H12 Australian Diversified Yield Investment Strategy

31 December 2022

Calculated by S&P Dow Jones Indices

High dividend yield from companies paying franked dividends.

Optimised for Australian superannuation funds and tax-exempt investors.

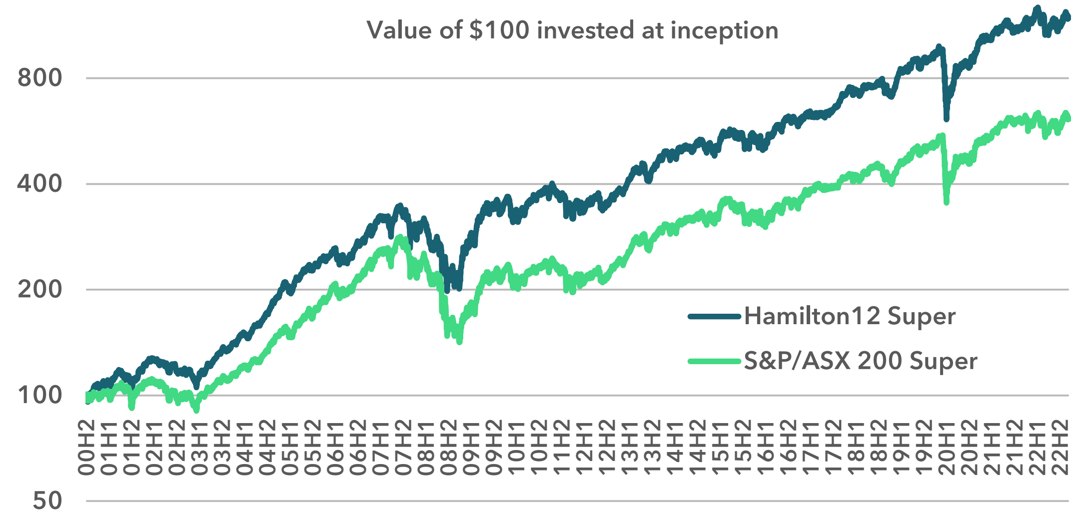
Persistently outperforms the S&P/ASX 200 index for no incremental risk.

OBJECTIVE

The portfolio aims to earn after-tax returns for Australian resident superannuation and tax-exempt investors that exceed those on the S&P/ASX 200 index. The portfolio is rebalanced 6 times per year using a rules-based approach that allocates the portfolio towards stocks offering high franked dividend yield, while maintaining diversification across industry sectors. All portfolio stocks are drawn from the S&P/ASX All Ordinaries index and are projected to pay franked dividends within 6 months of a rebalancing date. Portfolio weights take account of the portfolio stocks' relative market capitalisation and liquidity. Portfolio levels are computed by S&P Dow Jones Indices on a daily basis. Adjustments for corporate actions follow the rules adopted by S&P Dow Jones Indices.

AFTER-TAX RETURNS

Since inception, Hamilton12 super returns have been 11.74% per year, and Hamilton12 tax-exempt returns have been 13.42% per year (3.27% and 3.98% above the corresponding S&P/ASX 200 indices). Since the index was live, Hamilton12 super returns have been 12.00% per year and Hamilton12 tax-exempt returns have been 13.81% per year (2.62% and 3.45% above the corresponding S&P/ASX 200 indices).

