



Australian
National
University

ANU Student Managed Fund

Report for end of Semester 2, 2022

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Notes:

All dollar amounts in this report are Australian dollars.

This report is written by the members of the Relationship Team of The Australian National University (ANU) Student Managed Fund (SMF), in conjunction with other SMF team members. It has been reviewed by the SMF Convenors, the Director of the Research School of Finance, Actuarial Studies and Statistics (RSFAS) and the Communications team of the ANU College of Business and Economics (CBE). Any enquires, feedback or comments can be directed to smf.rsfas@anu.edu.au.

Further information on the SMF is found at: <https://rsfas.anu.edu.au/study/student-managed-fund>.

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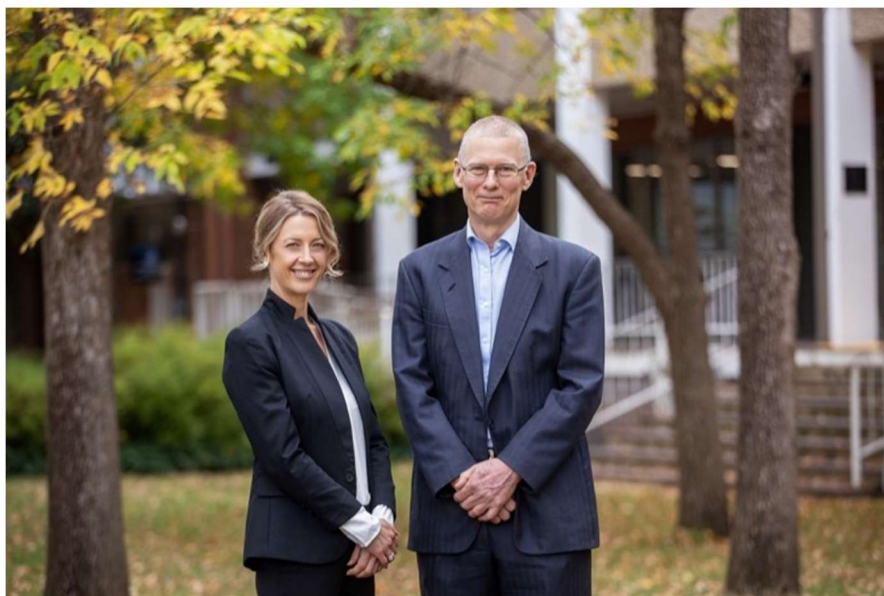
The sole purpose of this document is to report on the activities of the SMF and its related courses. It has been prepared by ANU staff and students who are not licensed to provide financial product advice under the Corporations Act 2001. The information provided on the investments does not constitute, and should not be relied upon, as financial product advice. For financial product advice that takes account of your particular objectives, financial situation and needs, readers should consider seeking that advice from an Australian Financial Services licensee.

Glossary

AA – Asset Allocation
AAA– BetaShares Australian High Interest Cash ETF
AAE – Active Australian Equities
AC – Australian cash and accruals
AE – Australian equities
AFI – Australian fixed income
AMA – ‘Ask Me Anything’
ANU – The Australian National University
BBRMF – Behavioural Bias Risk Management Framework
BHP – Broken Hill Proprietary Company
BXB – Brambles Limited
CSA – Candidate stock analysis
CBE – ANU College of Business and Economics
CIO – Chief Investment Officer
CLW – Charter Hall Long WALE REIT
CMT – Cash management trust
CRO – Chief Risk Officer
CSA – Candidate stock analysis
DM – Developed market equities
DOW – Downer EDI Limited
EM – Emerging markets equities
ERR – Earnings recovery rate
ESG – Environmental, Social and Governance
EU – Enforceable Undertaking
IAC – Investment Advisory Committee
IEM – iShares MSCI Emerging Markets ETF
ING – Inghams Group
IOZ – iShares Core S&P/ASX 200 ETF
PC – Portfolio construction
R&C – Risk and Compliance
REIT – Real estate investment trust
RIO – RIO Tinto Limited
RMD – ResMed Inc
RT – Relationship Team
SHL – Sonic Healthcare Limited
SMF – ANU Student Managed Fund
SRI – Socially Responsible Investment
SUN – Suncorp Group Limited
TLS – Telstra Corporation Limited
VGAD – Vanguard MSCI Index International Unhedged ETF
VGB – Vanguard Australian Government Bond Index ETF
VGS – Vanguard MSCI International Shares Index ETF
WBC – Westpac Banking Corporation

Convenor report

Convenors



*Dr Anna von Reibnitz
Course Convenor*

*Associate Professor Geoff Warren
Fund Convenor*

Five years since the SMF commenced operating in July 2017 and it seems to get better every year. We will underline the trend by highlighting selected improvements and some ‘firsts’ occurring during 2022 including some accomplishments. We also comment on the SMF’s great culture, reiterate our thanks to those supporting the Fund, and reflect on how the SMF might get even better.

All SMF sub-teams improved their processes during 2022. While a fuller account is provided in the team reports, we want to highlight some specific developments. We are impressed with how the Asset Allocation (AA) team has incorporated explicit three-year projections into their 10-year modelling, which we look forward to the team using to form portfolios that are also mindful of the possible path by which long-term returns might unfold through time. The Active Australian Equity (AAE) team has improved on how potential candidates for investment are initially identified. This should lead to better stock selection that avoids wasting time and ultimately leads to a more coherent AAE portfolio. Stock selection will also be further improved through enhancements made by the Risk and Compliance (R&C) team to the Socially Responsible Investing (SRI) policy, which should raise the quality of the support provided by R&C to the AAE team. Finally, the Relationship Team (RT) has significantly expanded its engagement activities and social media presence. This is already showing signs of having a substantial impact on the Fund’s profile and helping to attract more quality applicants to join the SMF.

There have been numerous firsts in 2022. The second semester saw a record number of offers to join the SMF team, with 13 offers made for Semester 1, 2023 plus a further two offers for the Semester 2, 2023. The Fund is now bumping up against its capacity of 24 students. The first foray into meeting with company management occurred, with BHP kindly making themselves available to discuss their approach to environmental, social and governance (ESG) matters. We also were able to attract \$18,100 in donations – the most significant amount since inception – in part due to the SMF being put forward as a preferred target for ANU Giving Day. Other firsts included a presentation to year 11 students on the SMF and fund management and an inaugural team dinner in the relaxed environment of a team member’s own residence with everyone sharing the cooking.

Two accomplishments worthy of note occurred during the year. First, the *Journal of Investing* published a paper in early 2022 that describes the SMF’s experience with developing and implementing its SRI policy.¹ Second, we were both jointly awarded the 2022 ANU Vice-Chancellor’s Citation for Outstanding

¹ von Reibnitz A. and Warren, G.J., “Socially Responsible Investing in a Student-Managed Investment Fund: A Case Study”, *Journal of Investing*, 31(6), 2022, 67-79, <https://joi.pm-research.com/content/31/6/67>.

Contribution to Student Learning for the Fund. It is very gratifying to receive recognition of the SMF as an outstanding offering to ANU students, and to share some of the learnings arising from the Fund's journey.

A constant for the SMF remains its outstanding culture. The SMF culture is very much team-based and encourages 'respectful contestability'. It is underpinned by the SMF's five key values of 'legacy', 'contribution', team', 'objectives' and 'long term', which also sit at the foundation of student assessments. While the SMF can be time-consuming and challenging for students, the culture helps makes the SMF an enjoyable experience while motivating them to give their best. We sometimes muse that students would be lucky to find such a great working environment after leaving University!

While some readers may find it repetitive, we again feel it is necessary to thank those who have supported the SMF. Our call-out list includes members of the SMF Investment Advisory Committee (IAC); the Communications, Advancement and Alumni teams at the CBE; all our guest speakers; and RSFAS management.

Looking forward, to some extent we hope for more of the same whereby the SMF continues to build on past successes. Nevertheless, there is room to do better in some areas. We would like to grow the Fund to a level that can fully support the SMF's scholarship commitments without having to partially rely on RSFAS support. This requires Fund assets of around \$900,000, an increase of about \$150,000-\$200,000. There is room for the investment teams to adopt a more holistic approach to considering investments. Specifically, the AA team could fill some gaps in its coverage such as currency and listed property; while the AAE team might aim to keep tabs on its entire stock universe rather than singling out specific companies and then drilling down. There is also scope for R&C and RT to be better integrated into the broader Fund. However, these would be marginal improvements for an operation that is already going extremely well.

Dr Anna von Reibnitz, Course Convenor

Associate Professor Geoff Warren, Fund Convenor

Chief Investment Officer report

Chief Investment Officers



*Hannah Young
(Semester 1, 2022)*



*Hugo Heanly
(Semester 2, 2022)*

Following a string of lockdowns, 2022 saw the SMF capitalise on the University's return to campus. SMF team members enjoyed in-person meetings and social events, simultaneously working to refine Fund processes as well as building rapport outside of Zoom meetings. The benefits were evident in the team output, with members implementing an array of new initiatives whilst living the SMF's key values.

- The AAE team expanded the Fund's active equities portfolio by receiving endorsement from IAC to acquire two stocks – Downer EDI (DOW) and Suncorp Group (SUN) the first semester. The second semester saw the Fund liquidate its position in Telstra Corporation (TLS), and develop a comprehensive foundation for future analysis of real estate investment trusts (REITs) and natural

resources. In particular, the AAE team worked extensively with R&C to build a framework for investing in the mining sector that addresses prevailing sector issues around SRI.

- The AA team finalised the introduction of the emerging market equities (EM) to the portfolio by completing the second tranche of the position that was endorsed by IAC in 2021. AA continued to refine their investment process through implementing a three-year forecast checkpoint, improving visibility of real return paths over the short-to-medium term. Further, the team received endorsement from IAC to adjust the asset mix within the defensive component of the portfolio by increasing our Australian fixed income (AFI) holding whilst decreasing Australian cash (AC), thus returning to the reference portfolio weights in these two asset classes.
- The R&C team revised the SMF SRI policy, strengthening the Fund's approach to sustainable investing. R&C constructed a SRI framework for mining and resources to better analyse the industry-specific ESG considerations in light of persistent issues within the sector such as a propensity for environmental damage and workplace harassment. The SMF is now much better positioned to address these issues and mitigate potential for reputational risk. Further, the team reviewed the SMF 'performance and attribution' model, including implementing modified Dietz return calculations for Fund performance that better incorporate the impact of inflows and outflows such as donations and distributions. Guidelines were also devised for sweeping cash exposure from the CMT to the higher-return cash ETF.
- RT has continued to grow the SMF's external presence. RT facilitated several events including the 'Ask Me Anything' (AMA) workshops, participation at both ANU and CBE Open Days as well as the inaugural CBE School Holiday Program for year 11 students. The benefits were evident in the large number of student applications for Semester 1, 2023. Further, RT launched the SMF Alumni LinkedIn group to formalise the growing network of diverse and successful alumni.

