# Heritage and Stabilisation Fund

## Quarterly Investment Report

July – September 2018

Central Bank of Trinidad & Tobago

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[1] This section includes economic developments to October 21, 2018.

## EXECUTIVE SUMMARY

- In the third calendar quarter of 2018, the Heritage and Stabilisation Fund (HSF) posted a return of 1.81 per cent compared with a gain of 1.54 per cent for its Strategic Asset Allocation benchmark. While all four mandates generated positive absolute returns, the main driver of performance was the fund's exposure to United States (US) equity markets.

- On a relative performance basis, the two Fixed Income portfolios outperformed their respective benchmarks. However, the two Equity mandates underperformed their respective benchmarks over the period.

- The total net asset value of the HSF as at the end of September 2018 was US$5,965.8 million, compared with US$5,863.1 million at the end of the previous quarter. Of this total, the investment portfolio was valued at US$5,965.7 million, while the remaining portion (US$0.18 million) was held in cash to meet the day-to-day expenses that arise from the management of the Fund.

- During the quarter, global growth stabilized, albeit at a slower pace. Output in the United States (US) was robust, supported by broad based gains in corporate investment, consumer consumption and positive developments in the labour market. However, other developed economies were negatively impacted by trade concerns and regional political risks which detracted from export orders and manufacturing activity.

- In the financial markets, investors were concerned about rising trade protectionism, political uncertainty in Europe as well as the impact of tightening monetary policy in the United States. These risks created a challenging environment for Non-US developed market equities which had a mixed performance over the quarter. However, US equity markets were bolstered by considerable growth in corporate earnings, driven in part by the tax cuts introduced earlier this year.

- Meanwhile, in the fixed income market, US Treasury yields rose over the period. Nonetheless, modest positive returns were achieved as higher interest rates helped to offset the decline in prices.

**Table 1**
**Absolute Quarterly Returns**
**For the period July – September 2018**
**/per cent/**

| | Absolute Return HSF | Absolute Return Benchmark |
|---|---|---|
| **Composite Portfolio** | **1.81** | **1.54** |
| US Short Duration Fixed Income | 0.14 | 0.05 |
| US Core Domestic Fixed Income | 0.18 | 0.02 |
| US Core Domestic Equity | 7.50 | 7.54 |
| Non-US Core International Equity | 0.96 | 1.23 |

**Table 2**
**Contributions to Quarterly Returns**
**For the period July - September 2018**
**/per cent/**

| | 3 Months Weighted Return as at 30-Sep-2018 | |
|---|---|---|
| | HSF | Benchmark |
| **Composite Portfolio** | **1.81** | **1.54** |
| US Short Duration Fixed Income | 0.03 | 0.01 |
| US Core Domestic Fixed Income | 0.07 | 0.01 |
| US Core Domestic Equity | 1.53 | 1.30 |
| Non-US Core International Equity | 0.18 | 0.22 |

NB: Differences in totals are due to rounding.

## SECTION 1 – INTERNATIONAL ECONOMIC ENVIRONMENT

During the third quarter of 2018, economic growth in the United States (US) continued to be the strongest among the developed countries. While activity declined compared to the robust second quarter expansion of 4.2 per cent, domestic economic fundamentals remained solid due to strong consumer consumption and corporate investment. Moreover, labour markets tightened further, with the unemployment rate falling to a multi-decade low of 3.7 per cent. Elsewhere, the United Kingdom (UK) and the Eurozone economies expanded at a moderate pace, despite the political risk in the region and the ongoing tensions resulting from the Brexit negotiations. Meanwhile, Japan's economy lost momentum towards the end of the period, as the ongoing trade war between the US and China weakened export demand. In addition, the country contended with a series of natural disasters during the quarter which resulted in disruptions to consumer and business activity.

Over the three months to September, prices somewhat stabilized in the US and UK, with core inflation either at or above the target levels established by their respective central banks. However, in the Eurozone and Japan, while inflation improved over the quarter, pricing pressure remains relatively subdued at close to 1.0 per cent.

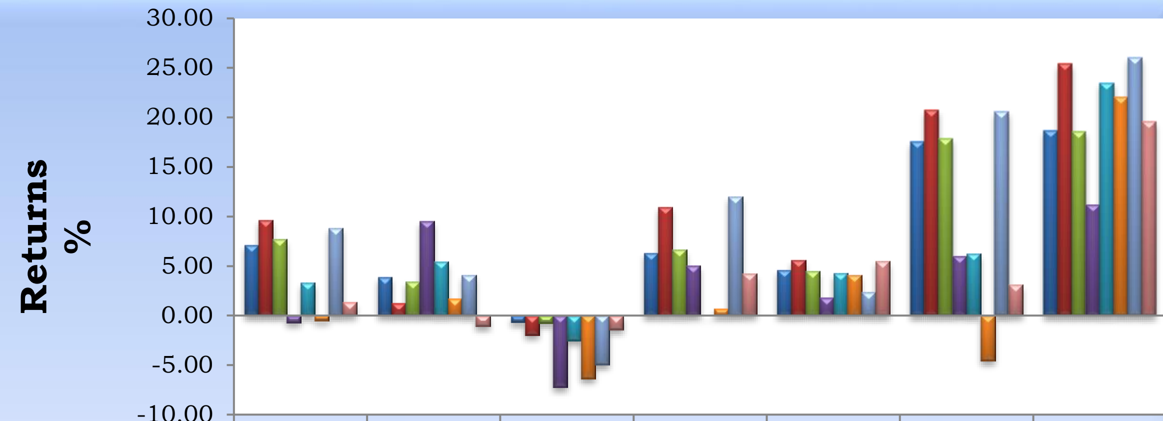
On the monetary policy front, the US Federal Reserve further reduced its accommodative stance by increasing the federal funds rate by 25 basis points to the range 1.50 per cent to 1.75 per cent at its September meeting. In the United Kingdom, the Bank of England (BOE) raised its benchmark interest rate by a quarter of a percentage point, from 0.50 per cent to 0.75 per cent in August. This was its first rate hike for 2018 and the second increase since the financial crisis. Meanwhile, the European Central Bank (ECB) and Bank of Japan (BOJ) maintained its benchmark interest rates during the period. While the BOJ is likely to continue to provide its current level of accommodation, the ECB is scheduled to end its bond purchase program by December 2018 and has indicated that it will consider raising rates near the end of summer 2019.

