

# Long-Term Investing Report

Comparing 10 and 20 year  
performance of various investments  
to December 2007

## Russell

**Russell web site**  
[www.russell.com.au](http://www.russell.com.au)  
**Email**  
[askrussell@russell.com](mailto:askrussell@russell.com)  
**Mail**  
GPO Box 3279  
Sydney NSW 2001

## ASX

**ASX web site**  
[www.asx.com.au](http://www.asx.com.au)  
**ASX Customer Service**  
131 279  
**Fax**  
(02) 9227 0885  
**Mail**  
PO Box H224  
Australia Square  
Sydney NSW 1215  
**Address**  
Australian Securities Exchange  
Exchange Centre  
20 Bridge Street  
Sydney NSW 2000



As one of the world's top-10 listed exchange groups, measured by its market capitalisation, the ASX Group was created through the merger of the Australian Stock Exchange and the Sydney Futures Exchange. The ASX Group operates under the brand Australian Securities Exchange.

The Australian Securities Exchange spans the markets for corporate control, capital formation and price discovery and functions as an operator, supervisor, central counterparty clearer and payments system facilitator.

The diverse domestic and international customer base of the Australian Securities Exchange includes issuers of a variety of listed securities, corporates, investment banks, trading banks, fund managers, hedge funds, commodity trading advisers and proprietary and retail traders.

More information on ASX can be found on our website [www.asx.com.au](http://www.asx.com.au)

Russell Investment Group, a global leader in multi manager investing, provides investment products and services in 47 countries. Russell manages \$230 billion in assets worldwide. Russell was founded in 1936, and is proud to have been working to improve financial security for Australians for more than 20 years.

Russell provides a full range of investment services to institutional clients, financial planners and individual investors. Millions of individual investors worldwide have access to Russell's services through a network of alliances that includes many of the world's top banks, brokers, insurance companies and independent investment advisors.

Russell provides access to some of the world's best money managers. We help investors put this access to work in large superannuation funds and in the life savings of individual investors.

More information on Russell can be found on our website [www.russell.com.au](http://www.russell.com.au)

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 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. This report is a continuation of the annual ASX Investment Performance Report, historically prepared by Russell. This is the 11th year it has been published.

## Results: Before-tax but after-costs

- » Australian shares achieved the highest return of 13.3% p.a. for the ten year period.
- » Australian shares also achieved the highest return of 12.5% p.a. for the twenty year period.
- » Australian listed property came a close second with a return of 12.7% p.a. for the ten year period, with residential investment property achieving a return of 11.6% p.a. to come in at third place.
- » Global listed property returned 9.7% p.a. for the ten year period.
- » Cash achieved the lowest return of any asset class over the ten and twenty year periods.

## Results: After-tax and after-costs

- » Australian shares outperformed all other asset classes at both the lowest and highest marginal tax rate for both the ten year and twenty year period.
- » Australian listed property achieved the second highest return of 11.3% and 9.0% at the lowest and highest marginal tax rates, respectively, for the ten year period.

- » When taking gearing into account (i.e. borrowing money to invest), Australian shares outperformed residential investment property at both the lowest and highest marginal tax rates.
- » Global property and global shares are not included on an after-tax basis due to the differential tax treatment for Australian investors in different countries.

## Diversified Managed Funds

- » The sample managed funds will naturally always lie in between the lowest and highest performing asset classes.
- » The managed funds exhibited less volatility than shares and listed property, providing a more consistent return for investors.

