Australian
National
University

Report for End of Semester 1, 2020

ANU Student Managed Fund

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Contents

Note: All dollar amounts quoted in this report are in Australian dollars, unless otherwise indicated.

Glossary

AA – Asset Allocation

AAE – Active Australian Equities

ANU – The Australian National University

AUSTRAC – Australian Transaction Reports and Analysis Centre

BIN – Bingo Industries

CBE – ANU College of Business and Economics

CIO – Chief Investment Officer

CPI – Consumer Price Index

CRO – Chief Risk Officer

ESG – Environmental, Social and Governance

ETF – Exchanged-Traded Fund

IAC – Investment Advisory Committee

IP – Investment Process

ING – Inghams Group

IPS – Investment Policy Statement

JBH – JB Hi-Fi

KMD – Kathmandu

LTIP – Long Term Investment Pool

SHL – Sonic Healthcare

SMF – Student Managed Fund

SRI – Socially Responsible Investment

SVW – Seven West Media

PKKP – Puutu Kunti Kurrama Pinikura

R&C – Risk and Compliance

RIO – Rio Tinto

RT – Relationship Team

TLS – Telstra Corporation

RSFAS – ANU Research School of Finance, Actuarial Studies and Statistics

WBC – Westpac Banking Corporation

About this Report

The Australian National University (ANU) Student Managed Fund (SMF) is pleased to report on its developments and achievements over Semester 1, 2020, especially in light of the challenges created by the COVID-19 pandemic. In addition to the usual updates from the Chief Investment Officer (CIO) and the SMF teams, we include a Convenor Report as part of the end-semester reports. Our Spotlight this time focuses on the newly refined SMF Socially Responsible Investment (SRI) Policy, which builds on the ANU SRI Policy by integrating in-depth SRI analysis into the research of our investments and reflecting SMF team beliefs. The new SRI Policy aims to further the Fund's search for investments that are not only profitable, but also purposeful. This report also includes a detailed performance attribution analysis where we have updated our method, as well as a statement of compliance with the refined SMF SRI policy.

We hope that you find this report both informative and engaging. We welcome feedback and are open to further comments or enquiries, which can be directed to the SMF email address (smf.rsfas@anu.edu.au).

More information about our activities and reports are accessible on our website and social media pages at the links below:

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/20409568/admin/

Abhay Madan, Yanfei (Victoria) Rao and Chenfan (Winnie) Wei
Relationship Team

Convenor Report

The first semester of 2020 has been a rollercoaster, with COVID-19 impacting the Fund's operations in a variety of ways. As with all rollercoasters, there were ups and downs. This report describes the ride that has been experienced by the SMF team, and what it has meant for the Fund and its students.

COVID-19 required all facets of the Fund's operations to move online. We have been using videoconferencing for team meetings, guest presentations, Investment Advisory Committee (IAC) meetings and interviews of new candidates for the next semester. Fortunately, working online did not greatly hamper the Fund's operations. We even discovered that videoconferencing offers some advantages, particularly when drawing on contacts from outside of Canberra such as guest presentations and IAC meetings. Further, not being restricted to allocated class times brought flexibility to run overtime and schedule additional meetings when required. The SMF is likely to make more use of videoconferencing going forward, even as restrictions are eased.

Nevertheless, loss of direct personal contact has its downsides. So far this hasn't created any significant issues, although the current team had the advantage of operating face-to-face for a few weeks prior to the lockdown. Next semester presents more of a challenge, as most courses including the SMF will continue to operate online. Areas of concern include senior team members passing on knowledge to the juniors when they are unable to sit down and work through something on a computer, maintaining the SMF's exceptionally strong culture, and building genuine team rapport. We have worked hard to build these elements, which are fundamental to the continuity of the SMF operations and (in particular) the student experience. We don't want them to fall by the wayside.

Rollercoaster aptly describes the market environment during the semester. Equity markets started strong, crashed, then staged an impressive rally. Individual stocks demonstrated stark and at times quizzical volatility. The Fund was buffeted by these market gyrations in two ways. First, the SMF team were required to make four rebalancing decisions as portfolio weights tested their ranges. Asset allocation rebalancing decisions were made in March (buy equities /sell fixed income) and then again in June (doing the reverse). Bingo (BIN) was reviewed as it moved in excess of 3% over target (no action taken), and then Westpac (WBC) as it went 3% below (it was then increased back to target). Fund performance was enhanced by this activity, with the team largely making correct decisions and trading occurring at *very* opportune times. Second, the challenges faced by the Fund in responding to volatility were highlighted by Rio Tinto (RIO). The team became interested in increasing the RIO weighting at around $82, but the stock then rose to about $97 by the time the recommendation was presented to the IAC. An investment opportunity had been identified, but missed. Although another angle emerged to the RIO story, as we describe below. The RIO episode also highlights why the SMF must take long-term positions, given that the students do not have the delegated authority to trade at short notice.

Continuing on the rollercoaster theme, grappling with the Fund's SRI policy added to the excitement of the ride. The semester commenced with an SRI review of WBC following allegations by Australian Transaction Reports and Analysis Centre (AUSTRAC) that the company may have breached the Anti-Money Laundering and Counter-Terrorism Financing Act. The team concluded that, while WBC's failure to take appropriate actions was highly regrettable, it did not indicate an unacceptable risk of further substantial social injury. As the semester drew to a close, revelations emerged that RIO had destroyed an ancient indigenous site of cultural significance. This put any thought of increasing the RIO weight on hold, and placed the company under a SRI review to be undertaken once the second semester commences. All of this occurred against a backdrop where the SMF team has crafted and received IAC endorsement for a revised SRI policy, which moves the Fund into a new phase of deeper SRI analysis that is integrated into the stock analysis and recommendation process. (See later 'Spotlight: The Revised SMF Socially Responsible Investment (SRI) Policy'.)

The events of the past semester have one overarching benefit – they have broadened and deepened the student learning experience. The SMF team members have learnt how to adjust to changing circumstances. They have discovered how operating in volatile markets can bring excitement, challenges and opportunities. And the importance – and greyness – of SRI also became quite apparent. It has been a time they will never forget.

Some updates are in order before signing off. This semester we welcomed Ross Blakers and Nicole McMillan from Whitehelm Capital to the IAC, replacing Debbie Saunders and Risman Cornelius from the same organisation. We are very grateful to the Debbie and Risman for their contribution to student learning, and to Whitehelm for the ongoing support given to the SMF. We also take this opportunity to thank the other IAC members: Heath Behncke, Paul Brunker, Mary Fallon and André Morony. With regard to the SMF team, as we transition between semesters we bid farewell to seven members and welcome 11 newbies. This takes the team size to a record 20 members, including three postgraduate students for the first time. We wish those departing all the best, and trust that the learning will carry through into next semester for those who will continue the legacy.

Dr Anna von Reibnitz, Course Convenor
Associate Professor Geoff Warren, Fund Convenor

Chief Investment Officer (CIO) Report

The ANU SMF has wrapped up what has undoubtedly been the most turbulent semester since its inception. COVID-19 presented the Fund with its fair share of challenges; most notably the difficulties associated with remote learning and significant equity market volatility. However, with these challenges came ample opportunities for learning and personal growth. The team's esprit de corps remained incredibly high throughout the semester. To me, this is a testament to the tenacity of our members to contribute their own legacy, leaving the Fund a better place than when they arrived.