## SECTION 2 – CAPITAL AND MONEY MARKET REVIEW

Uncertainty stemming from trade tensions between the US and China as well as the ongoing Brexit negotiations continued into the third quarter of 2018. Moreover, financial markets contended with risks stemming from Italy's proposed budget deficit as well as the potential contagion effects of Turkey's debt crisis on the European Banking sector. Despite a range of downside risks, market volatility was lower on average over the period, as markets appeared to be less sensitive to the political rhetoric. Market volatility in the US, as measured by the Chicago Board Options Exchange Volatility Index (VIX), declined over the third quarter of 2018; the VIX averaged 12.91 points, compared with 15.30 points in the previous quarter. Similarly, the European measure of investor anxiety, the Euro Stoxx 50 Volatility Index (VSTOXX), fell to an average of 14.23 points in the three months to September, from an average of 14.92 points over the second quarter.

While the ongoing trade war between the US and China remained a concern over the period, US equity markets delivered positive returns against the backdrop of robust economic growth and strong corporate earnings data. The US Standard and Poor's (S&P) 500 index rose 7.71 per cent in the third quarter of 2018, with broad based gains across all sectors. Meanwhile, in Asia, a weaker yen helped to support Japanese equities, with the Nikkei 225 returning 8.82 per cent over the quarter. However, in Europe, heightened political risk resulted in a broad "risk-off" sentiment in the region. Overall, the MSCI EAFE index, which gauges the performance of non-US Developed equity markets, managed to end the period modestly higher, returning 1.38 per cent when measured in US dollars.

**Figure 1**
**Total Returns on Equity Indices**
**/Per cent/**

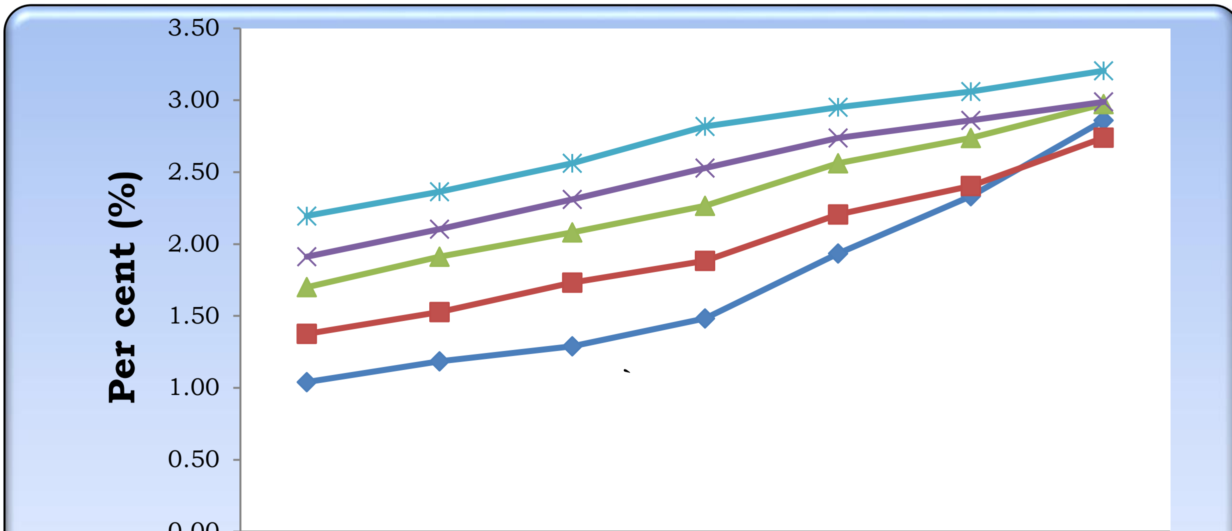



| | QTR Ended Sep-18 | QTR Ended Jun-18 | QTR Ended Mar-18 | QTR Ended Dec-17 | QTR Ended Sep-17 | FY 17/18 | FY 16/17 |
|---|---|---|---|---|---|---|---|
| Russell 3000 | 7.12 | 3.89 | -0.64 | 6.33 | 4.57 | 17.57 | 18.70 |
| Dow Jones | 9.63 | 1.26 | -1.96 | 10.96 | 5.58 | 20.76 | 25.45 |
| S&P 500 | 7.71 | 3.43 | -0.76 | 6.64 | 4.48 | 17.90 | 18.60 |
| FTSE 100 - UK | -0.70 | 9.51 | -7.20 | 5.03 | 1.82 | 6.00 | 11.21 |
| CAC 40 - France | 3.36 | 5.47 | -2.51 | -0.01 | 4.28 | 6.25 | 23.49 |
| DAX 30 - Germany | -0.48 | 1.73 | -6.35 | 0.69 | 4.09 | -4.54 | 22.05 |
| Nikkei 225 - Japan | 8.82 | 4.10 | -4.94 | 12.00 | 2.38 | 20.61 | 26.07 |
| MSCI EAFE | 1.38 | -1.06 | -1.39 | 4.27 | 5.47 | 3.13 | 19.61 |

Source: Bloomberg

In the US fixed income market, Treasury yields increased over the quarter given expectations for tighter monetary policy. The Federal Reserve raised its benchmark interest rate in September and the 2- year yield rose 29 basis points to 2.82 per cent, while the 10-year yield gained 20 basis points to end the quarter at 3.06 per cent. The yield curve continued to flatten over the quarter as the spread between the 2-year and 10-year portion of the curve fell from 33 basis points to 24 basis points.