## Tax Implications for Investors

- » The results of this study show that tax makes a significant difference to the end outcome for various investments.
- » Personal taxation has a greater impact on fixed interest and cash investments.
- » For the first time this year we have taken superannuation calculations into account, demonstrating that investing in superannuation can provide significant tax

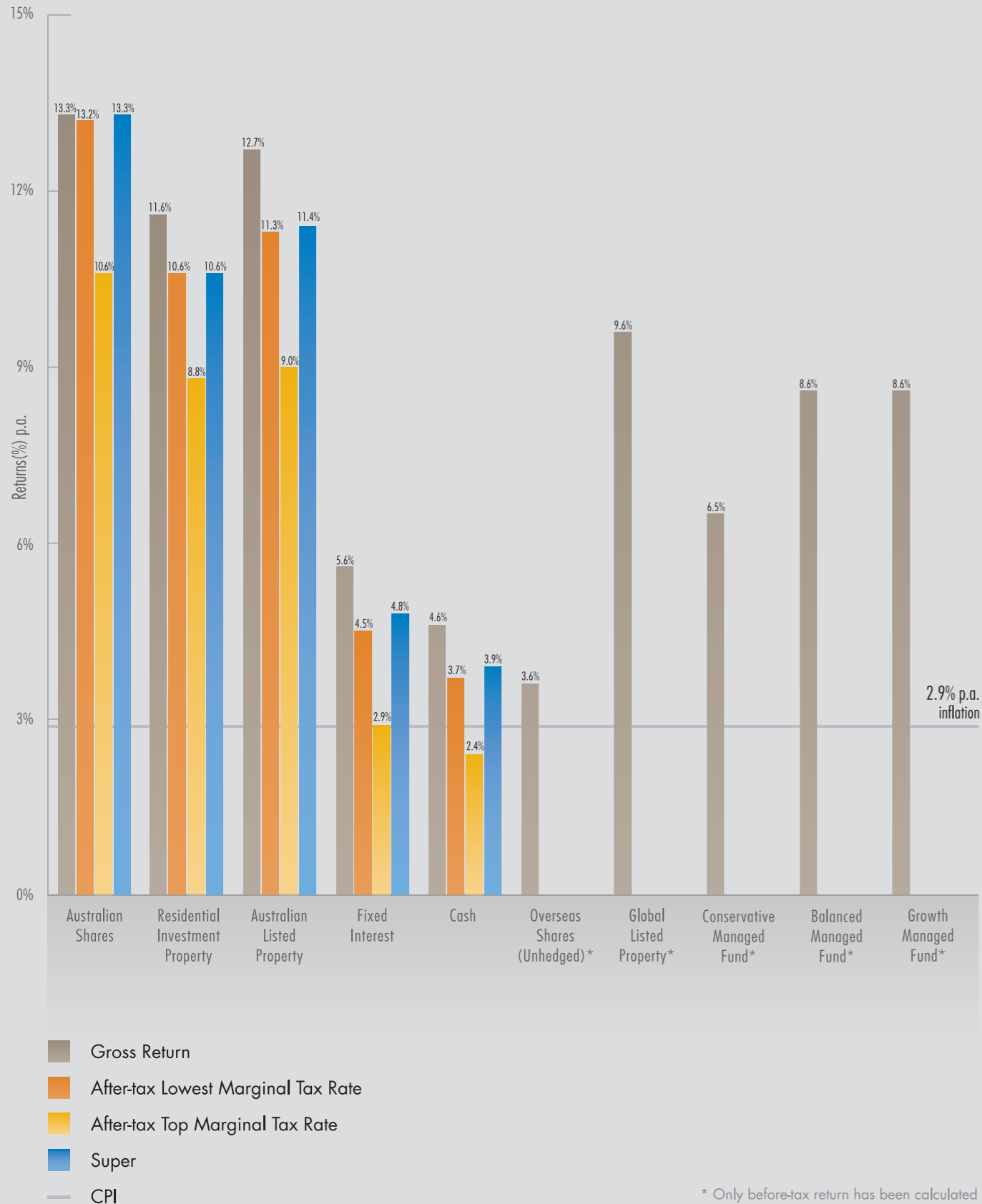
- advantages which may increase net returns compared to investments outside of superannuation.
- » The impact of personal taxation on Australian shares returns has been less significant, due to franking credits.
- » At the lowest marginal tax rate, the tax credits from dividend imputation resulted in the after-tax return being slightly greater than the before-tax return for the twenty year period.

## Effect of Gearing

- » Borrowing money to invest (i.e. leverage) over the past ten 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 the ten year period.