The Fund's performance during 2022 was posted amidst markets that have been under pressure from higher inflation, monetary tightening and the prospect of weaker economic growth. As of 15 November 2022, the portfolio had delivered a total year-to-date return of -3.26%, which amounted to modest underperformance of -0.40% versus the reference portfolio return of -2.86%. The underperformance was largely attributable to a -0.81% contribution from security selection in equities, with negative contributions from DOW, Inghams Group (ING) and SUN. Meanwhile, asset allocation made a positive contribution of +0.39%. Nevertheless, cumulative per annum return since inception remains strong at +8.12%, which exceeds the target return of +7.36% by +0.76% while outperforming the reference portfolio by +0.15%.

The SMF team operates as a values-driven collective that builds on what is a strong and differentiated culture. SMF team members leverage this culture to consistently achieve objectives whilst innovating on existing processes. New challenges posed in 2022 have continued to help strengthen the Fund while providing a unique learning environment. After meeting the exemplary incoming juniors, I maintain that the SMF legacy will grow even further whilst concurrently achieving its developmental, learning and investment objectives.

Hugo Heanly, CIO

Portfolio overview

Portfolio structure

Figure 1 below plots portfolio weights as at 15 November 2022, with the first chart comparing asset class weights to the reference portfolio and the second chart comparing active stock positions to their target weights within the AAE portfolio. Figure 2 details the asset values and associated weights of each investment within the portfolio.

The growth/defensive split constantly shifts in line with market movements, and stood at 80.67%/19.33% on 15 November 2022 thus deviating from the 80%/20% target by $\pm 0.67\%$. On 16 September 2022, the growth/defensive mix deviated from its target weights by $\pm 3.0\%$. This deviation largely emerged due to weakness in equity markets in response to monetary tightening and the associated implications for discount rates and growth expectations, with AC continuing to hold its value while equities declined. By exceeding $\pm 3\%$, the deviation triggered an informed rebalancing decision as per the SMF Investment Policy Statement (IPS). Trades to rebalance the growth/defensive asset weights back to target levels were undertaken on the 10th of October through purchases of the iShares Core S&P/ASSX200 ETF (IOZ) and the Vanguard MSCI Index International Shares Hedged ETF (VGAD) funded out of the cash management trust (CMT). The $\pm 0.67\%$ deviation from target at the date of writing reflects the rally in equities that occurred post the rebalancing.

Significant asset class deviations from the reference portfolio on 15 November 2022 include a +9.56% overweight in EM and underweights of -4.14% in Australian equities (AE) and -5.03% in unhedged developed market equities (DM,U). These deviations reflect the addition of a 10% target position in EM – a non-reference portfolio asset – that was implemented in two tranches of 5% each during Semester 2, 2021, and Semester 1, 2022. The EM purchase was funded by reductions of 5% each in the target weightings for AE and DM,U. The active EM position is motivated by a relatively high long-term return profile in comparison to other existing asset classes, which in turn is considered as compensation for risks that the SMF is willing to bear as a long-term investor.

The -0.67% underweight in the defensive component of the portfolio comprises of modest deviations in AFI (-0.36%) and AC (-0.32%) as compared to the reference portfolio. On 24 October 2022, the Fund received endorsement from IAC to unwind the active position targeting a +7.5% overweight in AC and a -7.5% underweight in AFI that was put in place during October 2020. The BetaShares Australia High Interest Cash ETF (AAA) and the Vanguard Australian Government Bond Index ETF (VGB) were traded to return AFI and AC to the reference portfolio weights of 15% and 5%, respectively. The AC/AFI position was initially put in place amidst significant concern regarding record-low bond yields and the risk that inflation could turn out higher than was expected at the time. The position turned out to be very successful for the Fund.

Changes to the AAE portfolio included the purchase of DOW and SUN in Semester 1, 2022 and the recent sale of TLS in Semester 2, 2022. As a result, the Fund closed the year with five active stock positions relative to a notational 'fully-invested' target of approximately 10 positions. During Semester 1, 2022 a rebalancing trade was made in ING after it moved -3% underweight relative to its 10% target weight. Notable deviations from target weights among the Fund's existing active stock positions as at 15 November 2022 included an overweight of +0.94% in BXB and underweights of -1.28% in ING, -0.58% in DOW and -0.56% in WBC.

The SMF portfolio was valued at \$747,380 as at 15 November 2022. The Fund's five active stock positions sum to 25.85% of the total SMF portfolio, and 48.38% of the AAE portfolio. The remainder of the SMF portfolio comprises of 30.01% in IOZ, 15.25% in DM, 9.56% in EM, 14.64% in AFI and 4.68% in AC including accruals.

Figure 1: Asset allocation and active stock weights as at 15 November 2022

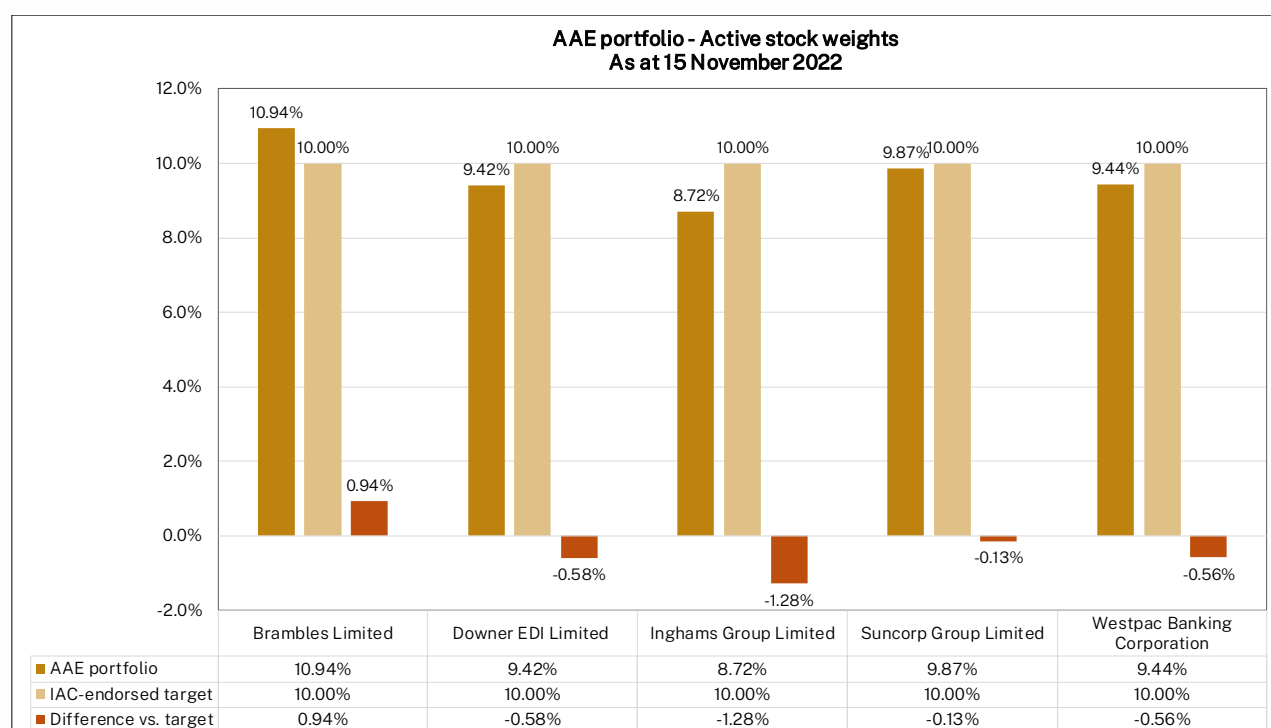
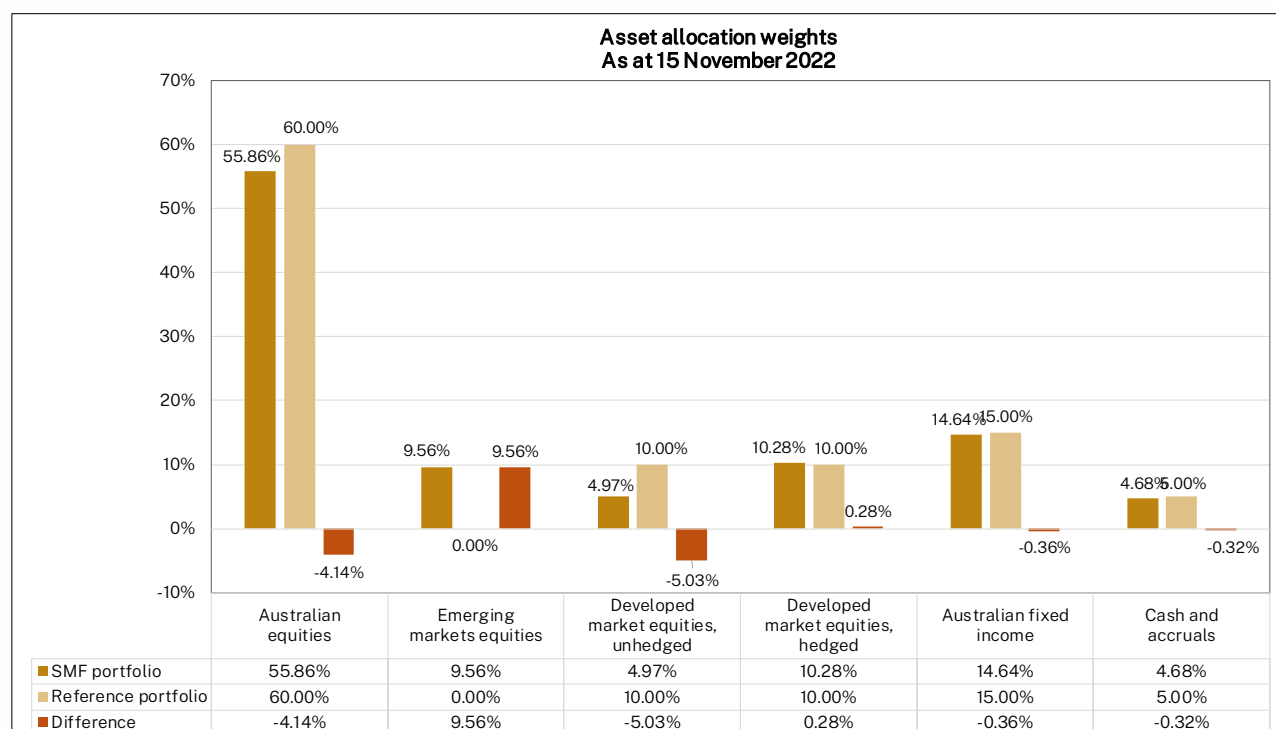


