

# MEASURING THE COST OF DELAY

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Introduction



The cost of delayed  
asset allocation changes



The cost of delayed  
portfolio rebalances



Conclusion

# MEASURING THE COST OF DELAY



## SCENARIO 1

Asset  
allocation  
changes



## SCENARIO 2

Portfolio  
rebalances

# MEASURING THE COST OF DELAY

## Scenario 1

Delayed  
implementation of  
asset allocation  
changes



This scenario was modelled on real live data within a HUB24 Invest managed portfolio. All data, modelling and calculations have been actuarially verified by Milliman, a leading global actuary management consultancy firm.



This scenario compares and simulates the potential cost of asset allocation implementation delays of 1,2,4 and 6 weeks.



On March 25, 2020, Client A held a \$500,000 investment in a diversified growth Managed portfolio X. Due to market conditions portfolio manager X implemented a reallocation of 5.5% (\$27,500) from a managed growth futures fund (Fund X) to a defensive Australian income securities managed fund (Fund Y).



After 6 months (to 30 September 2020), Growth fund X (previously held fund) performed at -15.46%, while the Defensive Fund Y (the receiving fund) performed at 23.29%. Performance was then simulated with implementation delays of 1, 2, 4 and 6 weeks.



Results were then compared in a table for each scenario including immediate implementation in both dollar and percentage terms.

# MEASURING THE COST OF DELAY

## Scenario 1

### Delayed implementation of asset allocation changes

- ➔ \$500,000 investment held on 25 March 2020
- ➔ 5.5% (\$27,500) switched from growth to defensive
- ➔ Measured over 6 months to 30 Sept.2020
- ➔ Implementation delays for 1, 2, 4 & 6 weeks were modelled

## OUTCOME

Cost of implementation delays between 1- 6 weeks were:

- \$4,460 (1 week) to \$6,380 (6 weeks)
- 42.3% to 60.1% of the gain was lost
- 0.9% to 1.28% performance  
Impact on the overall portfolio

FIGURE 1: ASSET ALLOCATION CHANGE

Time Delay	Benefit of asset allocation change (\$)	Cost of delaying asset allocation change (\$)	Cost of delaying asset allocation change (%)	Impact of asset allocation change on overall portfolio performance
No delay	\$ 10,630	NA	NA	2.13%
1 week	\$ 6,170	(\$4,460)	(42.30%)	1.23%
2 weeks	\$ 5,810	(\$4,810)	(45.50%)	1.16%
4 weeks	\$ 5,700	(\$4,920)	(46.50%)	1.14%
6 weeks	\$ 4,250	(\$6,380)	(60.10%)	0.85%

#### Notes

- All returns are calculated to include transaction costs and fees for the reallocated investments assumed to be 11 bps for both investments.
- Tax is not taken into consideration in these examples.
- The magnitude and direction of the results above are specific to the given set of market movements. Other sets of market circumstances and parameters will yield different results.

# MEASURING THE COST OF DELAY

## Scenario 2

## Dynamic vs static rebalancing



This scenario was modelled using index data over 5 years 1 January 2016 to 31 December 2020 incorporating the 2020 Covid 19 volatile period. All data, modelling and calculations have been actuarially verified by Milliman, a leading global actuary management consultancy firm.



Method 1 - Dynamic rebalancing. Tolerance based parameters used as a proxy for active rebalancing, where rebalances are implemented whenever asset allocation weightings move more than 2% outside the initial SAA target.



Method 2 - Static rebalancing. 'Point in time' rebalances are implemented twice a year on 28 February and 31 August back to the initial SAA target, to replicate a typical client review pattern outside of a managed portfolio environment.



\$500,000 is invested in a 70/30 growth-based portfolio strategically rebalanced to set index benchmarks. SAA is 35% Australian Equities (S&P /ASX 100 Index), 35% Global Equities (MSCI world ex-Australia index), and 30% Australian Cash ( Bloomberg Bank Bill 0+Yr Maturity Index)



Results from the two rebalancing methods (dynamic and static) were then compared over 1, 3 & 5 years.