Chart 1

Comparison of various investments, at different tax rates. 10 Years to 31 December 2007.



\* Only before-tax return has been calculated  
 Note: all returns are net of costs

# Long-Term Investing Report

All investment markets move in cycles. While this report presents a review of medium-long investment performance, it is not indicative of how asset classes might perform in the next 10 or 20 years. For a variety of reasons, Australian shares, Australian listed property and residential investment property have all experienced unprecedented booms at various points in the last ten years, strongly influencing results.

## 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 ten and twenty year periods ended 31 December 2007. Performance is calculated over these two 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 marginal rate as well as at the superannuation tax rate, and highest marginal rate, to provide a more accurate indication of performance for investors at different tax thresholds.

Seven major sectors are included in this report:

- » Australian shares
- » Residential investment property
- » Listed property\*
- » Global listed property
- » Overseas shares (unhedged)
- » Domestic fixed interest
- » Domestic cash

In addition to these seven sectors, the report includes net of costs returns for three sample diversified indexed managed funds for the ten year period ended 31 December 2007:

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

As a result, the performance of these sample funds will naturally always lie in between the lowest and highest performing asset classes. In this study, the balanced and growth funds returned less than Australian shares, Australian and global listed property, and residential investment property – but higher than overseas shares (unhedged), fixed interest and cash. The managed funds exhibited lower volatility (less variability in

**“Returns have been particularly strong for Australian shares, Australian and global listed property, and residential investment property over this period.”**

## Performance Comparison – Before Tax

### 10 Year Performance

Chart 1 shows that Australian shares outperformed all other investments in the past ten years followed closely by Australian listed property. Returns have been particularly strong for Australian shares, Australian and global listed property, and residential investment property over this period, even after taking inflation into account.

The sample managed funds are made up of a diversified selection of investments across a range of asset

returns, year to year), providing a more consistent yearly return for investors as a result of diversification effects.

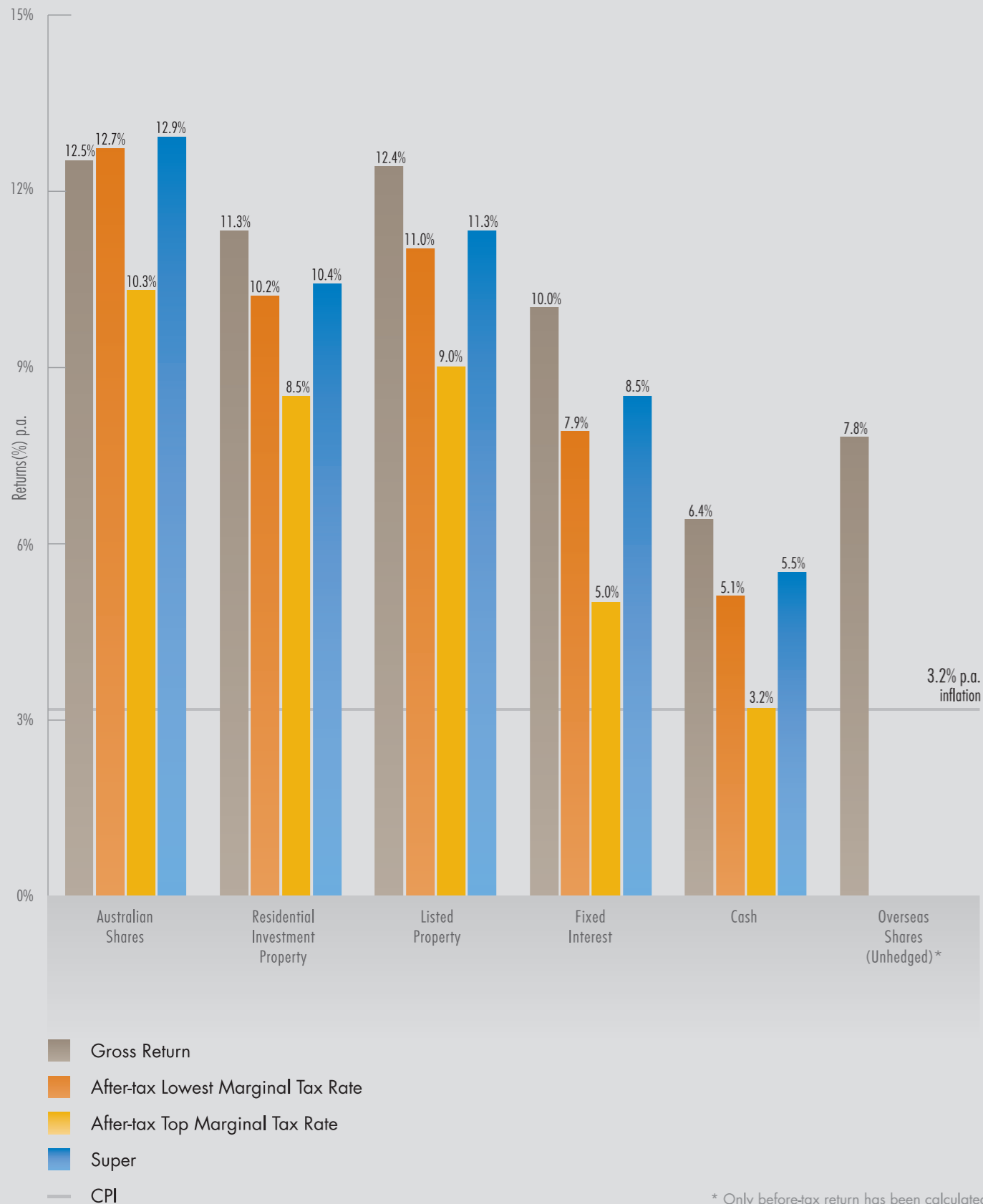
While it is appropriate that given the booming economic conditions, Australian shares have exhibited the strongest returns over the last ten years, the Australian sharemarket is now experiencing heightened volatility (variability in returns) in the last twelve months and negative returns in the period since November 2007.