Figure 2: Portfolio structure as at 15 November 2022

Portfolio component	Benchmark ETF	Asset values \$	SMF portfolio weight %	Reference portfolio weight %	Over (under) weight %
Australian equities					
AAE portfolio:					
iShares Core S&P/ASX 200 ETF		206,165	27.59		
Brambles Limited		43,692	5.85		
Downer EDI Limited		37,606	5.03		
Inghams Group Limited		34,815	4.66		
Suncorp Group Limited		39,418	5.27		
Westpac Banking Corporation		37,689	5.04		
Total AAE portfolio	iShares Core S&P/ASX 200	399,386	53.44	50	3.44
Held within AA portfolio:					
iShares Core S&P/ASX 200 ETF		18,109	2.42	10	-7.58
Total Australian equities	iShares Core S&P/ASX 200	417,495	55.86	60	-4.14
Developed markets, hedged	Vanguard MSCI Index International Shares, Hedged	76,822	10.28	10	0.28
Developed markets, unhedged	Vanguard MSCI Index International Shares	37,169	4.97	10	-5.03
Emerging market equities	iShares MSCI Emerging Market	71,460	9.56	0	9.56
Total international equities		185,451	24.81	20	4.81
Total equities		602,946	80.67	80	0.67
Australian fixed income	Vanguard Australian Government Bond Index	109,446	14.64	15	-0.36
Australian cash and accruals:					
BetaShares Australia High Interest Cash ETF		15,039	2.01		
BT Cash Management Trust		6,223	0.83		
Accrued interest and dividends		39	0.01		
Accrued franking credits		13,687	1.83		
Total cash and accruals	BetaShares Australia High Interest Cash	34,988	4.68	5	-0.32
Total fixed income and cash		144,434	19.33	20	-0.67
Total value of SMF assets		747,380			
Total portfolio value as reported in BT Panorama		733,693			
Accrued franking credits		13,687			
Total value of SMF assets		747,380	100	100	

Portfolio performance

Figure 3 presents performance both year-by-year and cumulative since the Fund's inception on 10 April 2018. The cumulative return since inception is 43.09% (8.12% per annum). This equates to outperformance of +4.46% (+0.76% per annum) relative to the return target, which in turn reflects the distribution rate of 4.5% per annum plus realised inflation. This performance is largely attributable to a broadly stronger equity markets since inception, especially during 2019 and 2021. The Fund also outperformed its reference portfolio by +0.78% (+0.15% per annum) since inception, although it underperformed by -0.40% in 2022 year-to-date. The sources of performance are detailed further in the attribution analysis section. All return calculations include franking credits. The Fund is currently paying administration fees to BT Panorama of about 0.23%-0.24% per annum.

Figure 3: Portfolio performance since inception as at 15 November 2022

Year	2018	2019	2020	2021	2022	Since inception	
Opening date	10 April 2018	1 January 2019	1 January 2020	1 January 2021	1 January 2022	10 April 2018	
Closing date	31 December 2018	31 December 2019	31 December 2020	31 December 2021	15 November 2022	15 November 2022	
PORTFOLIO VALUES							
Opening portfolio value in BT Panorama ¹	\$615,079.04	\$608,598.58	\$705,485.10	\$704,774.44	\$796,753.31		
+ Accrued franking credits	\$0.00	\$3,235.76	\$9,732.74	\$7,719.98	\$7,806.53		
Opening portfolio value	\$615,079.04	\$592,071.96	\$683,068.73	\$680,427.19	\$768,354.65		
Closing portfolio value in BT Panorama	\$608,598.58	\$705,485.10	\$704,774.44	\$796,753.31	\$733,693.48		
+ Accrued franking credits	\$3,235.76	\$9,732.74	\$7,719.98	\$7,806.53	\$13,686.79		
Closing portfolio value	\$611,834.34	\$715,217.84	\$712,494.42	\$804,559.84	\$747,380.27		
Change in portfolio value	\$608,598.58	\$705,485.10	\$704,774.44	\$796,753.31	\$733,693.48		
CASH FLOWS							
- Distribution related to prior period	\$0.00	-\$27,746.21	-\$32,186.49	-\$32,067.23	-\$36,205.19		
+ Amount held by CBE, offset against distribution	\$0.00	\$7,983.83	\$0.00	\$0.00	\$0.00		
- Contributions	\$0.00	\$0.00	\$1,000.00	\$150.00	\$4,188.00		
Total cash flows	\$0.00	-\$19,762.38	-\$31,186.49	-\$31,917.23	-\$32,017.19		
RETURNS (%)	2018	2019	2020	2021	2022	Cumulative	Per annum
SMF portfolio return ²	-0.53%	20.77%	4.16%	18.20%	-3.26%	43.09%	8.12%
Target return (Estimated as CPI + 4.5%) ³	4.56%	6.16%	5.36%	8.00%	9.76%	38.63%	7.36%
SMF return less target return	-5.09%	14.61%	-1.20%	10.20%	-13.01%	4.46%	0.76%
Reference portfolio return	0.58%	21.91%	3.40%	15.55%	-2.86%	42.31%	7.97%
SMF return vs. reference portfolio	-1.11%	-1.13%	0.76%	2.65%	-0.40%	0.78%	0.15%
Note: Administration fees - BT Panorama		0.02%	0.23%	0.21%	0.21%	0.67%	0.15%

1. Portfolio value for 10 April 2018 is estimated as at time of portfolio inception trades.

2. Based on the modified Deitz method, which adjusts for the portion of the year that cash flows are available to earn returns.

3. Preliminary estimate based on assumed +1.8% CPI (7.3% year-on-year) for December quarter 2022.

Attribution analysis

Figure 4 attributes portfolio performance versus the reference portfolio into the components of the investment process, specifically asset allocation and security selection. The asset allocation component measures performance attributable to deviations in asset class weights versus the reference portfolio, whereas the security selection component measures the contributions of the AAE portfolio relative to its S&P/ASX200 ETF benchmark, i.e. IOZ. A residual 'rounding' term captures interactions between returns on the two segments and asset values, as well as impacts from the cash portfolio.²

The total performance to date of the SMF portfolio against the reference portfolio of -0.40% reflects the balance of negative contributions of -0.81% from security selection and -0.21% from the fees charged by BT Panorama, a positive contribution from AA of +0.39% and a residual term of +0.24%. The latter mostly stems from interaction and aggregation effects related to accumulating performance over sub-periods, and is more significant than usually expected due to the volatile markets. The positive value means that portfolio assets adjusted for portfolio flows increased by more than explained by the bottom-up calculation of returns associated with asset allocation, security selection and fees.

The asset allocation attribution reveals that the positive contribution of +0.39% during 2022 comprises +0.47% from AFI, +0.72% from AC and +0.19% from DM equities (+0.03% hedged, +0.16% unhedged); and negative contributions of -0.21% from AE and -0.75% EM. The +0.25% difference in the contributions from AC versus AFI provides a rough guide to the addition to performance from underweighting AFI while overweighting AC during 2022. The positive cumulative contribution from AA since inception of +1.58% (+0.38% per annum) reflects the benefit from underweighting AFI versus AC from October 2020 to October 2022, as well as value-accretive rebalancing trades during 2020 when the SMF reweighted equities during the COVID-related sell-off at the market low. The EM position has detracted from cumulative portfolio returns so far.

The -0.81% contribution from security selection during 2022 reflects the AAE portfolio underperforming its IOZ benchmark by -1.33%. Positive contributions versus IOZ arose from WBC (+1.13%), BXB (+0.73%) and TLS (+0.23%), and negative contributions from SUN (-0.33%), DOW (-0.81%) and ING (-2.25%). Noting that some of the positive and negative contributions during 2022 reflect the impact of current market sentiment regarding interest rates and inflation as well as general stock price volatility, the since inception estimates may provide a better guide. Here the Fund posted relative performance versus IOZ of -1.81% cumulative (-0.44% per annum), reflecting the net of positive contributions from SHL (+2.50%), TLS (+2.38%), Rio Tinto (RIO) (+1.02%) and BXB (+0.09%) and negative contributions from SUN (-0.33%), BIN (-0.65%), DOW (-0.81%), WBC (-1.10%) and ING (-4.57%). ING has been the Fund's worst performing stock investment with the company's margins being squeezed due to a failure to pass through rising costs. The AAE team intends to conduct an in-depth review of ING in Semester 1, 2023 to get a better handle on the drivers of the business. In light of the Fund's recent sale of its active holding in TLS, it is worth noting that the position contributed a cumulative outperformance versus IOZ of +2.38% and +0.57% per annum since inception. The SMF has now exited both of its two inaugural active stock positions in RIO and TLS.

² The residual captures the interaction between asset allocation and security selection, and effects that arise from shifting asset values across return sub-periods and their interaction with asset returns. The latter reflects differences between time-weighted and asset-weighted returns, noting that total portfolio performance is based on an asset-weighted calculation while the attribution analysis involves time-weighting of sub-period returns. The residual also captures the impact of the 'cash' portfolio not being invested entirely in the benchmark ETF, with the SMF holding amounts in the cash management trust (CMT) and in the form of accruals, although this tends to be quite small in magnitude.

