



CENTRAL BANK OF  
TRINIDAD & TOBAGO



## **Heritage and Stabilisation Fund**

Quarterly Investment Report  
July – September 2016

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## EXECUTIVE SUMMARY

Global markets appeared to have recovered from the previous quarter's blow to momentum as investors took a more risk-on approach during the third quarter of 2016. Economic conditions were impacted primarily by developed market central bank actions, resolutions of the UK's stance on Brexit and geopolitical risks. Financial markets were relatively stable at the end of the quarter, as investors reacted to the actions from the US Federal Reserve, the European Central Bank, the Bank of Japan and the Bank of England, while keeping an eye on the progress of the US Presidential election.

Growth in the **United States** gained momentum in the third quarter, as Gross Domestic Product (GDP) expanded at an annualized rate of 2.9 per cent, compared to 1.4 per cent in the three months ending June. While the unemployment rate ticked up to 5.0 per cent in September from 4.9 per cent in June, the labour market continued to improve with higher participation levels and rising wage pressures. Inflation, as measured by the Core PCE Index, rose modestly over the period to 1.7 per cent in September from 1.6 per cent in June. The Federal Open Market Committee (FOMC) voted 7-3 to maintain the federal funds rate in the 0.25 to 0.50 per cent range, and lowered its expectations for economic growth as well as the future pace of interest rate hikes.

Latest data show that in the **Euro Area**, economic growth slowed in the three months to June 2016, as Gross Domestic Product grew by 0.3 per cent, down from 0.5 per cent in the three months to March 2016. A review of various macroeconomic indicators in the third quarter point to an increasingly fragile recovery in the currency bloc as composite, manufacturing and services PMI's all declined quarter-on-quarter. Inflation, on the other hand, painted a slightly more optimistic picture, as prices rose consistently over the quarter and the CPI increased by 0.4 per cent in September. The European Central Bank maintained its policy interest rates at its latest meeting and also confirmed that its current asset purchase program will continue to March 2017 or beyond if necessary.

The **UK economy** was stronger than expected in the three months to June 2016, as the economy grew 0.7 per cent, exceeding projections and higher than the 0.4 per cent reading in the quarter ending March 2016. Recent third quarter economic data from the UK suggests improved sentiment as manufacturing, services and composite PMI's all rose over the quarter. The labour market was somewhat stagnant as unemployment remained steady at 4.9 per cent in August. The Bank of England (BoE) opted to hold its main interest rate constant at 0.25 per cent, following the package of stimulus measures

introduced in August. At its August meeting following the country's decision to leave the European Union, the BoE, citing the fall in the exchange rate and the marked weakening in the outlook for growth in the short to medium term, took the decision to cut the Bank Rate by 25 basis points in addition to introducing a new Term Funding Scheme<sup>1</sup>. Other measures included the purchase of up to £10 billion of UK Corporate Bonds and the expansion of the asset purchase scheme for UK Government Bonds by £60 billion. On the political front, UK Prime Minister Theresa May announced that she will trigger Article 50 of the Lisbon Treaty in March 2017 and to that end the PM also created a 12-member Brexit negotiation team titled "The European Union Exit and Trade Committee".

Growth in the **Japanese** economy slowed in the second quarter of 2016 to 0.7 per cent on an annualised basis, compared to the 2.1 per cent expansion in the first quarter. Economic data in the third quarter trended lower, as composite and services PMI's declined, monthly cash earnings fell and household spending dropped in the third quarter. At its latest meeting, the Bank of Japan decided on significant changes to its monetary policy, as the central bank plans to implement yield curve targeting (particularly the 10-year yield) and a new "inflation overshooting commitment".

Developed **equity market** returns were solid in the third quarter. Momentum in US equity markets continued during the quarter, with the major indices ending the period in positive territory. Average equity volatility during the quarter as measured by the VIX, declined in the three months ending September 2016, although the index spiked in September, in relation to the Federal Reserve's policy meeting. In non-US developed equity markets, the MSCI EAFE returned 6.46 per cent, with returns in core Europe driving performance. Germany's DAX 30 outperformed its global developed counterparts with an 8.58 per cent return. In the UK, London's FTSE 100 climbed 7.07 per cent over the quarter, as concerns over the direction of the economy post-Brexit subsided and investors took a more risk-on approach in the search for return. Meanwhile, in Japan, the Nikkei 225 added 6.33 per cent.

**Global developed sovereign bond** yields fell precipitously early in the period as strong risk aversion following the United Kingdom's (UK) decision to exit the European Union drove investors to seek traditional safe haven assets. Yields remained under pressure in

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<sup>1</sup> A funding scheme that will lend central bank reserves to banks and building societies for an extended period at rates close to the Bank Rate.

the UK as the BOE expanded its quantitative easing programme. Meanwhile, yields recovered in the United States as markets priced in a greater probability that the Fed would raise rates at least once this year. The yield on the 10-year treasury increased 12.4 basis points to 1.60 per cent. In core Europe, German bunds remained relatively unchanged, albeit with some volatility during the quarter. In peripheral Europe, mounting concerns over Italy's financial system heightened expectation for support from the European Central Bank, which pushed yields down. Meanwhile, yields on 10 year Japanese bonds rose, but remained in negative territory. The broader **US fixed income market**, as measured by the Barclays Capital US Aggregate Bond index, returned 0.46 per cent over the period. Spread assets outperformed similar duration U.S. Treasuries as market sentiment improved over the quarter.

In the **currency market**, there was significant volatility during the quarter as bouts of risk aversion and central bank policy resulted in material market adjustments. The US dollar, as measured by the DXY index<sup>2</sup>, weakened modestly over the quarter, declining 0.71 per cent. Central bank developments in the UK and Japan resulted in pound and yen weakness respectively. Over the third quarter, the euro currency appreciated 1.16 per cent against the US dollar while the British pound depreciated 2.55 per cent. Meanwhile, the Japanese yen strengthened 1.83 per cent vis-à-vis the US dollar by the end of the quarter despite its significant depreciation early in the period.

The HSF investment portfolio gained 2.45 per cent for the quarter ended September 2016, compared with an increase of 2.12 per cent for the Strategic Asset Allocation (SAA) benchmark. The Fund's exposure to Non-US international developed and US equity securities were the largest contributors to the fund's performance for the quarter. In relation to the benchmark, all mandates contributed positively to relative performance during the quarter as they all outperformed their respective benchmarks. For the financial year ended September 30, 2016, the investment portfolio returned 5.83 per cent, underperforming its strategic benchmark which returned 6.29 per cent for the twelve month period. Exposure to US and Non-US international developed equity markets detracted from outperformance. Notably, in the quarter ended June 30, 2016, the Brexit decision severely impacted financial markets and the performance of riskier

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<sup>2</sup> The DXY index is a weighted measure of the United States Dollar relative to a basket of currencies of the U.S.'s major trading partners.

asset classes. At the end of September 2016, the net asset value of the HSF was US\$5,584.2 million, an increase from the US\$5,454.6 million reported at the end of June 2016.

**Table 1**  
**Contribution to Quarterly Return**  
**For the period Jul 2016 - Sep 2016**  
**/per cent/**

	<b>SAA Weights</b>	<b>Portfolio Weights as at 30-Sep-2016</b>	<b>Weighted Return HSF</b>	<b>Weighted Return Benchmark</b>
<b>Composite Portfolio</b>	100.00	100.00	2.45	2.12
<b>US Core Domestic Fixed Income</b>	40.00	41.80	0.32	0.18
<b>US Core Domestic Equity</b>	17.50	18.98	0.91	0.79
<b>Non US Core International Equity</b>	17.50	17.19	1.21	1.19
<b>US Short Duration Fixed Income</b>	25.00	22.03	0.00	-0.05

NB: Differences in totals are due to rounding.

**Table 2**  
**Comparative Quarterly Returns**  
**For the Quarters ended Mar 2016 – Sep 2016**  
**/per cent/**

	<b>3 Months Weighted Return as at 30-Sep-2016</b>		<b>3 Months Weighted Return as at 30-Jun- 2016</b>		<b>3 Months Weighted Return as at 31-Mar- 2016</b>	
	<b>HSF</b>	<b>Bench- mark</b>	<b>HSF</b>	<b>Bench- mark</b>	<b>HSF</b>	<b>Bench- mark</b>
<b>Composite Portfolio</b>	2.45	2.12	0.80	1.11	0.80	1.26
<b>US Core Domestic Fixed Income</b>	0.32	0.18	1.01	0.89	1.03	1.21
<b>US Core Domestic Equity</b>	0.91	0.79	0.32	0.36	-0.08	0.20
<b>Non US Core International Equity</b>	1.21	1.19	-0.68	-0.35	-0.54	-0.53
<b>US Short Duration Fixed Income</b>	0.00	-0.05	0.15	0.20	0.41	0.39

**Table 3**  
**Comparative Financial Year to Date Returns**  
**For the periods September 2015 & September 2016**  
**/per cent/**

	Financial Year to Date Return as at 30-Sep-2016		Financial Year to Date Return as at 30-Sep-2015	
	HSF	Bench- mark	HSF	Bench- mark
<b>Composite Portfolio</b>	5.83	6.29	2.47	1.13
<b>US Core Domestic Fixed Income</b>	2.18	2.05	1.05	1.18
<b>US Core Domestic Equity</b>	2.27	2.57	1.13	0.56
<b>Non US Core International Equity</b>	0.90	1.20	-0.11	-1.11
<b>US Short Duration Fixed Income</b>	0.41	0.38	0.41	0.53



## **SECTION 1 – INTERNATIONAL ECONOMIC ENVIRONMENT**

### **United States**

The United States (US) economy gained momentum during the third quarter of 2016, growing at an annualized rate of 2.9 per cent, according to the advance estimate from the Commerce Department, compared to 1.4 per cent in the second quarter. The underlying data indicated that the improvement was driven in part by a rise in business inventories as well as a surge in exports, which grew at an annual pace of 10.0 per cent up from 1.8 per cent in the second quarter. Meanwhile business investment remained modest and consumer spending moderated to an annual rate of 2.1 per cent in the third quarter compared to 4.3 per cent in the second quarter.

