

NORTHLAND REGIONAL COUNCIL EXTERNALLY MANAGED INVESTMENT FUNDS

MONTHLY REPORT 31 MAY 2022

20 JUNE 2022

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CONTENTS

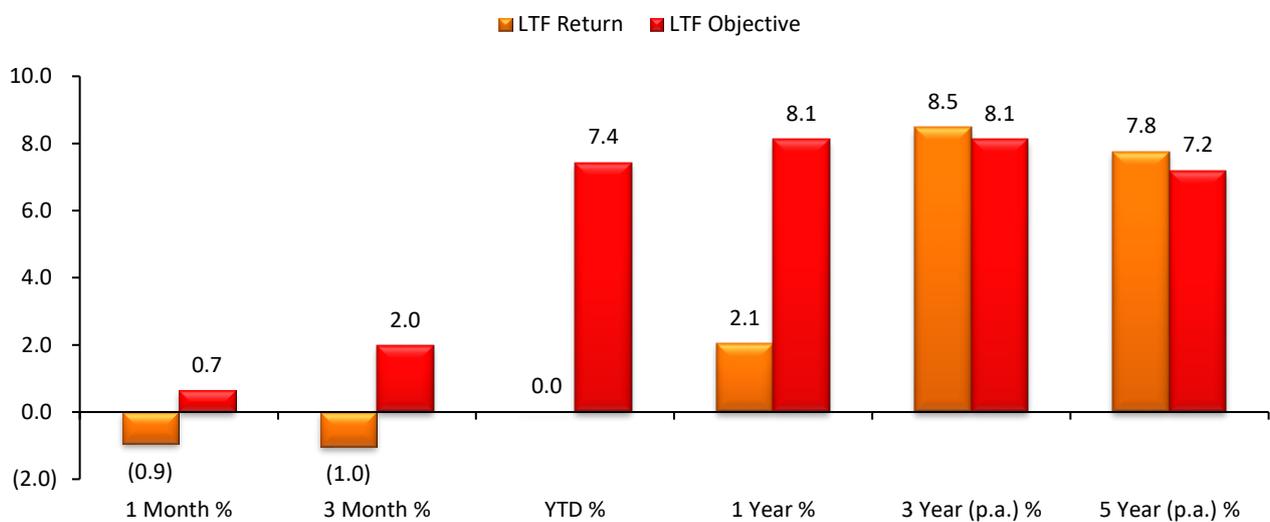
Introduction.....	4
Long Term Fund.....	6
Short Term Fund.....	12
Standard Deviation of Returns	17
Market Performance and Commentary – May 2022	18
Appendix 1: Benchmarks.....	18
Appendix 2: NRC Total Funds Under Management.....	31

EXECUTIVE SUMMARY

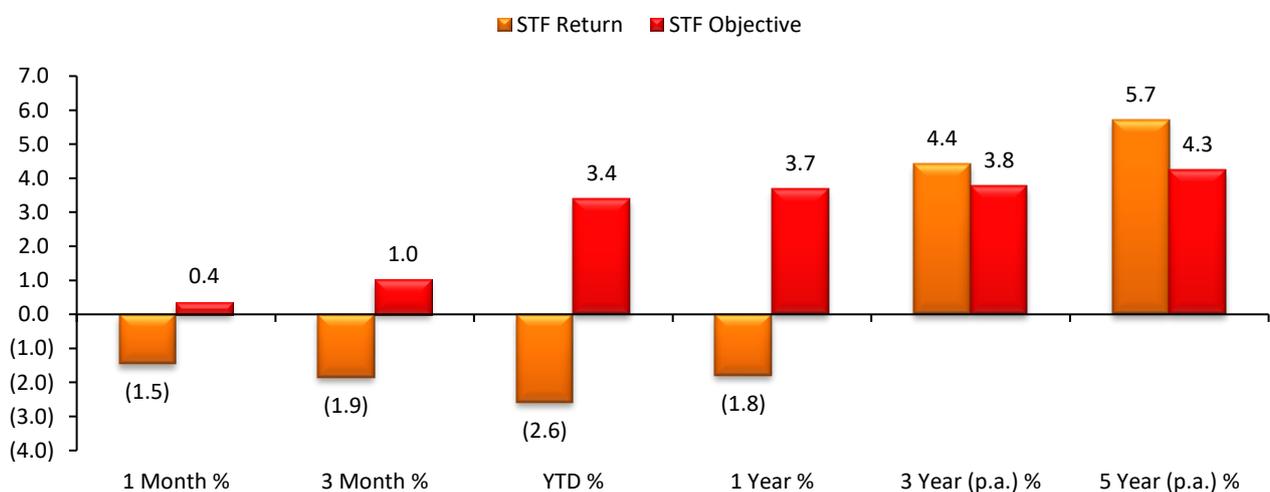
PERFORMANCE

Both the LTF and STF outperformed over longer periods but underperformed over the one month, three month, YTD and one year periods. The STF performed 4.1% below the LTF for the rolling three year period.

	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
LTF	(0.9)	(1.0)	0.0	2.1	8.5	7.8
Objective	0.7	2.0	7.4	8.1	8.1	7.2
Over / Underperformance	(1.6)	(3.0)	(7.4)	(6.0)	0.4	0.6



	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
STF	(1.5)	(1.9)	(2.6)	(1.8)	4.4	5.7
Objective	0.4	1.0	3.4	3.7	3.8	4.3
Over / Underperformance	(1.9)	(2.9)	(6.0)	(5.5)	0.6	1.4



PORTFOLIO HIGHLIGHTS

All funds with exposure to listed markets except BlackRock had flat or negative returns due to the continuing volatility of financial markets.

AUD denominated investments benefitted from exchange rate movements.

Private equity investments have continued to provide an uplift to the total Fund return.

The highest performing funds over the month were MLC II, MLC III and Fermat ILS Yield returning 5.3%, 2.1% and 0.7% respectively.

RECOMMENDATIONS/ACTIONS

The LTF Global Equity asset class is below its SIPO range due to the continuing volatility of financial markets, in particular the recent equities market sell-off. In addition, \$1 million was redeemed from Harbour T. Rowe Price Global Equity in May to help de-risk the portfolio.

The STF Castle Point 5 Oceans investment is above its upper SIPO range due to reduced cash holdings in TDs. This exposure will be progressively reduced to meet cash flow requirements.

We do not recommend any changes to either portfolio at this point.

ECONOMIC COMMENTS

Geopolitical and geoeconomics risks are at high levels.

Markets are volatile driven by investor sentiment.

Increasing food prices are causing social unrest in Asia and Africa.

Inflation is at record high levels in developed countries.

Interest rates are going up as result of response to increasing inflation.

INTRODUCTION

This is the monthly investment report to the Northland Regional Council by EriksensGlobal and is based on the Statement of Investment Policy and Objectives approved and signed on 22 February 2022.

Investment Objective (Net of Fees)
Long Term Fund
NZ CPI (rolling over three years) plus 4.5% per annum
Short Term Fund
90-day Bank Bill Index plus 3% per annum

The NZ CPI (rolling over three years) as at **31 March 2022 was 3.6% per annum**. The Fund objective for shorter time periods are based on the annualised rolling three-year CPI.

All performance figures are time-weighted returns shown **net** of fees, **gross** of tax and include currency gains and losses associated with conversion back to NZD. Past performance is not necessarily a guarantee of future performance and care should be exercised not to make decisions based on past performance only.

The returns have been calculated from monthly data provided by each asset manager. There may therefore be a discrepancy if the amounts invested in a particular asset have changed during the month.

Each Fund is invested in a multi-manager structure, with the managed products holding their own individual mandate (see Appendix 1).

Underlying Fund allocations are categorised as follows:

- Growth assets: global shares, Australasian shares, property and Australasian private equity
- Income assets: global bonds, Australasian bonds and other debt instruments
- Cash assets: cash or short duration bonds

The financial year-end for the Fund is 30 June, thus year-to-date returns are for **eleven** months.

LONG TERM FUND

PERFORMANCE SUMMARY

Asset	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
Diversified Growth						
Aspiring	(2.1)	(3.0)	(3.1)	(1.1)	10.6	9.3
Benchmark	0.6	1.9	7.0	7.6	7.6	6.7
Over / Underperformance	(2.7)	(4.9)	(10.1)	(8.7)	3.0	2.6
Castle Point 5 Oceans	(1.3)	(0.4)	0.9	1.5	6.5	6.0
Benchmark	0.4	1.1	3.5	3.8	3.6	4.1
Over / Underperformance	(1.7)	(1.5)	(2.6)	(2.3)	2.9	1.9
Milford Active Growth	(1.1)	(3.0)	(1.3)	0.5	10.3	10.3
Benchmark	0.8	2.4	9.1	10.0	10.0	10.0
Over / Underperformance	(1.9)	(5.4)	(10.4)	(9.5)	0.3	0.3
Mint Diversified Growth	(1.3)	(5.3)	(8.2)	(5.7)		
Benchmark	0.7	2.0	7.4	8.1		
Over / Underperformance	(1.9)	(7.3)	(15.6)	(13.8)		
Schroders Real Return	(0.1)	(0.9)	(0.7)	1.0	4.6	4.5
Benchmark	0.5	1.6	6.1	6.7	6.7	6.5
Over / Underperformance	(0.6)	(2.5)	(6.8)	(5.7)	(2.1)	(2.0)
Global Equity						
Harbour T. Rowe Price Global Equity	(3.8)	(11.1)	(21.3)	(14.7)	9.7	
Benchmark	(0.2)	(2.2)	(1.2)	4.3	11.8	
Over / Underperformance	(3.6)	(8.9)	(20.1)	(19.0)	(2.1)	
Nanuk New World	(1.6)	(4.0)	(0.4)	5.1		
Benchmark	(1.5)	(5.3)	(1.7)	1.9		
Over / Underperformance	(0.1)	1.3	1.3	3.2		
Private Equity						
Castlerock	0.0	7.3				
Benchmark	0.6	1.9				
Over / Underperformance	(0.6)	5.4				
Continuity Capital No.2	0.1	7.9	29.8	37.0	33.3	
Benchmark	1.2	3.6	13.7	15.0	15.0	
Over / Underperformance	(1.1)	4.3	16.1	22.0	18.3	
Continuity Capital No.4	0.3	9.4	16.0	22.1	16.1	
Benchmark	1.2	3.6	13.7	15.0	15.0	
Over / Underperformance	(0.9)	5.8	2.3	7.1	1.1	
Continuity Capital No.5	0.5	5.3	22.7	23.9		
Benchmark	1.2	3.6	13.7	15.0		
Over / Underperformance	(0.7)	1.7	9.0	8.9		
Continuity Capital No.6	(0.1)	(0.3)	(5.1)			
Benchmark	1.2	3.6	13.7			
Over / Underperformance	(1.3)	(3.9)	(18.8)			
Continuity Capital No.7	(1.8)					
Benchmark	1.2					
Over / Underperformance	(3.0)					
CPEC 9	0.6	2.8				
Benchmark	1.2	3.6				
Over / Underperformance	(0.6)	(0.8)				

Legend: Red = -2% or below; Amber = greater than -2% but less than 0%; Green = 0% or above