\* Although listed property is considered a separate sector in this report, it is also a sub-sector of Australian shares.

## Chart 2

Comparison of various investments, at different tax rates.

20 Years to 31 December 2007.



\* Only before-tax return has been calculated  
 Note: all returns are net of costs

# Long-Term Investing Report

→ continued from previous page

Short term volatility can be thought of as the price that investors pay for higher long term returns. As such, it is important to note that volatile short term return patterns are a very normal part of investing in growth type asset classes, such as equities, and investors with long-term horizons should see this period as a normal part of an investment cycle.

The diversity of Australian shares and tax advantages to local investors have shown it to be an integral and core part of any portfolio for those with a long term focus and time horizon.

### 20 Year Performance

Chart 2 shows that in the past twenty years, the Australian shares sector (12.5% p.a.) has outperformed all other investment sectors before taxation but after costs. Australian listed property (12.4% p.a.), residential investment property (11.3% p.a.) were also strong performers over the period. Fixed interest (10.0% p.a.) outperformed global shares (7.8% p.a.) and cash (6.4% p.a.) before tax. All investments performed well above average inflation (3.2% p.a.).

### Performance Comparison – After Tax

The results of this study show that tax makes a significant difference to the end outcome for various investments. Overall, for the twenty year period, at the top marginal tax rate, the effective tax rate for Australian shares is around 21%, residential investment property is approximately 24%, listed property is around 29%, fixed interest and cash is around 49%.

The relatively low effective tax rate for Australian shares can be attributed mainly to the benefits of dividend imputation. 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.

### 10 Year Performance

Taking tax into account, Chart 1 shows that in the past ten years, Australian shares have outperformed all other investment sectors.

At the lowest marginal tax rate, the after-tax returns of Australian shares (13.2% p.a.), Australian listed property (11.3% p.a.), residential investment property (10.6% p.a.), fixed interest (4.5% p.a.) and cash (3.7% p.a.) were well above the average rate of inflation (2.9% p.a.) over the ten year period.