The labour market continued to improve during the third quarter but at a more measured pace. While the unemployment rate rose from 4.9 per cent in June to 5.0 per cent in September, the increase was partially attributed to the higher labour force participation rate, which increased over the period from 62.7 per cent in June to 62.9 per cent in September. Job gains slowed towards the end of the quarter with the change in non-farm payrolls falling from 271,000 in June to 156,000 in September. There were some indications of rising wage pressure over the period. Average hourly earnings increased year on year from 2.5 per cent in June to 2.7 per cent in September. Inflation rose over the third quarter due to increasing shelter and medical care costs; the Consumer Price Index (CPI) increased from 1.0 per cent in June to 1.5 per cent in September, while the CPI ex-food and Energy was unchanged at 2.2 per cent. The Federal Reserve's preferred gauge of inflation, the Core PCE index, moved higher to 1.7 per cent in September, from 1.6 per cent in June.

At its September monetary policy meeting, the Federal Reserve (Fed) judged that it was appropriate to maintain the federal funds rate in the 0.25 per cent to 0.50 per cent range. However, the 7-3 vote reflected that there was divergence within the committee, which has held the federal funds rate steady following its decision to move off of the zero lower bound in December 2015. The September Federal Open Market Committee (FOMC) projections reflected lower growth and interest rate expectations versus its previous June forecast. The median growth rate for 2016 was downgraded from 2.0 per cent to 1.8 per cent, while the median federal funds rate forecasted for the end 2016 decreased from 0.9 per cent to 0.6 per cent. The minutes of the meeting revealed that several members

believed a hike could be warranted “relatively soon” and increased the likelihood that the Fed would raise rates at least once for the year.

## **Euro Area**

According to the latest available data, Euro Area growth slowed in the second quarter of 2016 to 0.3 per cent compared with 0.5 per cent in the three months ending March 2016. Economic data showed that domestic demand drove economic growth over the quarter, mainly attributable to government, spending while household consumption declined. The external sector also supported growth as net exports rose over the second quarter. On a country basis, growth in France and Italy stalled while a troubled banking sector, attributed to the “legacy challenge<sup>3</sup>” in addition to post-Brexit uncertainties kept the bloc in its low growth and low inflation environment.

In the third quarter, political and structural challenges continued to be headwinds to growth. Most recent data suggested that the Euro Area’s recovery remained fragile, potentially stabilizing at lower growth levels. The rate of economic expansion across the currency bloc, as indicated by the Composite PMI, declined in September to 52.6, the lowest reading since January 2015, from 53.1 in June. On a sector basis, the reading reflected a decline in both services and manufacturing output growth in September. The manufacturing PMI fell to 52.6 in September, slightly below June’s reading of 52.8, and was also above the services PMI, which declined to 52.2 from 52.8 in June. On a country level, the IHS Markit report showed that the Composite PMI slowed in Germany, Italy, Spain and Ireland, which was offset by an increase in France’s reading. In September, France’s Composite PMI registered 52.7, which was a significant improvement from the previous quarter, when the economy sank into contractionary territory.

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<sup>3</sup>The “legacy challenge” refers to that left by the Euro Area’s twin crisis in 2008, in which the financial crisis morphed into a sovereign debt crisis and a double-dip recession. This has left a legacy of persistently high levels of non-performing loans (NPLs) in parts of the euro area, which drive down bank profitability through loan-loss provisioning charges. NPLs also hamper the contribution of the banking system to the recovery in parts of the euro area economy, which in turn leads to weaker macroeconomic outcomes and still slower balance sheet repair.

Euro Area headline inflation rose to 0.4 per cent in the twelve months to September 2016 from 0.1 per cent in June. The main contributors to the rise in inflation were services, namely restaurants and cafes, and food and tobacco, while the energy component had the largest downward impact. The sustained rise in inflation suggested that the European Central Bank's (ECB) monetary stimulus was impacting the inflation target as intended. Core inflation remained relatively stable at 0.8 per cent in September, from 0.9 per cent in June. On a member state level, Bulgaria and Croatia registered the lowest annual inflation rates while Belgium, Estonia and Austria recorded the highest rates in September 2016.

Unemployment in the Euro Area remained unchanged at a record low over the period at 10.1 per cent in August. According to Eurostat, unemployment in core European countries, including Germany<sup>4</sup>, France, Italy and Spain<sup>5</sup> were 4.2 per cent, 10.5 per cent, 11.4 per cent and 19.5 per cent. Meanwhile, Greece's joblessness rate was the highest at 23.4 per cent in August. Taking a closer look at the components of unemployment, youth unemployment remained high. In August, Euro Area youth unemployment was 20.7 per cent. The lowest youth unemployment rate was observed in Germany at 6.9 per cent while the highest rates were recorded in Greece<sup>6</sup>, 47.7 per cent, Spain, 43.3 per cent and Italy, 38.8 per cent.

Monetary policy continued to play an important role in Euro Area economic growth and price stability over the third quarter. At its September meeting, the ECB kept rates unchanged at -0.40 per cent, 0.0 per cent and 0.25 per cent for its deposit rate, main re-financing rate and lending rates respectively. The ECB reiterated that it will maintain its accommodative support in order to reach its 2 per cent medium term inflation target. The central bank also confirmed that *"the monthly asset purchases of €80 billion are intended to run until March 2017, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of such inflation target."*

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<sup>4</sup> Germany's unemployment figure was the second lowest of the Euro Area, with Czech Republic's unemployment at 3.9 per cent in August 2016.

<sup>5</sup> Spain recorded the second highest level of unemployment in the currency bloc.

<sup>6</sup> Greece's latest youth unemployment rate as at June 2016

## United Kingdom

The UK economy grew 0.7 per cent in the three months ended June 2016, beating expectations, and almost twice the previous quarter's 0.4 per cent expansion. According to the data, fixed investment and private consumption contributed to the better than expected growth number, while an unfavourable external balance hampered growth.

Activity indicators over the third quarter pointed to continued UK strength, as reflected by the recovery in PMIs after June's "referendum-induced shock," as uncertainty waned. The Markit UK Composite PMI<sup>7</sup> rose to 53.9 in September, up from 52.4 in June, mainly supported by strengthening manufacturing and construction sectors. Services growth also contributed to the solid September PMI reading, albeit to a lesser extent. Manufacturing PMI increased to 55.4 in September from 52.1 in June and services PMI rose to 52.6 in September from 52.3 in June. According to the IHS Markit reports, the improvement in PMIs were mainly on account of solid domestic demand and the weakening exchange rate, which drove new business and new orders from abroad respectively. In September, other indicators including consumer confidence also rebounded, after falling in July.

UK prices, as measured by Consumer Price Index (CPI), surprised to the upside in September, increasing the most since November 2014, by 1 per cent, compared with 0.5 per cent in June. According to the Office for National Statistics, the main contributors to the change in inflation were rises in clothing, fuel and gas prices and increased overnight hotel rates. Core CPI increased to 1.5 per cent in September, up from 1.4 per cent in June.

The labour market improvement stalled to some extent over the third quarter as UK unemployment held steady at 4.9 per cent in August. Despite this, UK employers appeared to have shrugged off the initial shock of the referendum result, as data in September showed a rise in permanent staff placement volumes, after declines in June and July, according to the Markit UK Jobs Report. Additionally, increases in temporary staff billings were also recorded. Meanwhile, the number of permanent jobs in London

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<sup>7</sup> UK Composite PMI sank to 47.5 in July, alongside similar declines in UK Manufacturing and Services PMIs. Manufacturing PMI fell to 48.2 while Services PMI declined to 47.4. This, however, was followed by an uptick in August, with the Composite PMI reading up 53.6; manufacturing, and services PMIs also up 53.4 and 52.9 respectively.

fell as employers in the city were cautious post-Brexit. Average weekly earnings growth waned to 2.3 per cent in August, from 2.5 per cent in June, while average weekly earnings ex-bonus growth was flat at 2.3 per cent.