Figure 4: Performance attribution since inception as of 15 November 2022

Period	Contributions to performance vs. reference portfolio					Since inception	
	2018 %	2019 %	2020 %	2021 %	2022 %	Cumulative	Per Annum
Opening date	10/4/18	1/1/19	1/1/20	1/1/21	1/1/22	10/4/18	
Closing date	31/12/18	31/12/19	31/12/20	31/12/21	15/11/22	15/11/22	
SMF portfolio vs. reference portfolio							
Asset allocation	0.17%	-0.28%	1.55%	-0.24%	0.39%	1.58%	0.38%
Security selection - AAE portfolio	-1.26%	-0.58%	-0.66%	2.50%	-0.81%	-0.85%	-0.21%
Contribution from positions held (prior BT fees)	-1.09%	-0.87%	0.89%	2.26%	-0.42%	0.73%	0.17%
Administration fees - BT Panorama	0.00%	-0.02%	-0.23%	-0.21%	-0.21%	-0.67%	-0.15%
Residual (interaction, aggregation and cash portfolio effects)	-0.01%	-0.03%	-0.13%	0.60%	0.24%	0.73%	0.12%
Total relative performance	-1.10%	-0.90%	0.76%	2.65%	-0.40%	0.78%	0.15%
Asset allocation attribution							
Australian equities	0.01%	-0.04%	0.44%	0.02%	-0.21%	0.22%	0.05%
Australian fixed income	-0.02%	-0.11%	1.24%	1.31%	0.47%	2.91%	0.70%
Emerging market equities				-0.24%	-0.75%	-0.99%	-0.24%
Developed market equities, hedged	0.01%	-0.01%	-0.02%	-0.03%	0.03%	-0.02%	-0.01%
Developed market equities, unhedged	0.01%	0.01%	0.02%	-0.15%	0.16%	0.06%	0.01%
Cash and accruals	0.16%	-0.15%	-0.14%	-1.13%	0.72%	-0.54%	-0.13%
Time aggregation effect	0.00%	0.00%	0.00%	-0.03%	-0.03%	-0.05%	-0.01%
AA contribution to total portfolio performance	0.17%	-0.28%	1.55%	-0.24%	0.39%	1.58%	0.38%
AAE Portfolio vs. S&P/ASX200 ETF							
iShares Core S&P/ASX 200 ETF	-0.01%	-0.04%	-0.07%	-0.06%	0.00%	-0.18%	-0.04%
Bingo Industries Limited	-3.21%	1.89%	-0.75%	1.50%		-0.65%	-0.16%
Brambles Limited				-0.63%	0.73%	0.09%	0.02%
Downer EDI Limited					-0.81%	-0.81%	-0.20%
Inghams Group Limited		-2.43%	-0.17%	0.23%	-2.25%	-4.57%	-1.13%
Rio Tinto Limited	-0.04%	0.52%	0.54%			1.02%	0.25%
Sonic Healthcare Limited		-0.11%	1.85%	0.75%		2.50%	0.60%
Suncorp Group Limited					-0.33%	-0.33%	-0.08%
Telstra Corporation Limited	0.62%	0.53%	-1.05%	2.06%	0.23%	2.38%	0.57%
Westpac Banking Corporation		-1.49%	-1.49%	0.77%	1.13%	-1.10%	-0.27%
Time aggregation effect	-0.02%	-0.01%	-0.04%	0.01%	-0.02%	-0.08%	-0.02%
Relative performance vs. S&P/ASX200 ETF	-2.66%	-1.14%	-1.18%	4.64%	-1.33%	-1.81%	-0.44%
Average AAE portfolio weight in SMF portfolio	47.37%	50.88%	55.49%	53.83%	55.60%		
AAE contribution to total portfolio performance	-1.26%	-0.58%	-0.66%	2.50%	-0.81%	-0.85%	-0.21%

Transactions, income and fees

Figure 5 details the transaction activity within the BT Panorama account during 2022. The transactions undertaken span the categories outlined below.

- Transactions on 5 January 2022 were related to the payment of the distribution with respect to 2021. A cash transfer was made from BT Panorama to the ANU General Bank Account to satisfy the net difference between the distribution and donations held by CBE. Associated trades were made in IOZ and the Vanguard MSCI Index International Shares ETF (VGS) to both fund the payment and rebalance the AA weights back towards target.
- A compound trade was made on 4 April, 2022 to complete the second tranche purchase of EM to establish a 10% weighting while rebalancing the growth/defensive mix back to target.
- Active stock positions were purchased in DOW on 9 May 2022 and SUN on 24 May 2022 to establish 10% active weightings in each stock within the AAE portfolio.
- A compound trade was undertaken on 10 October 2022 to exit the active position in TLS while rebalancing the growth/defensive mix.
- Trades were made on 24 October 2022 to unwind the underweight position in AFI and overweight position in AC relative to the reference portfolio.

Figure 5: Transactions in 2022

Date	Details	Amount (\$)	
		Transaction Value	CMT Change
5-Jan-22	Trades to fund the distribution and rebalance AA weights		
	Sell 561 IOZ @ \$31.21. Transaction fee \$19.26.	17,489.55	
	Sell 68 VGS @ \$107.15. Transaction fee \$12.50.	7,273.70	24,763.25
5-Jan-22	Transfer of distribution for 2021 net of donations held by CBE		
	Distribution for 2021 of \$36,205.19, paid to CBE.	-36,205.19	
	Donation from 2021 of \$4,188.00, held by CBE.	4,188.00	-32,017.19
4-Apr-22	Finalising EM trade and rebalancing growth/defensive mix		
	Sell 634 IOZ @ \$31.22. Transaction fee \$21.77.	19,771.71	
	Sell 159 VGS @ \$97.02. Transaction fee \$16.97.	15,409.21	
	Buy 676 IEM @ \$61.21. Transaction fee \$45.52.	-41,423.44	
	Buy 273 VGB @ \$47.28. Transaction fee \$14.20.	-12,921.39	-19,163.91
9-May-22	DOW purchase, funded from IOZ		
	Sell 1375 IOZ @ \$29.19. Transaction fee \$44.15	40,092.25	
	Buy 7354 DOW @ \$5.48. Transaction fee \$44.28	-40,294.88	-202.63
24-May-22	SUN purchase, funded from IOZ		
	Sell 1380 IOZ @ 29.45. Transaction fee \$44.71	40,596.29	
	Buy 3318 SUN @ \$12.19. Transaction fee \$44.47	-40,474.30	121.99
10-Oct-22	TLS sale and rebalancing growth/defensive mix		
	Buy 133 VGAD @ \$71.51. Transaction fee \$12.50	-9,523.33	
	Sell 10062 TLS @ \$3.83. Transaction fee \$42.39	38,495.07	-26,226.79
24-Oct-22	Unwinding the underweight AFI / overweight AC position		
	Buy 1202 VGB @ \$44.42. Transaction fee \$58.73	-53,451.5)	
	Sell 1065 AAA @ \$50.15. Transaction fee \$58.75	53,351.00	-100.57
	Buy 133 VGAD @ \$71.51. Transaction fee \$12.50	-9,523.33	

Figure 6 details the income received and fees paid during 2022, up until 15 November. Fees include brokerage associated with trades and administration fees on the BT Panorama account. Inclusive of franking credits, the Fund generated income during the year equivalent to 3.49% of the estimated average portfolio value over the year. The AAE portfolio component generated dividend income that averaged 4.37% prior to franking credits and 5.82% including franking credits. The latter compares to 3.99% in 2020 to 4.91% in 2021, with the increase in yield reflecting companies increasing their dividend payouts in response to more favourable economic conditions.

Figure 6: Income received and fees paid in 2022 (to 15 November)

	INCOME RECEIVED (\$)					FEES PAID (\$)	
	Dividends	Franking credits	CMT interest	Total income Ex. franking	Total income Inc. franking	Brokerage	BT account fees
Total SMF portfolio							
AAE portfolio	17,682.15	5,870.76	0.00	17,682.15	23,552.91	145.48	
iShares Core S&P/ASX 200 ETF	31.81	9.50	0.00	31.81	41.31	45.25	
iShares MSCI Emerging Market ETF	676.58	0.00	0.00	676.58	676.58	45.52	
Vanguard Australian Bond ETF	211.52	0.00	0.00	211.52	211.52	72.93	
Vanguard International Shares Hedged ETF	0.49	0.00	0.00	0.49	0.49	12.50	
Vanguard International Shares ETF	843.05	0.00	0.00	843.05	843.05	29.47	
BetaShares Cash ETF	469.73	0.00	0.00	469.73	469.73	58.75	
BT Cash Management Trust	0.00	0.00	83.27	83.27	83.27		
Accrued dividends at end-period	0.00	0.00	0.00	0.00	0.00		
Accrued interest at end-period	0.00	0.00	0.00	0.00	0.00		
Total portfolio	19,915.33	5,880.26	83.27	19,998.60	25,878.86	540.85	1,537.45
<i>% of average SMF portfolio value</i>	<i>2.68%</i>	<i>0.79%</i>	<i>0.01%</i>	<i>2.70%</i>	<i>3.49%</i>	<i>0.07%</i>	<i>0.21%</i>
AAE portfolio							
iShares Core S&P/ASX 200 ETF	11,467.23	3,945.79	0.00	11,467.23	15,413.02	145.29	
Brambles Limited	1,250.40	175.07	0.00	1,250.40	1,425.47	44.28	
Downer EDI Limited	881.40	0.00	0.00	881.40	881.40	0.00	
Inghams Group Limited	899.30	385.41	0.00	899.30	1,284.71	44.47	
Suncorp Group Limited	564.06	241.74	0.00	564.06	805.80	0.00	
Telstra Corporation Limited	1,660.23	711.52	0.00	1,660.23	2,371.75	0.00	
Westpac Banking Corporation	959.53	411.23	0.00	959.53	1,370.76	0.00	
Total AAE portfolio	17,682.15	5,870.76	0.00	17,682.15	23,552.91	234.04	
<i>% of average AAE portfolio value</i>	<i>4.37%</i>	<i>1.45%</i>	<i>0.00%</i>	<i>4.37%</i>	<i>5.82%</i>	<i>0.06%</i>	

Team highlights

In this section, each team discusses their highlights from 2022.