Asset	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
Direct Capital VI	0.0	11.3	29.9	40.0		
Benchmark	0.6	1.9	7.3	8.0		
Over / Underperformance	(0.6)	9.4	22.6	32.0		
Federation Alternative	0.6	0.7	2.6	6.2		
Benchmark	1.2	3.8	14.6	16.0		
Over / Underperformance	(0.6)	(3.1)	(12.0)	(9.8)		
Milford PE III	(0.7)	(3.4)				
Benchmark	0.6	1.9				
Over / Underperformance	(1.3)	(5.3)				
MLC PE II	5.3	10.0	35.0	38.6	24.2	
Benchmark	1.2	3.6	13.7	15.0	15.0	
Over / Underperformance	4.1	6.4	21.3	23.6	9.2	
MLC PE III	2.1	5.8	51.2			
Benchmark	1.2	3.6	13.7			
Over / Underperformance	0.9	2.2	37.5			
Oriens Fund 2	0.0	35.0	17.0			
Benchmark	0.6	1.9	7.3			
Over / Underperformance	(0.6)	33.1	9.7			
PCP III	0.0	(1.8)	(2.6)	(5.9)	11.3	12.4
Benchmark	0.6	1.9	7.3	8.0	8.0	8.0
Over / Underperformance	(0.6)	(3.7)	(9.9)	(13.9)	3.3	4.4
PCP IV	0.0	0.0	(13.8)			12.4
Benchmark	0.6	1.9	7.3			
Over / Underperformance	(0.6)	(1.9)	(21.1)			
Diversified Income						
BlackRock FIGO	0.4	1.2	(1.8)	(0.6)	2.9	3.0
Benchmark	0.4	1.0	3.7	4.0	4.4	5.0
Over / Underperformance	0.0	0.2	(5.5)	(4.6)	(1.5)	(2.0)
Fermat ILS Yield	0.7	3.2	6.4			
Benchmark	0.4	1.1	4.2			
Over / Underperformance	0.3	2.1	2.2			
Harbour Income	(1.4)	(1.4)	(1.2)	(0.6)	4.9	5.3
Benchmark	0.4	1.2	4.0	4.3	4.1	4.6
Over / Underperformance	(1.8)	(2.6)	(5.2)	(4.9)	0.8	0.7
Milford Diversified Income	(1.7)	(0.6)	(0.3)	0.6	4.4	5.7
Benchmark	0.4	1.0	3.0	3.3	3.1	3.6
Over / Underperformance	(2.1)	(1.6)	(3.3)	(2.7)	1.3	2.1
Mint Diversified Income	(1.3)	(4.3)	(7.4)	(6.4)	1.1	2.9
Benchmark	0.5	1.6	6.1	6.6	6.6	5.7
Over / Underperformance	(1.8)	(5.9)	(13.5)	(13.0)	(5.5)	(2.8)
Cash						
Self Managed	0.1					
Benchmark	0.1					
Value Added	0.0					
Total Fund	(0.9)	(1.0)	0.0	2.1	8.5	7.8
Fund Objective	0.7	2.0	7.4	8.1	8.1	7.2
Over / Underperformance	(1.6)	(3.0)	(7.4)	(6.0)	0.4	0.6

Legend: Red = -2% or below; Amber = greater than -2% but less than 0%; Green = 0% or above

CONTINUITY CAPITAL PE FUND NO.2 (HISTORICAL RETURN)

The table below shows the returns of Continuity Capital No.2, including the period before it was transferred from the old PRF to the CIF.

Asset	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
Continuity Capital PE Fund No.2	0.1	7.9	29.8	37.0	33.3	23.4
Benchmark	1.2	3.6	13.7	15.0	15.0	15.0
Value Added	(1.1)	4.3	16.1	22.0	18.3	8.4

Legend: Red = -2% or below; Amber = greater than -2% but less than 0%; Green = 0% or above

AUSTRALIAN DOLLAR-DENOMINATED FUND RETURNS

The following table shows the movements of the AUD/NZD cross rate which affect the unhedged Schroders, MLC and BlackRock returns. A negative change in the cross rate is beneficial to the unhedged NZD return, while a positive change is detrimental to the unhedged NZD return.

Asset	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
AUD/NZD	(1.4)	(2.0)	(1.9)	(1.7)	(1.2)	(0.1)
Schroders Real Return (NZD)	(0.0)	(1.8)	(0.6)	0.6	4.8	3.7
Benchmark	0.5	1.6	5.5	6.7	6.7	6.5
Over / Underperformance	(0.5)	(3.4)	(6.1)	(6.1)	(1.9)	(2.8)
Schroders Real Return (AUD)	(1.4)	(3.8)	(3.3)	(1.9)	2.8	3.2
Benchmark	0.5	1.6	5.5	6.7	6.7	6.5
Over / Underperformance	(1.9)	(5.4)	(8.8)	(8.6)	(3.9)	(3.3)
MLC PE II (NZD)	4.8	8.7	28.2	34.5	23.5	
Benchmark	1.2	3.6	12.4	15.0	15.0	
Over / Underperformance	3.6	5.1	15.8	19.5	8.5	
MLC PE II (AUD)	3.3	6.5	25.8	32.2	22.1	
Benchmark	1.2	3.6	12.4	15.0	15.0	
Over / Underperformance	2.1	2.9	13.4	17.2	7.1	
MLC PE III (NZD)	5.0	5.6	48.1			
Benchmark	1.2	3.6	12.4			
Over / Underperformance	3.8	2.0	35.7			
MLC PE III (AUD)	3.5	3.6	46.1			
Benchmark	1.2	3.6	12.4			
Over / Underperformance	2.3	0.0	33.7			
BlackRock FIGO (NZD)	0.7	(0.5)	(2.2)	(1.9)	3.1	2.3
Benchmark	0.3	1.0	3.3	4.0	4.4	5.0
Over / Underperformance	0.4	(1.5)	(5.5)	(5.9)	(1.3)	(2.7)
BlackRock FIGO (AUD)	(0.7)	(2.5)	(4.0)	(3.6)	1.8	2.2
Benchmark	0.3	1.0	3.3	4.0	4.4	5.0
Over / Underperformance	(1.0)	(3.5)	(7.3)	(7.6)	(2.6)	(2.8)

Legend: Red = -2% or below; Amber = greater than -2% but less than 0%; Green = 0% or above

Asset	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
Continuity Capital No.5 (NZD)	4.3	7.4	22.2	21.3		
Benchmark	1.2	3.6	12.4	15.0		
Over / Underperformance	3.1	3.8	9.8	6.3		
Continuity Capital No.5 (AUD)	2.8	5.3	19.6	18.9		
Benchmark	1.2	3.6	12.4	15.0		
Over / Underperformance	1.6	1.7	7.2	3.9		
Continuity Capital No.7 (NZD)	(1.8)					
Benchmark	1.2					
Over / Underperformance	(3.0)					
Continuity Capital No.7 (AUD)	(3.7)					
Benchmark	1.2					
Over / Underperformance	(4.9)					
Nanuk New World (NZD)	(1.6)	(4.0)	(0.4)	5.1		
Benchmark	(1.5)	(5.3)	(1.7)	1.9		
Over / Underperformance	(0.1)	1.3	1.3	3.2		
Nanuk New World (AUD)	(2.2)	(6.6)	(2.9)	1.4		
Benchmark	(1.5)	(5.3)	(1.7)	1.9		
Over / Underperformance	(0.7)	(1.3)	(1.2)	(0.5)		
Federation Alternative (NZD)	0.6	0.7	2.6	6.2		
Benchmark	1.2	3.8	14.6	16.0		
Over / Underperformance	(0.6)	(3.1)	(12.0)	(9.8)		
Federation Alternative (AUD)	0.0	(2.0)	0.0	2.5		
Benchmark	1.2	3.8	14.6	16.0		
Over / Underperformance	(1.2)	(5.8)	(14.6)	(13.5)		
Fermat ILS Yield (NZD)	0.7	3.2	6.4			
Benchmark	0.4	1.1	4.2			
Over / Underperformance	0.3	2.1	2.2			
Fermat ILS Yield (AUD)	0.1	0.4	0.0			
Benchmark	0.4	1.1	4.2			
Over / Underperformance	(0.3)	(0.7)	(4.2)			
CPEC 9 (NZD)	0.6	2.8				
Benchmark	1.2	3.6				
Over / Underperformance	(0.6)	(0.8)				
CPEC 9 (AUD)	0.0	0.0				
Benchmark	1.2	3.6				
Over / Underperformance	(1.2)	(3.6)				

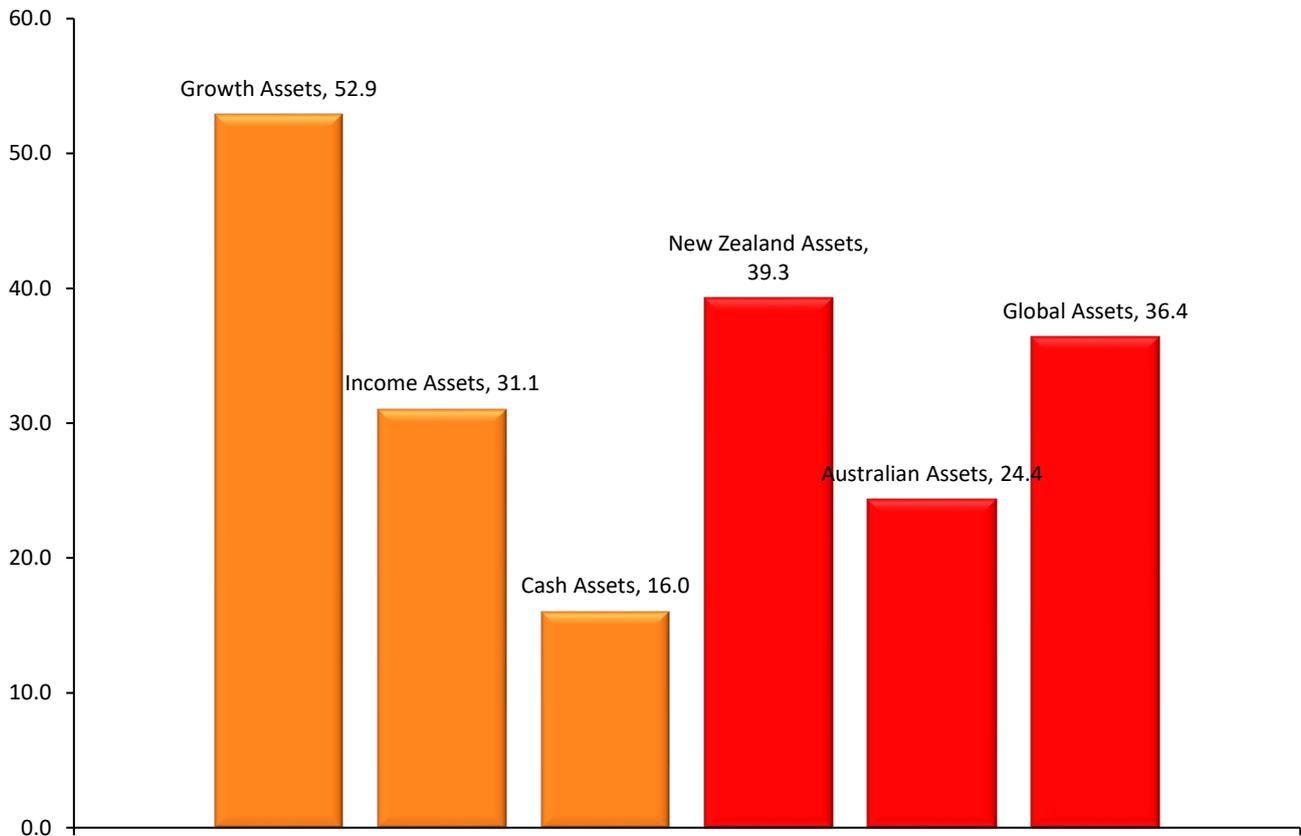
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LTF OVERALL FUND ASSET ALLOCATION