Additionally, one of the more unsuspected outcomes this semester was a marked improvement in the way that sub-teams interact with and understand each other. A key milestone for this symbiosis of sorts was the revision of the SRI Policy, which requires the Risk and Compliance (R&C), Active Australian Equities (AAE) and Asset Allocation (AA) teams to work together more closely moving forward. The proactivity of the SMF in this area signals our determination to preference investments that are both profitable and purposeful.

In addition to the implementation of the SRI Policy, each sub-team hit their own respective milestones.

- The AAE team proposed two investment recommendations to the IAC (although only presenting one – Kathmandu (KMD) – as a result of the late emergence of an SRI issue for RIO.

- The AA team recommended two asset class rebalancings; and made major strides in finalising their AA model, which will form the cornerstone of future dynamic asset allocation recommendations.

- The R&C team continued to progress the Behavioural Biases Risk Management Framework, and provided frequent portfolio updates to the Fund on the back of heightened market volatility.

- The Relationship Team (RT) worked hard in the initiation of new projects, including alumni profiling and the Guest Speaker Summary series.

It is worth highlighting the importance of R&C's work on the Fund's Behavioural Bias Risk Management Framework as a leading-edge initiative. It will form a toolbox of strategies for the Fund to utilise in improving our decision-making processes in an effort to better our investment outcomes.

In addition to guest presentations by Rod Chisholm (ATLAS Infrastructure) and David Maywald, CFA GAICD (Australian Sustainable Finance Initiative) earlier in the semester, we were fortunate to have Heath Behncke talk to the team about the future of digitalisation, innovation and disruption. Heath is one of our IAC members, and an ANU alumnus.

In terms of performance, the SMF has returned 15.72% since inception against our target return of 14.40%. This is a significant improvement over the 1.16% since-inception return reported in the Mid-Semester Report. While largely reflective of market movements, it is in part attributable to the three spectacularly timed rebalancing trades mentioned in the Convenor Report above.

Overall, I am astounded by both the quality and quantity of work produced by the Fund this semester. The pure grit of the Semester 1, 2020 cohort in working so diligently in the face of adversity will serve as the gold-standard for cohorts to come. I am honoured to have led the student team through what has been an incredibly busy and challenging period for the SMF. The lessons learnt and relationships built this semester will most certainly stand the test of time.

William Ranson-Smith, CIO

Team Updates

Active Australian Equities (AAE) Team

This semester, the AAE team was challenged by the economic impacts of COVID-19 and SRI issues involving WBC and RIO. However, every challenge is a unique learning experience, and the AAE team made the most out of these learning opportunities. We gained a greater appreciation of the importance of monitoring SRI risks, rebalancing stock positions and conducting scenario analysis to adequately capture the downside risk in a potential investment.

Through continuous implementation of the AAE investment process, 12 candidate stock reports and three in-depth stock analyses were completed after the initialisation screening stage. Unfortunately, this semester the AAE team were unable to add additional stock positions to the AAE portfolio. In-depth analysis was conducted over Seven West Group (SVW) and JB Hi-Fi (JBH), with neither receiving endorsement to proceed after SMF team discussion. The main concerns for SVW stemmed from SRI issues and corporate strategy; and for JBH the team concluded there was insufficient margin of safety in our valuation given the risk of intense competition from online competitors. Determined to continue in our quest for a suitable investment, the AAE team then revisited KMD, which was trading at sizeable discount to valuation. While our analysis of KMD led us to present an investment recommendation to the IAC, the recommendation failed to get endorsed due to concerns regarding leverage.

Given the ample room in the Fund's carbon intensity score, the AAE team also decided to seek endorsement from the IAC for an increase in the RIO target weight from 3% to 10%, conditional on a target price being reached. However, the late emergence of an SRI issue related to destruction of an indigenous historical site deemed it appropriate to postpone this recommendation until a thorough SRI review has been conducted by the Fund.

Although we would have liked to have added a stock to the portfolio this semester, we do not view this result as a failure. It underlines the robust process that the Fund has in place, ensuring that all stock positions meet our long-term objectives. Furthermore, the detailed analysis undertaken by the AAE team and the processes we have gone through in considering these stocks still contribute to the legacy of the Fund. The analysis becomes part of the body of knowledge, which is passed on partly in the form of 'abandoned stock reports' summarising the analysis undertaken and views formed. It has also helped identify ways in which we can improve our investment process. Some of these improvements include a more robust SRI checklist at the initial stage, simplifying and streamlining our models to ensure more time is devoted to qualitative analysis, and changing our stock filtering process. In terms of the filter, we will be moving from a positive to a negative screening process to widen the net of stocks considered in the initial phase.

As of 9 July 2020, the AAE portfolio comprised of 53.0% in six active stock positions, with the remainder invested in the benchmark ASX200 ETF. All stocks held have undergone a revaluation to ensure they continue to justify their place in the portfolio, along with ongoing monitoring for potential rebalancing. With regards to the latter, we confirmed our position in BIN after conducting a thorough rebalancing review. We also took advantage of the market pricing for a severe downside scenario to rebalance WBC back to its target weight of 10% at a price of $14.70 – the stock is currently trading nearly 22% higher. This rebalancing of WBC was motivated by the stock weight falling more than 3% below target weight, and the Fund's desire not to be underweight the banking sector.

I would like to thank every AAE member for their contributions and efforts over the semester. Next semester the AAE team welcomes six junior analysts – Josh Campbell, Albert Lake, Sida Li, Shalini Arokiasamy Rajkumar, Yao Xiong and Qing (Julie) Zhu. They will be led by the returning Senior Analysts Michael Oates (as AAE Team Leader), Matthew Pham and Angus Lloyd. I hope they all make the most of the amazing opportunity to be part of the AAE team.

Todd O'Dea, Head of AAE

Asset Allocation (AA) Team

This semester proved to be a very exciting one for the AA team, which saw the first ever implementation of our Investment Process (IP), building on the work of many previous AA teams who developed the foundational documents and models for implementation. Our goals for the semester were very ambitious, with the overall target of working through our IP in its entirety and being in the position to recommend target AA weights to the IAC. Although we were unable to achieve all of this, I remain immensely proud of our progress this semester. We worked through a substantial amount of the IP, with the team well-placed to make a final recommendation next semester.

Without a doubt, this past semester involved a truly unique learning experience. The AA team constantly navigated a wide array of challenges, which were to be expected when undertaking the IP for the first time. Work began with the sourcing and analysis of long-term historical data for our macroeconomic drivers, inflation and output gap. From this, the AA team forecasted 10 future scenario states and probabilities. We then undertook preliminary forecasting of our

asset class inputs for Australian and International Equities, Australian Fixed Income and Cash. Alongside all of this, the AA team revamped and further developed core aspects of our Portfolio Construction Model. In summary, the backward-looking aspects of our IP are now complete, with the team now able to focus predominantly on forecasting next semester.

Special acknowledgement must be made of the AA IP document, which was finalised in Semester 2, 2019. This proved absolutely vital to guiding our implementation of the process, and was a frequent source of reference throughout the semester. It is great testament to the detail and forward-thinking of past AA team cohorts that the IP document has stood the test of time.

Alongside the above, COVID-19 created a truly unique market environment, which provided the AA team with the opportunity to recommend two portfolio rebalances. Our first action was to rebalance Australian Equities following a fall in excess of the -5% hard rebalancing threshold in March 2020. Following the tremendous rebound, we then decided to rebalance our Growth vs. Defensive asset mix, as Total Equities exceeded the +3% soft threshold in late May. The experience of making these decisions will prove unforgettable and were immensely insightful, allowing us to take immediate action to improve the Fund's performance.

