

# Stocks vs. Property: The House Doesn't Always Win 



Many Kiwis have a love affair with investment property. It is easy to understand why. Residential property prices have boomed, up about sevenfold over the past 30 years. Annual house price growth of around +7\% has only modestly lagged the share market but has been delivered with less volatility along the way. You can also fund part of the investment with debt, further boosting the return on equity. So with house prices having dropped sharply is it now a no brainer to jump into rental property? We think not. The property market dynamics are dramatically different today than in the past, and, despite the pullback, New Zealand house prices are still amongst the most expensive in the world. We believe a repeat of the last 30 years is unrealistic and expect far more modest returns in the years ahead.
..Over the last 30 years, the ratio of median property prices to median household disposable income has risen
from $4 x$ to $9 x$...


MANY KIWIS LOVE INVESTING IN PROPERTY:
NZ HOUSEHOLDS INVESTMENT ASSETS


Source: Forsyth Barr analysis, Statistics New Zealand
NEW ZEALAND HOUSE PRICES HAVE SURGED


[^0]The drivers of historic house price inflation (HPI) can be divided into three categories:
(1) Inflation, or the value of your money going down. Average inflation in New Zealand has been about $+2.5 \%$ per year over the last 30 years. This is most likely roughly repeatable over the next 30 years.
(2) A massive jump in median house price versus median household disposable income. Over the last 30 years the ratio of median property prices to median household disposable income has risen from around $4 x$ to $9 x$, an average increase of about $+3 \%$ per year, driven by a combination of, 1) strong population growth, with housing supply struggling to keep pace, and 2) a steady and substantial decline in interest rates.
So could this trend continue? New Zealand house prices are already amongst the highest in the world relative to income. If it were to continue it would mean the ratio would have to rise to $20 x$ over the next 30 years. Realistic? We say definitely not! More realistic is to expect a return to the global average of $6 x$ to $8 x$, implying a $-1 \%$ drag on HPI per year.


NEW ZEALAND HOUSE PRICE VS. HOUSEHOLD INCOME


Source: Forsyth Barr analysis, RBNZ
(3) Other factors; around $+1.5 \%$ per year, can be attributed to factors such as real improvement in housing stock (e.g. adding insulation, heating, amenities) and population growth, which reduces available land per capita. These factors will probably persist.
Over the long-term, unless you think Kiwis will spend an ever increasing share of their income on housing, HPI is unlikely to significantly deviate from the growth in household disposable income. New Zealand's household disposable income has grown by approximately $+4 \%$ per year which, in our view, is a realistic long-term expectation for HPI.

While some hardened property investors will shake their heads and think that $+4 \%$ per year sounds unreasonably low given history, it's actually normal for physical assets. The value of gold and commodities in real terms (adjusted for inflation) have been relatively flat over a longterm period of time, while farmland has increased by productivity, approximately $+2 \%$ per year.

MOST HARD ASSETS SIMPLY MAINTAIN THEIR REAL (INFLATION-ADJUSTED) VALUE: GOLD, LAND AND OIL


[^1]Countries with more balanced property markets and greater land availability, like the United States, exhibit more sustainable long-term HPI trends. In the U.S., price per square foot has closely followed inflation, meaning the real value has been largely stable over time.

## the real value of us houses has been LARGELY STABLE



Source: Forsyth Barr analysis, US Census, FRED
We are not suggesting that individuals should avoid investing in property. It serves various purposes, such as accessing leverage (or debt), maintaining real value over time, and providing a stable cash flow when unlevered. Property ownership also instils savings discipline through mortgage payments. Additionally, some costs can be reduced by personally managing the property. It is, however, highly unlikely that the exceptional growth observed over the past 30 years will be replicated, and many property investors may have overly optimistic expectations regarding the three key factors that drive property investment's success: price increases, rental yield, and the total cost to maintain the property's real value.

## Working through the numbers

Let's examine the realistic long-term return on a $\$ 1$ million investment property, financed with $50 \%$ equity and $50 \%$ debt:
(1) Average rental yield over the past 20 years has been around $4 \%$, it's currently around $3.5 \%$. This equates to about $\$ 35,000$ per year.
(2) An interest-only mortgage at an interest rate of $6 \%$ (slightly below the long run average and today), the interest expense would amount to around \$30,000 per year.
(3) Estimating building life cycle and running costs is challenging. Full life cycle costs depend on factors such as property type, location, personal involvement, use of agents, and tax regulations. Estimates range from $1 \%$ to $4 \%$ of the property value per year. A realistic scenario suggests around $2 \%$, or \$20,000 per year. Major costs for freehold villas might include a new kitchen, roof, heating system, while apartments could involve body corporate costs and infrequent but major refurbishments. Apartments also have a finite life, with limited residual land value. To capture average property price increases (that $+4 \%$ ), ongoing upgrades and maintenance are essential - you need to keep up with the Joneses (and regulation).