AAE manages equity market turbulence, expands investible universe

2022 has generally been a weak year for equity markets, although AAE's IOZ benchmark managed to deliver a small positive return of 2.28% to 15 November 2022 once dividends and franking credits are included. The AAE portfolio underperformed this benchmark by -1.33% as market volatility caused some drastic revaluations in the market, with the Fund being on the wrong side of the movements with respect to ING and DOW in particular. The environment challenged the AAE team to look through short-term fluctuations and focus on the implications over the Fund's long-term horizon.

During Semester 1, 2022, DOW and SUN were analysed in-depth and both were added to the portfolio. Over Semester 2, 2022, the team researched BHP Group (BHP), ResMed (RMD) and Charter Hall Long WALE REIT (CLW). A recommendation to purchase CLW was taken to IAC but failed to receive endorsement. A recommendation to sell the active position in TLS was endorsed by IAC late in Semester 2, 2022 thus leaving five active stock positions in BXB, DOW, ING, SUN and WBC as at the end of 2022.

For DOW, the key driver of the AAE team valuation was cash flow reliability underpinned by government contracts, a structural shift towards contract work in the industry, and competitive advantages stemming from scale and a differentiated service offering. Whilst issues pertaining to inflation and labour shortages have created some headwinds, the team believes these to be transitory. We anticipate upside from DOW's recent restructuring that focuses the company on its core urban businesses.

For SUN, the AAE team saw the key to the investment thesis as the potential for growth in premiums without losing customers due to its position as a market leader, supported by a conservative capital position. Climate change related risks and rising reinsurance costs were given deep consideration but judged as unlikely to have a major impact on earnings. Of note is the recent sale of SUN's bank, which will result in a special dividend being delivered to the Fund at some point during fiscal year 2023.

BHP, RMD and CLW were all pursued through to in-depth analysis but were rejected at various stages. The team did not proceed with a BHP recommendation when it was revealed that the company exceeded the coal threshold set out under the ANU SRI policy during fiscal year 2022, as well as concerns surrounding reputational risk due to recent findings of sexual assault and harassment within the company. RMD was deemed too expensive as the share price increased while the analysis was being undertaken, which in part stemmed from transitory tailwinds from competitor product recalls. CLW was taken to IAC with a thesis surrounding predictable cash flows stemming from long-term leases and blue-chip tenants. However, the AAE team was unable to obtain IAC endorsement due to concerns surrounding the company's debt exposure given the prevailing interest rate environment.

Stock revaluations are a core part of the AAE team workload. During 2022, the focus was interrogating the investment thesis for each of the Fund's holdings. This culminated in the decision to sell TLS due to the interpretation that the market was pricing in an overly optimistic outlook for the company, with significant increases in revenue, margins and return on invested capital needed to justify the share price. This perspective was supported by the potential for increased industry competition and a historically high forward P/E ratio. Endorsement was obtained from IAC to exit the TLS position. The Fund took a 2.38% cumulative gain as compared to IOZ, amounting to a successful investment for the SMF team.

This year saw some notable developments in the models used within AAE. In-depth models were created for insurance companies, resource companies and REITs, as well as a barebones model for toll roads. These new resources will be useful for the team moving forward. The intent is to continue to expand and develop such models in order to maximise the team's investible universe. The AAE team adjusted its baseline cost of equity from 5.68% to 7.50% over the course of 2022 to ensure that valuations were appropriately framed relative to existing market prices, thus accounting for the impact of rising interest rates and inflation on market discount rates. Finally, the stock filtering process was adjusted to better identify stocks that might align with the needs of the portfolio, the long-term philosophy of the Fund and the team's thematic views. For instance, focus was placed this year on finding companies with capacity to weather the impacts of inflation and rising rates, and may even benefit from such environments.

Hugo Klimt, Head of AAE

AA strives to adopt a more realistic, dynamic asset allocation approach

The AA team continued to strive in 2022 towards the Fund's long-term investment objectives amidst significant short-term market volatility and abnormally challenging economic conditions. Grappling with the implications of this unique investment environment provided an excellent opportunity to learn, which the team leveraged to improve its investment process to reflect the practices used by fund managers in the real world. Specifically, more nuanced consideration of market and economic risk factors has been incorporated into the team's analysis, and the capacity built for asset-allocation decisions that are aware of return path dynamics through including explicit three-year forecasts within the 10-year scenario paths.

As the supply and demand implications of the COVID-19 pandemic continued into 2022, the AA team maintained the view that high inflation was unlikely to dissipate in the near-term despite hawkish action from central banks around the world. An assessment of market and economic indicators led the AA team to conclude that upward pressure on inflation is likely to continue due to supply-chain problems, high producer costs, wage growth and increasing energy and resources prices. While some easing of supply-driven inflationary pressures may cause goods inflation to decline, the AA team saw services inflation taking over as a key driver of persistent inflation and thus heightening the risk of a more delayed recovery than what was priced by markets. The AA team also recognised an aggressive monetary tightening-induced recession as a plausible eventuality. Adjustments made to the AA team's portfolio construction (PC) model reflected these views, and included further increasing the state probabilities on higher inflation and incorporating a new 'recession' scenario into the modelling.

With ongoing market volatility highlighting the Fund's vulnerability to shorter-term macroeconomic forces, the AA team prioritised the implementation of three-year modelling adjustments into the asset class inputs within the PC model's long-term scenarios. These adjustments incorporate short-to-medium market and macroeconomic factors into the AA process, thus increasing visibility on how the 10-year return paths for each asset class may unfold and adding a three-year return checkpoint to inform investment decisions. The three-year adjustment also allows for consideration of plausible macroeconomic or market events of concern. For instance, the recession scenario was captured as part of the three-year adjustments.

The PC model with three-year adjustments was first deployed mid-September when equity market weakness led to the Fund's growth/defensive mix deviating from target weights by more than 3%, thus triggering an informed rebalancing decision as per the SMF IPS. For the first time, the rebalancing decision was evaluated against both shorter- and longer-term return expectations.

The year culminated with an asset allocation recommendation to unwind the +7.5% overweighting in AC and -7.5% underweighting in AFI targets relative to the reference portfolio. The updated PC model facilitated a more in-depth analysis of shorter- and longer-term prospects, and helped to confirm that the position was no longer likely to benefit the Fund's long-term investment objectives moving forward. The AA team received endorsement from IAC to return the AFI and AC target weights within the defensive component of the portfolio to reference portfolio weights on 24 October 2022.

The AA team looks forward to continue refining the AA investment process to balance short-to-medium term risks and the Fund's long-term investment objectives. With the three-year modelling in its infancy, there remains ample opportunity for future cohorts to streamline and improve the process. Investigation of additional asset classes to expand the Fund's investible universe remains on the AA agenda. For example, there are plans to include foreign currency in the PC model, building on analysis completed in Semester 1, 2022 and insights offered by guest speaker Nigel Wilkin-Smith during Semester 2, 2022.

Overall, the AA team is incredibly proud of the advancements that it made to the overall AA investment process this year. We hope that this work will provide a valuable foundation for future cohorts to make more informed decisions regarding the Fund's asset allocation moving forward.

Stephanie Trinh, Head of AA

R&C – A refinement of processes

Key highlights for R&C in 2022 include the development to team processes and policy documents, especially on SRI. R&C also provided the AAE team with contestable investment viewpoints under the ‘red-teaming’ initiative, and supported broader SMF functionality by applying the Behavioural Biases Risk Management Framework (BBRMF) and undertaking portfolio analysis and monitoring.

The red-teaming initiative has been a focal point of R&C’s SRI/ESG analysis. The initiative provides the opportunity for R&C analysts to offer alternative perspectives during in-depth stock analysis, thus enhancing the investment case and fostering a greater sense of contestability at the Fund level. For instance, the addition of DOW and SUN were informed by red-teaming implementation as outlined below.

- **DOW** – The R&C team explored potential challenges in managing parties outside DOW’s immediate supply chains with respect to human rights and modern slavery. Workplace health and safety were investigated given that injuries at exposure sites can negatively impact on project contract completions and result in reputational damage that may impair DOW’s ability to retain or secure contracts.
- **SUN** – The R&C team assessed questionable insurance industry practices related to avoidance of claim payouts during the COVID pandemic, in line with the SMF preference for corporate trustworthiness under the SRI policy. Climate change risk was considered in detail, including potential for underestimation of natural hazard allowances and inability to anticipate surges in catastrophic weather events. R&C suggested that adverse climate effects be included in AAE team’s ‘bear case’ scenario.

With ESG becoming increasingly mainstream and important in funds management, enhancing the SMF SRI policy was a significant focus in 2022. Multiple revisions were made to the policy, including explicitly recognising reputational risk and new processes for SRI voting and the review of non-benchmark ETFs. Outstanding examples of purposive application of the SMF SRI policy are outlined below.

- **WBC SRI update** – SRI reviews of WBC were previously completed during 2020 and 2021 that focused on failure to adequately monitor transactions involving correspondent banks, alleged insider trading, unconscionable conduct, and breach of financial services obligations. A further comprehensive SRI update was completed in Semester 1, 2022, triggered by ASIC action over compliance failures. The R&C team also took the opportunity to consider the reputational risk impact of relatively insignificant yet numerous transgressions occurring over time. A central document was developed that compiles and assigns severity levels to SRI concerns raised at the SRI review and update stages.
- **BHP and mining** – SRI analysis of BHP exemplified the Fund’s commitment to excluding companies that may pose an unacceptable level of ‘social injury’ or reputational risk. The analysis is summarised here, and detailed further in the SRI report. Initial SRI concerns were raised when BHP was put forward at the candidate stock analysis (CSA) stage in early 2022 related to the bursting of a tailing dam in Brazil in 2015. BHP was subsequently analysed in-depth during Semester 2, 2022 encouraged by the Fund’s underweight position in mining and the integral nature of raw materials for the economy and energy transition. The in-depth analysis was subsequently halted following reports of harrowing sexual assault accusations and the finding that coal revenue had exceeded the 20% allowable under the ANU SRI policy. The commitment to SRI was further illustrated through a call with BHP management over ESG in late-November 2022, which helps pave the way for possible future investment if coal falls below 20% of revenues. The experience with BHP, as well as sale of the Fund’s RIO holding in 2020 following the Juukan caves incident and rejection of Woodside Energy on SRI grounds in 2021, has prompted R&C to develop a mining and resources SRI framework focused around the holistic ‘culture of mining’.