**Figure 2**
**US Treasury Curve**
**/Per Cent/**

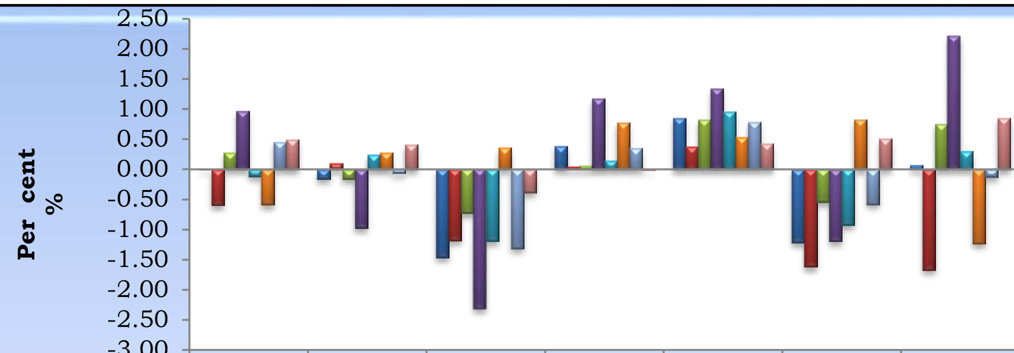



| | 3 Month | 6 Month | 1 Year | 2 Year | 5 Year | 10 Year | 30 Year |
|---|---|---|---|---|---|---|---|
| Sep-17 | 1.04 | 1.19 | 1.29 | 1.48 | 1.94 | 2.33 | 2.86 |
| Dec-17 | 1.38 | 1.53 | 1.73 | 1.88 | 2.21 | 2.41 | 2.74 |
| Mar-18 | 1.70 | 1.91 | 2.08 | 2.27 | 2.56 | 2.74 | 2.97 |
| Jun-18 | 1.91 | 2.10 | 2.31 | 2.53 | 2.74 | 2.86 | 2.99 |
| Sep-18 | 2.20 | 2.36 | 2.56 | 2.82 | 2.95 | 3.06 | 3.21 |

Source: Bloomberg

The broader US fixed income market, as represented by the Bloomberg Barclays US Aggregate Bond Index, earned a modest 0.02 per cent in the third quarter of 2018.
The rising interest rate environment would have resulted in negative returns in the US Treasury and G-7 Sovereign Bond (Hedged) sectors, which lost 0.59 per cent and 0.58 per cent respectively. However, the less interest rate sensitive sectors such as Asset Backed Securities and Commercial Mortgage-Backed Securities delivered positive returns of 0.50 per cent and 0.46 per cent respectively. Moreover, the US Corporate Investment Grade Sector delivered 0.97 per cent for the quarter as it benefitted from strong corporate earnings results and tightening credit spreads.

**Figure 3**
**Returns on Fixed Income Indices**
**/Per Cent/**



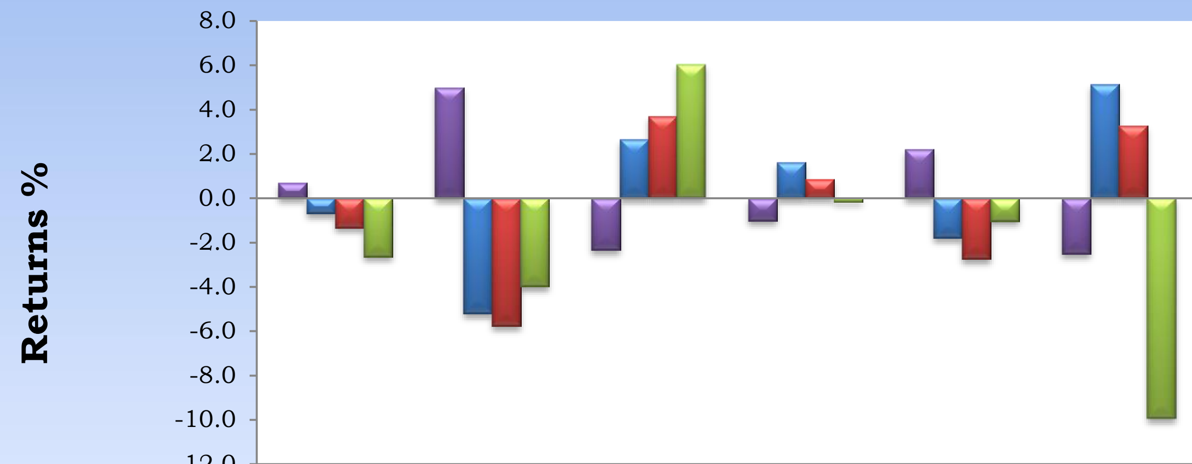

| | QTR Ended Sep-18 | QTR Ended Jun-18 | QTR Ended Mar-18 | QTR Ended Dec-17 | QTR Ended Sep-17 | FYTD Sep-18 | FYTD Sep-17 |
|---|---|---|---|---|---|---|---|
| Barclays US Aggregate | 0.02 | -0.16 | -1.46 | 0.39 | 0.85 | -1.22 | 0.07 |
| US Treasury | -0.59 | 0.10 | -1.18 | 0.05 | 0.38 | -1.62 | -1.67 |
| Agencies | 0.28 | -0.16 | -0.72 | 0.06 | 0.82 | -0.54 | 0.75 |
| US Corporate | 0.97 | -0.98 | -2.32 | 1.17 | 1.34 | -1.19 | 2.21 |
| US MBS | -0.12 | 0.24 | -1.19 | 0.15 | 0.96 | -0.92 | 0.30 |
| G7 Bonds (Hedged) | -0.58 | 0.27 | 0.36 | 0.78 | 0.53 | 0.83 | -1.23 |
| US CMBS | 0.46 | -0.06 | -1.31 | 0.35 | 0.79 | -0.58 | -0.13 |
| US ABS | 0.50 | 0.41 | -0.39 | -0.01 | 0.42 | 0.51 | 0.86 |

Source: Bloomberg

In currency markets, the US Dollar continued to appreciate against other major currencies. The Euro and Pound fell 0.68 per cent and 1.33 per cent respectively against the US dollar given the debate over Italy's proposed budget deficit and the possibility of the UK exiting the European Union without an agreement. The Japanese Yen also depreciated 2.63 per cent against the US dollar over the period due to the growing divergence between the monetary policies of the Bank of Japan and the Fed. The Dollar Spot Index (DXY), which measures the strength of the US dollar against a basket of key currencies, gained 0.70 per cent over the quarter.