At its meeting ending on August 3, 2016, following the country's decision to leave the European Union, the BoE, citing the fall in the exchange rate and the marked weakening in the outlook for growth in the short to medium term, took the decision to cut the Bank Rate by 25 basis points in addition to other measures aimed at stimulating the economy, having expressed that the "UK is likely to see little growth in GDP" in the second half of 2016. According to the August monetary policy minutes, the BoE voted for a package of measures in addition to the rate cut including: a new Term Funding Scheme to reinforce the pass-through of the cut in Bank Rate; the purchase of up to £10 billion of UK corporate bonds; and an expansion of the asset purchase scheme for UK government bonds of £60 billion, taking the total stock of these asset purchases to £435 billion. At its meeting ending on 14th September 2016, the Monetary Policy Committee voted unanimously to maintain the Bank Rate at 0.25 per cent and to continue with the purchase programme of sterling denominated non-financial investment-grade corporate bonds and UK government bonds.

On the political front, UK Prime Minister (PM), Theresa May, announced that Article 50 will be triggered in March 2017. Accordingly, the PM set up a 12-member Brexit negotiation team, named the European Union Exit and Trade Committee. As the name suggests, the team will oversee the negotiations of the withdrawal from the EU and the formation of a new relationship between the United Kingdom and the EU; and policy on international trade. Separately, Chancellor of the Exchequer, Phillip Hammond, stated that the UK will undoubtedly face a period of structural adjustments and emphasised that the BoE and the UK Government should embark upon specifically targeted investment projects, with a focus on encouraging business investment and restoring business confidence in light of the uncertain environment ahead.

## Japan

Japan's economic growth slowed sharply in the second quarter of 2016, expanding at an annualized rate of 0.7 per cent versus 2.1 per cent in the first quarter. While exports and capital spending remain weak, growth during the period was supported by a modest increase in domestic demand.

During the third quarter, economic growth remained moribund as a stronger Yen and subdued global growth continued to weigh on exports. Total export volume fell in July by 2.4 per cent but recovered somewhat in August, rising 0.8 per cent as increased demand from Europe helped to offset a decline in sales to the US. In September, the Nikkei/Markit Japan Composite PMI declined to 48.9 from 49.0 in June; the services sector softened, however, the Nikkei/Markit Japan Manufacturing PMI improved, rising above 50 to 50.4 in September. Meanwhile, after contracting for four consecutive months, industrial production rebounded in August, expanding 4.5 per cent compared to an average decline of 2.0 per cent over the previous three months.

On the labour market front, the August unemployment rate was unchanged from June at 3.1 per cent. While the jobs market remains robust, average monthly cash earnings declined 0.1 per cent in August from a year earlier due a decrease in bonus and part-time pay. Future wage gains are expected to remain sluggish partly due to the low level of mobility in Japan's labour market. In the absence of earnings growth, consumers remain reluctant to increase their purchases. Household spending dropped for the sixth consecutive month in August; consumption was particularly weak, falling 4.6 per cent from a year earlier, versus a decline of 2.3 per cent in June.

On the political front, in July, the ruling Liberal Democratic Party (LDP) secured a two-thirds majority in Japan's upper house. Going forward, this win will allow the government to achieve constitutional reforms, which is a key component of Prime Minister Abe's plan to spur growth in the nation.

Following its comprehensive assessment, the Bank of Japan (BOJ) announced significant changes to its monetary policy approach at its September meeting. The BOJ decided to shift its policy framework from increasing its monetary base to yield curve targeting and will attempt to maintain the 10-year Japanese government bond at current levels of approximately 0.0 per cent. The bank also introduced a new "inflation-overshooting commitment", whereby the BOJ will aim to exceed its 2.0 per cent inflation target for some time. Despite the BOJ's efforts, inflationary pressures remain weak. The Consumer

Price Index (CPI) declined for the fifth consecutive month in August, falling 0.5 per cent year on year compared to a decline of 0.4 per cent in June. In conjunction with the central bank's easing measures, Japan's government approved a new fiscal stimulus package aimed at addressing the country's faltering growth. While the headline amount of 28.1 trillion yen (\$276 billion) was highlighted, the program included a mere 7.5 trillion yen of new government spending.

## **SECTION 2 – CAPITAL AND MONEY MARKET REVIEW**

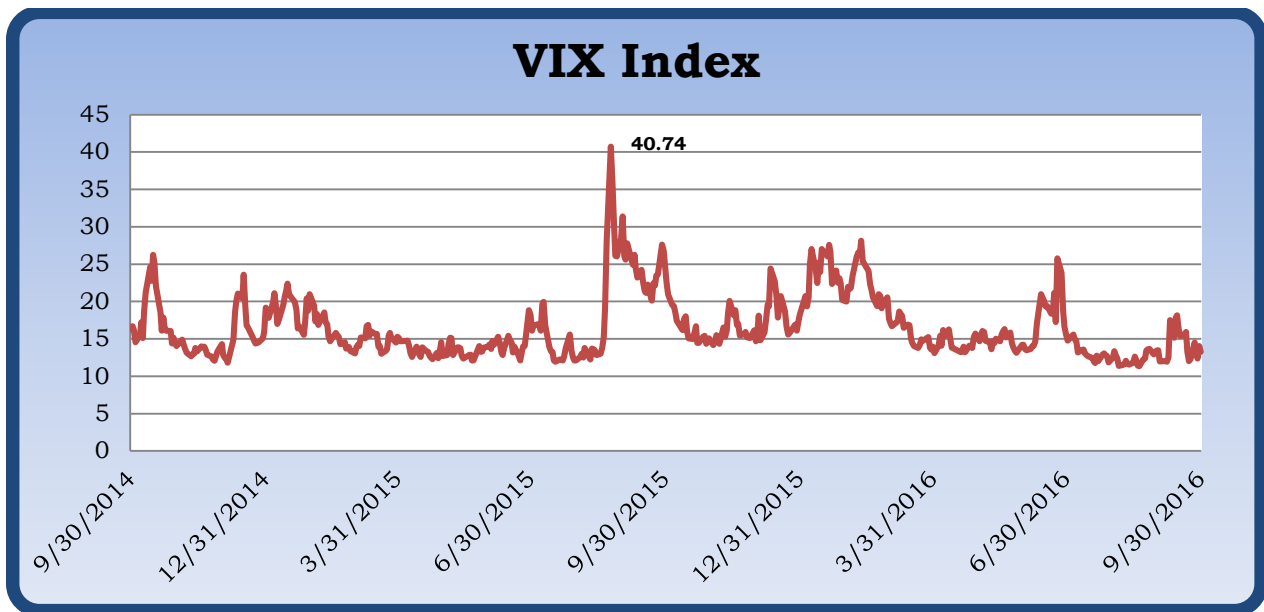
Global markets recovered in the third quarter of 2016, mainly attributable to a swift post-Brexit rebound. It appeared that investors also shrugged off geopolitical challenges, including the attempted coup in Turkey while other European political woes and concerns in the Euro Area banking sector remained downside risks to financial markets. Meanwhile, the price oil averaged US \$44.99 per barrel, hitting a low of US \$39.51 and peaking just under US \$48.99 over the quarter.

In bond markets, global developed sovereign bond yields endured a volatile period and were driven mostly by central bank developments during the third quarter. In the Eurozone, German bunds 10-year yields ended the period relatively unchanged at -0.12 per cent, while in the United Kingdom 10-year Gilt yields declined almost 12 basis points to end at 0.75 per cent at the end of September. In Japan, 10-year yields rose, but remained negative, as yields closed at -0.09 per cent in September. Meanwhile, short term interest rates trended higher over the quarter ahead of the implementation of the first leg of money market reform policy by the Securities and Exchange Commission in the US. The broader US fixed income market, as measured by the Barclays Capital US Aggregate Bond index, returned 0.46 per cent over the third quarter, driven by strong demand for US spread products.

The Chicago Board Options Exchange Volatility Index (VIX), which is a proxy for investor anxiety and market risk, remained relatively calm over the quarter. Volatility spiked in September, concentrated around the September 21<sup>st</sup> Fed meeting, but averaged 13.23 points, which was lower than the last quarter's average of 15.68. The VIX ended the quarter at 13.29 points. In Europe, volatility as measured by the Euro Stoxx 50 Index (VSTOXX), dipped in the third quarter, as the index averaged 20.73 points in the third quarter down from 25.78 points in the second quarter of 2016. However, the range of volatility during the quarter was fairly wide, given that the max reading for the index was 28.26 points, while the minimum value for the three months ending September 2016, was 16.83 points.