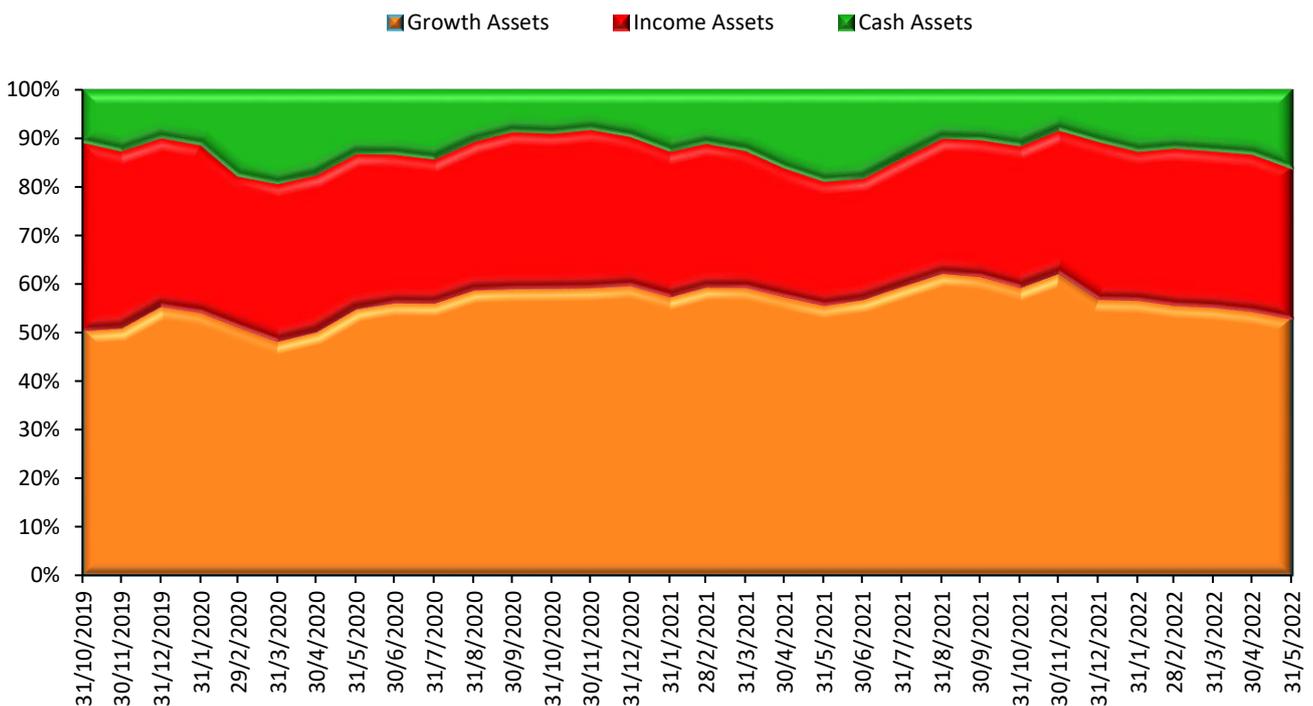
Asset	Market Value		Target %	Target Range %	Status
	\$	%			
Growth Assets	36,321,382	58.4	67	50 - 85	✓
Diversified Growth	23,143,183	37.2	35	25 - 70	✓
Aspiring	4,092,041	6.6	8	5 - 15	✓
Castle Point 5 Oceans	8,585,622	13.8	15	10 - 20	✓
Milford Active Growth	3,907,715	6.3	5	0 - 10	✓
Mint Diversified Growth	2,341,359	3.8	5	0 - 10	✓
Schroders Real Return	4,216,445	6.8	2	0 - 10	✓
Global Equity*	2,888,248	4.6	7	5 - 20	x
Harbour T. Rowe Price Global Equity	1,921,396	3.1	5	0 - 10	✓
Nanuk New World Fund	966,852	1.6	2	0 - 5	✓
Private Equity	10,289,951	16.5	25	0 - 35	✓
Castlerock	1,051,282	1.7	2	0 - 5	✓
Continuity Capital PE Fund No.2 LP	906,805	1.5	2	0 - 3	✓
Continuity Capital PE Fund No.4 LP	709,650	1.1	1	0 - 3	✓
Continuity Capital PE Fund No.5 LP	1,619,630	2.6	2	0 - 5	✓
Continuity Capital PE Fund No.6 LP	484,824	0.8	2	0 - 5	✓
Continuity Capital PE Fund No.7 LP	259,612	0.4	2	0 - 5	✓
CPEC 9	82,650	0.1	1	0 - 3	✓
Direct Capital VI	513,230	0.8	2	0 - 5	✓
Federation Alternative	970,554	1.6	2	0 - 5	✓
Milford PE III	485,000	0.8	2	0 - 5	✓
MLC PE II	1,187,299	1.9	2	0 - 5	✓
MLC PE III	308,726	0.5	1	0 - 3	✓
Oriens Fund 2	296,041	0.5	1	0 - 3	✓
PCP III	837,875	1.3	1	0 - 3	✓
PCP IV	576,772	0.9	1	0 - 3	✓
Income Assets	25,868,667	41.6	33	15 - 50	✓
Diversified Income	22,411,866	36.0	33	15 - 45	✓
BlackRock FIGO	619,084	1.0	2	0 - 10	✓
Fermat ILS Yield	683,493	1.1	2	0 - 10	✓
Harbour Income	7,928,587	12.7	9	0 - 15	✓
Milford Diversified Income	6,757,794	10.9	10	0 - 15	✓
Mint Diversified Income	6,422,908	10.3	10	0 - 15	✓
Cash	3,456,801	5.6	0	0 - 20	✓
Self-Managed	3,456,801	5.6	0	0 - 20	✓
Total Assets	62,190,049	100.0			

*Global Equity is below its range due to the continuing volatility of financial markets, in particular the recent equities market sell-off. In addition, \$1 million was redeemed from Harbour T. Rowe Price Global Equity in May to help de-risk the portfolio.

LTF UNDERLYING FUND ASSET ALLOCATION



UNDERLYING ASSET ALLOCATION



SHORT TERM FUND

PERFORMANCE SUMMARY

Asset	1 Month %	3 Month %	YTD %	1 Year %	3 Year (p.a.) %	5 Year (p.a.) %
Diversified Growth						
Castle Point 5 Oceans	(1.3)	(0.4)	0.9	1.5	6.0	
Benchmark	0.4	1.1	3.5	3.8	3.6	
Value Added	(1.7)	(1.5)	(2.6)	(2.3)	2.4	
Milford Active Growth						
Milford Active Growth	(1.1)	(3.0)	(1.9)	(0.2)		
Benchmark	0.8	2.4	9.1	10.0		
Over / Underperformance	(1.9)	(5.4)	(11.0)	(10.2)		
Mint Diversified Growth						
Mint Diversified Growth	(1.3)	(5.4)	(8.5)	(6.0)		
Benchmark	0.7	2.0	7.4	8.1		
Value Added	(2.0)	(7.4)	(15.9)	(14.1)		
Diversified Income						
Harbour Income						
Harbour Income	(1.4)	(1.4)	(1.8)	(1.2)	4.0	
Benchmark	0.4	1.2	4.0	4.3	4.1	
Value Added	(1.8)	(2.6)	(5.8)	(5.5)	(0.1)	
Milford Diversified Income						
Milford Diversified Income	(2.4)	(1.3)	(1.6)	(0.7)	3.7	5.2
Benchmark	0.4	1.0	3.0	3.3	3.1	3.6
Over / Underperformance	(2.8)	(2.3)	(4.6)	(4.0)	0.6	1.6
Mint Diversified Income						
Mint Diversified Income	(2.0)	(4.9)	(8.2)	(7.5)	0.9	2.8
Benchmark	0.5	1.6	6.1	6.6	6.6	5.7
Value Added	(2.5)	(6.5)	(14.3)	(14.1)	(5.7)	(2.9)
QuayStreet Income						
QuayStreet Income	(1.0)	(1.9)	(2.6)	(2.1)	2.2	3.5
Benchmark	0.3	0.9	2.6	2.8	2.6	3.1
Value Added	(1.3)	(2.8)	(5.2)	(4.9)	(0.4)	0.4
Cash						
Self Managed						
Self Managed	0.0					
Benchmark	0.1					
Value Added	(0.1)					
Total Fund						
Total Fund	(1.5)	(1.9)	(2.6)	(1.8)	4.4	5.7
Fund Objective	0.4	1.0	3.4	3.7	3.8	4.3
Value Added	(1.9)	(2.9)	(6.0)	(5.5)	0.6	1.4

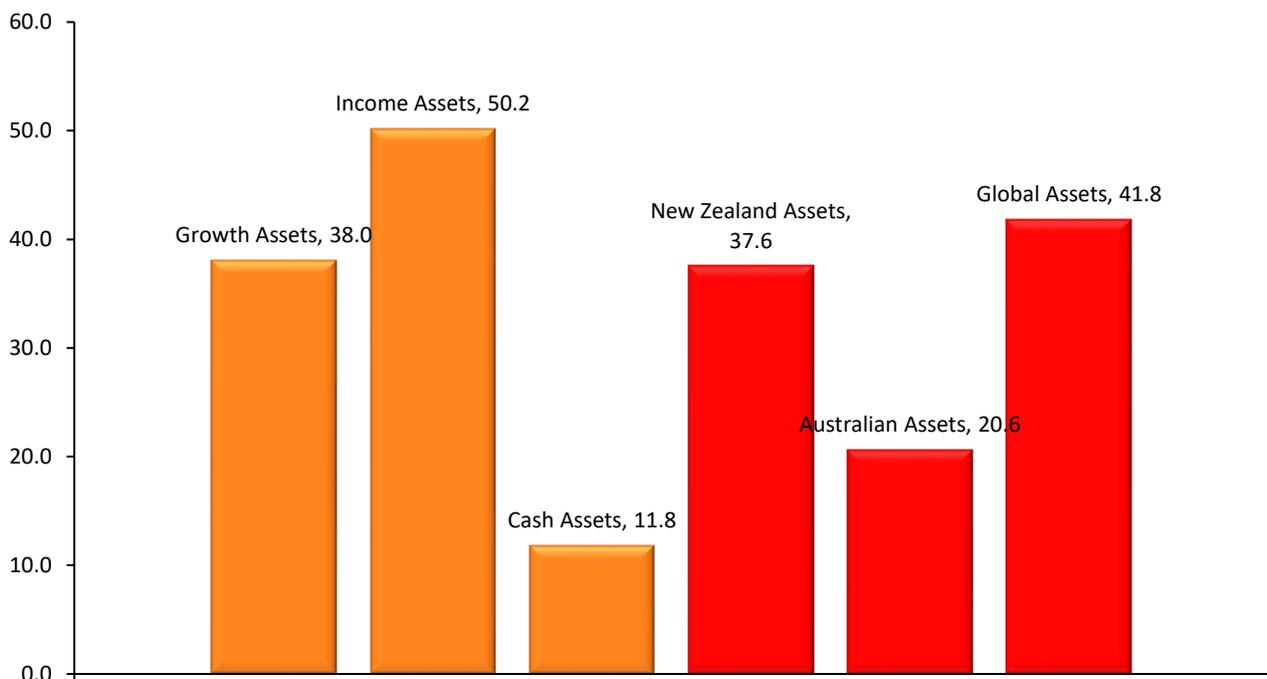
Legend: Red = -2% or below; Amber = greater than -2% but less than 0%; Green = 0% or above