The R&C team continued to implement the BBRMF throughout 2022 with the aim of identifying any thematic biases or other structural issues in the Fund’s decision-making processes and mechanisms. As part of R&C’s ongoing refinement of its processes, the BBRMF will be reviewed next year with the intent of improving ease of implementation and incorporating new biases that were observed during this year.

In summary, the R&C team is proud of the significant contribution that it has made to the Fund in 2022. Plans for the future revolve around further improving processes, undertaking efficient cross-team collaboration and continuing to provide high-level risk analysis.

Nimeth Dissanayake, Chief Risk Officer (CRO)

RT ventures into novel engagement initiatives

RT works towards enhancing the SMF's presence both within and outside the University by facilitating team member recruitment and maintaining a consistent digital presence. This year, RT members showed immense enthusiasm and were brimming with exciting ideas to enhance awareness of the Fund and building on the efforts of previous cohorts in adding to the legacy – one of the Fund's key values.

RT communicates the Fund's activities to external parties through Facebook and LinkedIn, and releases regular social media posts to boost engagement. A notable example is the 'Women in Finance' discussion with the two prior SMF CIOs, Elena Pleass and Alaina Warwick. The insightful discussion tapped into the gender aspect of working in finance from a female perspective. This session will be summarised and posted to help attract more female applicants in the future, while tightening the connection between the SMF and its alumni. RT has created numerous 'spotlights' based on guest speaker presentations. These include Michael O'Neill from Investors Mutual on insurance; Shaun O'Malley from Spirit Super on ESG and SRI; Albie Lake, Analysts at UBS Australia, on REITs; Nigel Wilkin-Smith, previously Director of Portfolio Construction at the Future Fund, on currency management; and John Razos, Investment Analyst at Talaria Capital, on varied topics ranging from ESG to managing clients to investment strategies. RT also conducted interviews with the latest RSFAS SMF Equity Scholarship recipient, Spencer Burnet, as well as ANU alumnus and founding member of the SMF, Karan Savara.

As a part of recruitment activities, the team hosted AMA sessions in both semesters. This event was conducted in-person during Semester 2, 2022 for the first time since the COVID pandemic commenced. It served to spread awareness about the Fund and connected potential applicants with existing SMF team members through a stall set up in the foyer of the CBE building, which allowed for direct interaction with the aim of providing an appreciation of the experience of working within a fund management operation. RT also conducted two application workshops during 2022 over Zoom to boost the quality of recruitment and to further spread awareness about the Fund.

External engagement remains a primary focus for RT. In addition to AMA sessions and application workshops, other events spearheaded included the CBE Information Market Day on 11 August 2022, ANU Open Day on 3 September 2022, the CBE Holiday Program for year 11 high schoolers on 27 September 2022, and involvement in ANU Giving Day promotions on 29 September 2022. All these activities helped convey how the SMF simulates the experience of working in a real fund.

RT continues to support the Fund's activities through overseeing production of the mid-semester and end-semester reports, organising professional photography for the reports, keeping meeting minutes, maintaining a consistent digital presence on Facebook and LinkedIn, promoting the Fund by circulating pamphlets and posters, and updating the SMF website.

Various new initiatives were launched by RT in 2022. LinkedIn posters were developed for incoming junior members to leverage their connections into additional profile for SMF; while SMF-branded email signatures were created so that emailing etiquettes can be used to present the Fund as a professional work environment. A new social media series called 'SMF updates' was introduced to provide a consistent and transparent record of the Fund's activities and promoting regular engagement. RT undertook an analysis of its digital presence to collect insights into the better-performing posts on social media, and found that the SMF update series was the best-performing category of posts. The SMF Alumni LinkedIn group was implemented with the aim of strengthening the SMF alumni network. It will be used to promote selected professional job openings, solicit alumni involvement such as seeking out guest speakers, and to share interesting articles.

Looking forward, RT plans to lead the SMF in collaborating and forming mutually beneficial associations with other student managed funds across Australia, and venture into new formats such as podcasts.

Anvi Ghiya, Head of RT

Socially responsible investment (SRI) report

The SMF portfolio is invested in line with the SMF SRI policy, which is directly derived from the University's SRI policy. The policy aims to support sustainable business practices that are beneficial for society, whilst discouraging those that may cause 'social injury'. Potential implications for investment returns are also taken into consideration. Vital points of the SMF SRI policy are outlined below.

- (i) Exclude companies that draw more than 20% of revenues from adult entertainment, coal, gambling, tobacco, alcohol, armaments, and exploitative lending practices.
- (ii) Hold an active equity portfolio with 30% less carbon intensity than the S&P/ASX 200.
- (iii) Avoid investments that are likely to cause an unacceptable level of 'social injury'.
- (iv) Favour investments that generate 'social benefit'.
- (v) Preference companies that actively pursue sustainable business activities as determined by the SMF team, with a current focus on the following activities and practices related to ESG categories:
 - E. climate change action
 - S. equity, diversity, and inclusion
 - G. corporate trustworthiness, including transparency, compliance, and accountability.

All active stock positions currently held by the SMF strictly adhere to the industry exclusions list, outlined above in point (i). This industry exclusions list is applied to reviews of the SMF portfolio conducted at the beginning of the semester, in addition to narrowing down stocks that have been proposed via the CSA filtering process.

Figure 7 reports SRI compliance regarding carbon intensity as of 15 November 2022 (point (ii)). Directly sourced from the ANU Investment Office, the carbon intensity of the AAE component of the SMF portfolio is calculated from active stock positions using tonnes of CO₂ produced per \$1 million of revenue on a holdings-weighted basis. This is then compared with the carbon intensity of the S&P/ASX200 estimated on a market capitalisation basis. The Fund is pleased to report carbon intensity that is -86.9% below the S&P/ASX200 index, which exceeds the 30% threshold target by a margin of +56.9%.

Figure 7: Carbon intensity of the AAE component as of 15 November 2022

	ASX200	BXB	DOW	ING	SUN	WBC	Total active stock positions	Active stock positions vs. ASX200	Target improvement	Margin
Weight in AAE Portfolio	51.62%	10.94%	9.42%	8.72%	9.87%	9.44%	48.38%			
Carbon Intensity	236.08	17.0	54.3	83.5	2.8	4.9	31.0	-86.9%	-30.0%	56.9%

Conditions (iii), (iv) and (v) of the SRI policy are evaluated on an ongoing basis with respect to existing holdings and throughout the stock analysis process. The Fund's active commitment to monitor and avoid investments that cause an unacceptable level of 'social injury' and 'reputational risk' are reflected via two key action points over the course of the year – the WBC SRI update and BHP in-depth analysis. These were summarised in the R&C report, with additional detail provided below on the BHP SRI analysis.

BHP and the mining SRI framework

This section provides a detailed account of the SRI analysis conducted around BHP as an example of how the SMF implements its SRI policy. It conveys how this experience help to prompt the development of a SRI framework for mining and resources.

'Social injury' and 'reputational risk' concerns for BHP were initially raised at the CSA stage during Semester 1, 2022. A major point of concern was the role of company negligence in the bursting of the Fundao tailing dam in Mariana, Minas Gerais, Brazil in 2015, which resulted in significant environmental damage as well as deaths. In an initial poll conducted in Semester 1, 2022 during the CSA stage, 66.7% of SMF team members voted yes and 33.3% voted no or abstained to the question: "Do you think BHP adheres to our SRI policy?" In addition, 52.4% of members voted yes and 47.6% voted no or abstained to the question: "Do you think an investment in BHP is permissible based on the level of reputational risk it would pose?"

Some team members expressed the view that the mining sector should be examined further, referring to the integral nature of raw materials in fuelling the economy and energy transition as a counterbalance against the SRI risks. As a result, a high-level comparative SRI analysis was undertaken of selected mining companies including Fortescue Metals Group, RIO, OZ Minerals Limited, and IGO Limited. BHP was found to outperform the other companies examined based on various ESG indicators.

In-depth analysis of BHP was hence commenced in Semester 2, 2022. However, the analysis was unexpectedly brought to a standstill upon harrowing reports of more than 100 sexual assault cases across BHP mine sites and accommodation villages over the prior 12 months alone. The R&C team responded by thoroughly investigating sexual harassment in mining and resources industries workplaces, and found the severity of sexual harassment of women to provoke genuine concern. Fly-in fly-out employment in the mining and resources industry has multiple factors that appear to promote incivility including a poor culture, gender inequality and power disparity in the workplace.

Following extensive Fund-level discussions surrounding these matters, a further poll was undertaken. Regarding the reputational risk that could arise from an investment in BHP, 53% deemed it acceptable and 42% as unacceptable while 5% abstained. Of the 42% that deemed an unacceptable level of reputational risk, 78% voted to delay investment in BHP and 22% voted to not invest in BHP at all. As part of this vote, it was also asked: *“What measures or initiatives should the Fund implement to ensure it minimises reputational risk if we were to invest in BHP?”* Notable responses are included below.

“Ongoing review of the mining industry and BHP.”

“R&C frameworks to monitor SRI risks for the mining sector and reporting to justify our investments.”

Before much additional analysis was undertaken, BHP was excluded from the SMF’s investable universe due to reporting that 24% of revenues were derived from coal during fiscal year 2021-22, thus exceeding the 20% industry exclusions threshold under the ANU SRI policy. Analysis of BHP thus ceased. However, R&C had previously arranged a videoconference call with BHP management for 29 November 2022 to discuss the company’s approach to ESG. The insights from this call will be input into deliberations over the SRI credentials of BHP and the mining sector in general, which could potentially pave the way for a future investment in BHP if coal falls to below 20% of revenues at a later date.

Informed by this valuable learning process, R&C have taken the initiative to develop a ‘mining and resources sector SRI framework’ that is framed around forming a critical view on the holistic ‘culture of mining’. The framework envisages an industry-wide screening process that considers evidence of any systemic cultural flaws prior to making an investment. The framework also creates a clear sub-industry benchmarking process that allows for longitudinal qualitative and quantitative analysis of the mining and resources sector as new cohorts are introduced into the SMF.