**Figure 1**  
**Equity Market Volatility in the US**  
**/points/**



Source: Bloomberg

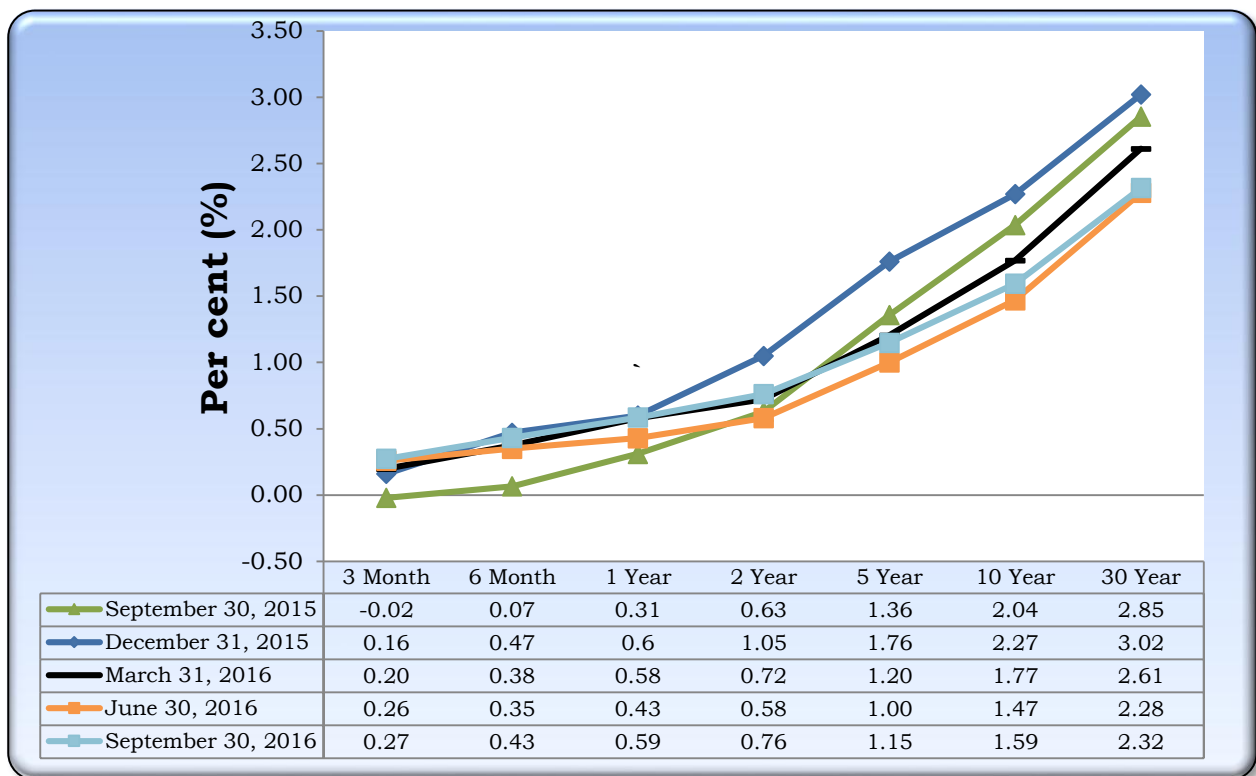
## **US Fixed Income**

Over the third quarter, yields trended higher, with the 2-year rising 18 basis points to 0.76 per cent, while the 10-year increased 12.4 basis points to 1.59 per cent. However, there was significant movement during the period, with the 10-year reaching a low of 1.36 per cent in the immediate aftermath of the United Kingdom's decision to leave the European Union. Yields subsequently recovered as risk sentiment improved, and rallied ahead of the FOMC meeting in September, reaching a high of 1.73 per cent before trending lower to end the quarter at 1.59 per cent. The yield curve flattened over the period and the spread between the 2 and 10-year segment of the curve compressed 5.7 basis points to 83.3 basis points.

Demand for safe haven assets eased over the period, as markets adjusted to the surprise decision by the UK and investor sentiment improved. Moreover, communication from various Federal Reserve committee members during the quarter placed upward pressure on rates. While there remains significant uncertainty surrounding the future path of

interest rates, the probability that the Fed would hike at least once before the end of the year increased as the quarter progressed.

**Figure 2**  
**US Treasury Yield Curve**  
**/per cent/**



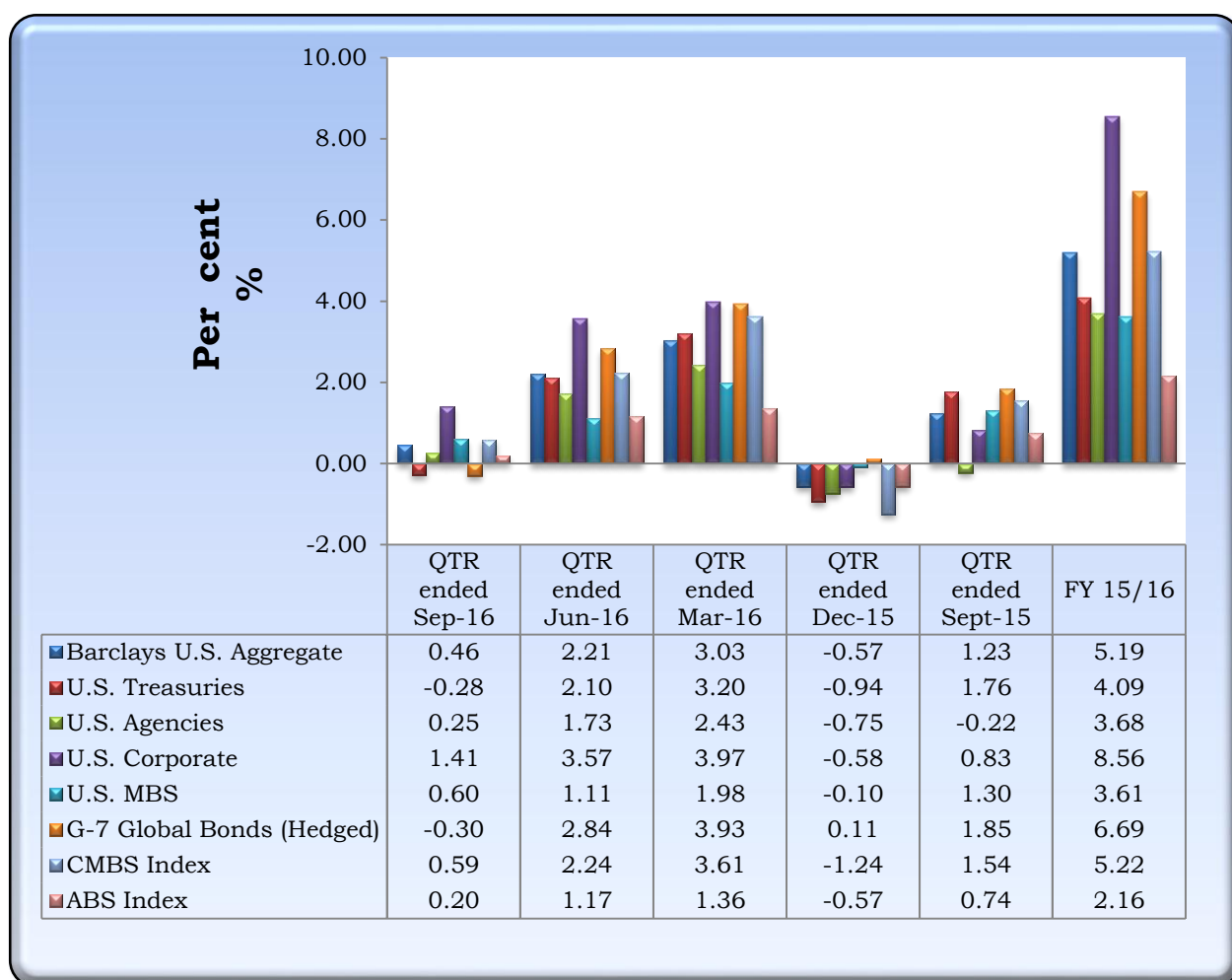
Source: Bloomberg

The broader US fixed income market, as measured by the Barclays Capital US Aggregate Bond index, returned 0.46 per cent over the third quarter. Elevated levels of risk aversion at the start of the period drove yields lower, however, relatively positive global economic data releases over the quarter helped to alleviate concerns that the United Kingdom's exit from the EU would trigger a severe downturn.

Spread products broadly outperformed similar duration US Treasuries and credit spreads narrowed modestly. There was strong demand for US spread products from foreign buyers, as the yield on US assets grew increasingly attractive due to the growing divergence in monetary policy between the US and other developed markets. In the US

Corporate Investment Grade credit market, spreads declined 17.5 basis points to 1.38 per cent over the three months to September.

**Figure 3**  
**Returns on Fixed Income Indices**  
 /per cent/



Source: Barclays Capital

## **Global Fixed Income Markets**

Global developed sovereign bond yields were driven mostly by central bank developments during the third quarter. In the Eurozone, German bund yields ended the period relatively unchanged at minus 0.12 per cent; however, there was significant volatility during the quarter, with rates briefly entering positive territory before falling back below zero per cent. Meanwhile, despite mounting concerns around the Italian financial system, Italian government bond yields declined over the period, as investors expect the European Central Bank (ECB) to eventually increase its support for the region's more fragile economies. Italian 10-year bond yields fell 7.0 basis points to 1.19 per cent.