# MEASURING THE COST OF DELAY

## Scenario 2

### Dynamic vs static rebalancing

- ➔ \$500,000 invested on 1 January 2020
- ➔ 70/30 Growth Index based portfolio
- ➔ SAA: 35% Aust Equities, 35% Global Equities, 30% Aust Cash
- ➔ Dynamic: 2% tolerance,  
Static: Twice p.a. (28 Feb and 31 August)

## OUTCOME

- \$3,531 (0.71%) advantage derived from dynamic rebalancing over 1 year

FIGURE 2: 1 year return results of portfolio rebalancing

Time	Period	Total Return	Scenario 1: Dynamic rebalances		Scenario 2: Static rebalances		Advantage derived from dynamic rebalancing	Advantage derived from dynamic rebalancing (As a % of initial balance)
			Profit/loss	Number of rebalances	Profit/loss	Number of rebalances		
1 year	1.1.20-31.12.20	3.19%	\$15,951	6	\$12,420	2	\$3,531	0.71%

#### Notes

- All returns are calculated to include transaction costs and fees for rebalancing (11 bps for Australian equities and 22 bps for International equities, 0 bp for cash).
- Tax is not taken into consideration in these examples.
- The magnitude and direction of the results above are specific to the given set of market movements, tolerances selected and static rebalancing frequency and timing (dates used). Other sets of market circumstances and parameters will yield different results.
- This figure has been prepared for illustrative purposes only and is not intended to reflect any particular person's circumstances. Past performance is not indicative of future performance.



# MEASURING THE COST OF DELAY

## Scenario 2

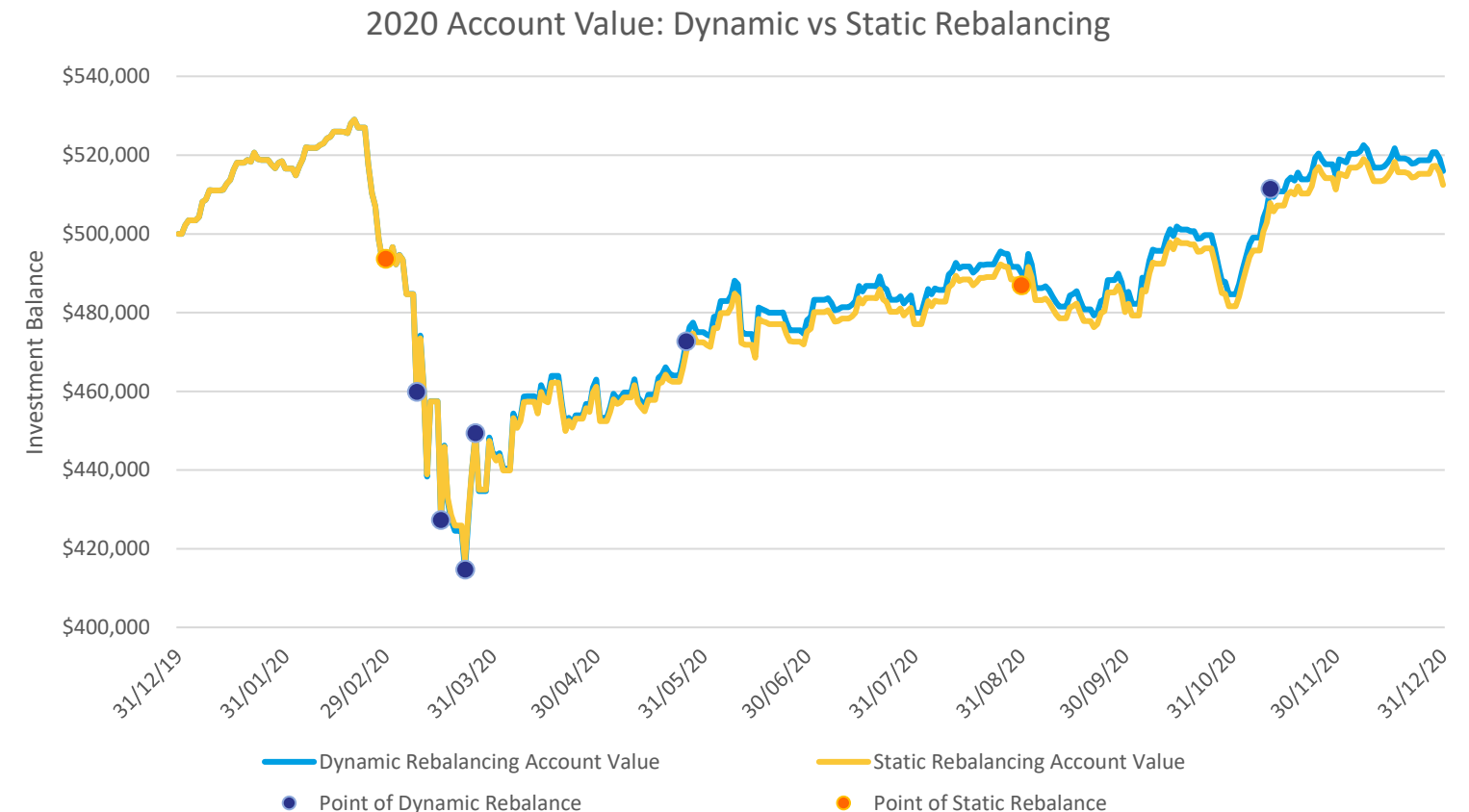
### Dynamic vs static rebalancing

- ➔ \$500,000 invested on 1 January 2020 for 12 months to 31 December 2020
- ➔ Blue and yellow dots represents when each method triggered a rebalance