Global property and global shares are not included on an after tax basis due to the differential tax treatment for Australian investors in different countries.

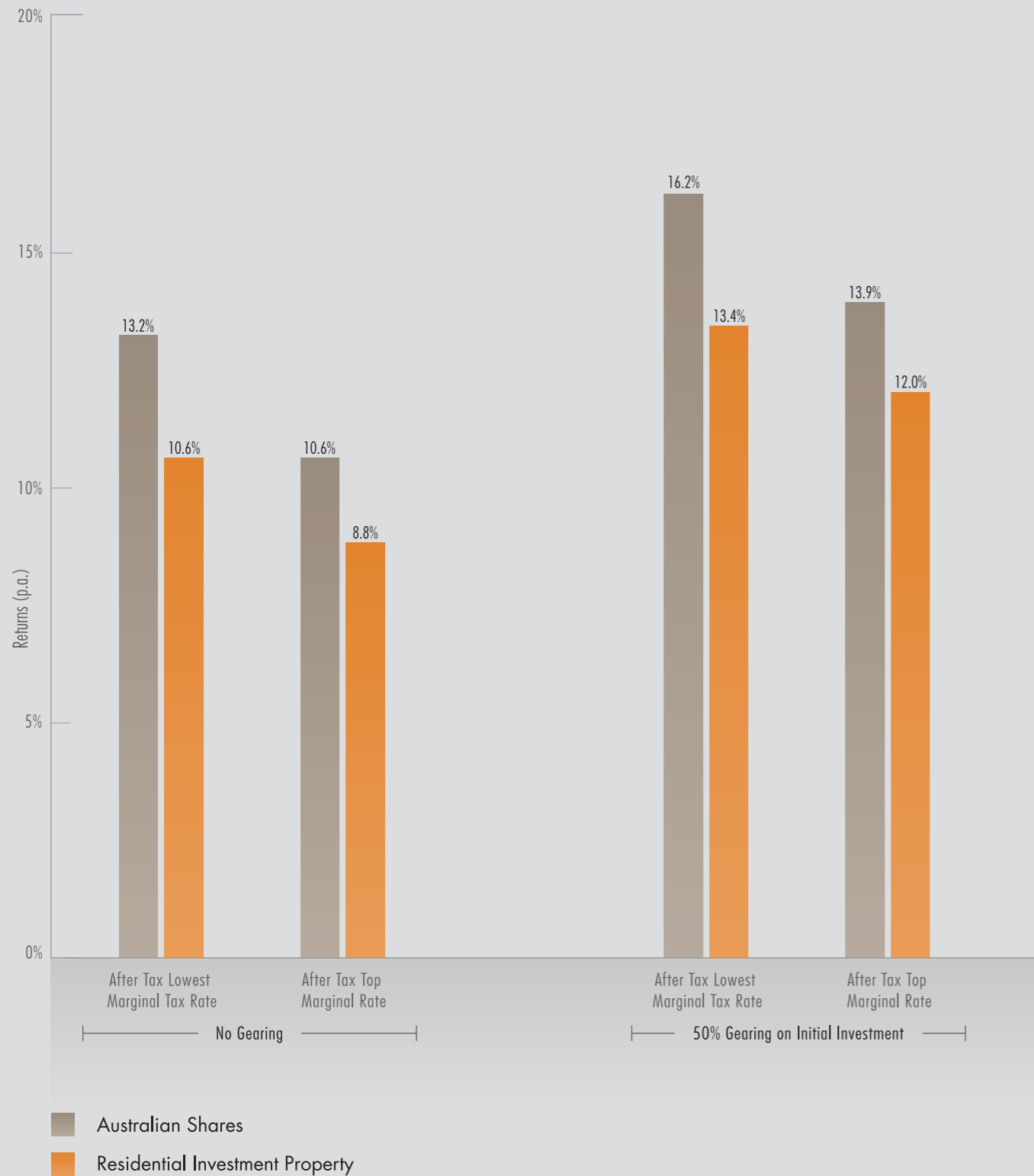
At the top marginal tax rate, the after-tax returns from Australian shares (10.6% p.a.), Australian listed property (9.0% p.a.) and residential investment property (8.8% p.a.) have exceeded inflation.