In the United Kingdom, demand for UK gilts rose in the wake of the June 23rd referendum. Rates continued to trend lower, following the Bank of England's (BOE) decision to lower its bank rate and expand the size and scope of its asset purchase programme. In addition, towards the end of the period, the BOE indicated the potential for future rate cuts, which placed further downward pressure on yields. The 10-year gilt fell 11.9 basis points over the quarter to 0.75 per cent.

In Japan, investors were disappointed by the Bank of Japan's (BOJ) monetary policy changes over the quarter. Moreover, there was mounting concerns that the central bank may be approaching its limits. The BOJ shifted its policy framework at its September meeting, deciding to focus on yield curve targets instead of monetary base levels. Despite vowing to maintain its asset purchases, markets broadly expect the BOJ to taper its long bond buying, reducing demand for the 10-year Japanese bond. Yields on the 10-year Japanese bond increased 12.8 basis points to minus 0.09 per cent.

**Table 4**  
**G-7 Generic Government 10 Year Yields**  
**/per cent/**

Country	Generic Government 10 Year Yields		Change (basis points)
	Sep 2016	Jun 2016	
<b>US</b>	1.594	1.470	12.40
<b>UK</b>	0.745	0.864	(11.90)
<b>France</b>	0.183	0.181	0.20
<b>Germany</b>	(0.122)	(0.131)	0.90
<b>Italy</b>	1.186	1.256	(7.00)
<b>Canada</b>	0.993	1.059	(6.60)
<b>Japan</b>	(0.094)	(0.222)	12.80

Source: Bloomberg

## Money Markets

Short term borrowing costs rose over the 3 month period, mostly due to new regulations in the US money market, the Money Market Reform<sup>8</sup>, which was implemented on October 14<sup>th</sup> 2016. According to the US Securities and Exchange Commission (SEC), the amendments make structural and operational reforms in order to address risks of investor runs in money market funds, while preserving the benefits of the funds.

The 1-month London Inter-Bank Offered Rate (LIBOR) increased to 0.531 per cent in September from 0.465 per cent in June. The 3-month London Inter-Bank Offered Rate

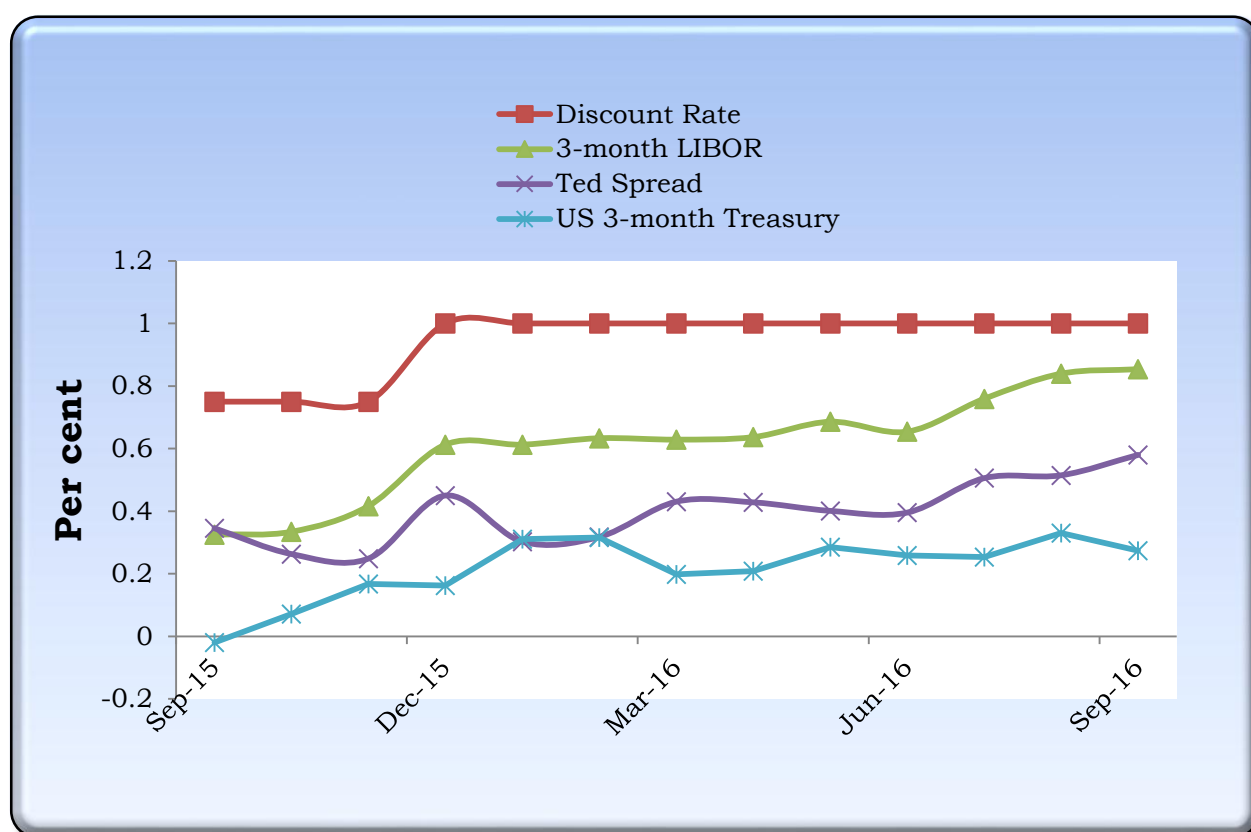
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<sup>8</sup> 1. The rules would require institutional prime and municipal money market funds to move from a stable \$1.00 price per share to a floating net asset value. Money market funds sold to individual investors can maintain the fixed \$1.00 share price.

2. The SEC's amendments also include new rules about liquidity fees and gates (temporary suspension of redemptions) allowing a fund's board of directors to directly address runs on a fund.

(LIBOR) rose to 0.854 per cent at the end of the September, the highest since May 2009, from 0.654 in June. The recent jumps in the LIBOR were as a result of a significant flight from money market funds (MMF), as investors trimmed demand for bank debt among prime MMFs in favour of US Treasuries and other government-related securities in an effort to exempt themselves from the new rules of the SEC. The difference between the 3 month LIBOR and the US 3-month T-bill, as measured by the Ted Spread, increased to 0.580 per cent from 0.395 per cent in June. Meanwhile, the interest rate on the US 3-month Treasury bill rose slightly to 0.274 per cent, from 0.259 per cent in June. The Fed Funds rate and the discount rate remained unchanged at 0.50 per cent and 1 per cent respectively.

**Figure 4**  
**US Money Market Rates**  
 /per cent/



Source: Bloomberg

## Equity Markets

In the US, equity indices rallied over the quarter, with the S&P 500<sup>9</sup> and Russell 3000 returning 3.85 per cent and 4.39 per cent, mainly on the back of solid July returns. In July, investor sentiment rebounded after the negative sentiment stemming from the Brexit outcome in June, with the Russell 3000 and S&P 500 returning 3.97 per cent and 3.68 per cent respectively. Sentiment was also boosted by expectations that the Fed would delay any interest rate hikes during the quarter, amid global growth uncertainty, and a mixed US economic backdrop. On a sectoral basis, seven of the eleven sectors contributed to positive returns in the S&P 500 during the quarter. Technology, Financials and Consumer Discretionary lead the gains in the index while Consumer staples and Utilities detracted from performance over the quarter.

In non-US developed equity markets, the MSCI EAFE returned 6.46 per cent in the three months to September 2016. The MSCI EAFE was also mainly supported by July's rebound in returns. In Europe, Germany's DAX 30 outperformed its peers with an 8.58 per cent return while France's CAC 40 posted a 5.20 per cent return. Notwithstanding this, political uncertainties in the Euro Area, including the fallout from the Brexit vote, the recent re-emergence of the Euro Area banking sector problems, particularly concentrated in Germany (Deutsche Bank), and weak economic data weighed on returns for the indices.