Declaration

The Fund declares that it has complied with the University’s SRI policy while effectively implementing the SMF SRI policy throughout 2022. The Fund remains committed to consistently reviewing and refining its SRI policy to support sustainable business practices while pursuing long-term returns.

Appendix

List of SMF activities

SMF activities during Semester 1, 2022

SMF student team make-up

- The SMF team comprised 21 members during the semester, including nine seniors continuing from Semester 2, 2021 and 12 juniors joining the Fund.
- Fourteen applications were received from students to join the Fund, and 13 interviews conducted.

SMF meetings

- Twelve weekly meetings were held throughout the semester. Nine meetings were held on Mondays from 9am to 12pm; with three make-up meetings on other days due to Monday public holidays. Two meetings were held in-person in Marie Reay Room 3.04, with the remainder via Zoom.
- An end-of semester event was held in-person on Friday 27 May 2022 in Marie Reay Room 3.02 to farewell the departing seniors and welcome the new juniors joining the Fund next semester. This was followed by a social gathering at Badger & Co.

SMF IAC meetings and investment recommendation endorsements

- The IAC endorsed the completion of the second tranche of the IEM purchase and the associated portfolio rebalancing through email on 1 April 2022.
- The first IAC meeting was held on 9 May 2022 to discuss the recommendation for an active 10% position in DOW within the AAE portfolio, to be funded by the sale of IOZ. The DOW recommendation received a majority endorsement from the IAC.
- The second IAC meeting was held on 24 May 2022 to discuss the recommendation for an active 10% position in SUN within the AAE portfolio, to be funded by the sale of IOZ. The SUN recommendation received unanimous endorsement from the IAC. The IAC also endorsed revisions to the SMF Investment Policy Statement (as summarised below).

Transactions

- Four trades were completed on 4 April 2022 to purchase the second tranche of EM while rebalance the asset class weights.
 - IEM: purchase of 676 units for the cost of \$41,423.44, to achieve a 10% target weight in EM.
 - VGB: purchase of 273 units for the cost of \$12,921.39, to achieve a 7.5% target weight in AFL.
 - VGS: sale of 159 units for proceeds of \$15,409.21, to achieve a 5% target weight in DM,U.
 - IOZ: sale of 634 units for proceeds of \$19,771.71, to fund the balance by reducing AE.
- Two trades were completed on 9 May 2022 to achieve an active position in DOW equal to 10% of the AAE portfolio.
 - DOW: purchase of 7,345 shares for the cost of \$40,294.88, to achieve a 10% target weight in the AAE portfolio.
 - IOZ: sales of 1,375 units for proceeds of \$40,092.25, to fund the transaction.
- Two trades were completed on 24 May 2022 to achieve an active position in SUN equal to 10% of the AAE portfolio.
 - SUN: purchase of 3,318 shares for the cost of \$40,474.30..
 - IOZ: sale of 1,380 units for proceeds of \$40,596.29, to fund the transaction.

External cash flows

- A transfer of \$32,017.19 was made from the SMF BT Panorama account to the ANU general bank account on 5 January 2022, representing the distribution with respect to 2021 of \$36,205.19 less \$4,188.00 in donations received that were being held by CBE.

Major reports

- A report was completed to summarise the EM position finalisation and rebalancing recommendation on 30 March 2022, explaining the reasons for combining the implementation of the second tranche of investment in EM with a broader rebalancing of the SMF portfolio.

- Investment recommendation reports for DOW and SUN were created on 1 May 2022 and 16 May 2022, respectively, in support of investment recommendations presented at the IAC meetings.

Revisions to policy

- *Investment Policy Statement* – In addition to housekeeping changes, two revisions were made to the rebalancing procedures. The first allows rebalancing to proceed once a rebalancing threshold is exceeded, even if the weighting subsequently falls back below that threshold. The second permits the cash holdings to be rebalanced by switching from the CMT into the cash ETF (AAA) once the CMT weight exceeds 2%. The revisions were endorsed by the IAC and subsequently approved by the Director of RSFAS, Associate Professor Stephen Sault, on 24 May 2022.
- *Revisions to the SMF SRI policy* – Changes included: increased prominence to reputational risk; requirement for stocks to pass separate 75% SRI and reputational risk votes; implementation of the SRI policy adjusted to frontload the analysis of social injury and reputational risk to the CSA stage; and provisions regarding the treatment of non-benchmark ETFs. A revised SRI policy document was created dated 16 May 2022 (version 3.8).

External engagement –guest speakers and other points of contact

- Michael O'Neill, Portfolio Manager at Investors Mutual, provided a guest lecture on analysing banking and insurance stocks on 7 March 2022.
- Shaun O'Malley, Head of Investments at Spirit Super, provided a guest lecture on superannuation fund management on 21 April 2022.
- Harrison Papworth and Nick Collings, Analysts at PATRIZIA and SMF alumni, provided a guest lecture discussing career pathways and the inflation environment on 2 May 2022.
- Spencer Burnet, the latest RSFAS Student Managed Fund Equity Scholarship recipient, was interviewed by RT.
- Karan Savara, Director of Business Development at FBR and Robotics ME and Co-Chairman of Technology at UAE Association of Business Councils, was interviewed by RT for the alumni profile series on 24 April 2022.
- Paul Bruner, IAC member and Portfolio Manager at Optar Capital, assisted the AAE team in the analysis of DOW.
- Michael O'Neill, Portfolio Manager at Investors Mutual, assisted the AAE team in the analysis of SUN.

Other notable items

- An AMA session was held on 26 March 2022.
- An SMF application workshop was held on 9 April 2022.
- The RSFAS Student Managed Fund Equity Scholarship for 2022 was awarded to Spencer Burnet.

SMF activities during Semester 2, 2022

SMF student team make-up

- The SMF team comprised 23 members during the semester, including 12 seniors continuing from Semester 2, 2021 and 11 juniors joining the Fund.
- Offers were made and accepted for 13 students to join the Fund in Semester 1, 2023; plus a further two offers for Semester 2, 2023.
- Twenty-six applications were received from students, and 21 interviews conducted.

SMF meetings

- Twelve weekly meetings were held throughout the semester. Eleven meetings were held on Mondays from 9am to 12pm; with one make-up meeting on another day due to a Monday public holiday. Four meetings were held in-person in the Moran Building Room G008, with the remainder via Zoom.
- An end-of semester event was held in-person on 28 October 2022 in Marie Reay Room 3.02 to farewell the departing seniors and welcome the new juniors joining the Fund next semester. This was followed by a social gathering at Badger & Co.

SMF IAC meetings and investment recommendation endorsements

- The first IAC meeting was held on 10 October 2022 to discuss a recommendation to sell the entire active position in TLS and invest the proceeds in IOZ. The recommendation received unanimous endorsement from the IAC.
- The second IAC meeting was held on 24 October 2022 to discuss a recommendation to unwind the overweight position in AC and underweight position in AFI of $\pm 7.5\%$ versus the reference portfolio; as well as a recommendation to add a 10% active weight in CLW to the AAE portfolio. The recommendation to unwind the AC/AFI position received unanimous endorsement from the IAC; while the recommendation to purchase CLW was declined by all IAC members.

Transactions

- Three trades were completed on 10 October 2022 to facilitate the sale of the active holding in TLS and rebalance the growth versus defensive weight back to target (reference portfolio) weights.
 - TLS: sale of 10,062 shares for a net receipt of \$38,495.07.
 - IOZ: purchase of 2,062 shares for net cost of \$55,198.53. Of the shares purchased, 1,433 were to be allocated to the AAE component and 626 to the AA component of the portfolio.
 - VGAD: purchase of 133 shares for net cost of \$9,523.33.
 - Difference was funded by reducing holdings in the CMT by \$16,703.46.
- Two trades were completed on 24 October 2022 to rebalance the AC and AFI holdings back to the reference portfolio weights.
 - AAA: sale of 1,065 shares for net proceeds of \$53,351.00.
 - VGB: purchase of 1,202 shares for net cost of \$53,451.57.
 - Difference of \$100.57 was funded by reducing holdings in the CMT.

External cash flows

- Franking credits of \$4,180.00 with respect to fiscal year 2020-21 were received by the University on behalf of the SMF during August 2022. It was decided that CBE would retain the cash for the time being, and the amount would be offset against the 2022 distribution to be paid in January 2023.
- ANU Finance was advised by the Fund Convenor on 26 August 2022 that the SMF had earned franking credits totalling \$6,402.98 in fiscal year 2021-22, so that they may be claimed from the Australian Taxation Office.
- Donations were received of \$18,100.00 since the beginning of 2022, mainly in response to ANU Giving Day where CBE Advancement put forward the SMF as a target for contributions. An undertaking by the Fund Convenor to personally match donations contributed to the success of the campaign.

Major reports

- Investment recommendation reports for TLS and CLW were created on 3 October 2022 and 17 October 2022, respectively, in support of investment recommendations presented at the IAC meetings.
- An *Asset allocation rebalancing report* was created dated 10 October 2022 to explain the rebalancing of the growth versus defensive weights, which was implemented in conjunction with the TLS sale.
- An *Asset allocation recommendation report* was created dated 17 October 2022 in support of the recommendation to unwind the underweighting of AC and overweighting of AFI.

Revisions to policy

- Guidelines were established by R&C for the decision of whether and how much cash to sweep from the CMT to AAA to capture higher returns once the 2% threshold weight in the CMT is achieved.

External engagement –guest speakers and other points of contact

- A meeting was held between McGrathNicol representatives (Nathan de Meillon and Shane O’Keefe) and the Fund Convenor to explore possible engagement opportunities on 25 August 2022.
- Albert Lake, Investment Banking Analyst at UBS Australia and previous SMF Head of AAE, provided a guest lecture on REITs on 19 August 2022.
- Nigel Wilkin-Smith, previously Director of Portfolio Construction at the Future Fund, provided a guest lecture on currency management on 29 August 2022.
- John Razos, Investment Analyst at Talaria Capital, provided a guest lecture on various aspects of fund management on 8 October 2022.