The AA team welcomes two new analysts in Semester 2, 2020, Alicia Sun and Abhay Madan, with Nicholas Collings taking over as the AA Team Leader and Eric Gittleman as a Senior Analyst. There has never been a more exciting time to be a part of the AA team and I look forward to them presenting the first set of AA target weightings to the IAC next semester. It has been tremendously rewarding to lead an absolutely fantastic team this semester, and I will certainly be keeping a keen eye on AA's future progress.

Rocky Lagudi, Head of AA

Risk & Compliance (R&C) Team

A focus for the R&C team this semester was improving its core operations, which include portfolio analysis, risk management, performance evaluation, compliance monitoring and stock research related to both investment and SRI risks. One of the major tasks was to improve the accuracy and efficiency of the performance attribution model. This has resulted in some changes that are outlined later in the report. The R&C team also worked closely with the AAE and AA teams throughout the semester to further develop the SMF SRI Policy. Moreover, the team aimed to finalise and implement the Behavioural Biases Risk Management Framework. Collectively, the R&C team has continued to strengthen the contribution it makes to the Fund and improve collaboration with the other sub-teams.

The finalisation of the SMF SRI Policy will form a cornerstone of the SMFs stock selection and portfolio construction moving forward. In doing so, it supports the SMF's continual search for opportunities that are both profitable and purposeful. For the R&C team, it creates an additional responsibility in terms of monitoring the SMF portfolio in regard to the SRI Policy. The team will also collaborate with the AA team at the beginning of each semester to complete an SRI-based ETF review, with the intent of extending the scope of the Policy to the ETFs held within the AA component of the portfolio. Moreover, the R&C team will assist the AAE team's search for sustainable, profitable investments through more structured ESG research as well as a holistic risk assessment of candidate stocks. It has been extremely enjoyable to see the collaboration amongst sub-teams in creating a policy that will be fundamental in ensuring a sound portfolio is passed onto future cohorts.

Development of the Behavioural Biases Risk Management Framework has been a key initiative of the R&C team during recent semesters. The Framework involves the R&C team working with the other sub-teams to identify and address behaviours that may impede good decision-making, and to enhance the culture of contestability by ensuring that views are voiced and respected. While the Framework remains in its developmental stage, it will become more robust as it is implemented and the SMF enhances its operations. It has been encouraging to see R&C extend the scope of the Framework to the SMF meetings, in addition to AAE and AA sub-team meetings. The R&C team is looking forward to finalising the Framework next semester.

Overall, I am proud of the progress the team has made this semester to further R&C's involvement in the SMF's broader operations. I believe the team is well-positioned to continue doing so in future semesters. The team is pleased to welcome Sailendra Sanku and Isabel Gray as the incoming Risk and SRI Analysts, respectively. Ulrika (Yui Ting) Li will be transitioning into the position of Chief Risk Officer (CRO). I look forward to seeing the growth of the team in the coming semesters as R&C continues to develop its position within the Fund and its contribution towards the SMF legacy.

Ash White, CRO

Relationship Team (RT)

RT has put in endless efforts to build on the existing communication platforms to extend both the scale and the scope of the SMF's external communications. The main achievements this semester include the creation of the first SMF introductory video, guest speaker reports and an SMF alumni corner. The RT has also established the SMF LinkedIn page, and designed a SMF t-shirt and a series of thank-you e-cards. All of the above activities were carried out in compliance with the SMF Social Media Policy Statement, which provides protocol for both internal and external communications.

With the website and Facebook page now up and running, the focus has shifted to enhancing the content published. The website was initially established with the aim of conveying the core values and the contestability culture of the Fund, while the Facebook page was introduced to spread awareness of the Fund among the ANU student community. The RT is now taking this a step further by publishing richer information with the aim of website showcasing who we are and what we have been doing. For example, aside from broadcasting regular Fund activities such as the ANU College of Business and Economics (CBE) information market and SMF team photos, the RT created an SMF alumni profiling series for the website. This initiative showcases SMF alumni and their experiences in the Fund. The guest speaker reports share key takeaways gained from presentations to the SMF, thus providing some insight into our day-to-day operations and learning experiences.

We have also been developing our LinkedIn strategy. LinkedIn is a useful platform for increasing awareness in the finance industry in a way that is complementary to our Facebook page. We intend to use LinkedIn to communicate the SMF's core values and display the quality work we have accomplished. For example, publishing of the revised SRI policy on LinkedIn highlights the professional work produced by the SMF, as well as promotes our socially responsible and long-term investment principles.

It has been a challenging semester for the RT due to the social-distancing restrictions related to COVID-19 and resulting closure of the ANU campus, with many plans cancelled such as the group photo shoot. The team responded by publishing Zoom screenshots for our group photos, and producing the first promotional video to support the call for SMF applications. The RT has also created the first SMF t-shirt, which aims to strengthen the bond between SMF members and provide a valuable source of marketing.

Aside from the efforts associated with marketing the Fund, the RT continues to provide ongoing support to the Fund. We prepare minutes of the Fund's weekly meetings, draft SMF reports (like this one), create thank-you e-cards to the guest speakers, interview SMF alumni, and maintain the report templates that help increase the efficiency of other teams when writing their reports.

I am very pleased with our achievements this semester, and very grateful to every team member who worked hard and contributed towards them. Next semester we will welcome Arnav Chopra and Qifan (Cheryl) Yang as the Relationship Officers, with Chenfan (Winnie) Wei taking over as the Relationship Manager. Abhay Madan will be transferring teams to become an AA analyst. I am confident the motivations and capabilities of the RT team will continue to increase the SMF's presence online and offline, both within the university and in industry, and hence promote the positive reputation of both the SMF and ANU.

Yanfei (Victoria) Rao, Relationship Manager

Spotlight: The Revised SMF Socially Responsible Investment (SRI) Policy

The revision of the SMF SRI Policy (see https://www.rsfas.anu.edu.au/media/3358945/ANU-SMF-SRI-Policy-v20-Approved-.pdf) was a landmark development this semester. It takes the SMF into the realms of integrating our own SRI analysis into the selection and review of investments. The SMF SRI Policy is an extension of the University's SRI Policy, which aims to support sustainable business practices that are beneficial for society and discourage activities that may cause social injury, while securing significantly lower carbon intensity than industry benchmarks (see https://policies.anu.edu.au/ppl/%20document/ANUP_005802). The revised SMF Policy builds on the ANU Policy by incorporating the SRI beliefs of *both* the SMF and the University, while aiming to boost investment performance through pursuing opportunities that are both profitable and purposeful. It provides enhanced guidance to the team on how these principles are to be implemented when constructing and reviewing the assets held within the SMF portfolio.

The journey towards the revised Policy was triggered by a universal update of Environment, Social and Governance (ESG) ratings by Sustainalytics. The SMF was previously targeting a 10% improvement in its average ESG rating versus the ASX200 benchmark. The improvement stood at +13.3% as at 31 December 2019 (+3.3% against the target). However, the Sustainalytics' update reduced this to approximately +5% (circa -5% against the target). The portfolio was hence in contravention of its previous SRI Policy. Prior to the breach, the Fund had also been encountering a range of issues with the ESG ratings as reliable indicators of social benefit versus social injury. The SMF thus requested that the IAC permit the breach, subject to undertaking a review of the SRI Policy by the end of the semester.