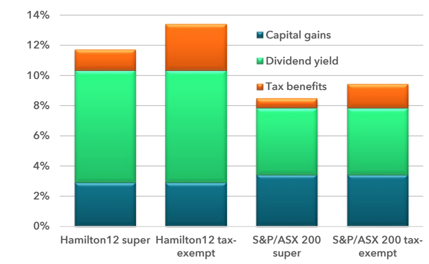


Period	Hamilton12 super	Hamilton12 tax-exempt	S&P/ASX 200 super	S&P/ASX 200 tax-exempt
1 yr	2.49%	4.29%	-0.36%	0.73%
2.1 yrs (live)	12.00%	13.81%	9.37%	10.36%
3 yrs	8.42%	10.06%	6.12%	7.01%
5 yrs	9.91%	11.59%	7.71%	8.64%
10 yrs	11.39%	12.99%	9.29%	10.27%
All 22 yrs	11.74%	13.42%	8.47%	9.43%

Annualised returns. Inception date = 8 September 2000. From 8 September 2000 to 30 June 2005, S&P/ASX 200 returns are estimated using their average tax benefits, relative to dividend yield, from 1 July 2005 to 30 June 2022. After-tax returns are based upon an assumed tax rate of 15% for a superannuation fund and 0% for a tax-exempt investor.

RETURNS DECOMPOSITION

Annual tax benefits have been 1.39% for a superannuation investor and 3.07% for a tax-exempt investor. The annual tax benefits exceed those of the equivalent S&P/ASX 200 indices by 0.78% and 1.50%, respectively. Franking is approximately 96% compared to 83% for the S&P/ASX 200.



Return	Hamilton12 super	Hamilton12 TE	S&P/ASX 200 super	S&P/ASX 200 TE
Capital	2.91%	2.91%	3.43%	3.43%
Dividend	7.43%	7.43%	4.43%	4.43%
Pre-tax	10.34%	10.34%	7.86%	7.86%
Tax gain	1.39%	3.07%	0.61%	1.58%
After-tax	11.74%	13.42%	8.47%	9.43%

INFORMATION

Data files for the strategy are delivered via the S&P Dow Jones Indices' SFTP (EDX) site.

REUTERS

.H12AYD15 (Superannuation)

.H12ADYD0 (Tax-exempt)

FACTSET AND REFINITIV

H12AYD15 (Superannuation)

H12ADYD0 (Tax-exempt)

FIRST VALUE DATE
September 8, 2000

LAUNCH DATE
November 6, 2020

HAMILTON12

Hamilton12 focuses on creating rules-based investment strategies of tradable securities, designed to help investors achieve better risk-adjusted returns at lower cost. We offer a transparent and disciplined way to increase returns, minimise risk and reduce expenses on a persistent basis. Our portfolio construction approach is grounded in a rigorous understanding of portfolio theory, market segmentation and the impact of taxation on investment returns.

Details at: S&P Global custom index calculations
Hamilton12 overview

SECTOR ALLOCATION AND TOP 10 HOLDINGS

The Hamilton12 portfolio formation rules ensure that the portfolio is diversified across all 11 FTSE Industry Classification Benchmark (ICB) industry sectors.

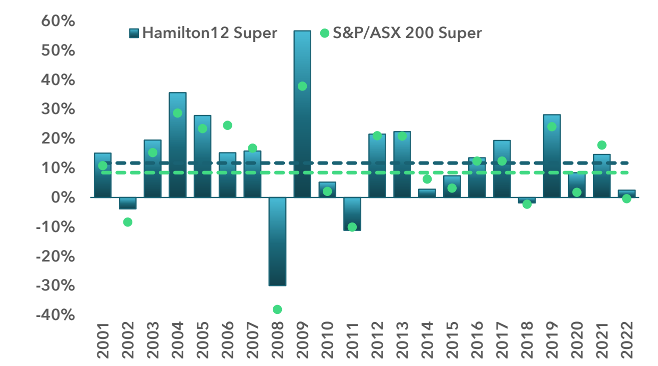
Industry sector	H12 weight	S&P/ASX 200 wgt	Company	H12 weight	S&P/ASX 200 wgt
Basic Materials	31.41%	19.82%	BHP	15.63%	8.12%
Financials	21.85%	27.10%	Fortescue Metals	5.27%	2.41%
Consumer Discretionary	9.21%	8.07%	National Australia Bank	5.22%	4.13%
Industrials	7.82%	11.00%	Commonwealth Bank	4.17%	7.36%
Health Care	7.75%	10.95%	Rio Tinto	4.03%	1.63%
Real Estate	5.54%	7.00%	Westpac Banking	3.39%	3.39%
Energy	4.49%	4.97%	Telstra	3.00%	1.99%
Telecommunications	4.25%	2.94%	Wesfarmers	2.81%	2.45%
Consumer Staples	3.93%	4.60%	Macquarie Group	2.76%	3.06%
Technology	2.65%	2.50%	Sonic Healthcare	2.50%	0.73%
Utilities	1.10%	1.06%	Top 10	48.78%	31.00%
Industry active share	16%		Stock active share	61%	