## OUTCOME

- Static rebalanced twice
- Dynamic rebalanced six times (with 4 rebalances triggered over 6 weeks in March/April)
- \$3,531 (0.71%) Advantage derived from dynamic rebalancing over 1 year

FIGURE 3: 1 year outperformance of dynamic rebalancing over static rebalancing



#### Notes

- This graph demonstrates the performance of both rebalancing approaches and highlights each time a rebalance occurs.
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# MEASURING THE COST OF DELAY

## Scenario 2

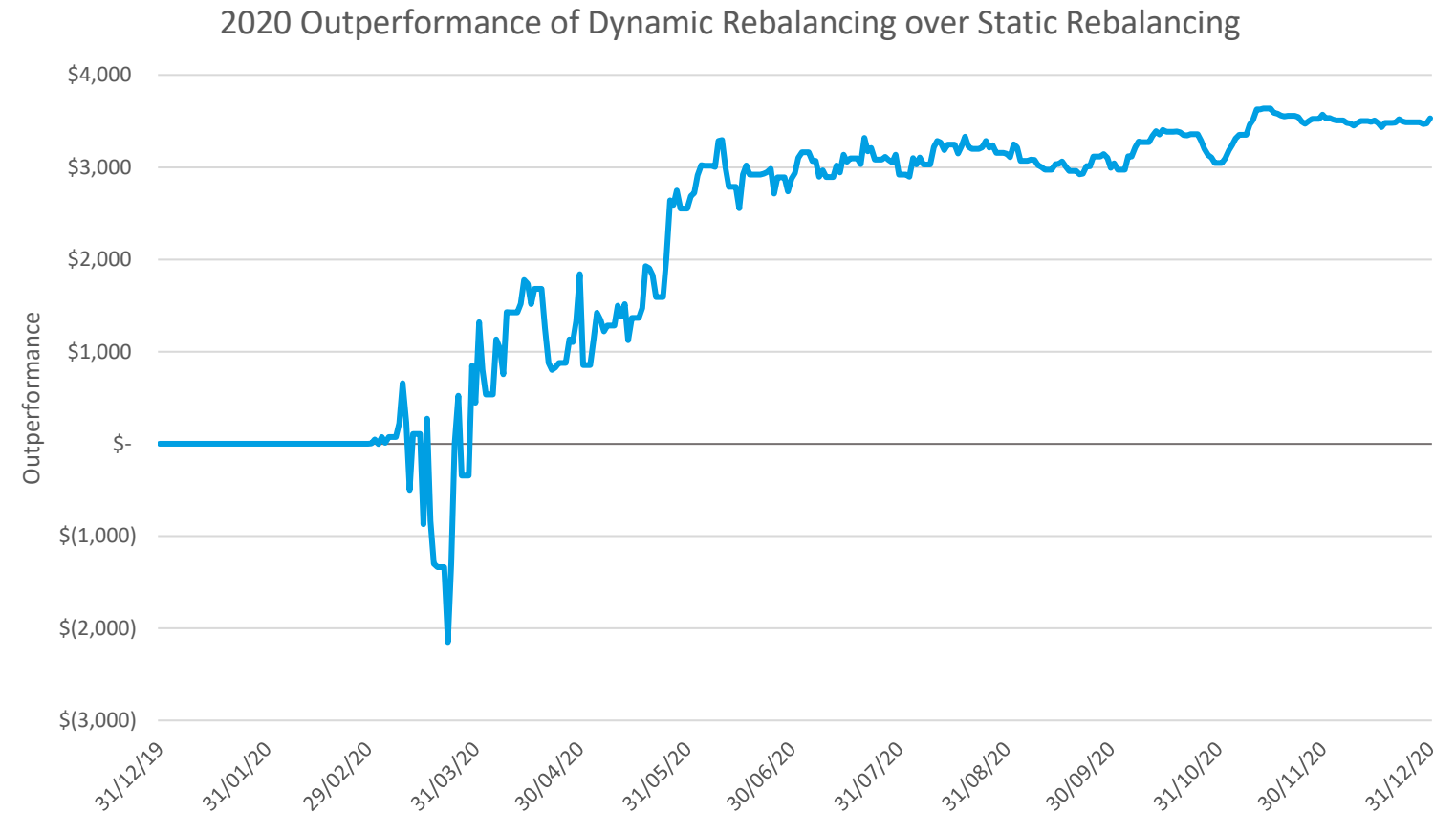
### Dynamic vs static rebalancing

- ➔ \$500,000 invested on 1 January 2020 for 12 months to 31 December 2020
- ➔ The blue line represents the performance difference between the Dynamic and static rebalancing approaches.
- ➔ The 1<sup>st</sup> rebalance was triggered on Static rebalancing method (28 February 2020)

## OUTCOME

- \$3,531 (0.71%) Advantage derived from dynamic rebalancing over 1 year

FIGURE 4: 1 year outperformance of dynamic rebalancing over static rebalancing



#### Notes

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# MEASURING THE COST OF DELAY

## Scenario 2

### Dynamic vs static rebalancing

- ➔ \$500,000 invested on 1 January 2020
- ➔ 70/30 Growth Index based portfolio
- ➔ SAA: 35% Aust Equities, 35% Global Equities, 30% Aust Cash
- ➔ Dynamic: 2% tolerance, Static: Twice p.a. (28 Feb and 31 August)

## OUTCOME

- \$6,144 (1.23%) advantage derived from dynamic rebalancing over 3 years
- \$8,335 (1.67%) advantage derived from dynamic rebalancing over 5 years

FIGURE 5: 1, 3 & 5 year return results of portfolio rebalancing

Time	Period	Total Return	Scenario 1: Dynamic rebalances		Scenario 2: Static rebalances		Advantage derived from dynamic rebalancing	Advantage derived from dynamic rebalancing (As a % of initial balance)
			Profit/loss	Number of rebalances	Profit/loss	Number of rebalances		
1 year	1.1.20-31.12.20	3.19%	\$15,951	6	\$12,420	2	\$3,531	0.71%
3 years	1.1.18-31.12.20	22.80%	\$114,001	11	\$107,857	6	\$6,144	1.23%
5 years	1.1.16 - 31.12.20	44.35%	\$221,771	15	\$213,435	10	\$8,335	1.67%

#### Notes

- All returns are calculated to include transaction costs and fees for rebalancing (11 bps for Australian equities and 22 bps for International equities, 0 bp for cash).
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- The magnitude and direction of the results above are specific to the given set of market movements, tolerances selected and static rebalancing frequency and timing (dates used). Other sets of market circumstances and parameters will yield different results.