While preliminary discussions focused toward ESG ratings, this subsequently evolved into a holistic review of SRI procedures and practices. Across multiple semesters, the Fund had regularly discussed the dislocation in the way they viewed and discussed environmental and social factors relative to governance. We note that this is not a shortcoming of ESG ratings per se, but rather an indication of the limitations of the previous SRI Policy. We recognised the value of ESG ratings, such as encapsulating information, providing an independent source, and their role as a 'red flag' mechanism. These benefits were considered against their shortcomings, which include a considerable time lag in developments being reflected in ratings, a large-cap bias, and the lack of consistency across agencies. The team further consulted with several industry practitioners to discuss alternative methods in regard to incorporating ESG ratings within the investment process.

Ultimately, the team concluded that it would be more effective to incorporate the social injury and social benefit components of the ANU SRI Policy by integrating SRI analysis throughout the investment process, rather than relying on ESG ratings to capture the SRI credentials of investments. As such, the formal ESG target improvement was removed. In saying that, ESG ratings will continue be monitored both at the total portfolio and individual stock level and used to help identify potential issues for further investigation. Also, the Fund will hold a portfolio with 30% less carbon intensity than the benchmarking S&P/ASX200, a 5% greater reduction than the original target.

Another change to the SRI Policy was the introduction of the facility to incorporate the SMF's beliefs. Two mechanisms allow this to occur. The first is that the SMF team may extend the investment exclusions beyond those being applied by the University investment funds, which include companies with over 20% of revenues from coal, gambling, tobacco or pornography. The SMF has added alcohol and armaments to the exclusion list. The second mechanism is that the new Policy accommodates the preferencing of companies engaged in specific sustainable business activities and practices, as determined by the SMF team. The current preferences under each of the ESG categories are as follows:

- E. climate change action
- S. equity, diversity and inclusion
- G. corporate trustworthiness, including transparency, compliance and accountability.

The above preferences were selected on the basis that each aligns closely with beliefs that have been expressed by the Fund members and/or the University. This approach gives direction in evaluating 'social benefit', while further ensuring each subsection of the E, S and G are consistently addressed in candidate stock analysis. Of course, the expressed preferences do not prevent other socially beneficial activities being taken into account.

The revised Policy also advances the integration of SRI throughout the investment process, including considering the relevance of SRI factors for risk, return and valuations. The latter will be handled by incorporating SRI impacts via either cash flow forecasts, discount rates or scenario analysis. As a result, the Policy aims to support socially beneficial activities while improving the ability to maintain (or increase) the real value of the SMF portfolio over the long term.

We are proud to announce the approval and endorsement of the SMF SRI Policy in May 2020. The Policy's finalisation represents one of the SMF's many successes this semester and will form a central part of ensuring a sound portfolio is passed onto future cohorts. The next phase includes embedding the Policy throughout the AAE and AA investment processes. The SMF is looking forward to the challenges and opportunities this presents. Finally, we would like to thank Mary Fallon, Saksham Malhotra, David Maywald, Rod Chisholm and Saurav Patel for the valuable inputs on structuring the revised SRI Policy and improving our investment process.

Ash White, CRO and Angus Lloyd, SRI Analyst

Portfolio Overview

Portfolio Structure

Figure 1 presents the SMF portfolio weights as at 9 July 2020. Asset values and total portfolio weights including accruals are displayed in Figure 2. The top chart in Figure 1 shows asset class weights compared to the reference portfolio. The deviations are minor, noting that the portfolio was rebalanced back towards the reference weights on 9 June 2020. The portfolio is overweight by 0.15% in total international equities (0.12% unhedged and 0.03% hedged), 0.35% in Australian fixed income, and 0.48% in cash, with underweight of 0.98% in Australian equities. These differences arise from asset class movements post the rebalancing. The total 'cash' weight of 5.48% includes 0.91% for accruals such as franking credits, which the Fund receives as cash post the financial year. The second chart displays the active stock weights within the AAE portfolio – which comprises 51.84% of the overall SMF portfolio – relative to target weights as endorsed by the IAC. (Note: The SMF does not have access to S&P/ASX200 index weights.) Deviations from target weights are attributable to the relative price performance of stocks held versus the reference ASX200 ETF since the target weight was established, with the exception of WBC, which was rebalanced back to target on 27 April 2020. Deviations of more than 1% from target weights include Sonic Healthcare (SHL) (+1.80%), Telstra Corporation (TLS) (+1.34%) and Bingo Industries (BIN) (+1.24%). The SHL and TLS overweights reflect outperformance since purchase. The overweight in BIN reflects outperformance following a revision of its target weight from 10% to 6% in May 2019. No stocks were added to or removed from the AAE portfolio during Semester 1, 2020, apart from the WBC rebalancing.

Figure 1: Portfolio Weights at 9 July 2020

Asset Allocation Weights At 9 July 2020

	Australian Equities	International Equities, Unhedged	International Equities, Hedged	Australian Fixed Income	Cash and Accruals
SMF Portfolio Weight	59.02%	10.12%	10.03%	15.35%	5.48%
Reference Portfolio Weight	60.00%	10.00%	10.00%	15.00%	5.00%
Difference	-0.98%	0.12%	0.03%	0.35%	0.48%