STF OVERALL FUND ASSET ALLOCATION

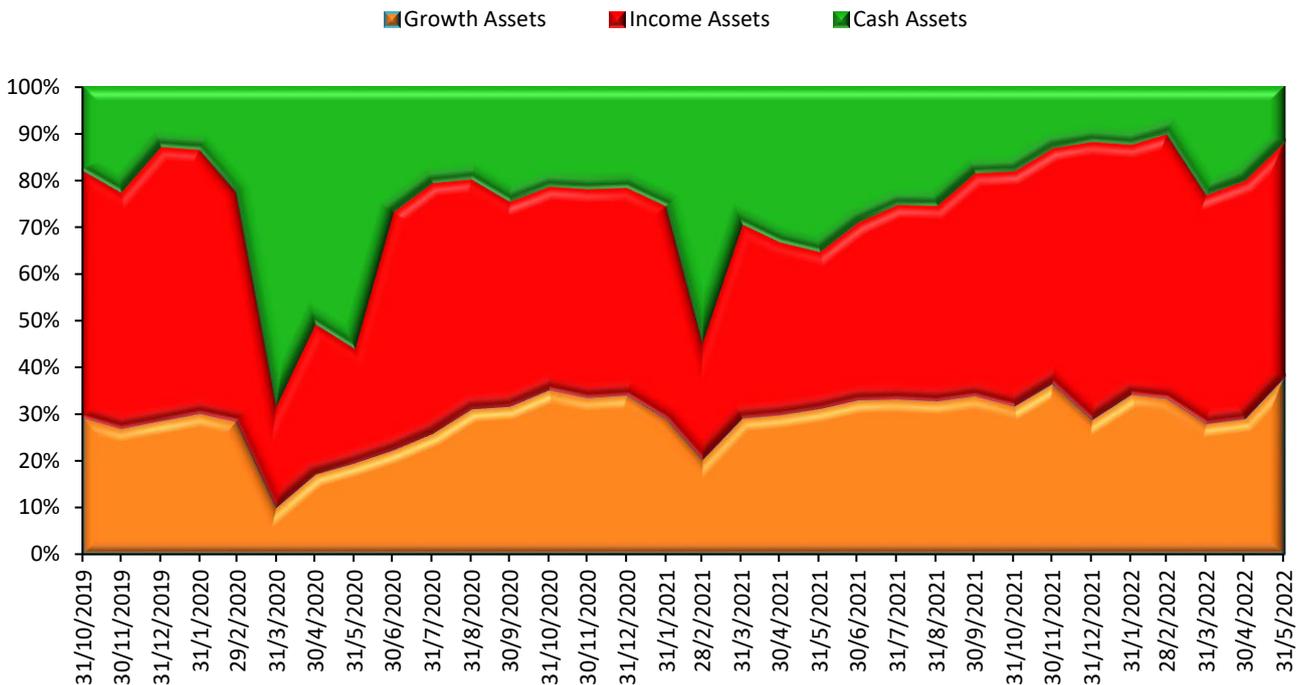
Asset	Market Value		Target %	Target Ranges %	Status
	\$	%			
Growth Assets	4,994,269	39.7	20	0 - 40	✓
Diversified Growth	4,994,269	39.7	20	0 - 40	✓
Castle Point 5 Oceans*	2,881,036	22.9	10	0 - 20	✗
Milford Active Growth	1,656,720	13.2	5	0 - 20	✓
Mint Diversified Growth	456,513	3.6	5	0 - 20	✓
Income Assets	7,593,938	60.3	80	60 - 100	✓
Diversified Income	7,593,938	60.3	80	60 - 100	✓
Harbour Income	2,456,974	19.5	20	0 - 30	✓
Milford Diversified Income	2,140,681	17.0	20	0 - 30	✓
Mint Diversified Income	621,616	4.9	20	0 - 30	✓
QuayStreet Income	2,374,668	18.9	20	0 - 30	✓
Cash	0	0.0	0	0 - 20	✓
Self-Managed	0	0.0	0	0 - 20	✓
Total Assets	12,588,207	100.0			

*Castle Point 5 Oceans is above its upper range due to reduced cash holdings in TDs. This exposure will be progressively reduced to meet cash flow requirements.

STF UNDERLYING FUND ASSET ALLOCATION



UNDERLYING ASSET ALLOCATIONS



The spike in February 2021 in cash assets is due to the inclusion, then exclusion, of the KMR Grant funds.

PERFORMANCE COMMENTARY

The **Aspiring Fund** fell 2.1% in May. The NZ portfolio was down 6.4% compared to the NZX 50 index that was down 4.9% and the average NZ stock return that fell 6% over the month. Infratil was the main detractor, getting caught up in the NZ market selloff falling 7.9% despite a strong earnings result. Fletcher Building (down 12.4%) and Australian counterpart CSR (down 23.9%) detracted from returns as sentiment continued to fall against the building sector. A key positive contributor was Australian lotteries and gaming company Tabcorp. Aspiring has now sold out of this position believing it has reached its full potential. Aspiring added to its holding in Ramsay Healthcare making it the largest position in the Fund. The international portfolio had a positive month led by Volkswagen (up 3.9%). The Fund remains cautiously positioned and Aspiring is taking a patient approach to deploying the Fund’s cash balance (26% of the Fund) as opportunities present themselves in the coming months.

The **Castle Point 5 Oceans Fund** was down 1.4% in May. The global equity strategies had mixed results with the Acadian Managed Volatility strategy falling 0.6% and the Schroders Global Recovery Fund posting a positive 4.2% return. Castle Point’s local strategies were both down over the month with the Ranger Fund falling 9.1% and the Trans-Tasman Fund down 5.8%. The bond funds detracted from returns with the T. Rowe Price Dynamic Global Bond Fund down 1% and Daintree Core Income Trust down 0.6%. The Kohinoor Core tail risk strategy was down 4.7%. Direct mortgage loans and carbon credits contributed positively over the month.

The **Harbour T. Rowe Price Global Equity Fund** fell 1.8% for the month underperforming its benchmark by 1.6%. At a sector level the largest detractor was Information Technology (detracting 1%) followed by Energy (detracting 0.6%). The largest contributor was Healthcare (adding 0.3%). At a stock level the largest detractor was Snap Inc. that fell 51% over the month detracting one quarter of a percent from the Fund. The next largest detractor was Atlassian Corp. falling 21%. Adding to portfolio returns was Evotec that was up 12.3% following a 60% share price fall in February and subsequent analyst upgrades.

The **Milford Active Growth Fund** fell 1.1% in May as share markets fell particularly in New Zealand and Australia. Key positive contributors included energy companies EOG (up 17.3%) and Shell (up 11.8%) and global banks Barclays (up 14.1%) and JP Morgan (up 10.8%). Global banks are beneficiaries of higher interest rates as they are able to deploy their assets at higher yields. During the month Milford added business accounting and tax software company Intuit. The Fund remains more defensively positioned than usual given Milford's view of the current uncertain investment environment. Milford increased the Fund's exposure to fixed income securities that it believes already reflects the possibility of higher interest rates.

The **Mint Diversified Growth Fund** fell 1.3% over the month. The fixed income and global equity portfolios posted small positive returns, but the remaining portfolios were down over the month. Currency hedging also detracted value. American semiconductor company AMD was the largest positive contributor over the month. American multinational telecommunications company Comcast also had a solid month. PushPay was an outperformer in Australasian equities as further details emerged on an expression of interest to purchase the company. Travel management technology company Serko was the largest detractor after announcing disappointing full-year results. During the month Mint added multinational consumer goods company Reckitt Benckiser and exited its positions in Netflix and media company Schibsted. Mint remains fully invested in equities and believes it will outperform bonds in the next 12 months.

The **Nanuk New World Fund** fell 2.2% in May in AUD terms outperforming its benchmark by 1.4%. The NZD fell 0.6% against the AUD resulting in an NZD return for the month of -1.6%. The Fund's lack of exposure to the energy sector (energy stocks are excluded from the Fund) accounted for circa 0.5% of the underperformance. Also detracting from returns was American natural food company Hain Celestial Group Inc that fell 21% over the month. Nanuk reduced its exposure to this stock due to reduced conviction. Tandem Diabetes Care Inc. (down 30%) also detracted from returns. Positive contributions to returns came from Siemens Healthineers (up 10%), biosimulation company Certara Inc (up 10%) and International Flavours and Fragrances (up 9%).

The **Schroder Real Return Fund** returned -0.7% in AUD for the month. The NZD fell against the AUD resulting in a return of -0.1% for the month in NZD. Global equities contributed positively to returns adding 0.1% and tactical equity futures added a further 0.1%. Commodities, real estate debt and the duration overlay also contributed positively. Australian equities were the main detractor having a -0.4% impact. Australian corporate and government debt holdings detracted 0.2% from returns and dividend futures detracted 0.1%. Over a third of the Fund is now in cash as Schroder's base assumption is that we are in the midst of a bear market and heading for a recession.

The **Harbour Income Fund** was down 1.3% over May. Contributors to returns were the Harbour Long/Short Fund and holdings in the credit sector. These were more than offset by losses in listed property and income stocks. Harbour continues to hold its cautious approach to equities through holding more defensive income

stocks and the Harbour Long/Short Fund. Harbour reduced its holding in the Harbour T. Rowe Price Global Equity Fund owing to its growth stock focus. Harbour is also cautious about longer-term bonds expecting a return to higher yields. Harbour reduced its holdings in sub-investment grade NZ bonds as a result of its cautious stance to the riskier end of the corporate bond market.

The **Milford Diversified Income Fund** was down 1.7% in May. Many of the Fund's bonds were weaker, most notably in Australian Dollars and Euros where market interest rates rose post the respective central banks indicating coming rate increases. Performance across the Fund's shares was mixed. There were some strong performers, including rising rate beneficiaries such as offshore banks which partially recovered from recent recession scare weakness (e.g. Barclays Bank up 14.1%) and Shell PLC (up 10.3%), a recent addition to the Fund and a beneficiary of UK energy transition. Unfortunately, there was notable weakness across the Fund's property company holdings. Industrial property companies such as US based Prologis and Australian based global property manager Goodman Group were two of the weakest on fears that tenant demand may be waning as Amazon disclosed it had spare warehouse capacity. Milford's positioning in the Fund remains cautious with its share exposure significantly lower than its long run neutral position.

The **Mint Diversified Income Fund** was down 1.2% in May. Most asset classes were negative over the month with the exception of fixed income. Listed property was down 0.8% in reaction to higher interest rates. Positive contributions came from American multinational telecommunications company Comcast and a2 Milk in Australasian equities. Listed property shares were the largest negative contributors notably Stride and Precinct. Travel management technology company Serko also detracted value after disappointing full-year results. During the month Mint added multinational consumer goods company Reckitt Benckiser and exited its position in financial information and analytics company S&P Global. Mint remains fully invested in equities and believes it will outperform bonds in the next 12 months. It also believes yields are trading at appealing levels reflecting interest rate hike expectations.

Continuity Capital Fund No. 2 made two distributions during the month of 11.8176 cents per unit on 4 May and 4.7815 cents per unit on 17 May. This amounted to a total payment for the month of \$331,982. The Fund was up 0.1% over the month. **Continuity Capital Fund No. 4** was up 0.3% over May due to a distribution of 4.9023 cents per unit. This amounted to a payment of \$49,053. **Continuity Capital Fund No. 5** was down 0.2% over May in AUD terms. In NZ dollar terms the Fund was up 0.5% owing to the NZD falling against the AUD over May. There were no capital calls payable or distributions received during the month. **Continuity Capital Fund No. 6** fell 0.1% over May due to downward revaluations of some of the underlying companies. A capital call of 5 cents per unit was made during the month amounting to \$100,000. **Continuity Capital Fund No. 7** made its first capital call on 31 May 2022. The value of invested funds was 1.8% lower than the capital contributed owing to initial fees and expenses. **PCP IV** had a capital call for a new investment into Coffee Supreme in May. **Milford PE III** had its fifth capital call of 18c for a new investment in AECC Global. **Oriens Fund 2** had a capital call for a new investment into Van Dyck Fine Foods Limited in May.

STANDARD DEVIATION OF RETURNS

At the request of the Investment Sub-Committee we have included the table below showing the standard deviation of returns for each NRC Fund. We have also included two Morningstar Category Benchmarks and the NZX50 Index to provide some context.

The Morningstar category benchmarks are defined as below:

- The Multisector Balanced Category consists of funds that invest in a number of sectors and have 41% to 60% of their assets in growth sectors. These are typically defined as equity and property asset classes.
- The Multisector Moderate Category consists of funds that invest in a number of sectors and have between 21% and 40% of their investments exposed to the growth sectors. These are typically defined as equity and property asset classes.

Standard deviation is a measure of variation around an average return. For example, if a fund returned 10% per annum on average over the past three years with a standard deviation of 3%, this means the annual return could have been between 7% and 13%. The higher the standard deviation, the wider the range in returns.

The investment industry has traditionally used standard deviation as one measure of risk. However, risk is complex and has many different sides to it so cannot be condensed into one measure. The use of standard deviation as a measure of risk can give a false impression of confidence, or a false impression of fear. The statistic does not tell us whether the variation in returns is more on the upside, or more on the downside. Neither does it tell us how frequent large falls may occur. We note that the figures below are based on past returns and are not a reliable indicator of the distribution of future returns. The figures are annualised and have been calculated using monthly returns.