- A 'Women in Finance' roundtable was held with two prior SMF CIOs on 2 September 2022 – Elena Pleass, Associate Director at Adamantem Capital, and Alaina Warwick, Investment Banking Analyst at Morgan Stanley.

Other notable items

- SMF team members held a 'welcome back' get-together on 27 July 2022.
- An AMA session was held on 30 August 2022.
- SMF team members participated in ANU Open Day on 3 September 2022.
- An SMF application workshop was held on 17 September 2022.
- SMF team members presented to year 11 students on the SMF and fund management as part of the CBE School Holiday Program.
- Members of RT participated in the CBE Giving Day promotion on 29 September 2022.
- A team dinner was held at the residence of AA team head Stephanie Trinh on 29 September 2022.
- A videoconference was held with BHP management on 29 November 2022 to discuss the company's approach to ESG issues.
- Dr Anna von Reibnitz was on parental leave during the second term of Semester 2, 2022, during which Associate Professor Geoff Warren fulfilled the role of both Fund Convenor and Course Convenor.
- Paul Brunner was reappointed as a member of the SMF IAC for further three years on 21 September 2022.
- The *Journal of Investing* published a paper based around the SMF's experience with developing and implementing its SRI policy. Citation and link: von Reibnitz A. and Warren, G.J., "Socially Responsible Investing in a Student-Managed Investment Fund: A Case Study", *Journal of Investing*, 31(6), 2022, 67-79, <https://joi.pm-research.com/content/31/6/67>.
- Co-Convenors Dr Anna von Reibnitz and Associate Professor Geoff Warren were awarded the 2022 ANU Vice-Chancellor's Citation for Outstanding Contribution to Student Learning for the SMF.

SMF donors

Over \$200,000

Russell Clark (seed donor)

\$10,000 – \$50,000

Family of André Morony

Associate Professor Geoff Warren

\$1,000 – \$10,000

Sahibjeet Bains

Frank Fan

Geoffrey J. Randal

Mu Tian

\$1,000 or less

Andaleeb Akhand

Benjamin Archer

Chettun K. Arianaick

Sarah Backhouse

Xinyi Bao

Tejinder Bhagria

Norman Bradshaw

Joshua Campbell

Paul A Cummins

Stephen J. Duckett

Jaun S. Del Busto Gonzales

Kerry-Ann Hugo

Di Jin

Ravi Kumar

Rayyan Firdausi

Mingliang Li

David Maywald

Jennifer Rowland

Stephen J. Sault

Chris Smith

James Styles

NM Sudewa and C Nawarathna

Louis Summerfield

Mohammad Tahir

Sam Vongsaya

Ron Waldon

Natasha Walton

Minyue Wang

Shuxin Yang

Lei Ying

Thida Zaw

Ge Zhan

Undeclared donors (8)

The total amount donated to date is \$316,938. This brings the total contributions to \$613,436, including RSFAS matching all donations made prior to 2020.

Investment Advisory Committee members during 2022

External members

Heath Behncke

Ross Blakers

Paul Brunker

Mary Fallon

Andre Morony

Holon Global Investments

PATRIZIA

Optar Capital

ANU Investment Office

Independent

Alternate external members

Nicole McMillan

(Alternate to Ross Blakers)

PATRIZIA

Internal members

Associate Professor Geoff
Warren (Chair)

Fund Convenor

Dr Anna von Reibnitz

Course Convenor

The SMF CIO and CRO both sit on the IAC as non-voting members.

SMF team members

Semester 1, 2022

Hannah Young

Jonathon Boyd	Team Head
Samuel Watson	Senior Analyst
Hugo Klimt	Analyst
Olivia Cameron	Analyst
Hugo Heanly	Analyst
Jayden Pham	Analyst
Janet Thudyan	Analyst

Semester 2, 2022

Chief Investment Officers

Hugo Heanly

Active Australian Equities Team

Hugo Klimt	Team Head
Olivia Cameron	Senior Analyst
Jayden Pham	Senior Analyst
Janet Thudyan	Senior Analyst
Ben Carlyon	Analyst
Ryan McCoy	Analyst
Alexander Norman	Analyst
Conner Skidmore	Analyst

Asset Allocation Team

Zachary Taylor	Team Head	Stephanie Trinh	Team Head
Michael Slater	Analyst	Michael Slater	Senior Analyst
Stephanie Trinh	Analyst	Callum McGarty	Senior Analyst
Callum McGarty	Analyst	Lachlan Simpson	Analyst
		Tong Wu	Analyst

Risk and Compliance Team

Daniel Dwyer	Chief Risk Officer	Nimeth Dissanayake	Chief Risk Officer
Liyang Xue	Senior Analyst	James Gray	Senior Analyst
Jie Qi Tay	Senior Analyst	Shuang Liang	Analyst
Nimeth Dissanayake	Analyst	James Riordan	Analyst
James Gray	SRI Analyst	Muhammad Saad Bin Khalid	SRI Analyst

Relationship Team

Julie Lin	Team head	Anvi Ghiya	Team head	Jingwei Liao	Team head
Liam Asmaro	Engagement Manager	Isabella (Bella) White	Engagement Manager	Alexander Aranega	Engagement Manager
Anvi Ghiya	Relationship Officer	Alexander Aranega	Relationship Officer	Joseph Bamber	Relationship Officer
Isabella (Bella) White	Relationship Officer	Jingwei Liao	Relationship Officer	Sueyoon Kim	Relationship Officer

Convenors

Dr Anna von Reibnitz	Course Convenor	Dr Anna von Reibnitz	Course Convenor	Dr Anna von Reibnitz	Course Convenor
Assoc Professor Geoff Warren	Fund Convenor	Assoc Professor Geoff Warren	Fund Convenor	Assoc Professor Geoff Warren	Fund Convenor

Accepted Semester 1, 2023

Ben Carlyon

Alexander Norman	Team Head
Ryan McCoy	Senior Analyst
Conner Skidmore	Senior Analyst
Lauren Vanstone	Analyst
Matthew de Bortoli	Analyst
Liam Newport	Analyst
Gurisha Gupta	Analyst
Callum Vincent	Analyst
Ryan Phillips	Analyst

Lachlan Simpson	Team Head
Tong Wu	Senior Analyst
Caitlin Tully	Analyst
William Brake	Analyst
Emerson Yang	Analyst

Team photo

Semester 1, 2022



Semester 2, 2022



SMF honour role

Semester 2, 2017

Haoyan (Howie) Chen*
Mia Dekovic*
Wenlin Lin*
Elena Pleass*

Semester 1, 2018

Vipul Nijhawan
Ben Rada-Martin
Olaide Yinka-Kehinde
Manling (Sarah) Zhu

Semester 2, 2018

Ruolin (Alex) Mai
Isabella Mortimore
Victor Munagala
Harrison Papworth
Rory Roche*
Wayne Wang
Lanyu Zhang
Zhan Zhang
Zhongxi Zheng

Semester 1, 2019

Jak Carty
Azmina Hossain
Chuxuan (Jessie) Jiang
Aiyun (Stephanie) Li
Saurav Patel
Hongyi Xu
Chengxuan (Charles) Zhang

Semester 2, 2019

Sahibjeet Bains
Luke Farrar
Sophie Lebang
Chaoqi (Shawn) Lin
Harrison McKenzie-McHarg
Khurshed Mehta
Alisha Nath
Jia Jun Desmond Ng
Jiaqi (Karen) Mao
Lachlan Phillips
Dalton Tham
Alaina Warwick

Semester 1, 2020

Charya Kannangara
Rocky Lagudi
Abhay Madan*
Todd O'Dea
William Ranson-Smith
Yanfei (Victoria) Rao
Ashley White
Shengchang (Albert) Zhang

Semester 2, 2020

Bernice Choi
Nicholas Collings
Eric Gittleman
Angus Lloyd
Michael Oates
Matthew Pham
Shalini Rajkumar*
Ulrika Yui Ting Li
Chenfan (Winnie) Wei
Qifan (Cheryl) Yang*

Semester 1, 2021

Joshua Campbell
Zhenyu (Alicia) Sun
Albert Lake
Sida Li
Qing (Julie) Zhu
Sailendra Sanku
Isabel Gray
Arnav Chopra
Yao Xiong

Semester 2, 2021

Max Burrows
Felix Jones
Lachlan Scott
Jingxin (Ben) Mai
Michael Searle
Jing (Jean) Ran
Xinyi (Alice) Wang
Jonathan Lang
Yuchen (Ricky) Yang
Inuja (Jay) Aluwihare
Seonghyun Yong
Petal Wang

Semester 1, 2022

Liam Asmaro
Jonathan Boyd
Daniel Dwyer
Julie Lin
Jie Qi Tay
Zachary Taylor
Samuel Watson
Hannah Young
Liyang Xue

Semester 2, 2022

Olivia Cameron
Nimeth Dissanayake
Anvi Ghiya
James Gray
Callum McGarty
Hugo Heanly
Hugo Klimt
Jayden Pham
Michael Slater
Janet Thudyan
Stephanie Trinh
Isabella (Bella) White

* Fund member for one semester only.

Team composition by semester

Team / Position	CIO	AA	AAE	R&C	RT	TOTAL
Semester 2, 2017	0.5	2	3.5	2	-	8
Semester 1, 2018	1	3	4	3	1	12
Semester 2, 2018	1	4	8	3.5	1.5	18
Semester 1, 2019	1	5	8	2.5	1.5	18
Semester 2, 2019	1	3	9	3.5	2.5	19
Semester 1, 2020	1	3	6	3	3	16
Semester 2, 2020	1	3	9	3	3	19
Semester 1, 2021	1	4	8	5	3	21
Semester 2, 2021	1	4	6	6	4	21
Semester 1, 2022	1	4	7	5	4	21
Semester 2, 2022	1	5	8	5	4	23
Semester 1, 2023*	1	5	9	5	4	24

* Expected figures for Semester 1, 2023.

Contact details

SMF email: smf.rsfas@anu.edu.au

SMF website: <https://www.rsfas.anu.edu.au/rsfas-education/student-managed-fund/>

SMF Facebook page: <https://www.facebook.com/smfANU/>

SMF LinkedIn page: <https://www.linkedin.com/company/anu-smf>

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