AAE Portfolio - Active Stock Weights At 9 July 2020

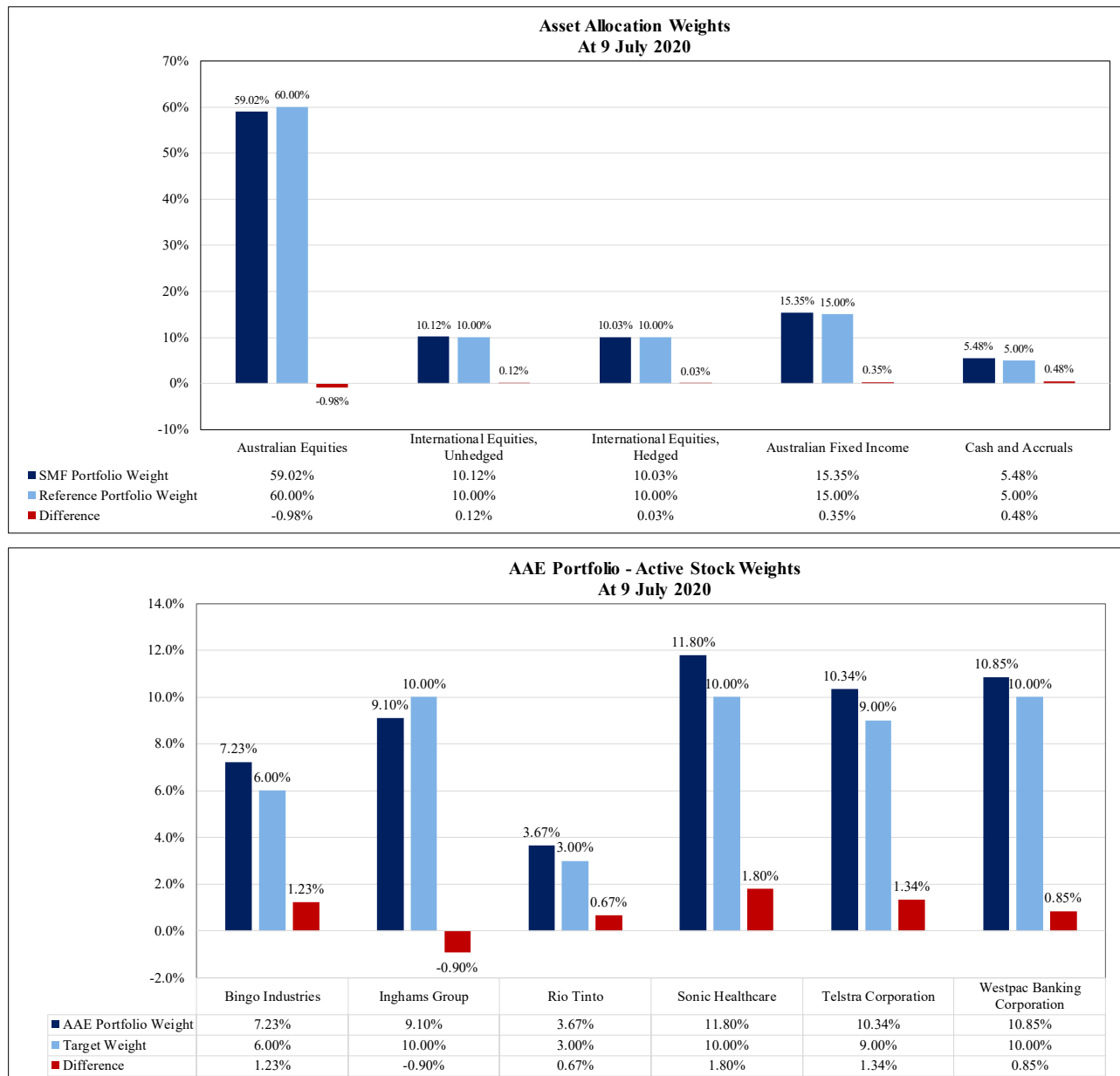|	Bingo Industries	Inghams Group	Rio Tinto	Sonic Healthcare	Telstra Corporation	Westpac Banking Corporation
AAE Portfolio Weight	7.23%	9.10%	3.67%	11.80%	10.34%	10.85%
Target Weight	6.00%	10.00%	3.00%	10.00%	9.00%	10.00%
Difference	1.23%	-0.90%	0.67%	1.80%	1.34%	0.85%

Figure 2: Portfolio Structure at 9 July 2020

Portfolio Component	Benchmark ETF	Asset Values $	SMF Portfolio Weight %	Reference Portfolio Weight %	Over (Under) Weight %
Australian Equities					
Active Australian Equities Portfolio:					
iShares Core S&P/ASX 200 ETF		160,595	24.38		
Bingo Industries		24,675	3.75		
Inghams Group		31,064	4.72		
Rio Tinto		12,531	1.90		
Sonic Healthcare		40,294	6.12		
Telstra Corporation		35,318	5.36		
Westpac Banking Corporation		37,038	5.62		
Total AAE Portfolio	iShares Core S&P/ASX 200	**341,514**	**51.84**	**50**	**1.84**
Asset Allocation Portfolio:					
iShares Core S&P/ASX 200		47,293	7.18	10	-2.82
Total Australian Equities	iShares Core S&P/ASX 200	**388,807**	**59.02**	**60**	**-0.98**
International Equities, Hedged	Vanguard International Shares Index, Hedged	66,068	10.03	10	0.03
International Equities, Unhedged	Vanguard International Shares Index	66,675	10.12	10	0.12
Total International Equities		**132,743**	**20.15**	**20**	**0.15**
Total Equities		**521,550**	**79.17**	**80**	**-0.83**
Australian Fixed Income	Vanguard Australian Government Bond Index	**101,114**	**15.35**	**15**	**0.35**
Australian Cash & Accruals:					
BetaShares Australia High Interest Cash		16,677	2.53		
BT Cash Management Trust		11,034	1.67		
Accrued Interest & Dividends		2,452	0.37		
Accrued Franking Credits		5,970	0.91		
Total Cash & Accruals	BetaShares Australia High Interest Cash	**36,132**	**5.48**	**5**	**0.48**
Total Fixed Income & Cash		**137,246**	**20.83**	**20**	**0.83**
Total Value of SMF Assets					
Total Portfolio Value as Reported in BT Panorama		652,826			
Accrued Franking Credits		5,970			
Total Value of SMF Assets		**658,796**	**100**	**100**	

Portfolio Performance

Figure 3 reports the Fund's portfolio performance during 2018, 2019 and 2020 (year-to-date), as well as cumulative returns since inception. It is very pleasing to see a SMF portfolio return of 15.72% since inception, equating to outperformance of +1.15% in terms of compound returns against the 14.40% target return (comprising the 4.5% distribution rate plus realised inflation estimated using the CPI). This compares with underperformance of -10.33% as reported in the Mid-Semester Report, and in large part is due to the improving market conditions in the latter half of the semester. Of this +1.15% outperformance, 14.65% was accrued during 2019. Although the 2020 year-to-date return is -3.70%, this is a significant improvement compared to the -17.24% return in the Mid-Semester Report. The maintenance of a return surplus is important to the Fund as a buffer to preserve our investment and philanthropic objectives.

The Fund has also outperformed the reference portfolio benchmark by +0.11% since inception, estimated using compound (i.e. geometric) returns. The differences comprise of relative returns of -1.10% in 2018, -0.90% in 2019, and +2.14% in 2020. The sources of this relative performance are discussed both in the 'Portfolio Structure' section and in the performance attribution analysis below. We note that estimated performance versus the benchmark has been impacted by a change in the method for calculating accumulated returns as well as the reference portfolio return with respect to the rebalancing assumption. This is summarised below, and described in more detail in Appendix II.

Figure 3: Portfolio Performance: 10 April 2018 to 9 July 2020

Year	2018	2019	2020	Cumulative
Opening Date	*10 April 2018*	*1 January 2019*	*1 January 2020*	*10 April 2018*
Closing Date	*31 December 2018*	*31 December 2019*	*9 July 2020*	*9 July 2020*
PORTFOLIO VALUES				
Opening Portfolio Value in BT Panorama*	$615,079.04	$608,598.58	$705,485.10	
- Distribution Related to Prior Period	$0.00	-$27,746.21	-$32,186.49	
+ Amount Held by CBE, Offset Against Distribution	$0.00	$7,983.83	$0.00	
+ Accrued Franking Credits	$0.00	$3,235.76	$9,770.12	
Adjusted Opening Portfolio Value	**$615,079.04**	**$592,071.96**	**$683,068.73**	
Closing Portfolio Value in BT Panorama	$608,598.58	$705,485.10	$652,825.95	
+ Accrued Franking Credits	$3,235.76	$9,770.12	$5,969.78	
- Contributions	$0.00	$0.00	-$1,000.00	
Closing Total Portfolio Value	**$611,834.34**	**$715,255.22**	**$657,795.73**	
RETURNS				
SMF Portfolio Return (Based on Change in Value)	**-0.53%**	**20.81%**	**-3.70%**	**15.72%**
Target Return (Estimated as CPI + 4.5%) **	4.56%	6.16%	3.06%	14.40%
SMF Return vs. Target Return*	***-4.87%***	***13.80%***	***-6.56%***	***1.15%***
Reference Portfolio Return	0.58%	21.91%	-5.72%	15.60%
SMF Return less Reference Portfolio Return*	*-1.10%*	*-0.90%*	*2.14%*	*0.11%*