Standard Deviation of Returns	1 Year %	3 Year (p.a.) %
LTF	4.4	6.8
STF	3.7	4.1
NZ Multi-Sector Balanced	5.3	5.2
NZ Multi-Sector Moderate	4.2	5.1
S&P/NZX 50	12.8	14.5

Over the one-year period the LTF had a higher standard deviation than the Moderate benchmark and a lower standard deviation than NZX 50 and the Balanced benchmark. The STF had a lower than the NZX 50, Moderate benchmark and Balanced benchmark.

Over the three-year period the LTF had a higher standard deviation than the Balanced and Moderate benchmarks and a lower standard deviation than the NZX 50. The STF had a lower standard deviation than the NZX 50, the Balanced benchmark and the Moderate benchmark.

MARKET PERFORMANCE AND COMMENTARY – MAY 2022

MARKET PERFORMANCE

Index	Index Level/Price	1 Month %	3 Month %	1 Year %
Global Equities				
MSCI World NR	6,584.44	-0.2	-4.2	-1.4
MSCI World NR (NZD)	13,043.63	-0.2	-2.0	6.5
MSCI Emerging Markets	671.92	-0.2	-5.7	-15.7
S&P 500 (US)	4,132.15	0.0	-5.5	-1.7
Nikkei 225 (Japan)	27,279.80	1.6	2.8	-5.5
FTSE 100 (UK)	7,607.66	0.8	2.0	8.3
DAX (Germany)	14,388.35	2.1	-0.5	-6.7
CAC 40 (France)	6,468.80	-1.0	-2.9	0.3
Trans-Tasman Equities				
S&P/NZX 50	11,308.34	-4.8	-5.6	-8.2
S&P/ASX 300	84,348.91	-2.8	3.1	4.7
Bonds				
S&P/NZX NZ Govt Stock	1,696.32	0.1	-4.7	-9.3
S&P/NZX A Grade Corporate	5,471.06	0.4	-2.8	-6.4
Barclays Global Agg (Hedged to NZD)	393.22	-0.1	-5.0	-6.9
Oil				
West Texas Intermediate Crude	114.67	9.5	19.8	72.9
Brent Crude	119.85	12.5	18.9	74.4
NZD Foreign Exchange				
AUD	0.9074	-0.6	-2.7	-3.5
EUR	0.6077	-1.2	0.9	2.1
GBP	0.5165	-0.1	2.4	0.9
JPY	83.7415	-0.4	7.4	5.2
CNY	4.3480	0.9	1.8	-6.3
USD	0.6510	0.3	-3.8	-10.6

Source: Nikko AM, indices are in the local currency of the asset unless otherwise indicated.

Executive summary:

- Australian and New Zealand stock markets sold off. US markets stabilised.
- Geopolitical risks are still high
- Food security is a priority on the global agenda
- Oil prices have risen to around \$120 per barrel
- Inflation is at record high levels in Europe
- New Zealand dollar depreciated against most currencies.

ECONOMIC COMMENTARY

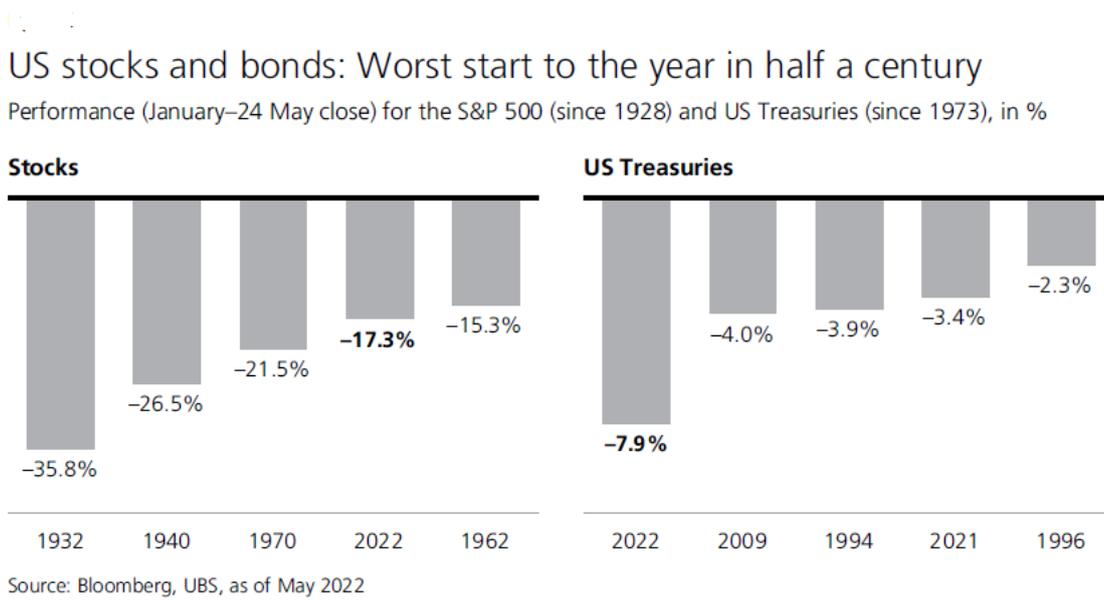
GLOBAL SNAPSHOT

Geopolitical tensions have intensified. In May, China boosted its military exercises in Taiwanese airspace and strengthened its positions in the Pacific Islands. Russia advanced deeper into Ukrainian territory; Mariupol is now under Russian control after a drawn-out siege of the Azovstal plant.

According to the UN, the war in Ukraine has initiated a global food crisis that will last several years without intervention. The World Bank announced an additional \$12bn in funding to mitigate the "devastating effects". The global food crisis continues to influence markets, and we expect this to peak in August or September this year.

The S&P 500 had its poorest performance at this time of year since the 1970s. Year-to-date total returns from the Bloomberg US Treasury Index are the worst since the benchmark's inception in 1973, at -7.9%. The war in Ukraine, US inflation at four-decade highs, and recession fears as the Fed raises rates have all contributed to the decline (Figure 1).

Figure 1



The Fed plans to cut its \$8.5 trillion balance sheet from June, when it will no longer roll over \$30 billion in maturing Treasury securities and \$17.5 billion in maturing agency mortgage-backed securities per month. From September, those caps will rise to \$60 billion and \$35 billion, respectively.

The FOMC's early-May meeting surprised some institutions, with all members supporting 50-basis-point rate increases over the next few meetings to bring interest rates to a neutral level. Some members indicated that a more "restrictive" approach to tightening monetary policy could be in order, depending on how the economy evolves.

European Central Bank (ECB) President Christine Lagarde sided with hawkish colleagues in a blog post, confirming an early end to the ECB's bond-buying programme in the third quarter and making her first explicit call for interest rate increases.

Fitch's latest survey revealed that Australian investors expect the credit environment to become more challenging in 2022. Rising political and geopolitical tension is at the heart of investor concerns, with 52% of respondents ranking this as the most significant risk to credit markets over the next 12 months. A hard landing in China and a domestic housing-market downturn have consistently ranked among the top three threats in past surveys and now sit at third and fourth, respectively, behind the withdrawal of quantitative easing.

LOCAL SNAPSHOT

The RBNZ followed April's 50 basis point increase in the cash rate with another significant 50-point rise at its May policy meeting.

COVID disruption for businesses has reduced this year compared to the first two years of the pandemic. Companies will use lessons learned over the past few months to refine how they will respond to future waves of COVID. Meanwhile, inflation, supply chain and labour challenges have intensified – and will persist in 2022. Russia's invasion of Ukraine and China's COVID lockdowns are prolonging the pain. Labour shortages will continue through into 2023, even though New Zealand border restrictions will ease. Geopolitical tensions also mean that businesses need to start thinking more strategically about their future export markets and sources of imports. Investing in cost- and labour-saving capital and technology is one of the best options today.

The latest ANZBO survey showed that close to 56% of businesses now expect economic conditions to weaken over the coming year. That's a significant drop in confidence since last month, with economic confidence now at its lowest level since April 2020, when the economy was still in lockdown.

A key area of business concern is cost pressure, with 95% of businesses expecting operating costs to rise over the coming year. We expect all affected companies that haven't already will raise their prices over the next few months.

WORLD FINANCIAL MARKETS

Equities

The tech-heavy Nasdaq Composite Index gained ground, breaking a seven-week streak of declines in the last week of May, however still ended the month down 2.05%. The S&P 500 rallied 6.6% in the last week of May resulting in a flat return over the month (0.01%). Every sector in the S&P 500 advanced, with consumer discretionary and energy stocks performing especially well. Excepting the healthcare sector which lagged. The cross-sector strength appeared to reflect optimism that inflationary pressures could be peaking. Value stocks underperformed their growth counterparts and small-caps underperformed large-caps.

In Europe, the Euro Stoxx 50 fell 0.4% as investors concerned about elevated inflation, slowing economic growth, the pace of central bank policy tightening, and the invasion of Ukraine. The main market indexes posted gains except France. France's CAC 40 ended the month -1.0%. Germany's DAX added 2.1% and the UK's FTSE 100 returned 0.8%.

Fixed Interest

The 10-year US Treasury yield traded lower, down four basis points to 2.74% from 2.78%, as the market appeared to focus on signs of slowing growth in the economy that could lead to a slower pace of Fed rate hikes on the back of eurozone inflation data and news that the EU will ban most Russian oil imports by the end of this year.

Core eurozone bond yields fluctuated but ended slightly higher. Yields initially ticked up after ECB President Christine Lagarde suggested the possibility of positive rates by year-end. Yields retreated somewhat on weaker-than-expected eurozone PMI data. Over the last week of May, the German 10-year bund yield rose two basis points to 0.96% from 0.94%.

UK gilt yields broadly tracked core markets. The 10-year gilt yield ended the month at 2.1%.

Spreads in the US investment-grade corporate market tightened as investors' risk appetite increased. Demand for high yield bonds was stronger across sectors. Total fixed interest returns were 0.55% in May.

HI-TECH RACE: WEST OR EAST

By the middle of this decade, many major automakers will act more like tech companies than car companies. Hyundai offered a glimpse into the future with a new \$5 billion investment to expand its robotic, autonomous, and electric air-vehicle ambitions. It's just one example of the larger automotive industry's transition into a software-driven industry.

The company already owns 80% of robotics company Boston Dynamics and has partnered with Korean driverless vehicle company Motional to roll out a line of robotaxis. Hyundai also launched the Supernal division last year to develop electric air taxis, which they hope will carry passengers by 2028.

Last year, Ford unveiled a hands-free driving system for some of its most popular truck models. Meanwhile, hundreds of companies are in a race to develop air taxis. By the middle of the decade, more automakers will call themselves "mixed mobility" companies. The average car today is 90% hardware and 10% software. But the future could see hardware's share fall to 40%, industry experts say, while software will account for another 40% and content 20%. Telecom Ericsson predicts this connected automotive market could reach \$166 billion by 2025.

Significant investments in domestic chip production could lead to a global semiconductor alliance by the end of the decade. Samsung announced a massive investment in South Korea's domestic chip sovereignty with a pledge to spend nearly \$365 billion on next-gen tech over the next five years. The pandemic has forced nations to reassess their domestic production capabilities to secure supply chains for microchips. But economic cooperation with allies could be the best way to strengthen supply chains.