**Figure 4**

**Foreign Exchange Returns for Major Currencies vis-à-vis the US Dollar /Per Cent/**




| | QTR Ended Sep-18 | QTR Ended Jun-18 | QTR Ended Mar-18 | QTR Ended Dec-17 | FY 17/18 | FY 16/17 |
|---|---|---|---|---|---|---|
| DXY CURNCY | 0.70 | 5.00 | -2.33 | -1.02 | 2.21 | -2.50 |
| EURUSD CURNCY | -0.68 | -5.19 | 2.66 | 1.62 | -1.78 | 5.15 |
| GBPUSD CURNCY | -1.33 | -5.77 | 3.71 | 0.86 | -2.74 | 3.28 |
| JPYUSD CURNCY | -2.63 | -3.99 | 6.03 | -0.15 | -1.02 | -9.94 |

Source: Bloomberg

## SECTION 3 – PORTFOLIO PERFORMANCE

### *Strategic Asset Allocation*

During the period July to September 2018, the asset classes of the Fund deviated from their Strategic Asset Allocation (SAA) but their weights all remained within the permitted (+/- 5 per cent) range. The approved SAA for the HSF investment portfolio is as follows:

| | | |
|---|---|---|
| **i.** | ***US Short Duration Fixed Income Mandate*** | *25.0%* |
| **ii.** | ***US Core Domestic Fixed Income Mandate*** | *40.0%* |
| **iii.** | ***US Core Domestic Equity Mandate*** | *17.5%* |
| **iv.** | ***Non US Core International Equity Mandate*** | *17.5%* |

At the end of September 2018, the equity portion of the Fund continued to carry an overweight position while the exposure to fixed income securities had a corresponding underweight allocation. At the asset class level, the US Core Domestic Equity mandate had the largest overweight of 4.07 per cent while the US Core Domestic Fixed Income mandate had the largest underweight position amounting to 2.79 per cent.

The total net asset value of the Fund as at the end of September 2018 was US$5,965.8 million, compared with US$5,863.1 million at the end of the previous quarter. Of this total, the investment portfolio was valued at US$5,965.7 million, while the remaining portion was held in cash to meet the day-to-day expenses that arise from the management of the Fund. The Fund's target asset allocation and the portfolio weightings as at September 30, 2018 are shown in Table 3 below.

**Table 3**
**Portfolio Composition relative to the Approved SAA**
**/per cent/**

| | Asset Class | | *Dec-17* | *Mar-18* | *Jun-18* | *Sep-18* |
|---|---|---|---|---|---|---|
| | | *Target Weight SAA* | *Actual % of Fund* | *Actual % of Fund* | *Actual % of Fund* | *Actual % of Fund* |
| *Portfolio Weights* | US Short Duration Fixed Income | 25.00 | 20.82 | 22.65 | 22.64 | 22.27 |
| | US Core Domestic Fixed Income | 40.00 | 36.99 | 37.89 | 37.81 | 37.21 |
| | US Core Domestic Equity | 17.50 | 21.62 | 19.84 | 20.43 | 21.57 |
| | Non-US Core International Equity | 17.50 | 20.57 | 19.62 | 19.12 | 18.95 |

Totals may not sum to 100 due to rounding.

***Performance of the Investment Portfolio***

During the third quarter of 2018, the HSF gained 1.81 per cent compared with a return of 1.54 per cent for its SAA benchmark[2]. The main driver of the 27 basis points outperformance was the overweight allocation to the US Core Domestic Equity mandate compared to the SAA. The asset class delivered the largest absolute return for the period. Other incremental gains were derived from the US Core Fixed Income portfolios which outperformed relative to its benchmark.

The **US Core Domestic Equity** mandate returned the highest absolute performance for the HSF during the third quarter of 2018, earning 7.50 per cent. However, it underperformed its benchmark, the Russell 3000 ex Energy index, by 4 basis points. Although stock selection within the consumer discretionary and healthcare sectors benefitted the portfolio, holdings in the Information Technology and Industrials sectors

[2] The SAA benchmark is a blended benchmark which comprises, Bank of America/Merrill Lynch US Treasury 1-5 Years Index (25%), Bloomberg Barclays US Aggregate Bond Index (40%), Russell 3000 ex Energy Index (17.5%), and MSCI EAFE ex Energy Index (17.5%).

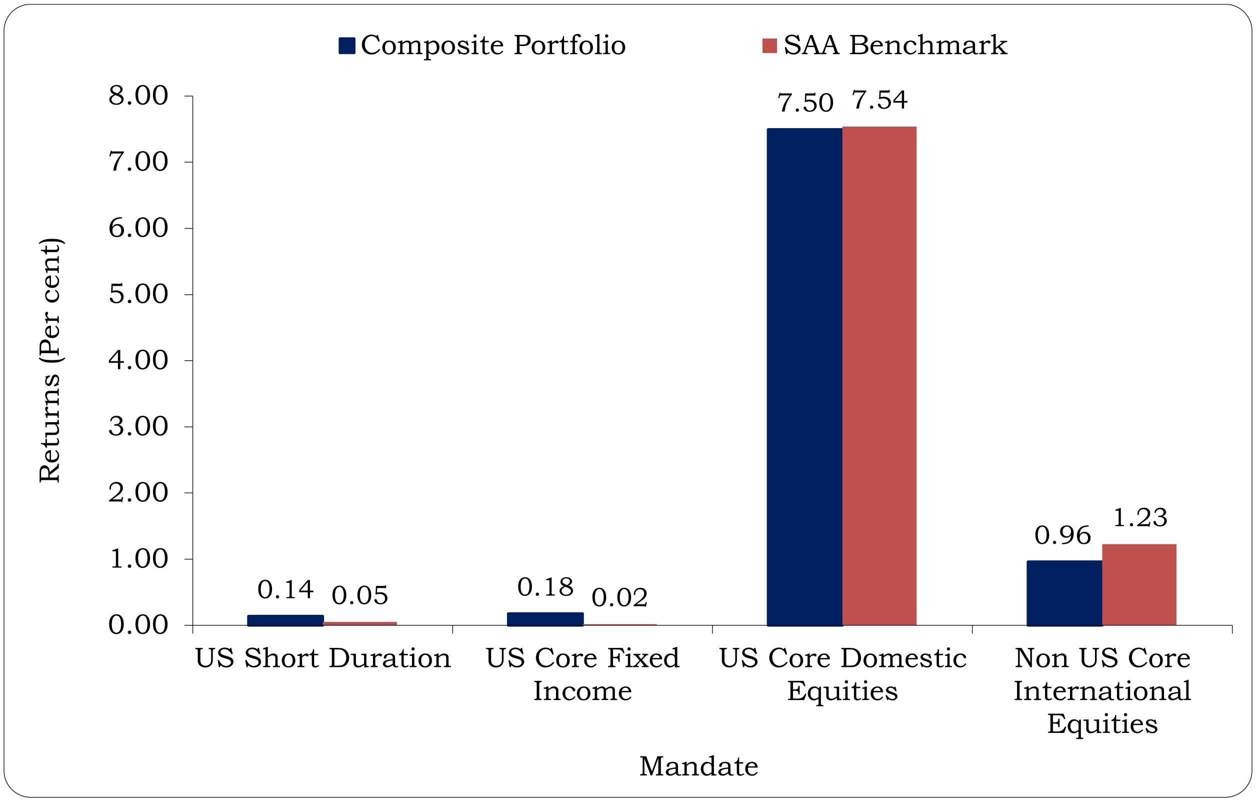
dragged down portfolio returns. The net asset value of this mandate as at September 30, 2018 was **US$1,286.9 million**, compared with US$1,197.9 million three months earlier.