TABLE 1: A REALISTIC LOOK AT RETURNS FROM AN INVESTMENT PROPERTY

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Equity | 500,000 | 540,000 | 582,000 | 625,000 | 670,000 | 717,000 |
| Mortgage | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Property value | $1,000,000$ | $1,040,000$ | $1,082,000$ | $1,125,000$ | $1,170,000$ | $1,217,000$ |
| Rental income @ 3.5\% | 35,000 | 36,400 | 37,900 | 39,400 | 41,000 | 42,600 |
| Interest payments @ 6\% | $(30,000)$ | $(30,000)$ | $(30,000)$ | $(30,000)$ | $(30,000)$ | $(30,000)$ |
| Building/life cycle costs @ 2\% | $(20,000)$ | $(20,800)$ | $(21,600)$ | $(22,500)$ | $(23,400)$ | $(24,300)$ |
| Profit/(loss) | $(15,000)$ | $(14,400)$ | $(13,700)$ | $(13,100)$ | $(12,400)$ | $(11,700)$ |
| HPI @ 4\% | 40,000 | 42,000 | 43,000 | 45,000 | 47,000 | 49,000 |
| Return on Investment (ROI) | $5.0 \%$ | $5.1 \%$ | $5.1 \%$ | $5.1 \%$ | $5.2 \%$ | $5.2 \%$ |
| ROI with building costs @ 1\% | $7.0 \%$ | $7.0 \%$ | $6.9 \%$ | $6.9 \%$ | $6.9 \%$ | $6.9 \%$ |
| ROI with building costs @ 4\% | $1.0 \%$ | $1.3 \%$ | $1.3 \%$ | $1.5 \%$ | $1.7 \%$ | $1.8 \%$ |
| Source: Forsyth Barr analysis |  |  |  |  |  |  |

Combining points 1,2 , and 3 result in a loss of approximately $\$ 15,000$ or $1.5 \%$ of the property value, assuming no effective taxes are paid and before any capital gains (HPI). As discussed, a realistic expectation for long-term HPI is around $+4 \%$ per year, amounting to $\$ 40,000$. This leaves an annual profit of $\$ 25,000$, equating to a $5 \%$ pre-tax return on your $\$ 500,000$ equity investment.

Looking forward, realistically we see limited real growth in property. This is logical - after 30 years an investor still owns the same property. While positive cash flow for a modestly leveraged property might be achievable after expenses, most investors rely on capital gains for returns.
LONG TERM EQUITY RETURNS


Source: Forsyth Barr analysis, Jeremy Siegel, BoE

## Property vs. investing in the share market

Investing in the share market is owning small slices of listed companies. In contrast to property, the real value of a company can grow. Over the last 200 years the real value of your investment has doubled approximately every 10 years if you re-invested the dividends. Using the house analogy above; after 10 years you have two houses, after 20 years four houses, and so forth. Companies grow in real terms by re-investing a proportion of their profits into new equipment.

Let's consider a "normal" company, assuming it has \$100 of equity, no debt, and makes a 14\% return on equity, of which it pays out half or $\$ 7$ in dividends and re-invests the rest. The share market would value this company somewhere around $\$ 250$ (assuming a P/E or price-toearnings multiple of $18 x$ ).
In your first year owning this company your return will consist of $+3 \%$ in dividends ( $\$ 7$ on your $\$ 250$ investment), plus a $+7 \%$ increase in the share price. Why does the share price go up? Well, next year the company will have $+7 \%$ more assets and $+7 \%$ more equity and, if the company maintains that $14 \%$ return on equity, it will have $+7 \%$ more in profits.

The above example closely resembles an average global company and results in a $+10 \%$ per year return. In reality, earnings do not go up by $+7 \%$ every year and the P/E does not remain stable at $18 x$, but over the long-term these are realistic assumptions. The US S\&P 500 share market index, the largest market in the world, has increased by $+10.5 \%$ per year since 1988 (when it was introduced). Overall, the share market has delivered about $+9 \%$ return per year.

## You can benefit from increases in residential property prices via the equity market

If you still want to invest in residential property the share market also provides options. One example is Summerset, a New Zealand aged-care operator, which builds retirement villages.
When Summerset listed in 2011 it had 1,352 retirement units (mostly villas) about one for every 160,000 shares on issue.
Since Summerset listed, properties have approximately doubled in price and the number of Summerset units have increased by a factor of $4 x$. This has resulted in a lift in book value per share by a factor of $8 x$ and the share price by a factor of $6.5 x$.

TABLE 2: COMPANIES GROW IN REAL TERMS BY RE-INVESTING A PROPORTION OF THEIR PROFITS INTO NEW EQUIPMENT

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Opening equity | 100 | 107 | 114 | 123 | 131 | 140 |
| Profit @ 14\% return on equity | 14 | 15 | 16 | 17 | 18 | 20 |
| Dividends @ 50\% | 7 | 7.5 | 8.0 | 8.6 | 9.2 | 9.8 |
| Reinvested @ 50\% | 7 | 7.5 | 8.0 | 8.6 | 9.2 | 9.8 |
| Closing equity | 107 | 114 | 123 | 131 | 140 | 150 |
| Market equity value (18x P/E) | 252 | 270 | 289 | 309 | 330 | 353 |
| Total shareholder return | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ |
| Dividend yield | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ |
| Capital return | $7 \%$ | $7 \%$ | $7 \%$ | $7 \%$ | $7 \%$ | $7 \%$ |

Source: Forsyth Barr analysis


Summerset has been one of the best performing shares in New Zealand over the last decade, helped by the booming property market. But to be clear, while we consider Summerset to be a good long-term investment, its extraordinary performance over the last decade is unlikely to be repeated (unless Kiwis start to pay 20x their income for property!). Contrary to owning an investment property, however, Summerset doesn't solely rely on HPI to deliver appropriate returns. Over the long-term Summerset and other companies' ability to reinvest in their business means we would expect the shares in these companies to materially outperform a rental property.

SUMMERSET PERFORMANCE VERSUS NEW ZEALAND HPI


Source: Forsyth Barr analysis, Thomson Reuters, REINZ

If at any time you want to discuss investment options and opportunities, your Forsyth Barr Investment Adviser is available to provide you advice and assistance.


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[^2]
[^0]:    Source: Forsyth Barr analysis, Statistics New Zealand, REINZ

[^1]:    Source: Forsyth Barr analysis, Thomson Reuters, USDA

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