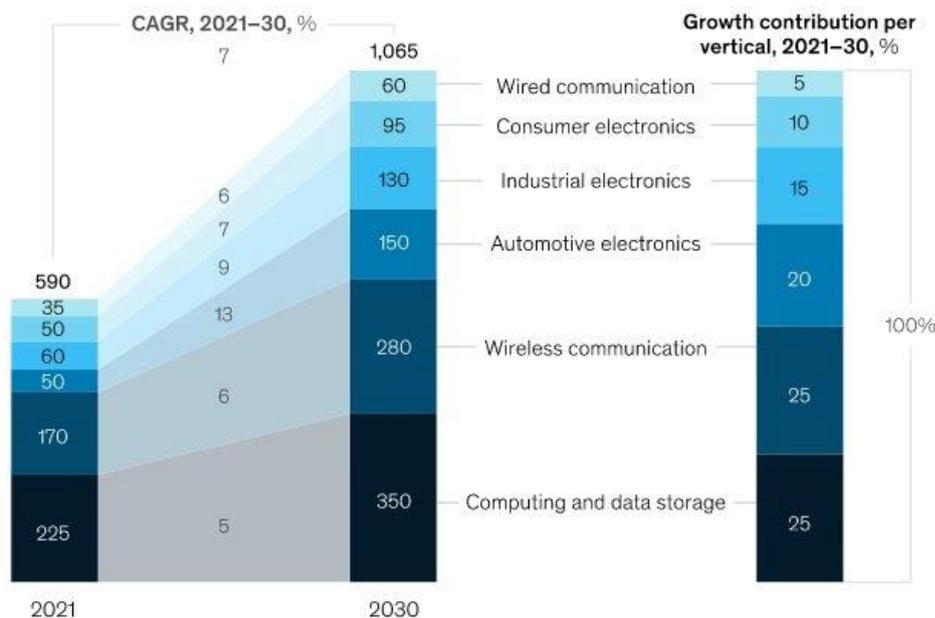
About 80% of Samsung's investment will stay in South Korea. The goal is to use the investments to secure the two weakest links in the semiconductor supply chain: talent and machinery. The money will create 80,000 jobs by 2026 and purchase the most advanced production machines from ASML. These machines can cost around \$400 million apiece at their current price point. Both Samsung and US-based Intel want these machines to create 3-nanometer chips and compete to get them to market before the other. These 'N3' chips could be used for high-performance, low-power application processors, next-gen telecom, and high-resolution image sensors.

The CEO of Intel projected that the current chip shortage is likely to persist through 2024. The industry is worth approximately \$600 billion and could grow to a trillion by the end of the decade (Figure 2). Nations see it as worthwhile to invest heavily in new domestic manufacturing, and chipmakers are thriving. Samsung has already pledged billions to create plants in the US alongside Intel and industry leader TSMC. This is to take advantage of the CHIPS for America Act that will grant billions in subsidies for production and research and development in the US. India, the EU, and China all have similar plans to woo chipmakers to their shores. But the investments required to create domestic supply chains in each region would cost \$30 billion every year for decades. No one nation or company can sustain those levels, so a global semiconductor alliance could ultimately be the solution.

Figure 2

The overall growth in the global semiconductor market is driven by the automotive, data storage, and wireless industries.

Global semiconductor market value by vertical, indicative, \$ billion



Source: McKinsey

Deere wants to become the Apple of agriculture. The farm equipment giant unveiled a new push for autonomous tractors with software to harvest crop data. The race to automate agriculture has accelerated as labour shortages and the global food crisis gain momentum.

Deere has developed self-driving tractors loaded with \$500,000 of the latest software to harvest data. The first green 14-ton tractors will begin to plough fields in the US fall. The company will also combine the smart tractors with a subscription model to drive revenue growth. Deere's strategy to scale its tech products came after the manufacturer's stock plunged 14% on 20 May. It was the company's most significant drop in 14 years. Its closest competitors, AGCO and CNH Industrial, have announced they will pursue similar smart setups.

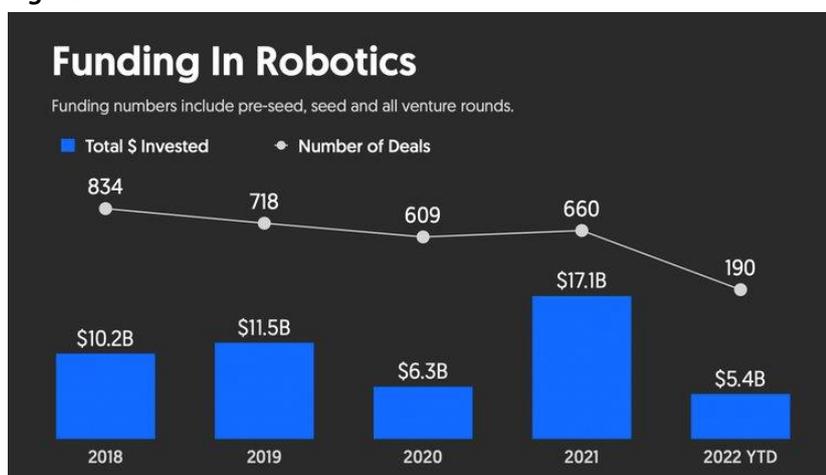
These advancements come with some risks. The growth in agritech has made the sector vulnerable to hackers. Meat processing giant JBS paid \$11 million in ransom to resolve a cyber-attack that impacted Australia, Canada, and the US. And this month, US agriculture firm AGCO was hit by a ransomware attack that affected production. If hackers disrupt hardware and software used in crops, it could severely impact the global supply chain.

IBM estimates that the average smart farm can generate half a million data points per day. The next step is to build machines that autonomously plant seeds with this harvested data. As the number of grain producers dwindles, investments in automation will save farmers time and money. Globally we could see nearly 39,000 autonomous tractors in use by 2026. Deere and its rivals will embrace innovation to feed a global population expected to hit 9.7 billion by 2050.

Household robots are also on the rise. Appliance giant Dyson will invest \$3.4 billion to debut new robots by 2030 to complete everyday household chores. It's the latest investment in robots connected to the cloud, but their rollout could stagnate with the slow adoption of 5G networks.

Dyson aims to tackle more mundane household chores with new robot prototypes with fine motor skills. Their arms can lift plates, vacuum, or pick up toys and will require 5G connectivity to roam wirelessly. It helps utilize the cloud's vast computing and data storage for precision control in near real-time. Dyson plans to build the UK's largest robotics centre and has already hired 2,000 employees for the initiative, half of which are engineers.

Figure 3



Source: Crunchbase

5G connectivity's low latency is the key to speed up robot adoption, as it provides greater processor power beyond the physical limits of the bot. However, this highlights a chicken-and-egg quandary. South Korea was the first nation to launch 5G and 45% of its population is now connected. So far, \$20 billion has been spent on network upgrades, but telecom firms are reluctant to spend more even though the tech is capable of 20x faster speeds. Demand and uptake haven't yet made it worthwhile.

South Korean tech firm Naver has invested \$550 million into its own robots called The Rookies, who deliver parcels and coffee to employees at its headquarters. To power them, it became South Korea's first non-telecom company to launch a locally licensed 5G network. As expensive processors are offloaded to the cloud, it saves an average of \$1,500 per robot. Besides Naver, no one sees this value more than Amazon, which employs an army of warehouse-bots and pledged \$1 billion towards new robotic innovations last year. But whether it's robots in the office, the warehouse, or at home, developers and 5G providers will need to sync up to make this cloud-powered vision a reality.

GEOPOLITICS

The war in Ukraine is in focus from a humanitarian and food supply perspective. Russian troops have advanced deep into Ukrainian territory and now control major parts of the southern and eastern regions. The last stand of defence in Mariupol fell and "Azovstal" defenders surrendered in May. The number of surrenders varies from hundreds to thousands depending on the source of information, however, Red Cross and other humanitarian organisations have kept silent and have avoided reporting figures.

EU unity is crumbling in face of a total oil embargo. The members of the Union could not agree on terms and exemptions for some members such as Hungary, Czech Republic, and Slovakia. Asia has become the largest importer of Russian oil for the first time in history. India and China have benefitted from the current situation by importing highly discounted oil from Russia. These increased Chinese imports of Russian oil heavily hit Iran, another nation with heavy sanctions. Before the war in Ukraine, Iran was the main supplier of oil to China which helped to keep its economy afloat. That situation has now changed and less money is coming into the country. That, coupled with a food supply shortage, has created difficulties for the President and Ayatollah.

On a call from the UN and global leaders, Russia agreed to open the Ukrainian ports for wheat exports to curb food shortages, in exchange for the lifting of sanctions. Russia is also considering lifting its ban on fertiliser exports if sanctions are withdrawn.

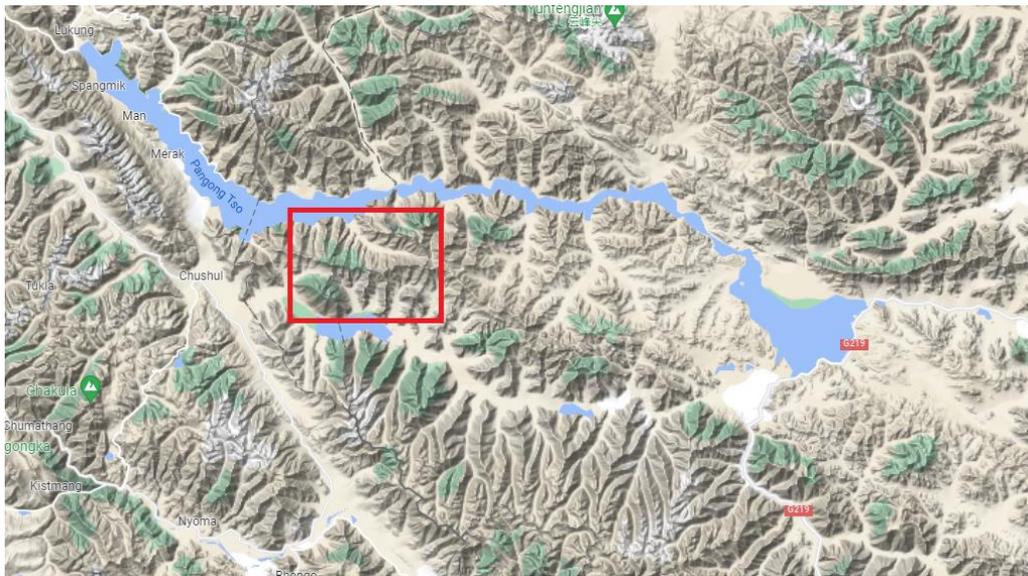
More than 1,000 companies with foreign capital have left Russia since the start of the Ukraine invasion. Unsurprisingly, their places have been taken by Chinese investors. JAC, a Chinese automaker, is considering opening up production in Avtovaz plants in Russia. These were formerly owned by the Renault-Nissan Alliance who pulled their production lines due to the conflict.

Aside from economic co-operation, China and Russia have also strengthened their military ties. During President Biden's visit to Japan and South Korea with the Indo-Pacific Economic Forum initiative, Russian and Chinese air forces held joint exercises which included nuclear bombers flying alongside Japanese and Korean air spaces.

China is also testing Taiwanese air defences after deploying 30 fighter aircraft. This is the biggest deployment since January 2022, when 22 aircraft were involved in similar actions. Tensions between China and Taiwan have further increased after Biden announced that the US will protect the independence of the island by any means, including military action. The US Foreign Office has since denounced that statement.

Tensions are increasing on the border between China and India, too. China has built a second bridge over Lake Pangong Tao (Figure 4). Experts say it will increase mobility of troops to reach the disputed territory currently isolated by the lake and give China a strategic advantage.

Figure 4



Source: Google Map

After signing an agreement with the Solomon Islands in April, China continues to increase its presence in the Pacific region. Diplomats were hoping to sign a security deal with 10 Pacific nations however this has been unsuccessful to date. Many analysts expect the Chinese to continue their diplomacy and increase their influence in the area, gaining access to key fisheries.