The **Non-US Core International Equity** mandate generated a modest return of 0.96 per cent during the third quarter of 2018, underperforming its benchmark, the MSCI EAFE ex Energy index, which gained 1.23 per cent. While stock selection positively contributed to performance, the overweight allocation to mid-capitalization companies within the benchmark detracted from returns. The mandate's net asset value at the end of September 2018 was **US$1,130.5 million**, compared with US$1,120.9 million at the end of June 2018.

The **US Short Duration Fixed Income** mandate posted a gain of 0.14 per cent during the third quarter, compared with a return of 0.05 per cent for its benchmark, the Bank of America Merrill Lynch US Treasury 1-5 year index. The increase in US short-term Treasury yields over the quarter detracted from absolute performance, however, the portfolio would have benefitted from its lower duration compared to the benchmark as well as its exposure to Supranationals. The net asset value of this mandate as at the end of September 2018 was **US$1,328.7 million,** compared with US$1,327.3 million at the end of June 2018.

The longer duration **US Core Domestic Fixed Income** mandate returned 0.18 per cent, outperforming its benchmark, the Barclays Capital US Aggregate Bond index, which was relatively flat at 0.02 per cent over the quarter. The relatively better performance of the portfolio occurred on account of its overweight exposure to the Consumer Asset Backed sector and the Investment Grade Corporate Credit sector which benefitted from spread compression. The net asset value of this mandate at the end of September 2018 was **US$2,219.6 million**, compared with US$2,216.4 million three months earlier.

**Figure 5**
**Absolute Returns by Mandate**
**For the period July – September 2018**
**/per cent/**



## SECTION 4 – COMPLIANCE AND PORTFOLIO RISKS

### *Compliance*

During the third quarter of 2018, there was one breach of the investment guidelines. This arose as a corporate action resulted in "spin-off" shares and the divested company was subsequently classified as part of the energy sector. This holding was sold in October 2018 and the portfolio is back in compliance with the investment guidelines.

### *Portfolio Risks*

The main risks for the HSF portfolio are Credit, Concentration, Interest Rate, and Currency risks. The following paragraphs give a description of how these risks are mitigated.

### *Credit Risk*

Within the **money market portion** of the Fund, Credit Risk is minimized by the strict adherence to the following standards: (i) all counterparties must have a minimum credit rating of either A-1 from the Standard and Poor's rating agency or P-1 from Moody's; and (ii) a maximum exposure limit for counterparties of no more than 5.0 per cent of the market value of the portfolio.

For **fixed income instruments**, Credit Risk is mitigated by the use of credit concentration limits as well as minimum credit quality ratings. Bonds must have an investment grade rating as defined by Standard and Poor's, Moody's or Fitch. Should the required ratings on an existing fixed income security fall below the minimum standards, the security must be sold within an agreed upon timeframe. Table 4 below shows the Average Credit Quality of the US Short Duration and US Core Fixed Income Portfolios as at September 30, 2018.

**Table 4**
**Average Credit Rating**

| Mandate | Portfolio | Benchmark |
|---|---|---|
| **US Short Duration** | **AA+** | **AA+** |
| **US Core Fixed Income** | **AA** | **AA** |

***Concentration Risk***

Concentration or Diversification Risk is minimised by investing across various asset types. The portfolio is currently invested across four asset groupings as follows - US Short Duration Fixed Income, US Core Domestic Fixed Income, US Core Domestic Equity and Non-US Core International Equity. The Asset classes in which the Fund invests react differently under a given market condition. As such, it is likely that when one asset class has strong returns, another may have lower returns. The Fund's investments are also diversified across a number of assets with the aim of securing a positive return over a range of market conditions and lowering the total risk of the portfolio. In addition, Concentration Risk is minimized within asset groups. For the **equity portfolios**, this Risk is managed by imposing a maximum percentage holding of 3.0 per cent of any security's outstanding shares, as well as a maximum sector deviation relative to the benchmark of 5.0 per cent.

***Interest Rate Risk***

Interest Rate Risk is managed using a weighted average effective duration limit on the respective portfolios, with an allowable range of one (1) year longer or shorter than the weighted average duration of the respective benchmark. Table 5 shows the weighted average duration for the US Short Duration and US Core Domestic Fixed Income portfolios as at September 30, 2018.

**Table 5**
**Weighted Average Duration**
**/Years/**

| **Mandate** | **Portfolio** | **Benchmark** |
|---|---|---|
| **US Short Duration** | **2.46** | **2.64** |
| **US Core Domestic Fixed Income** | **5.80** | **5.91** |

***Currency Risk***

Currency Risk is managed by containing and managing the exposure to non-US dollar instruments. For the Fixed Income and US Core Domestic Equity mandates, no more than 10 per cent of the market value of the portfolio can be invested in securities which are denominated in currencies other than the US Dollar. The Non-US Core International Equity Portfolio is comprised primarily of non-US dollar denominated securities, and the Fund accepts the currency risk inherent in the relevant benchmark. For this mandate, currency hedging is permitted up to 15 per cent of the market value of the portfolio using the US dollar as the base currency. At the end of September 2018, the currency exposure for this portfolio was 97 per cent of its market value. During the quarter, all the portfolios were within their respective limits.