The table is based upon average portfolio weights on the 6 rebalancing dates in the prior 12 months, and the corresponding market capitalisation weights in the S&P/ASX 200 on the rebalancing dates. Active share is the sum of absolute differences between portfolio weight and S&P/ASX 200 weight, averaged across 6 rebalancing dates.

RISK

The historical performance of the portfolio shows returns above that of the S&P/ASX 200 for relatively low incremental risk along with below-average downside risk. Sharpe ratios of approximately 0.6 mean that for every 1% increase in volatility, annual returns increase by about 0.6%. Alphas of 3.3% and 3.9% mean that around 3-4% of annual returns are due to events other than movements in the S&P/ASX 200. Upside capture ratios of 106% and 108%, and downside capture ratios of 89% and 88%, mean that portfolio returns exceed that of the S&P/ASX 200 during periods of high equity market returns, but are not as low as those of the S&P/ASX 200 during periods of low equity market returns. Tracking error of approximately 6% means that there is about a two-thirds chance that portfolio returns will deviate from the S&P/ASX 200 by about 6% in any given year.

Annual returns year end December



Concept	Metric	Super	Tax-exempt
Overall risk	Standard deviation	15.8%	16.0%
	S&P/ASX 200 Std dev	14.7%	14.8%
	Maximum drawdown	43.1%	42.2%
	S&P/ASX 200 max draw	50.1%	49.3%
Reward-for-risk	Sharpe ratio	0.55	0.61
	ASX 200 Sharpe	0.37	0.39
Equity market exposure	Alpha	3.3%	3.9%
	Beta	0.97	0.97
	Upside capture	106%	108%
	Downside capture	89%	88%
Benchmark risk	Tracking error	5.9%	6.0%

Standard deviation is measured using monthly returns and converted to an annual figure according to the following equation.

Standard deviation of annual returns = Square root $\{[\text{Standard deviation of monthly returns}^2 + (1 + \text{Average of monthly returns})^2]^{12} - [1 + \text{Average of monthly returns}]^{24}\}$

In computing the annual standard deviation, we compiled 10,000 simulations of possible annual returns by re-sampling from the distribution of monthly returns and computed the standard deviation of annual returns.

The Sharpe ratio is annualised portfolio returns minus the annualised return on investments in the risk-free rate, divided by the annualised portfolio standard deviation.

Alpha and beta are measured by regression monthly portfolio excess returns on S&P/ASX 200 excess returns. Excess returns are returns above the risk-free rate of interest, measured using the one month bank bill swap rate at the start of each month.

To compute upside and downside capture we split months into those in which the S&P/ASX 200 earned returns above or below the risk-free rate. Upside capture is the annualised return on the portfolio during up market months minus the annualised return on the risk-free rate, scaled by the annualised return on the S&P/ASX 200 minus the annualised return on the risk-free rate. Downside capture is the corresponding figure for down market months.

Tracking error is the annualised standard deviation of the difference in portfolio returns and returns on the S&P/ASX 200. To compute the annualised tracking error, we compiled 10,000 simulations of possible annual returns by re-sampling from the distribution of monthly returns and computed the standard deviation of the difference in portfolio returns and those of the S&P/ASX 200.