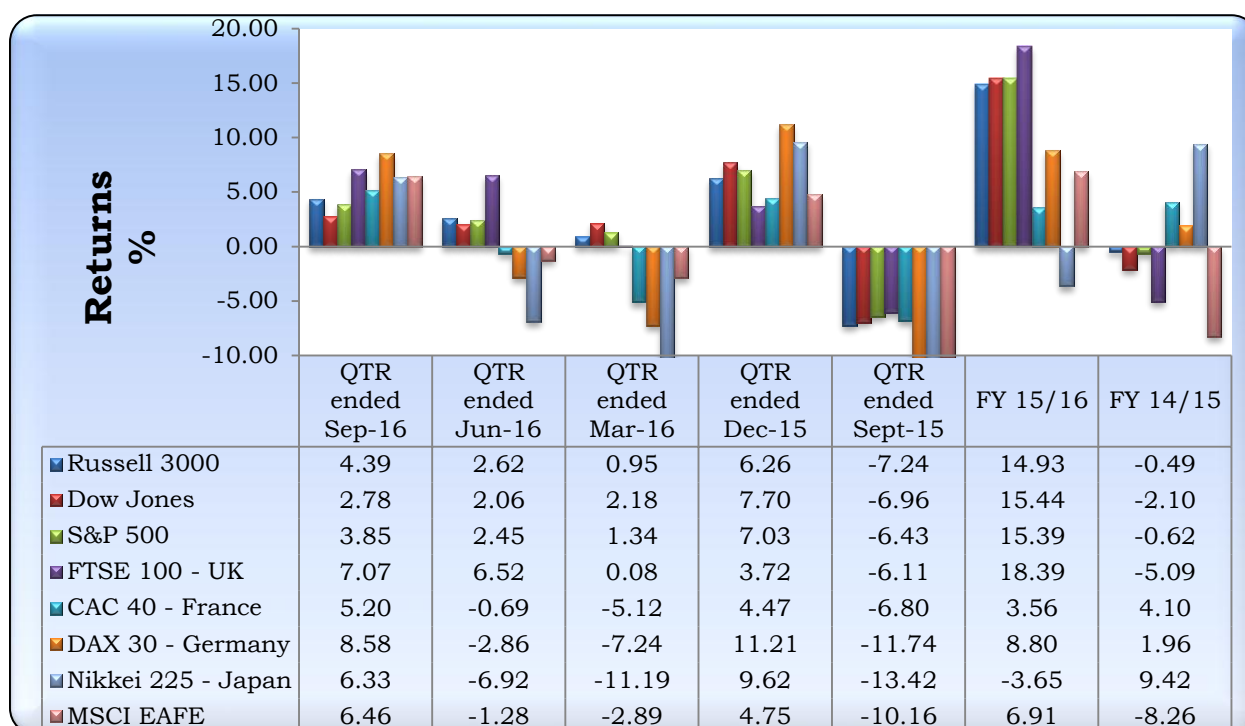
In the UK, London's FTSE rallied 7.07 per cent for the quarter; surpassing its US counterparts, and slightly lagging equity returns in Germany. Over the quarter, UK stocks rebounded post-Brexit, as financial conditions in the UK appeared to stabilize. Investors took a more risk-on approach in the search for yield amid the low interest rate environment and a flattening UK yield curve. UK equities were also buoyed by the depreciating pound, which boded well for the FTSE's export companies. Added to this, communication from the BoE that any interest rate hike would be delayed and further stimulus, despite stronger than expected economic data for the UK, also provided additional support to investor sentiment.

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<sup>9</sup> In September 2016, the S&P 500 added a new sector, the Real Estate sector, which was previously included in the broader Financials sector. Financials will now account for a smaller portion of the index.

In the Asian sphere, Japan's Nikkei 225 rallied 6.33 per cent over the quarter. Higher returns were dampened by a negative performance in September's and intra quarter yen strengthening, but investor sentiment improved over the expectations for the Japanese economy given the solid victory by Prime Minister Abe in the Upper House elections and the BoJ's monetary policy decisions. (See Figure 5)

**Figure 5<sup>10</sup>**  
**Total Returns on Equity Indices**  
 /Per cent/



Source: Bloomberg

<sup>10</sup> Equity returns in previous reports were stated as price returns. All time periods listed above have been re-stated to reflect the total returns of the various indices.



## **Currency Markets**

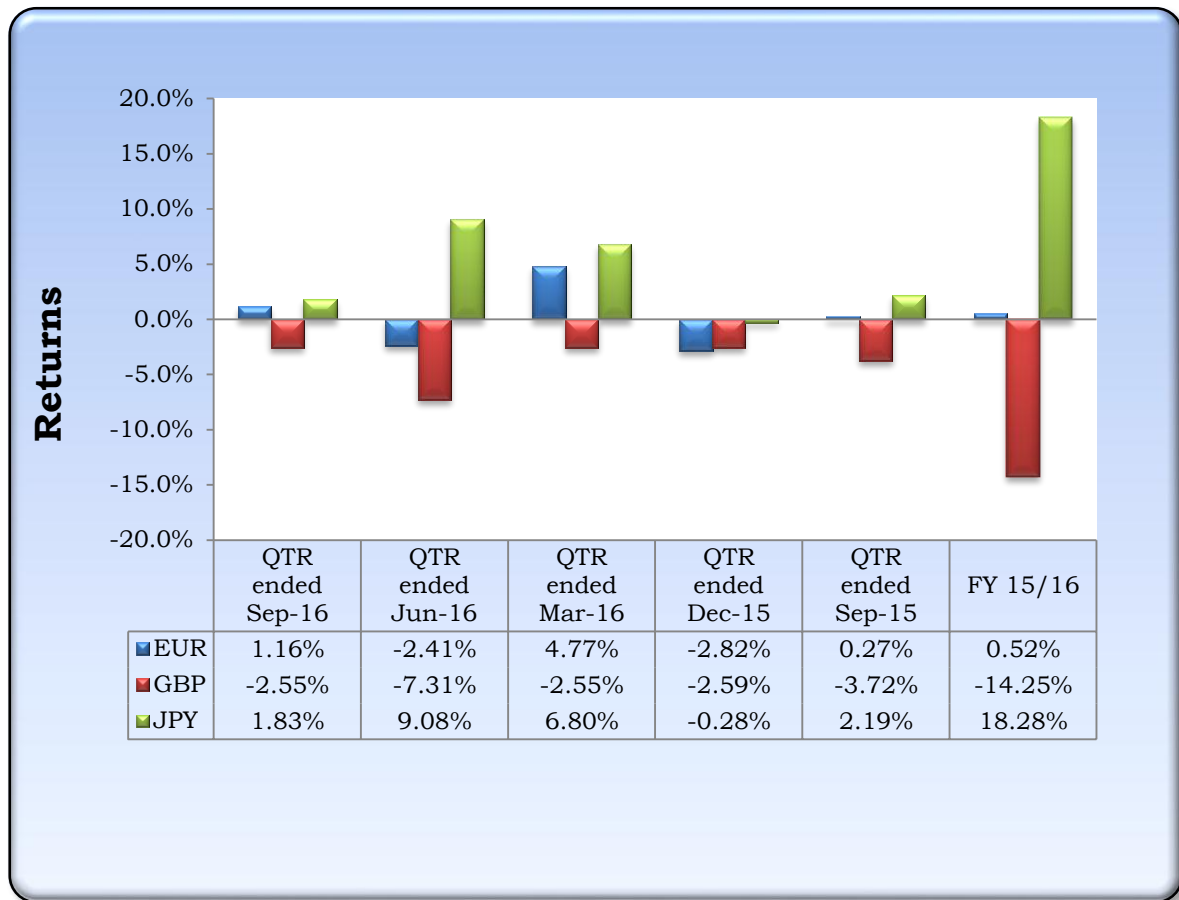
The United States dollar, as measured by the DXY index declined 0.71 per cent over the third quarter. The heightened uncertainty resulting from the United Kingdom's decision to exit the European Union resulted in U.S. dollar strength early in the period. However, demand for the currency declined as fears around the potential negative implications on global growth subsided over the quarter. Moreover, there was greater political stability in the United Kingdom, with the appointment of the new Prime Minister Theresa May, which also helped to alleviate market concerns. The euro currency recovered during the period as market sentiment improved, gaining 1.16 per cent in the three months to September.

The pound weakened further over the quarter, depreciating 2.55 per cent. The Bank of England (BOE) downgraded its economic outlook for the United Kingdom and provided a range of easing measures aimed at stimulating the economy. Moreover, at its September meeting, the BOE indicated that future rate reductions could occur if its August economic predictions are ascertained to remain credible.

The Japanese yen depreciated significantly in early July, reaching 106.89 on lower levels of risk aversion and increasing speculation that the Bank of Japan (BOJ) would deliver additional stimulus at its upcoming monetary policy meeting. However, the BOJ's policy changes failed to meet investor expectations and concerns that the central bank was nearing its limitations resulted in a stronger yen. The currency ended the quarter at 101.35, and returned 1.83 per cent over the period.

**Figure 6**

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



Source: Bloomberg

### SECTION 3 – PORTFOLIO PERFORMANCE

#### ***Strategic Asset Allocation***

During the period July 2016 to September 2016, the asset classes of the Fund deviated from the Strategic Asset Allocation (SAA) benchmark weights and the US Short Duration Fixed Income mandate exceeded the permitted (+/- 5 per cent) range. As at July 31, 2016, the US Short Duration Fixed Income Mandate had an allocation of 19.95 per cent, or 5.05 per cent below the SAA of 25.00 per cent. The approved SAA for the HSF investment portfolio is as follows:

<b>i.</b>	<b><i>US Short Duration Fixed Income Mandate</i></b>	<b><i>25.0%</i></b>
<b>ii.</b>	<b><i>US Core Domestic Fixed Income Mandate</i></b>	<b><i>40.0%</i></b>
<b>iii.</b>	<b><i>US Core Domestic Equity Mandate</i></b>	<b><i>17.5%</i></b>
<b>iv.</b>	<b><i>Non US Core International Equity Mandate</i></b>	<b><i>17.5%</i></b>

During the month of August 2016, pursuant to a directive from the HSF Board of Governors, the HSF portfolio was rebalanced with the aim of bringing the US Short Duration Fixed Income mandate within compliance to the maximum of a 5% deviation from the approved SAA weight. A total of US\$120 million was transferred from the US Core Fixed Income mandate to the US Short Duration Fixed Income mandate. By the end of the quarter, the asset class with the largest overweight exposure was the US Core Fixed Income mandate while the US Short Duration Fixed Income mandate, had the largest underweight position.