Fixed interest assets generated returns equal to the average rate of inflation (2.9% p.a.) The cash return (2.4% p.a.), has fallen below the average rate of inflation.

At the superannuation tax rate, returns were higher than at the lowest marginal tax rate and well exceeded those at the top marginal rate. Australian shares were again the top performing sector, producing returns of 13.3% p.a. This was followed by Australian listed property (11.4% p.a.) and residential listed property (10.6% p.a.). Fixed interest and cash produced returns above the average rate of inflation at 4.8% p.a. and 3.9% p.a. respectively.

### Chart 3

Comparison of Australian shares and residential investment property, on an after-tax basis, with and without gearing. 10 Years to 31 December 2007.



Note: all returns are net of costs

## Long-Term Investing Report

→ continued from previous page

### 20 Year Performance

Excluding overseas shares (unhedged) from the after-tax analysis, Chart 2 shows that in the past twenty years, the Australian shares sector has outperformed all other investment sectors after allowing for taxation and expenses. On a before-tax basis, the real returns (i.e., after inflation) of Australian shares, Australian listed property, overseas shares (unhedged), residential investment property and fixed interest, have been strong.

At the lower marginal tax rate, the after tax returns of Australian shares (12.7% p.a.), Australian listed property (11.0% p.a.), residential investment property (10.2% p.a.), fixed interest (7.9% p.a.) and cash (5.1% p.a.) were well above the average rate of inflation (3.2% p.a.).

At the top marginal tax rate, the after-tax returns from Australian shares (10.3% p.a.), residential investment property (8.5% p.a.) and Australian listed property (9.0% p.a.) have exceeded inflation. Returns from fixed interest assets (5.0% p.a.) were more moderate, and cash returns (3.2% p.a.) matched the average rate of inflation.

At the superannuation tax rate, the largest returns were for Australian shares, returning 12.9% p.a. This was greater than the returns provided at both the lowest marginal tax rate and the highest marginal tax rate.

In all other asset classes, returns taking into account superannuation fell between the returns of the lowest marginal tax rate and the highest marginal tax rate.

The results highlight the greater impact of personal taxation on fixed interest 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. At the lower marginal tax rate, the tax credits from dividend imputation resulted in the after-tax return being slightly greater than the before-tax return.

### Effects of Gearing

We will now consider the effect of borrowing on investment performance. Of the asset classes under analysis, gearing (borrowing money to invest) is most common amongst investments in Australian shares and residential investment property.

Chart 3 compares the ten year investment return 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)
- » Gearing arrangements involve interest-only loans
- » Indicative home loan interest rates (for residential property) are on average 1.0% 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 chart shows that the use of leverage over the past ten years has magnified the after tax return of both Australian shares and residential investment property. The results reflect that the performance of the two asset classes have more than offset the borrowing costs over the ten year period.



## Performance Calculations

The investment performance comparisons in this report took into account real life tax implications, investment costs and changes as they occurred over the last ten and twenty years.

### 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-expenses. **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 ten year period from 1 January 1998 to 31 December 2007, and over a twenty year period from 1 January 1988 to 31 December 2007. 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 rate** are currently 16.5% and 46.5%, respectively. These rates have varied slightly over the ten and twenty 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%.
- » The **corporate tax rate** was reduced from 34% to 30% from July 2001. The corporate tax rate has varied slightly over the past ten years due to changes in taxation policy. 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 ten year and twenty year returns, capital gains tax is calculated on both the initial investment and any subsequent reinvestment of income. Cash and fixed interest are not subject to capital gains tax as all gains are taxed as income and are therefore subject to marginal rates.

- » Assets acquired prior to 21 September 1999 and held for a minimum of twelve 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) 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. We have assumed 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.