*   *Portfolio value for 10 April is estimated as at time of portfolio inception trades*

**   *An increase in the CPI of 0.34% is assumed for the June quarter of 2020*

*** *Estimated as: (1 + SMF Return) / (1 + Benchmark Return) - 1*

Attribution Analysis

Performance Attribution

The R&C team conducts performance attribution analysis to better understand the key drivers of performance versus the reference portfolio. R&C have made some changes to the calculations and their reporting, and hence we will spend some time explaining the changes as well as how the attribution analysis works. This analysis aims to benchmark performance at both total portfolio level as well as decisions made by the AA team against the reference portfolio, and to benchmark the AAE portfolio against the iShares Core S&P/ASX 200 ETF. Analysis of performance starts with estimating relative performance for the overall SMF portfolio, the AA portfolio, and the AAE portfolio versus their respective benchmarks. The relative return of the AA portfolio becomes the AA contribution, which is attributed into asset class contributions assuming that the AA team held their asset exposure via the benchmark ETFs. AAE portfolio returns versus the ASX200 ETF constitute the security selection contribution, which is attributed into contributions from individual stock holdings. The difference between the relative performance on the overall SMF portfolio and the sum of the AA and security selection contributions is divided into the administration fee charged by BT Panorama (which the SMF commenced paying in October 2019) and a rounding term. The latter reflects a number of elements that prevent attribution analysis from summing exactly, including interactions between AA and security selection, impacts from aggregating contributions over time, and a cash portfolio effect related to the fact that the SMF earns a lower return than the benchmark cash ETF on the cash management trust as well as zero returns on accruals. One of the effects of changing to using compound (i.e. geometric) returns as the basis of calculations has been to reduce the size of the time aggregation effect.

The latest analysis is displayed in Figure 4 (see below). The attribution of overall portfolio performance relative to the reference portfolio appears at the top. The second section of Figure 4 reports the AA contributions from each asset class, which we are reporting for the first time. The third section reports the contribution of each stock held in the AAE portfolio relative to the benchmark S&P/ASX200 ETF (i.e. security selection).

The asset allocation contribution since inception is +1.33%, which largely arises from 2020. The attribution analysis identifies that notable positive contributions arise from Australian equities (+0.40%), Australian fixed income (+0.64%) and cash (+0.27%). The main source of these contributions was the rebalancing undertaken on 23 March 2020, when around 5% of the portfolio was switched out of fixed income and cash and into Australian equities. This trade happened to occur on the day that the market bottomed prior to rallying by around 30%. Another influence is the change in the method of calculating reference portfolio returns on the assumption that it is rebalanced at the beginning of each year. This meant that the SMF portfolio benefited from rebalancing while the reference portfolio did not.

The AAE portfolio is estimated to have underperformed the ASX200 ETF benchmark by -2.05% compound since inception, which translates into a security selection contribution of -1.00%. Positive contributors to performance versus the ASX200 ETF include RIO (+0.92%), SHL (+1.96%), and TLS (+2.36%). BIN and WBC delivered negative contributions of -3.38% and -2.79% respectively, and Inghams Group (ING) returned a smaller negative contribution of -0.90%. The SMF believes that the long-term fundamentals remain intact for BIN, ING and WBC. If anything, we are keeping a close eye on stocks that are testing our valuations such as RIO and SHL. The calculations include any franking credits received, with the SMF returns and AAE contributions having benefitted from holding stocks that have paid relatively high fully-franked-dividends (notably RIO and TLS, with WBC halting dividend payments in 2020).

Figure 4: Performance Attribution: 10 April 2018 to 9 July 2020

Year	Contributions to Performance vs. Reference Portfolio			
Period Covered	**2018**	**2019**	**2020**	**Cumulative**
Opening Date	*10 April 2018*	*1 January 2019*	*1 January 2020*	*10 April 2018*
Closing Date	*31 December 2018*	*31 December 2019*	*9 July 2020*	*9 July 2020*
SMF Portfolio vs. Reference Portfolio				
Asset Allocation	0.17%	-0.28%	1.45%	1.33%
Security Selection - AAE Portfolio	-1.26%	-0.58%	0.86%	-1.00%
Contribution from Positions Held	-1.09%	-0.87%	2.30%	0.31%
Administration Fee – BT Panorama		-0.02%	-0.14%	-0.16%
Interaction, Aggregation & Cash Portfolio Effects	-0.01%	-0.01%	-0.02%	-0.04%
Total Relative Performance	**-1.10%**	**-0.90%**	**2.14%**	**0.11%**
Asset Allocation Attribution				
Australian Equities	0.01%	-0.04%	0.43%	0.40%
International Equities, Hedged	0.01%	-0.01%	-0.02%	-0.02%
International Equities, Unhedged	0.01%	0.01%	0.01%	0.04%
Australian Fixed Income	-0.02%	-0.11%	0.77%	0.64%
Cash and Accruals	0.16%	-0.15%	0.25%	0.27%
Aggregation Effect	0.00%	0.00%	0.00%	0.00%
AA Contribution to Total Portfolio Performance	*0.17%*	*-0.28%*	*1.45%*	*1.33%*
AAE Portfolio vs. S&P/ASX200 ETF				
iShares Core S&P/ASX 200 ETF	-0.01%	-0.04%	-0.05%	-0.10%
Bingo Industries	-3.21%	1.89%	-2.03%	-3.38%
Inghams Group	0.00%	-2.43%	1.56%	-0.90%
Rio Tinto	-0.04%	0.52%	0.43%	0.92%
Sonic Healthcare	0.00%	-0.11%	2.08%	1.96%
Telstra Corporation	0.62%	0.53%	1.19%	2.36%
Westpac Banking Corporation	0.00%	-1.49%	-1.32%	-2.79%
Aggregation Effect	-0.02%	-0.01%	-0.08%	-0.11%
Relative Performance vs. S&P/ASX200 ETF	**-2.66%**	**-1.14%**	**1.78%**	**-2.05%**
AAE Contribution to Total Portfolio Performance	*-1.26%*	*-0.58%*	*0.86%*	*-1.00%*

Changes to Attribution Analysis Methods

R&C have implemented several changes to the estimation of SMF portfolio performance relative to the reference portfolio and the attribution analysis in this report. In short, we have:

- Changed how we calculate returns over time by reporting and accumulating geometric (i.e. compounded) returns rather than arithmetic returns. See *Appendix II. 'Changes to Reporting Methods'* for a detailed explanation. The new calculation method applies to both portfolio-level returns and the asset allocation and security selection contributions. This has led to some modest differences in the 2018 and 2019 performance figures and their attribution relative to previous reports.

- Altered the rebalancing assumptions embedded in the calculation of the reference portfolio return, moving to the assumption that the reference portfolio is being rebalanced at the beginning of each year. Previously, the reference portfolio was assumed to be rebalanced (i.e. reset) coincidently with trade and cash flow events that impact on the SMF portfolio holdings or balance. See *Appendix II. 'Changes to Reporting Methods'* for further detail.

- Commenced reporting the AA attribution analysis, in addition to the AAE attribution. The AA attribution results were previously inconsequential under the original calculation method and a lack of active AA decisions. The AA contribution has become meaningful following two rebalancing decisions and the change in reference portfolio rebalancing assumptions mentioned above.