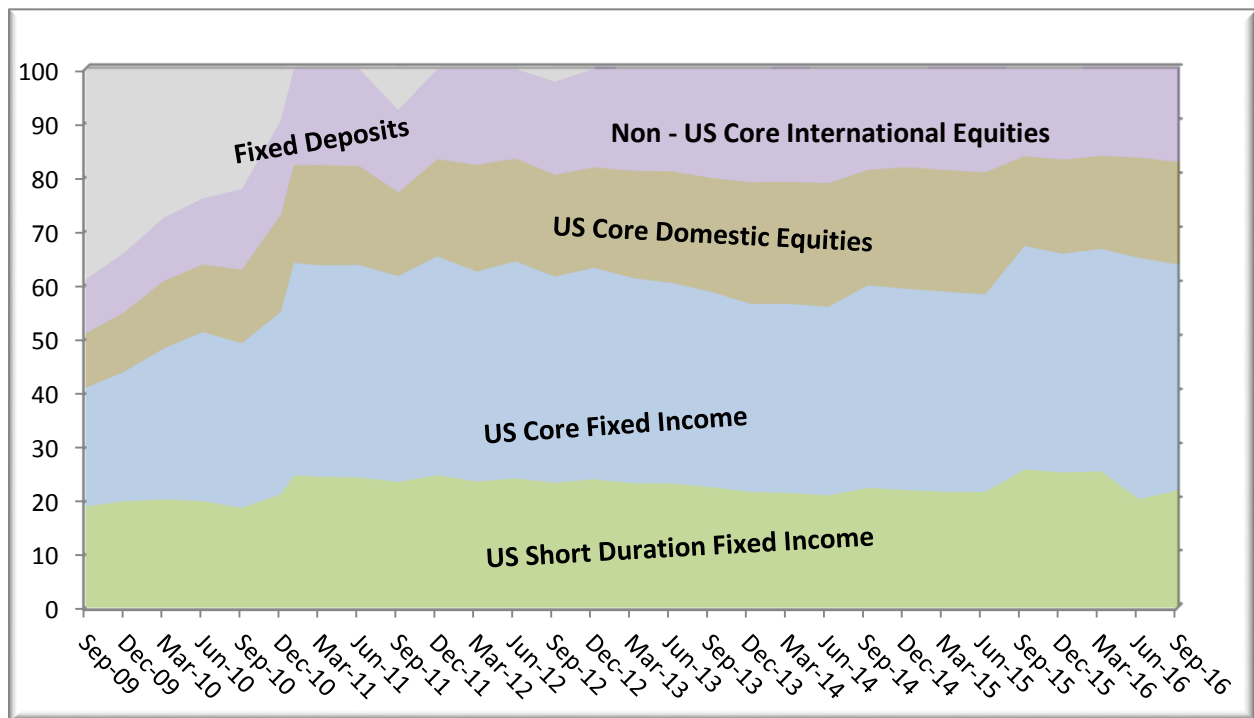
The total net asset value of the Fund as at the end of September 2016 was US\$5,584.2 million, compared with US\$5,454.6 million at the end of the previous quarter. Of this total, the investment portfolio was valued at US\$5,582.9 million, while the remaining portion (US\$1.3 million) was held in cash 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 for the period December 31, 2015 to September 30, 2016 are shown in Table 2, overleaf.

**Table 5**  
**Portfolio Composition relative to the Approved SAA**  
**/per cent/**

Asset Class		Dec-15	Mar-16	Jun-16	Sep-16	
Portfolio Weights		Target	Actual	Actual	Actual	
		Weight	% of	% of	% of	
		SAA	Fund	Fund	Fund	
	US Short Duration Fixed Income	25.00	25.37	25.57	20.36	22.03
	US Core Domestic Fixed Income	40.00	40.45	41.16	44.69	41.80
	US Core Domestic Equity	17.50	17.40	17.17	18.54	18.98
	Non-US Core International Equity	17.50	16.77	16.10	16.40	17.19

Totals may not sum to 100 due to rounding.

**Figure 7**  
**Asset Composition of the HSF Portfolio**  
 /per cent/



### ***Performance of the Investment Portfolio***

During the third quarter of 2016, the HSF investment portfolio increased 2.45 per cent, compared with an increase of 2.12 per cent for the SAA benchmark<sup>11</sup>. The outperformance of the investment portfolio for the quarter can be attributed to positive allocation and security selection effects. More specifically, during the quarter security selection within the mandates of the HSF contributed the most to excess returns along with an overweight to the US Core Fixed Income mandate. The HSF portfolio's quarterly return was primarily impacted by the equity mandates which added approximately 2.13 per cent, while the fixed income portion of the Fund added approximately 0.32 per cent.

<sup>11</sup> The SAA benchmark is a blended benchmark which comprises, Bank of America/Merrill Lynch US Treasury 1-5 Years Index (25%), Barclays US Aggregate Bond Index (40%), Russell 3000 ex Energy Index (17.5%), and MSCI EAFE ex Energy Index (17.5%).

The **US Short Duration Fixed Income** portfolio lost 0.04 per cent during the third quarter of 2016, outperforming its benchmark, the Bank of America Merrill Lynch US Treasury 1-5 year index, by 15 basis points. This outperformance was attributed to the interest rate duration strategies employed during the quarter and the portfolio's long exposure to US Breakeven inflation products, non-US government bonds, and agency commercial MBS securities. The net asset value of this mandate as at September 30, 2016 was **US\$1,229.8 million**, compared with US\$1,110.3 million at the end of the previous quarter. The change in the net asset value of this mandate is attributable to both financial market movements and the US\$120 million transfer from the US Core Fixed Income mandate during the month of August 2016.

The longer duration fixed income mandate which consists of **US Core Fixed Income** securities, increased 0.73 per cent for the third quarter of 2016, outperforming its benchmark, the Barclays Capital US Aggregate Bond index, by 27 basis points. This outperformance was due to both security selection and sector allocations during the quarter. Allocations to the asset backed security sector and agency mortgage backed securities added to performance over the period. Additionally, security selection in the Financials Corporate bond sector and Inflation Protected securities also helped performance. The net asset value of this mandate as at September 30, 2016 stood at **US\$2,333.7 million** compared with US\$2,436.9 million as at June 30, 2016. The change in the net asset value of this mandate is attributable to both price changes and the US\$120 million transfer to the US Short Duration Fixed Income mandate during the month of August 2016.

The **Non-US International Equities** mandate gained 7.43 per cent for the third quarter of 2016, compared to an increase of 6.86 per cent for its benchmark, the MSCI EAFE ex Energy index. The outperformance of the portfolio relative to its benchmark was due to positive stock selection and sector allocation decisions. Stock selection was especially positive in the Consumer Staples and Information Technology sectors and in UK and Europe. Sector allocations proved beneficial in the Real Estate, Health Care and Consumer Staples sectors. The net asset value of the Non-US Core International Equity mandate as at September 30, 2016 increased to **US\$959.6 million**, from US\$894.4 million at the end of June 2016.

The **US Core Domestic Equities** mandate increased 4.90 per cent, compared with an increase in its benchmark of 4.51 per cent, resulting in the mandate outperforming its benchmark for the period. During the quarter both stock selection and sector allocation