# Appendix I

## HSF Portfolio - Historical Performance

| Quarter End | Current Returns | | | Financial YTD | | | Annualised Return Since Inception | | |
|---|---|---|---|---|---|---|---|---|---|
| | Portfolio | Benchmark | Excess | Portfolio | Benchmark | Excess | Portfolio | Benchmark | Excess |
| | % | % | bps | % | % | bps | % | % | bps |
| **FY 2010** | | | | | | | | | |
| December | 0.96 | 0.89 | 6.65 | 0.96 | 0.89 | 6.65 | 3.72 | 3.78 | -6.16 |
| March | 1.61 | 1.68 | -6.20 | 2.59 | 2.58 | 0.49 | 3.95 | 4.03 | -7.76 |
| June | -1.83 | -1.89 | 6.05 | 0.71 | 0.64 | 6.69 | 3.07 | 3.12 | -5.18 |
| September | 5.33 | 5.08 | 24.73 | 6.07 | 5.75 | 31.93 | 4.37 | 4.35 | 2.06 |
| **FY 2011** | | | | | | | | | |
| December | 2.29 | 2.21 | 8.15 | 2.29 | 2.21 | 8.15 | 4.70 | 4.65 | 4.13 |
| March | 1.62 | 1.54 | 7.24 | 3.94 | 3.79 | 15.68 | 4.81 | 4.76 | 5.72 |
| June | 1.88 | 1.81 | 6.68 | 5.89 | 5.67 | 22.91 | 4.98 | 4.91 | 7.00 |
| September | -4.82 | -4.28 | -53.66 | 0.79 | 1.14 | -34.89 | 3.57 | 3.63 | -6.29 |
| **FY 2012** | | | | | | | | | |
| December | 2.74 | 3.03 | -28.52 | 2.74 | 3.03 | -28.52 | 3.97 | 4.08 | -12.00 |
| March | 5.04 | 4.46 | 57.50 | 7.92 | 7.63 | 29.29 | 4.78 | 4.78 | -0.08 |
| June | -0.90 | -0.60 | -30.42 | 6.95 | 6.98 | -3.72 | 4.37 | 4.43 | -6.13 |
| September | 3.53 | 2.98 | 55.03 | 10.73 | 10.18 | 55.02 | 4.68 | 4.65 | 2.07 |
| **FY 2013** | | | | | | | | | |
| December | 1.49 | 1.45 | 4.11 | 1.49 | 1.45 | 4.11 | 4.88 | 4.83 | 4.76 |
| March | 3.29 | 2.90 | 39.19 | 4.82 | 4.38 | 44.01 | 5.23 | 5.12 | 11.20 |
| June | -0.30 | -0.69 | 39.05 | 4.51 | 3.66 | 84.64 | 4.97 | 4.80 | 17.26 |
| September | 3.95 | 3.47 | 47.35 | 8.63 | 7.26 | 137.06 | 5.40 | 5.16 | 24.01 |
| **FY 2014** | | | | | | | | | |
| December | 3.95 | 2.66 | 129.38 | 3.95 | 2.66 | 129.38 | 5.80 | 5.37 | 42.67 |
| March | 1.46 | 1.30 | 16.28 | 5.47 | 4.00 | 147.73 | 5.80 | 5.37 | 43.52 |
| June | 2.56 | 2.30 | 25.90 | 8.17 | 6.38 | 178.44 | 5.96 | 5.51 | 45.76 |
| September | -0.48 | -0.73 | 25.31 | 7.65 | 5.60 | 204.51 | 5.69 | 5.22 | 47.69 |
| **FY 2015** | | | | | | | | | |
| December | 2.25 | 1.63 | 62.27 | 2.25 | 1.63 | 62.27 | 5.81 | 5.26 | 54.46 |
| March | 2.29 | 2.25 | 3.95 | 4.60 | 3.92 | 67.71 | 5.92 | 5.39 | 53.34 |
| June | -0.02 | -0.51 | 49.43 | 4.58 | 3.39 | 119.07 | 5.74 | 5.16 | 57.93 |

| Quarter End | Current Returns | | | Financial YTD | | | Annualised Return Since Inception | | |
|---|---|---|---|---|---|---|---|---|---|
| | Portfolio | Benchmark | Excess | Portfolio | Benchmark | Excess | Portfolio | Benchmark | Excess |
| | % | % | bps | % | % | bps | % | % | bps |
| **FY 2015** | | | | | | | | | |
| September | -2.02 | -2.19 | 16.83 | 2.47 | 1.13 | 134.06 | 5.31 | 4.73 | 58.12 |
| **FY 2016** | | | | | | | | | |
| December | 1.68 | 1.67 | 0.22 | 1.68 | 1.67 | 0.22 | 5.36 | 4.79 | 56.52 |
| March | 0.80 | 1.26 | -46.14 | 2.48 | 2.95 | -46.70 | 5.30 | 4.80 | 49.64 |
| June | 0.80 | 1.11 | -30.92 | 3.30 | 4.09 | -78.90 | 5.24 | 4.79 | 44.83 |
| September | 2.45 | 2.12 | 32.85 | 5.83 | 6.29 | -45.72 | 5.37 | 4.89 | 47.33 |
| **FY 2017** | | | | | | | | | |
| December | -0.46 | -0.98 | 51.92 | -0.46 | -0.98 | 51.92 | 5.17 | 4.66 | 51.64 |
| March | 3.17 | 2.92 | 24.41 | 2.69 | 1.91 | 77.74 | 5.37 | 4.84 | 52.92 |
| June | 2.74 | 2.44 | 30.00 | 5.50 | 4.40 | 110.45 | 5.51 | 4.97 | 54.69 |
| September | 2.61 | 2.06 | 54.78 | 8.25 | 6.55 | 170.48 | 5.64 | 5.05 | 58.79 |
| **FY 2018** | | | | | | | | | |
| December | 2.24 | 1.83 | 40.22 | 2.24 | 1.83 | 40.22 | 5.72 | 5.11 | 61.32 |
| March | -0.55 | -0.94 | 38.21 | 1.67 | 0.88 | 78.91 | 5.53 | 4.90 | 63.49 |
| June | 0.26 | 0.21 | 5.36 | 1.94 | 1.09 | 84.52 | 5.43 | 4.81 | 62.52 |
| September | 1.81 | 1.54 | 27.02 | 3.79 | 2.65 | 113.37 | 5.47 | 4.84 | 63.61 |

Notes:

(1) Differences in totals are due to rounding.