- Commenced reporting the administration fee charged by BT Panorama within the attribution analysis, noting that the SMF commenced paying monthly account fees in October 2019.

- Allocated trade-related effects to the individual securities, whereas previously these effects were embedded in the 'rounding' term within the attribution analysis. These trade effects comprise of brokerage incurred and the difference between prices at which securities are traded and the close price on the day of the trade.

Ulrika Yui Ting Li, R&C Analyst

Socially Responsible Investment (SRI) Report

The SMF portfolio is required to comply with the SMF SRI Policy, which is an extension of the ANU SRI Policy. The Policy is detailed at https://www.rsfas.anu.edu.au/media/3358945/ANU-SMF-SRI-Policy-v20-Approved-.pdf, and can be summarised as comprising five main conditions:

- Exclude companies that derive more than 20% of revenues from adult entertainment, alcohol, armaments, coal, gambling and tobacco.
- Hold an active equity portfolio with 30% less carbon intensity than the S&P/ASX 200.
- Avoid investments that are likely to cause an unacceptable level of 'social injury'.
- Favour investments that create 'social benefit'.
- Preference companies engaged in specific sustainable business activities and practices as determined by the Fund. The current preferences under each of the ESG categories are:
  - E. climate change action
  - S. equity, diversity and inclusion
  - G. corporate trustworthiness, including transparency, compliance and accountability.

Figure 5 reports the SRI compliance as of 9 July 2020 with regard to the carbon intensity of the active stocks investments within the AAE portfolio. Carbon intensity for the active stock positions are sourced from company reports, and calculated based on the annual carbon emissions (in tonnes) per $1 million of revenue earned. Carbon intensity for the S&P/ASX200 ETF is sourced from the 2019 ANU SRI Policy Report. We are pleased to confirm the SMF portfolio is fully compliant with the carbon intensity requirement (i.e. condition 1) with respect to its active stock positions. This is demonstrated by a -48.7% reduction in carbon intensity relative to the S&P/ASX 200. We also attest that the Fund is in compliance with the industry exclusion requirements (i.e. condition 2) with respect to its active stock positions.

Figure 5: Current Position of the AAE Component in Regard to SRI Compliance

	ASX200	BIN	ING	RIO	SHL	TLS	WBC	Total Active Stock Positions	Active Stock Positions vs. S&P/ASX200	Target Improvement	Margin
Weighting in AAE portfolio	47.0%	7.2%	9.1%	3.7%	11.8%	10.3%	10.9%	53.0%	-	-	-
Carbon intensity	236.1	213.9	284.6	430.7	10.8	50.6	5.0	121.2	-48.7%	-30.0%	18.7%

Conditions 3 through 5 of the SRI Policy are continuously evaluated by the Fund regarding existing active investments and throughout the candidate stock investment analyses. This can be exemplified through the Fund's decision to not pursue prospective stocks when the SMF team concludes that a company is likely to cause an unacceptable level of 'social injury' while producing minimal 'social benefit'. During recent semesters, the SMF has opted to not pursue several candidate stocks due to objectionable positions regarding net 'social injury' or 'benefit'. Once the AAE portfolio is fully invested in active stock positions, as against its current partial exposure to the S&P/ASX200 ETF, the AAE portfolio will progress towards complete compliance with the elements of the SMF SRI Policy.

As detailed in the Mid-Semester Report, the team undertook an SRI review on WBC following allegations that it may have breached the Anti-Money Laundering and Counter-terrorism Financing Act, 2006. An in-depth review concluded that there was sufficient confidence in WBC's management to negotiate the remediation process and limit the probability of similar SRI breaches occurring in the future. As such, the SMF remains comfortable retaining the WBC position. The IAC and the Director of RSFAS were informed of this decision on 8 March 2020.

The team further notes that an SRI review of RIO will be undertaken after the commencement of Semester 2, 2020 with respect to the detonation of explosives, which destroyed sites of aboriginal cultural significance. As the incident occurred in late-May, and thereby coinciding with the final week of the semester, the temporarily delayed review will allow the team to make a well-informed decision. The team believes this is appropriate given RIO has since paused work at the respective site and is liaising with the Puutu Kunti Kurrama Pinikura (PKKP) regarding its plans and the protection of other sites in the Pilbara region. The IAC and the Director of RSFAS were informed of this decision on 6 May 2020.

APPENDIX I. Team Activities and Structure

SMF Activities during Semester 1, 2020

SMF Student Team Make-up

- The SMF had 16 members during the semester, comprising seven seniors continuing from Semester 2, 2019 and nine juniors joining the Fund.
- The Fund will comprise of 20 members in Semester 2, 2020, including nine senior members from Semester 1 2020, and 11 junior members.
- Team compositions in Semester 2, 2019, Semester 1, 2020 and projected for Semester 2, 2020 are as follows:

Team / Position	Semester 2, 2019	Semester 1, 2020	Semester 2, 2020
Chief Investment Officer	1	1	1
Asset Allocation	3	3	4
Active Australian Equities	9	6	9
Risk and Compliance	3.5	3	3
Relationship	2.5	3	3
Total	*19*	*16*	*20*

SMF Meetings

- 11 weekly meetings were held throughout the semester on Mondays, 9am-12pm via Zoom.
- The SMF will celebrate its achievements and welcome new members with an online end-of-semester get-together on 24 July 2020 via Zoom.

SMF Investment Advisory Committee (IAC) Meetings and Subsequent Transactions

- Two IAC meetings occurred during the semester.
- The first IAC meeting was held on 4 May 2020, with the primary aim of discussing the revised SMF SRI Policy as a response to the breach with regard to the ESG ratings target that occurred as a consequence of Sustainalytics changing its calculation methods. All IAC members supported the new SMF SRI Policy, and the Policy was endorsed on 7 May.
- The second IAC meeting was held on 3 June 2020. Two key matters were covered. First, KMD was presented as a recommended stock for the AAE portfolio with 10% target weight, but was not endorsed. Second, the AAE team had planned to propose an increase in target weight of RIO from 3% to 10% within the AAE portfolio, funded via a reduction of the iShares Core S&P/ASX200 ETF. However, due to the emergence of an SRI issue related to the destruction of an indigenous historical site, the SMF team decided to put the proposal on hold and placed the company under SRI review to be undertaken once the second semester commences.
- Ross Blakers was appointed as an IAC member, with Nicole McMillan as his alternate. Both represent Whitehelm Capital, and respectively replace Debbie Saunders and Risman Cornelius from the same organisation.

Visitors and Guest Speakers

- Rod Chisholm, Founding Partner of ATLAS Infrastructure, Monday 2 March 2020.
- David Maywald, Australian Sustainable Finance Initiative, Thursday 9 April 2020.
- Heath Behncke, IAC member/Managing Director of Holon Global Investments, Monday 25 May 2020.

