on acquisition and disposal. Withholding taxes are used to offset Australian taxes in the year the dividends are received.

- The **conservative managed fund** measure is based on investment in an indexed managed fund with an asset allocation consistent with the industry average for funds that have between 25–35% growth assets. Growth assets include Australian shares, overseas shares (hedged and unhedged) and property. Allowance is made for buy/sell spreads on acquisition and disposal and annual investment management fees equivalent to that of a retail indexed manager. After-tax returns are not calculated due to lack of data on distributions.

- The **balanced managed fund** measure is based on investment in an indexed managed fund with an asset allocation consistent with the industry average for funds that have between 65–75% growth assets. Growth assets include Australian shares, overseas shares (hedged and unhedged) and property. Allowance is made for buy/sell spreads on acquisition and disposal and annual investment management fees equivalent to that of a retail indexed manager. After-tax returns are not calculated due to lack of data on distributions.

- The **growth managed fund** measure is based on investment in an indexed managed fund with an asset allocation consistent with the industry average for funds that have between 75–85% growth assets. Growth assets include Australian shares, overseas shares (hedged and unhedged) and property. Allowance is made for buy/sell spreads on acquisition and disposal and annual investment management fees equivalent to that of a retail indexed manager. After-tax returns are not calculated due to lack of data on distributions.