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# IN SUMMARY

We've highlighted two ways managed portfolios can enhance client portfolio value

## ➔ Asset Allocation Changes

With the ability to implement asset allocation changes without delay, managed portfolios can offer a range of benefits:

- Efficient implementation of investment decisions.
- Maximise the benefits from the latest investment manager expertise.
- Potential to reduce paperwork & cost to client by reducing the need for ad-hoc reviews, ROAs and client consent.

## ➔ Portfolio Rebalances

Ensuring the portfolio is maintained inline with target weightings is a key component of portfolio management. By removing the delay in implementing these rebalances:

- Portfolios can be updated as and when needed to take advantage of market volatility
- Portfolios remain consistent across your client base, with no client left behind in out of date models.

THANK YOU

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# IMPORTANT INFORMATION

## EXECUTIVE SUMMARY

Managed portfolios are at the forefront of delivering client value, enabling advisers to tailor portfolios to client and market circumstances to create better client outcomes. Although no two platforms are the same, the innovative functionality available from managed portfolio solutions empower financial advisers with greater flexibility and capabilities to adapt portfolios and add value for their clients. Platform Alpha refers to the value that can be unlocked for clients by the enhanced technology available on HUB24. The platform alpha or value these enhanced capabilities could deliver were quantified last year in HUB24's Platform Alpha whitepaper.<sup>1</sup> This paper builds on this notion to illustrate how platform capabilities can be used to unlock implementation efficiencies, which can have a significant impact on a client's portfolio value over time.

## RELIANCE AND LIMITATION

This report is not a recommendation for the use of one particular platform over other platforms. Milliman worked with HUB24 in connection with the preparation of this paper and in relation to the verification of HUB24's analysis. The strategies reflected in the scenarios and examples may not be suitable for all platform clients, portfolio managers or advisers. Readers of this report should consider clients' unique circumstances before deciding to use an equivalent strategy.

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# IMPORTANT INFORMATION