(2) In August 2009, International Equities and Fixed Income Securities were added to the HSF portfolio. The performance benchmark for the HSF portfolio became a blended benchmark which comprise, Bank of America/Merrill Lynch US Treasury 1-5 Years Index, US One-month LIBID Index, Barclays US Aggregate, Russell 3000 ex Energy, and MSCI EAFE ex Energy.

(3) In January 2011, the HSF Portfolio achieved its Strategic Asset Allocation where the portfolio was invested in four assets classes. US Short Duration Fixed Income (25), US Core Fixed Income (40), US Equity (17.5) and Non-US International Equity (17.5).

(4) With effect from the quarter ended December 2012, the Annualised Returns Since Inception were computed using a geometric average and not the previously used arithmetic average. For comparative purposes, prior period annualized returns since inception shown above were computing using a geometric average.

# Appendix II

# Heritage and Stabilisation Fund

# Portfolio Valuation (USD)

| Valuation Date | Net Asset Value | Total Comprehensive Income | Accumulated Surplus & Unrealized Capital Gains/Losses | Contributions / (Withdrawals) |
|---|---|---|---|---|
| **Annual Portfolio Valuation** | | | | |
| September 30,2007 | 1,766,200,701 | 41,966,361 | 41,966,361 | 321,706,043 |
| September 30,2008 | 2,888,421,556 | 68,412,770 | 110,379,131 | 1,054,174,457 |
| September 30,2009 | 2,964,686,478 | 76,248,691 | 186,755,766 | - |
| September 30,2010 | 3,621,984,041 | 177,645,460 | 364,361,226 | 477,344,263 |
| September 30,2011 | 4,084,016,158 | 9,715,841 | 374,074,067 | 451,400,519 |
| September 30,2012 | 4,712,376,278 | 420,693,705 | 794,770,772 | 207,550,846 |
| September 30,2013 | 5,154,027,747 | 399,007,950 | 1,193,778,722 | 42,414,251 |
| September 30,2014 | 5,533,425,248 | 379,167,024 | 1,572,945,746 | - |
| September 30,2015 | 5,655,143,565 | 120,639,605 | 1,693,585,351 | - |
| September 30,2016 | 5,584,246,290 | 305,452,096 | 1,999,037,447 | (375,050,860) |
| September 30, 2017 | 5,762,544,777 | 429,475,446 | 2,428,512,893 | (252,548,048) |
| September 30, 2018 | 5,965,847,092 | 203,717,910 | 2,632,230,803 | - |
| **Quarterly Portfolio Valuation** | | | | |
| December 31, 2014 | 5,653,895,156 | 120,509,077 | 1,693,454,823 | - |
| March 31, 2015 | 5,779,420,631 | 125,471,133 | 1,818,925,956 | - |
| June 30, 2015 | 5,774,951,169 | (4,765,278) | 1,814,160,678 | - |
| September 30, 2015 | 5,655,143,565 | (120,575,327) | 1,693,585,351 | - |
| December 31, 2015 | 5,744,963,957 | 90,833,573 | 1,784,418,924 | - |
| March 31, 2016 | 5,787,343,363 | 42,134,260 | 1,826,553,184 | - |
| June 30, 2016 | 5,454,568,405 | 42,838,704 | 1,869,391,888 | (375,050,860) |
| September 30, 2016 | 5,584,246,290 | 129,645,559 | 1,999,037,447 | - |
| December 31, 2016 | 5,555,039,859 | (29,605,256) | 1,969,432,191 | - |
| March 31, 2017 | 5,473,047,983 | 170,609,885 | 2,140,042,076 | (252,548,048) |
| June 30, 2017 | 5,619,311,033 | 146,006,897 | 2,286,048,973 | - |
| September 30, 2017 | 5,762,544,777 | 142,463,920 | 2,428,512,893 | - |

# Appendix II

## Heritage and Stabilisation Fund

## Portfolio Valuation (USD)

| Valuation Date | Net Asset Value | Total Comprehensive Income | Accumulated Surplus & Unrealized Capital Gains/Losses | Contributions / (Withdrawals) |
|---|---|---|---|---|
| **Quarterly Portfolio Valuation** | | | | |
| December 31, 2017 | 5,888,599,170 | 124,900,387 | 2,553,413,280 | - |
| March 31, 2018 | 5,852,789,288 | (36,468,342) | 2,516,944,938 | - |
| June 30, 2018 | 5,863,070,206 | 12,336,541 | 2,529,281,479 | - |
| September 30,2018 | 5,965,847,092 | 102,949,324 | 2,632,230,803 | - |

## Appendix III

## Summary Characteristics of Composite Benchmarks

### Fixed Income Benchmarks

| Key Characteristics | Bloomberg Barclays US Aggregate Index | Merrill Lynch 1-5 Index |
|---|---|---|
| **Total Holdings** | 10,133 | 156 |
| **Coupon (%)** | 3.22 | 2.11 |
| **Duration (Years)** | 5.91 | 2.64 |
| **Average Life (Years)** | 8.25 | 2.77 |
| **Yield to Maturity (%)** | 3.45 | 2.86 |
| **Option Adjusted Spread (bps)** | 38 | 0 |
| **Average Rating (S&P)** | AA | AA+ |
| **Minimum Rating (S&P)** | BBB | AA+ |

### Equity Benchmarks

| Key Characteristics | Russell 3000 (ex-Energy) | MSCI EAFE (ex-Energy) |
|---|---|---|
| **Total Holdings** | 2,847 | 888 |
| **Earnings Per Share (EPS Growth 3-5yr fwd)** | 13.4 | 8.68 |
| **Price Earnings (P/E fwd)** | 18.3 | 13.27 |
| **Price / Book (P/B)** | 3.3 | 1.72 |
| **Weighted Average Market Capitalization* (Bn)** | 211.75 | 56.9 |

*Market capitalization is a measurement of the size of a company (share price x the number of outstanding shares). The weighted average market capitalization of a stock market index represents the average size of the firms comprising the index where each is weighted according to its market capitalization.