# Performance Calculations

→ continued from previous page

## Gearing

- » After tax returns with **gearing** have also been calculated for Australian shares and residential investment property over the ten year period from 1 January 1998 to 31 December 2007. 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 per cent 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 sums or income stream benefit payments.

## 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 agents' fees.
- » The **cash** measure assumes an investment in cash management trusts, with data sourced from the RBA Bulletin.
- » 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 **fixed interest** measure is based on investment in Australian Government and corporate bonds. Returns are derived from the Commonwealth Bank All Series All Maturities Index to September 1989 and then the UBS Warburg Australia Composite Bond Index thereafter. Price movements and coupon payments are both taxed as income.
- » The **Australian listed property** 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 listed property 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 MSCI World ex Australia Gross Dividends Accumulation Index (Unhedged) in AUD. Allowance is made for brokerage on acquisition and disposal. After-tax returns are

not calculated due to the differential tax treatment of overseas shares investments by an Australian investor in different countries.

- » The **global listed property** measure is based on investment in listed property securities with price movements and dividend reinvestment consistent with the UBS Global Investors Index (Unhedged) in AUD. Allowance is made for brokerage on acquisition and disposal. After-tax returns are not calculated due to the differential tax treatment of overseas investments by an Australian investor in different countries.

**"After-tax returns are not calculated due to the differential tax treatment of overseas investments by an Australian investor in different countries."**

- » 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 the differential tax treatment of overseas shares investments (which forms part of the allocation) by an Australian investor in different countries.

- » 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 the differential tax treatment of overseas shares investments (which forms part of the allocation) by an Australian investor in different countries.

- » 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 the differential tax treatment of overseas shares investments (which forms part of the allocation) by an Australian investor in different countries.

A PDF of this report is available  
from the Russell and ASX websites:

- » [www.russell.com.au/longterminvestingreport](http://www.russell.com.au/longterminvestingreport)
- » [www.asx.com.au](http://www.asx.com.au)



#### **Russell/ASX Long-Term Investing Report**

The Russell/ASX Long Term Investing Report (the "Report") has been prepared by Russell Investment Management Ltd ABN 53 068 338 974, AFS Licence 247185 ("RIM"). Copyright © 2008 RIM. All rights reserved. This material is proprietary and may not be reproduced, transferred, or distributed in any form without prior written permission from RIM.

#### **Disclaimer**

**Information contained in this booklet:** (1) Is provided in good faith and is derived from sources believed to be accurate and reliable at the time of publication; (2) Is general information only and does not contain any recommendations, reports, analyses, or other advisory information relating to specific securities or issuers of securities and does not constitute an invitation to persons to enter or offer to enter into an investment agreement or to exercise any rights conferred by an investment, to acquire, dispose of, underwrite or convert an investment or contain information calculated to lead directly or indirectly to persons doing so; and (3) Has not been prepared having regard to your objectives, financial situation or needs. You should consider obtaining independent advice before making any investment and/or financial decisions. Past performance is not indicative of future performance.

Neither ASX Limited ABN 98 008 624 691 and its related bodies corporate ("ASX") nor Russell Investment Management Limited ABN 53 068 338 974, AFS Licence 247185 or its related companies ("RIM"), give any representation or warranty as to the reliability, accuracy or currency of the information. To the extent permitted by law, neither ASX nor RIM (including their respective officers, agents and employees) shall be liable in any way for any loss or damage arising in any way (including by way of negligence) from or in connection with any information provided or omitted or from anyone acting or refraining to act in reliance on this information.

RIM or its associates, officers or employees may have interests in the financial products referred to in this information by acting in various roles including, broker or adviser, and may receive fees, brokerage or commissions for acting in these capacities. In addition, RIM or its associates, officers or employees may buy or sell the financial products as principal or agent. You may contact RIM on (02) 9229 5111.

# Historically this report was prepared by Towers Perrin (Australia) Pty Limited for ASX from 1998 to 2003. Russell Investment Group acquired Towers Perrin HR Services (superannuation actuarial services, asset consulting and employee benefits administration) Australian operations in August, 2004. MKT/1732/0508