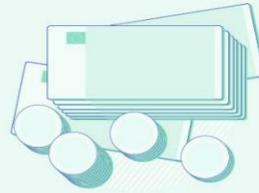
CLIMATE CHANGE

Figure 5

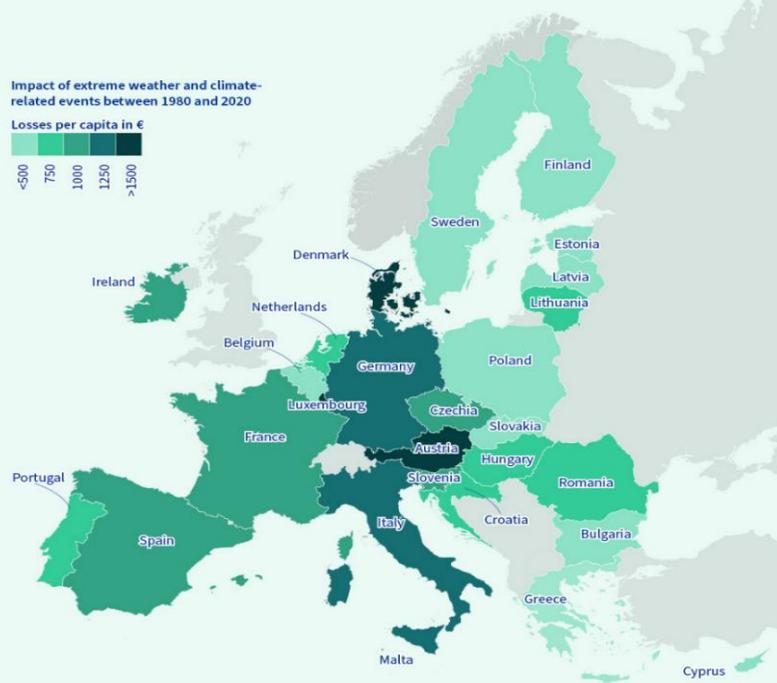
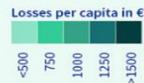
The financial losses caused by extreme weather and climate-related events exceeded **€487 billion** in the EU27 over the last 40 years.

This is significantly more than what the EU spends over two years on all its policies and programmes.

The overall cost was the highest for Germany, Italy and France.

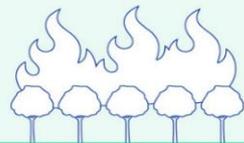


Impact of extreme weather and climate-related events between 1980 and 2020



over €5 billion

Economic cost of river flooding in Europe on average every year



€2 billion

Economic damage caused by forest fires every year

Source: European Environment Agency
 2020 European State of the Climate report, Météo-France,
 The European Forest Fire Information System

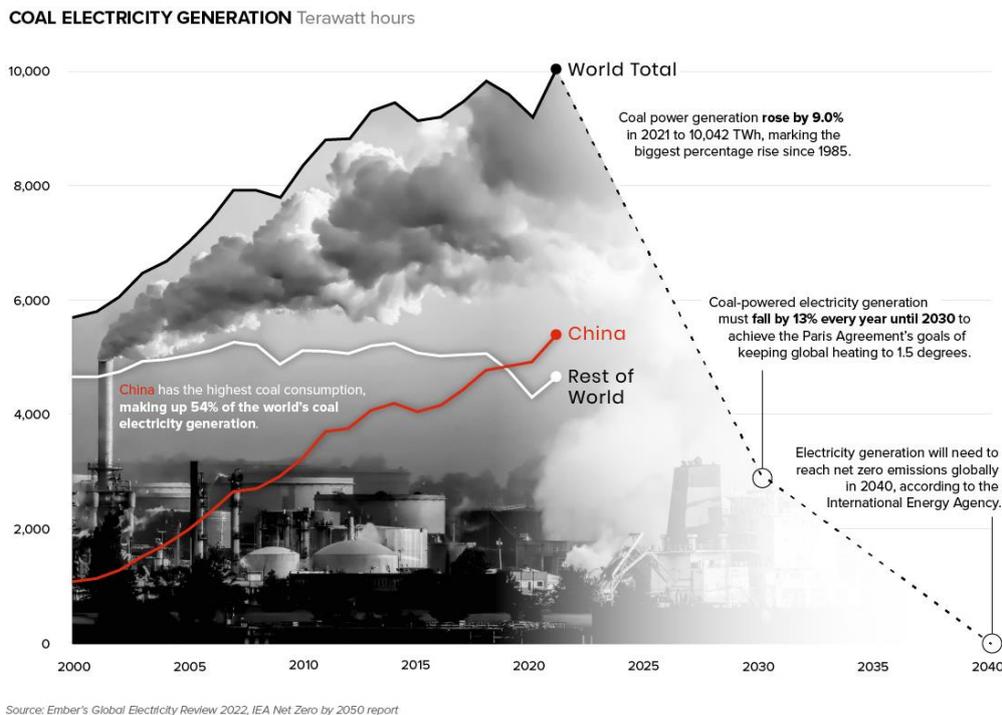
The 2022 heatwave is estimated to have led to at least 90 deaths across India and Pakistan and triggered an extreme glacial lake flood in northern Pakistan and forest fires in India. The heat reduced India's wheat crop yields, causing the government to reverse an earlier plan to supplement the global wheat supply that the war in Ukraine has impacted. In India, a shortage of coal led to power outages that limited access to cooling, compounding health impacts and forcing millions of people to use basic coping mechanisms such as limiting activity to the early morning and evening.

Climate change is also impacting Europe. Drought, snow falling on blossoms, and travelling to Scotland for cold water swim training are a few ways in which Europeans are experiencing climate change. The financial impact of climate change is exceeding billions of euros per year (Figure 5).

COAL ENERGY?

China has the highest coal consumption, making up 54% of the world's coal electricity generation. The country's consumption jumped 12% between 2010 and 2020, despite coal making up a lower percentage of the country's energy mix in relative terms (Figure 6).

Figure 6



Source: visualcapitalist.com

Combined, China and India account for 66% of global coal consumption and emit about 35% of the world's greenhouse gasses (GHG). If we add the United States to the mix, this goes up to 72% of coal consumption and 49% of GHGs.

How fast the transition away from coal will be achieved depends on a complicated balance between carbon emissions cuts and maintaining economic growth, the latter of which is still largely dependent on coal power. The current geopolitical situation undermined all efforts for the previous decade when an artificially created deficit of oil served to increase coal consumption.

FOOD SECURITY

Social unrest in the southwest province of Iran became the first wakeup call caused by continued soaring food prices in several cities. The protests were triggered in late May by a cut in state subsidies for imported wheat that caused price hikes of 300% for a variety of flour-based staples. The government of President Ebrahim Raisi also raised the prices of basic goods such as cooking oil and dairy products.

The UN estimated 1 in 3 people faced food insecurity in 2020. For billions of people hunger is the norm and the risk of famine is ever-present, often exacerbated by conflict and climate change. Broadly speaking, the situation is further deteriorating.

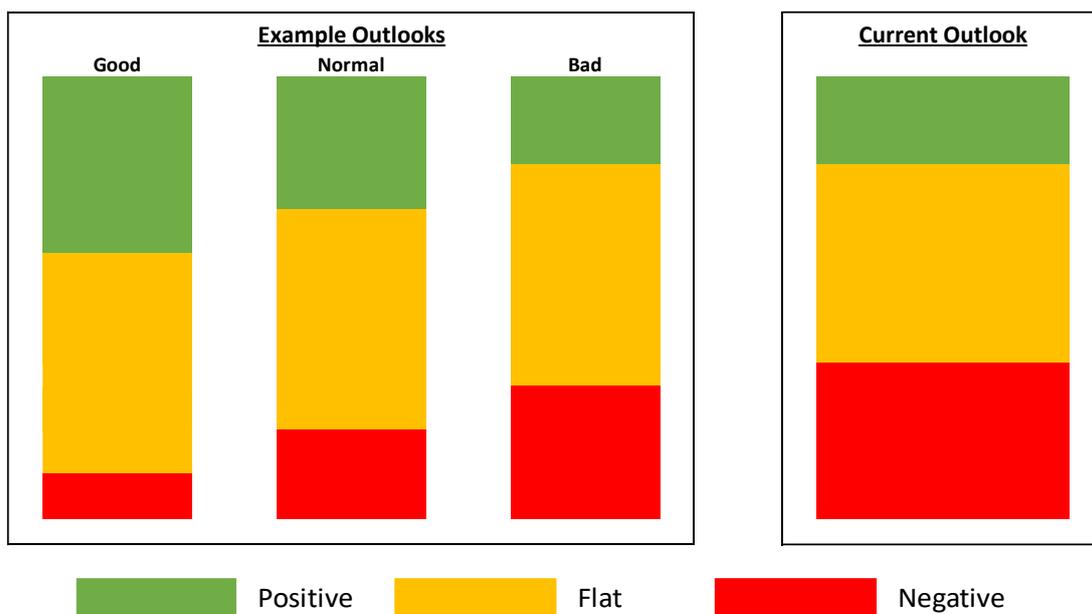
Middle-income countries, such as Egypt and Brazil, are exceptionally poorly placed to cope with increased food insecurity. Many governments have exhausted their financial and material reserves fighting COVID and have subsequently incurred large debts.

The total number of people facing acute food insecurity and requiring urgent food assistance has nearly doubled since 2016, according to the Global Network Against Food Crises, a joint UN and EU project. Their latest report has pinpointed countries of particular concern: Ethiopia, South Sudan, southern Madagascar and Yemen, where around 570,000 people are in the most severe or “catastrophe” phase of food insecurity, immediately in threat of starvation and death.

According to the U.S. Department of Agriculture, Russia, Europe, the United States, and Canada are traditionally the top global wheat exporters and accounted for roughly 60% of world wheat exports from 2015 through 2020. However, each has faced significant wheat crop setbacks in recent seasons, with their collective export share dropping to only 50.7% in the 2021-22 season and most likely will drop further due to the war in Ukraine reducing import opportunities.

As previously mentioned in *Climate Change*, India was planning to ease the wheat shortage, however heat waves in March and April have disrupted these plans. The Indian government banned the private export of wheat but still permitted exports through the government channels to existing importers – Bangladesh and Sri Lanka.

MARKET OUTLOOK



The current market is less likely to have a good return (green) as a bad return (red) over the next two to three years. It is more likely to have an average return (amber).

APPENDIX 1: BENCHMARKS

LONG TERM FUND

Asset	Benchmark
Growth Assets	
Diversified Growth	
Aspiring	NZ CPI + 4% p.a.
Castle Point 5 Oceans	NZ OCR + 3% p.a.
Milford Active Growth	10% p.a.
Mint Diversified Growth	NZ CPI + 4.5% p.a.
Schroders Real Return	Australian CPI (trimmed mean) + 4.5% p.a.
Global Equity	
Harbour T. Rowe Price Global Equity	MSCI All Country World Index
Nanuk New World Fund	FTSE Russell Environmental Opportunities Index
Private Equity	
Castlerock	8% p.a.
Continuity Capital PE Fund No.2 LP	15% p.a.
Continuity Capital PE Fund No.4 LP	15% p.a.
Continuity Capital PE Fund No.5 LP	15% p.a.
Continuity Capital PE Fund No.6 LP	15% p.a.
Continuity Capital PE Fund No.7 LP	15% p.a.
CPEC 9	15% p.a.
Direct Capital VI	12% p.a.
Federation	16% p.a.
Milford PE III	8% p.a.
MLC PE II	15% p.a.
MLC PE III	15% p.a.
Oriens Fund 2	8% p.a.
PCP III	8% p.a.
PCP IV	8% p.a.
Income Assets	
Diversified Income	
BlackRock FIGO	Bloomberg AusBond Bank Bill Index + 4% - 6% p.a.*
Fermat ILS Yield	Bloomberg AusBond Bank Bill Index + 4.5%
Harbour Income	NZ OCR + 3.5% p.a.
Milford Diversified Income	NZ OCR + 2.5% p.a.
Mint Diversified Income	NZ CPI + 3% p.a.
Total Assets	NZ CPI + 4.5% p.a.

*We have used 4% as a benchmark

SHORT TERM FUND

Asset	Benchmark
Growth Assets	
Diversified Growth	
Castle Point 5 Oceans	NZ OCR + 3% p.a.
Milford Active Growth	10% p.a.
Mint Diversified Growth	NZ CPI + 4.5% p.a.
Income Assets	
Diversified Income	
Harbour Income	NZ OCR + 3.5% p.a.
Milford Diversified Income	NZ OCR + 2.5% p.a.
Mint Diversified Income	NZ CPI + 3% p.a.
QuayStreet Income	NZ OCR + 2% p.a.
Total Assets	90-day Bank Bill Index plus 3% p.a.