## Appendix IV

## Summary of the Fund's Net Asset Value by Mandate

## /US$ Million/

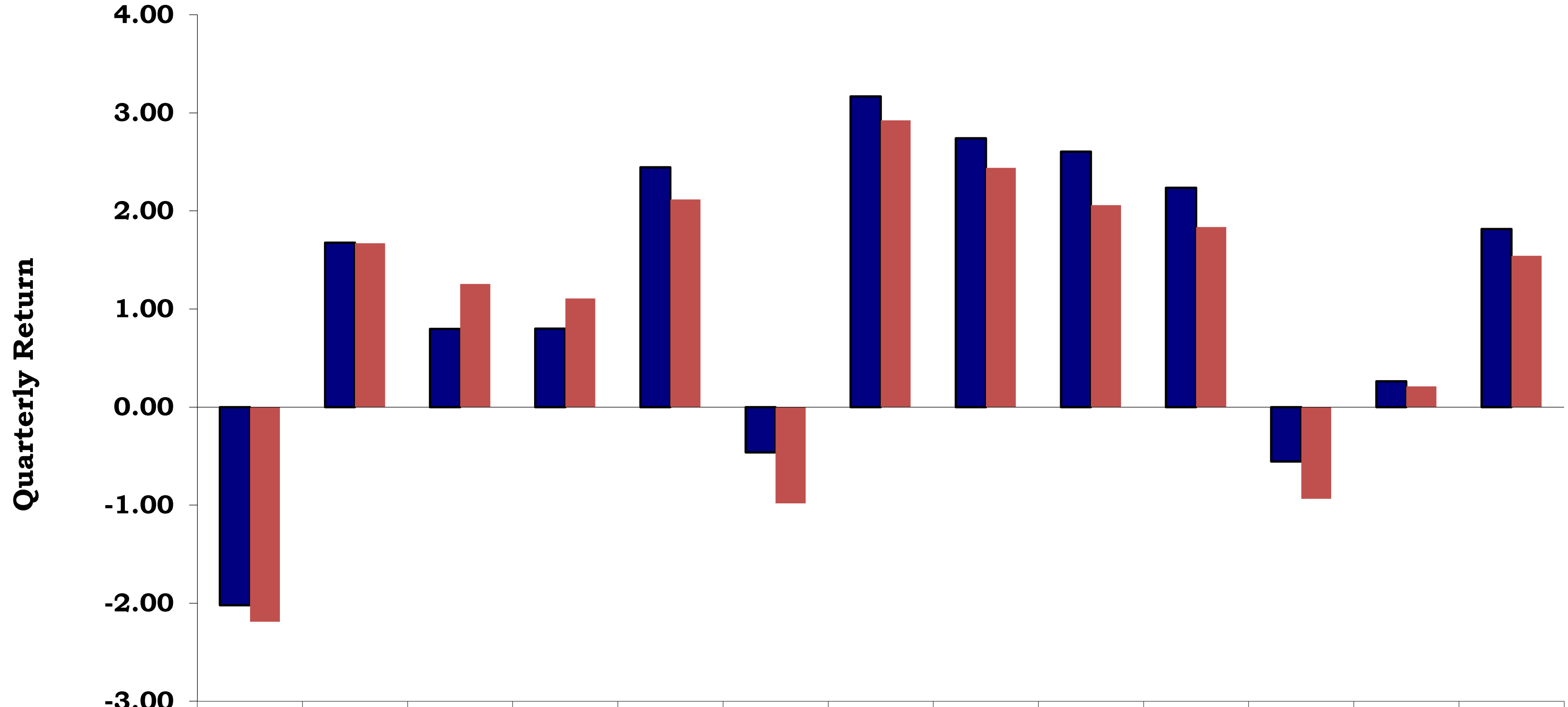
| | Sep-17 | Dec-17 | Mar-18 | Jun-18 | Sep-18 |
|---|---|---|---|---|---|
| **Total Fund Value** | **5,762** | **5,889** | **5,853** | **5,863** | **5,966** |
| **Total Value of Equity** | **2,363** | **2,484** | **2,309** | **2,319** | **2,417** |
| US Core Domestic Equity | 1,199 | 1,273 | 1,161 | 1,198 | 1,287 |
| Non-US Core International Equity | 1,165 | 1,211 | 1,148 | 1,121 | 1,131 |
| **Total Value of Fixed Income** | **3,399** | **3,403** | **3,543** | **3,543** | **3,548** |
| US Short Duration Fixed Income | 1,230 | 1,226 | 1,325 | 1,327 | 1,329 |
| US Core Domestic Fixed Income | 2,169 | 2,178 | 2,218 | 2,216 | 2,220 |
| **Total Value of Cash or Cash Equivalents** | **0** | **1** | **1** | **1** | **0** |

NB: Differences in totals are due to rounding.

## Appendix V

## HSF Portfolio Quarterly Returns

**/per cent/**




| | FY2015 Q4 | FY2016 Q1 | FY2016 Q2 | FY2016 Q3 | FY2016 Q4 | FY2017 Q1 | FY2017 Q2 | FY2017 Q3 | FY2017 Q4 | FY2018 Q1 | FY2018 Q2 | FY2018 Q3 | FY2018 Q4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSF Portfolio | -2.02 | 1.68 | 0.80 | 0.80 | 2.45 | -0.46 | 3.17 | 2.74 | 2.61 | 2.24 | -0.55 | 0.26 | 1.81 |
| Benchmark | -2.19 | 1.67 | 1.25 | 1.11 | 2.12 | -0.98 | 2.92 | 2.44 | 2.06 | 1.83 | -0.94 | 0.21 | 1.54 |

HSF Portfolio    Benchmark