Major Reports and Actions

- *Bingo Rebalancing Report* was finalised on 22 March 2020, in response to the weight moving to more than +3% above target. The decision was not to rebalance back to the 6% target weight.
- An *Asset Allocation Rebalancing Report* dated 23 March was prepared in response to the total Australian equity weight moving to more than -3% and then subsequently -5% below target. The decision was made to rebalance back to target through buying Australian equities and reducing holdings in Australian fixed income and cash. The trades were completed on 23 March 2020.
- A *Westpac Rebalancing Report* was finalised on 27 April 2020, in response to the weight moving to more than -3% below target. The decision was made to rebalance back to the 10% target weight. The trade occurred on 27 April 2020, funded by the sale of the iShares Core S&P/ASX 200 ETF.
- The SMF SRI Policy was reviewed, and the related document titled *Socially Responsible Investment Policy v2.0* was endorsed by the IAC on 7 May 2020. See 'Spotlight' and 'SRI Report' for details.
- An *Asset Allocation Rebalancing Report* dated 9 June 2020 was prepared in response to the total weight in equities moving to more than +3% above target, matched by an underweighting in fixed income and cash. The decision was made to rebalance back to target. The trades occurred on 9 June 2020, and included selling of Australian equities (via

the iShares Core S&P/ASX200 ETF held within the AA component, leaving the AAE portfolio intact) and international equities, matched by purchases of Australian fixed income and an increase in cash.

- *Investment Recommendation Reports* on *KMD* and *RIO* were created in support of investment recommendations for presentation at the IAC meeting on 3 June 2020.

Other Notable Items

- A distribution of $32,186.49 was made on 8 January 2020. The distribution was funded out of cash and the sale of a portion of the holdings in the Vanguard MSCI Index International Shares ETFs (hedged and unhedged) on 6 January 2020, with the latter acting to reduce an overweight position in international equities versus target.
- A transfer of $7092.22 was made from the University to the SMF BT Panorama account on 6 March 2020, comprising the following:
    - Franking credit rebates received from the Australian Tax Office of $6,092.22.
    - Donations totalling $1,000 that were being held by CBE. This amount reflected three separate donations received during 2018 and 2019.
- Design of the SMF t-shirt was finalised and is ready for production in the next semester.
- The first SMF promotional video was produced.
- The SMF LinkedIn page is now being regularly updated with a new LinkedIn strategy.

SMF Team Membership

Members for Semester 1, 2020   New Members for Semester 2, 2020

Chief Investment Officer (CIO)
William Ranson-Smith

Risk and Compliance (R&C) Team

Ash White	Chief Risk Officer (CRO)	Saliendra Sanku	R&C Team
Charya Kannangara	Senior Analyst	Isabel Gray	R&C Team (SRI focus)
Ulrika Yui Ting Li	Analyst		

Asset Allocation (AA) Team

Rocky Lagudi	Team Leader	Zhenyu (Alicia) Sun	AA Team
Eric Gittleman	Analyst		
Nicolas Collings	Analyst		

Active Australian Equities (AAE) Team

Todd O'Dea	Team Leader	Josh Campbell	AAE Team
Shengchang (Albert) Zhang	Senior Analyst	Albert Lake	AAE Team
Bernice Choi	Analyst	Yao Xiong	AAE Team
Michael Oates	Analyst	Sida Li	AAE Team
Matthew Pham	Analyst	Shallini Arokiasamy Rajkumar	AAE Team
Angus Lloyd	Analyst (SRI focus)	Qing (Julie) Zhu	AAE Team

Relationship Team (RT)

Yanfei (Victoria) Rao	Relationship Manager	Arnav Chopra	Relationship Team
Abhay Madan	Relationship Officer	Qifan (Cheryl) Yang	Relationship Team
Chenfan (Winnie) Wei	Relationship Officer		

Convenors

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

APPENDIX II. Changes to Reporting Methods

Further Explanation of Changes to the Attribution Analysis

This appendix describes some changes to the method of attributing performance relative to the reference portfolio that have been instigated by R&C in this report. The changes do not affect the 'official' total return generated by the SMF over the course of a year, which is calculated based on the change in the portfolio value adjusted for cash inflows (i.e. contributions) and outflows (i.e. the distribution). However, the changes mentioned below do impact on how we calculate the reference portfolio return, and the contributions to performance versus the reference portfolio. The changes have led to some revisions to the estimated total relative performance, and the interaction and aggregation effect in the attribution.

As background, R&C divides the year into sub-periods based around events that impact on the portfolio structure, such as trades or cash flows into (i.e. contributions) or out of (i.e. distributions) the Fund. The portfolio weights used in estimating portfolio performance and its attribution are refreshed at these points. Previously, the reference portfolio weights were also reset (i.e. rebalanced) at the same time. The first change is to *not* reset the reference portfolio weights for each sub-period, but rather to reset them only at the beginning of each year. The effect is to change the reference portfolio rebalancing 'strategy' against which the SMF portfolio is being benchmarked. The previous method benchmarked the SMF against a reference portfolio that rebalanced at *ad hoc* times, i.e. in conjunction with changes to SMF portfolio. This first change means that the Fund is being benchmarked against a strategy where an investment is made in the reference portfolio at the beginning of the year and held throughout the year, without being rebalanced. Arguably this is more consistent with how most indices are calculated, i.e. the weights of the assets in the benchmark float around with the performance. This change affects the asset allocation contributions, which are of larger magnitude than previously reported. It also means that the value added (or subtracted) by SMF rebalancing decisions appears in the relative performance of the SMF portfolio versus the reference portfolio.

The second change made is to base the attribution analysis over the year on accumulated compound (geometric) returns, rather than accumulating arithmetic returns. The move in this direction was motivated by the high market volatility encountered during the COVID-19 crisis of 2020, which was leading to accumulated contributions that were quite inconsistent with overall portfolio performance. The revised approach generates a better estimate of the contributions generated over the year, and reduces the time aggregation 'rounding' term considerably. The downside is that it sacrifices the precisely additive nature of the attribution calculations. Using arithmetic returns allows contribution from positions held to sum up to the difference in portfolio and benchmark returns within a sub-period, and this does not occur when geometric returns are used as the basis of calculation.

The effect of this change can be further explained with a simple-two period example. Assume that the ASX200 return is -25% in period 1 and +25% in period 2. The SMF AAE portfolio returns are -23% and +24% respectively. This implies that AAE outperformed its benchmark by +2% in period 1, followed by underperformance by -1%. Arithmetic calculations suggest net outperformance of +1% over the two periods, i.e. +2%-1%. However, the cumulative return over the two periods for the ASX200 is -6.3%, calculated by $((1 - 0.25) * (1 + 0.25) - 1)$, while for the AAE portfolio the cumulative return is -4.5%, calculated by $((1 - 0.23) * (1 + 0.24) - 1)$. This implies outperformance by +1.7%, rather than +1%. Under the change to compound returns, an outperformance of +1.7% rather than +1% is reported. Indeed, during the volatile markets in the year to date, at one stage the arithmetic calculations suggested that the AAE contribution was negative, while it was meaningfully positive based on comparing the compound returns on the AAE portfolio and the ASX200 ETF. It was decided that the geometric, rather than the arithmetic, returns were more representative of the cumulative wealth generated by the AAE portfolio relative to investing in the ASX200 ETF.

We believe that the revised methods provide a superior evaluation of SMF performance versus the benchmark, noting that it is accumulated portfolio values over time that are the primary concern. We also note that while these changes boosted reported performance versus the reference portfolio in the current instance relative to what would have been reported otherwise, they are just as likely to depress as enhance the relative performance of the SMF over time. That is, we are not building in an inherently positive bias. Finally, addressing these issues has demonstrated how multi-period performance attribution is not a precise art, but rather that choosing the most appropriate method involves an element of subjective judgement.

ANU SMF / RSFAS /CBE
+61 2 6125 4626
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/20409568/admin/

The Australian National University
Canberra ACT 2601 Australia
www.anu.edu.au
CRICOS Provider No. 00120C