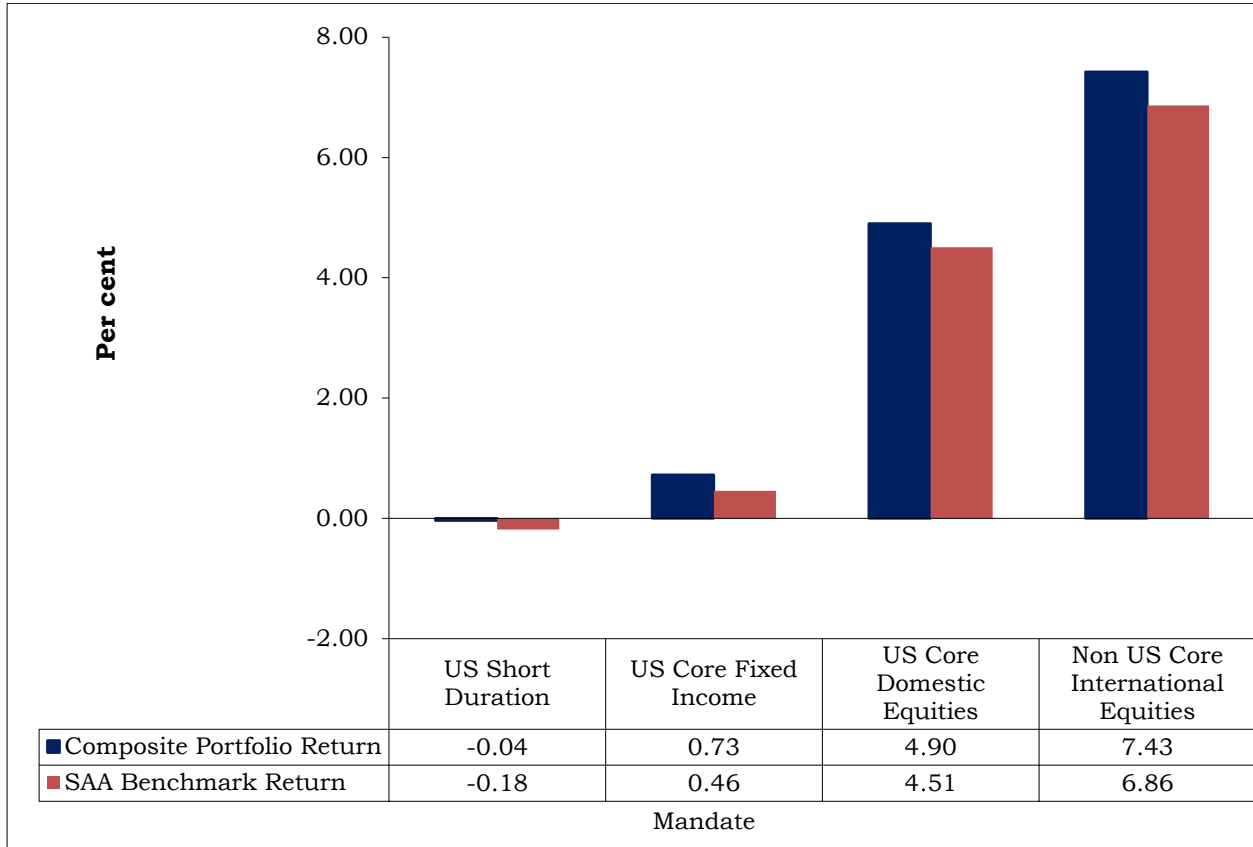
added to relative performance. Stock selection was the largest contributor during the quarter, as Morgan Stanley and Best Buy rallied during the quarter. Allocations to the Financial Services, Technology and Producer Durables sectors also helped to generate positive excess returns. The net asset value of this mandate, as at September 30, 2016, was **US\$1,059.9 million**, compared with US\$1,011.1 million at the end of June 2016.

**Table 6**  
**Contribution to Quarterly Return**  
**For the period Jul 2016 – Sep 2016**  
**/per cent/**

	<b>SAA Weights</b>	<b>Portfolio Weights as at 30-Sep-2016</b>	<b>Weighted Return HSF</b>	<b>Weighted Return Benchmark</b>
<b>Composite Portfolio</b>	100.00	100.00	2.45	2.12
<b>US Core Domestic Fixed Income</b>	40.00	41.80	0.32	0.18
<b>US Core Domestic Equity</b>	17.50	18.98	0.91	0.79
<b>Non US Core International Equity</b>	17.50	17.19	1.21	1.19
<b>US Short Duration Fixed Income</b>	25.00	22.03	0.00	-0.05

NB: Differences in totals are due to rounding.

**Figure 8**  
**Absolute Returns by Asset Class**  
**For the period Jul 2016 – Sep 2016**  
**/per cent/**





## **SECTION 4 – COMPLIANCE AND PORTFOLIO RISKS**

### **Compliance**

As at July 31, 2016, the US Short Duration Fixed Income mandate deviated from the Strategic Asset Allocation (SAA) benchmark weight, exceeding the permitted (+/- 5 per cent) range. The US Short Duration Fixed Income mandate had an allocation of 19.95 per cent, or 5.05 per cent below the approved SAA of 25.00 per cent as at July 31, 2016. By August 31, 2016, all of the asset classes of the fund were within their permitted ranges.

### **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 implied 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, 2016.

**Table 7**  
**Average Credit Rating**

<b>Mandate</b>	<b>Portfolio</b>	<b>Benchmark</b>
<b>US Short Duration</b>	<b>AA+</b>	<b>AA+</b>
<b>US Core Fixed Income</b>	<b>AA</b>	<b>AA+</b>

### ***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, 2016.

**Table 8**  
**Weighted Average Duration**  
**/Years/**

<b>Mandate</b>	<b>Portfolio</b>	<b>Benchmark</b>
<b>US Short Duration</b>	<b>2.66</b>	<b>2.66</b>
<b>US Core Domestic Fixed Income</b>	<b>5.37</b>	<b>5.51</b>

### ***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 2016, the currency exposure for this portfolio was 98 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
<b>FY 2010</b>									
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
<b>FY 2011</b>									
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
<b>FY 2012</b>									
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
<b>FY 2013</b>									
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
<b>FY 2014</b>									
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
<b>FY 2015</b>									
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
<b>FY 2015</b>									
September	-2.02	-2.19	16.83	2.47	1.13	134.06	5.31	4.73	58.12
<b>FY 2016</b>									
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

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)**

<b>Valuation Date</b>	<b>Net Asset Value</b>	<b>Total Comprehensive Income</b>	<b>Accumulated Surplus &amp; Unrealized Capital Gains/Losses</b>	<b>Contributions / (Withdrawals)</b>
<b>Annual Portfolio Valuation</b>				
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)

<b>Quarterly Portfolio Valuation</b>				
March 31, 2012	4,397,263,070	205,928,989	687,290,865	-
June 30, 2012	4,378,930,036	(44,520,884)	642,769,982	26,241,964
September 30, 2012	4,712,376,278	152,000,791	794,770,772	181,308,882
December 31, 2012	4,780,065,524	66,787,005	861,557,777	-
March 31, 2013	4,933,344,741	220,441,931	1,015,212,703	-
June 30, 2013	4,914,375,234	(18,801,609)	996,411,094	-
September 30, 2013	5,154,027,747	197,367,628	1,193,778,722	42,414,251
December 31, 2013	5,354,721,875	199,949,013	1,393,727,735	-
March 31, 2014	5,429,643,570	74,268,941	1,467,996,676	-
June 30, 2014	5,563,339,006	134,504,162	1,602,500,838	-
September 30, 2014	5,533,425,248	(29,555,092)	1,572,945,746	-
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	-

**Appendix III**  
**Summary Characteristics of Composite Benchmarks**  
**Fixed Income Benchmarks**

<b>Key Characteristics</b>	<b>Barclays US Aggregate Index</b>	<b>Merrill Lynch 1-5 Index</b>
<b>Total Holdings</b>	9,908	153
<b>Coupon (%)</b>	3.09	1.86
<b>Duration (Years)</b>	5.51	2.66
<b>Average Life (Years)</b>	7.82	2.76
<b>Yield to Maturity (%)</b>	1.97	0.89
<b>Option Adjusted Spread (bps)</b>	47	0
<b>Average Rating (S&amp;P)</b>	AA+	AA+
<b>Minimum Rating (S&amp;P)</b>	BBB-	AA

**Equity Benchmarks**

<b>Key Characteristics</b>	<b>Russell 3000 (ex-Energy)</b>	<b>MSCI EAFE (ex-Energy)</b>
<b>Total Holdings</b>	2,805	890
<b>Earnings Per Share (EPS Growth 3-5y fwd)</b>	10.9	7.61
<b>Price Earnings (P/E fwd)</b>	16.9	14.52
<b>Price / Book (P/B)</b>	2.7	1.61
<b>Weighted Average Market Capitalization* (Bn)</b>	\$120.96	\$51.93

\*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/**

	<b>Sep-15</b>	<b>Dec-15</b>	<b>Mar-16</b>	<b>Jun-16</b>	<b>Sep-16</b>
<b>Total Fund Value</b>	<b>5,665</b>	<b>5,745</b>	<b>5,787</b>	<b>5,454</b>	<b>5,584</b>
<b>Total Value of Equity</b>	<b>1,851</b>	<b>1,963</b>	<b>1,925</b>	<b>1,905</b>	<b>2,019</b>
US Core Domestic Equity	938	1,000	994	1,011	1,060
Non-US Core International Equity	913	963	931	894	959
<b>Total Value of Fixed Income</b>	<b>3,803</b>	<b>3,782</b>	<b>3,862</b>	<b>3,547</b>	<b>3,563</b>
US Short Duration Fixed Income	1,467	1,458	1,480	1,110	1,230
US Core Domestic Fixed Income	2,337	2,324	2,382	2,437	2,333
<b>Total Value of Cash or Cash Equivalents</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>

NB: Differences in totals are due to rounding.



**Appendix V**  
**HSF Portfolio Quarterly Returns**  
**/per cent/**

**Quarterly HSF & SAA Benchmark Returns**