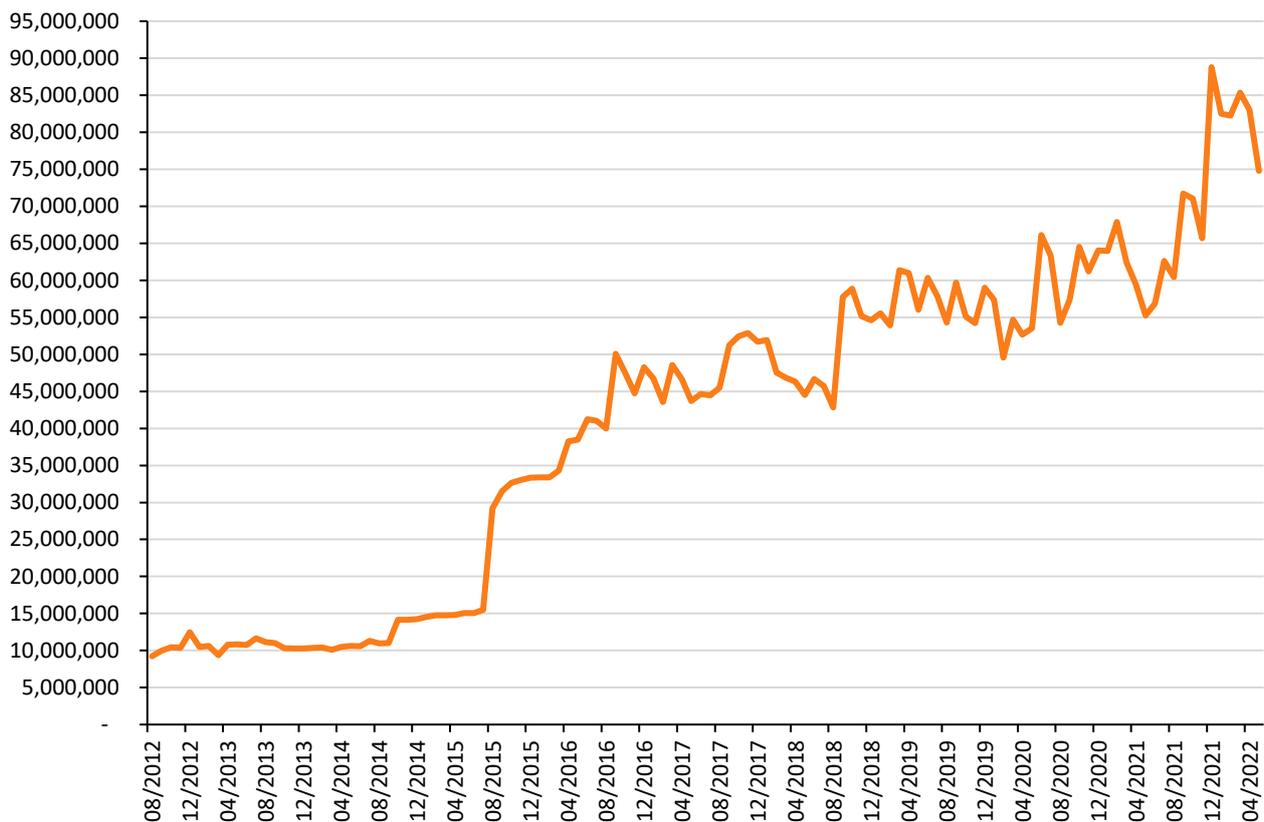
APPENDIX 2: NRC TOTAL FUNDS UNDER MANAGEMENT

FUNDS UNDER MANAGEMENT: BREAKDOWN

Manager	Fund	LTF	STF	NRC Total FUM \$	NRC Manager % of Total FUM
Aspiring	Aspiring	4,092,041		4,092,041	5.5
BlackRock	FIGO	619,084		619,084	0.8
Castle Point	5 Oceans	8,585,622	2,881,036	11,466,658	15.3
Castlerock	Long-Term PE Partnership	1,051,282		1,051,282	1.4
Continuity Capital	No.2	906,805		906,805	5.3
	No.4	709,650		709,650	
	No.5	1,619,630		1,619,630	
	No.6	484,824		484,824	
	No.7	259,612		259,612	
CPE Capital	Fund 9	82,650		82,650	0.1
Direct Capital	DC VI	513,230		513,230	0.7
Federation	Alternative	970,554		970,554	1.3
Fermat	ILS Yield	683,493		683,493	0.9
Harbour	Income	7,928,587	2,456,974	10,385,561	16.5
	T. Rowe Price Global Equity	1,921,396		1,921,396	
Milford	Active Growth	3,907,715	1,656,720	5,564,435	20.0
	Diversified Income	6,757,794	2,140,681	8,898,475	
	PE III	485,000		485,000	
Mint	Diversified Income	6,422,908	621,616	7,044,523	13.2
	Diversified Growth	2,341,359	456,513	2,797,873	
MLC	PE Co-investment Fund II	1,187,299		1,187,299	2.0
	PE Co-investment Fund III	308,726		308,726	
Nanuk	New World	966,852		966,852	1.3
Oriens Capital	Fund 2	296,041		296,041	0.4
Pioneer Capital	PCP III	837,875		837,875	1.9
	PCP IV	576,772		576,772	
QuayStreet	Income		2,374,668	2,374,668	3.2
Schroders	Real Return	4,216,445		4,216,445	5.6
Self-managed Cash	N/A	3,456,801		3,456,801	4.6
NRC Total FUM		62,190,049	12,588,207	74,778,256	100

Note: all values are in NZD

FUNDS UNDER MANAGEMENT: ROLLING MONTHLY TIME SERIES



FUNDS DENOMINATED IN AUD

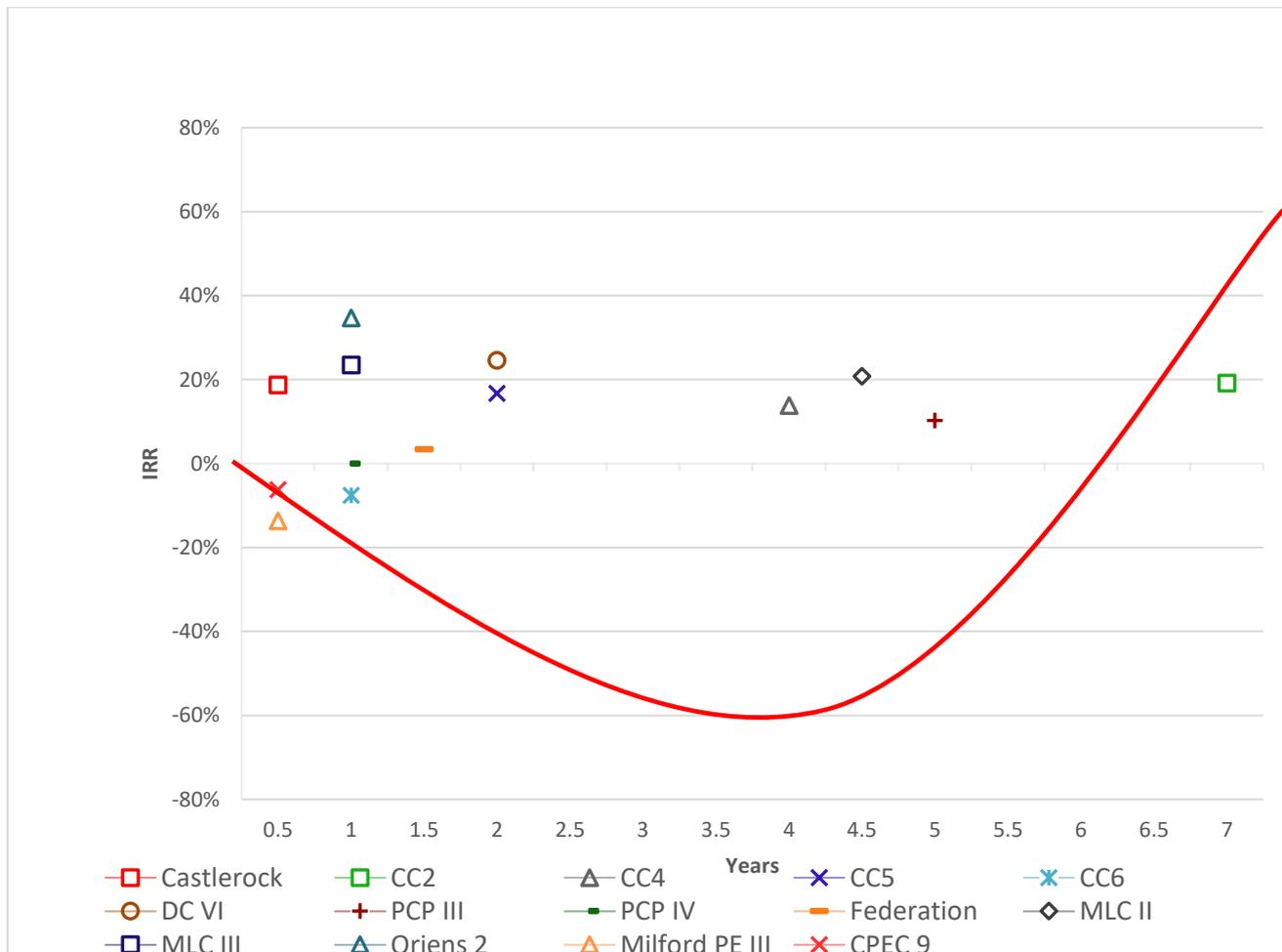
Funds Denominated in AUD		NRC Total AUD	NRC Total NZD
BlackRock	FIGO	561,780	619,084
Continuity Capital	Fund No.5	1,469,713	1,619,630
	Fund No.7	235,581	259,612
CPE Capital	Fund 9	75,000	82,650
Federation	Alternative	880,717	970,554
Fermat	ILS Yield	620,227	683,493
MLC	PE Co-investment Fund III	1,077,400	1,187,299
	PE Co-investment Fund II	280,150	308,726
Nanuk	New World	877,358	966,852
Schroders	Real Return	3,826,161	4,216,445
NRC Total AUD		9,904,086	10,914,345

Note: 20% of LTF \$62,190,049 is equal to \$12,438,010, so there is a \$1.5 million buffer.

PRIVATE EQUITY – COMMITTED CAPITAL (CALLED VS UNCALLED)

Private Equity Fund	Committed Capital \$	Called \$	Uncalled \$	Distributed Capital \$	Expected Calls \$	Expected Distributions \$
Castlerock	1,000,000	1,000,000	-	50,715		75k
CC2	2,000,000	1,900,000	100,000	2,501,369	50k	150k
CC4	1,000,000	750,000	250,000	327,935	125k	100k
CC5 (AUD)	3,306,013	1,818,307	1,487,706	548,312	400k	150k
CC6	2,000,000	500,000	1,500,000	-	400k	-
CC7 (AUD)	2,204,009	264,481	1,939,528	-	200k	-
CPEC 9 (AUD)	551,002	82,650	468,352	-	150k	25k
DC VI	2,000,000	371,784	1,628,216	21,860	400k	-
Federation (AUD)	925,684	925,684	-	-	-	-
Milford PE III	1,000,000	500,000	500,000	-	150k	-
MLC II (AUD)	1,102,004	927,337	174,668	448,185	50k	250k
MLC III (AUD)	551,002	269,991	281,011	-	150k	-
Oriens Fund 2	1,000,000	140,000	860,000	-	200k	-
PCP III	1,000,000	837,028	162,972	107,149	10k	50k
PCP IV	1,000,000	603,138	396,862	-	150k	-
TOTAL	20,639,714	10,890,400	9,749,314	4,005,526		

PRIVATE EQUITY PERFORMANCE AS AT 31 MAY 2022



NRC TOTAL UNDERLYING FUND ALLOCATIONS

