Review of the Heritage and Stabilisation Fund (HSF)

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Governor
Central Bank of Trinidad and Tobago

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Outline

- Background
- HSF Act
- Strategic Asset Allocation
- Review of Fund Performance
- Peer Perspective
- HSF Review
Background
1. The economy benefitted tremendously from two oil booms during the 1970’s, but government spending went unchecked. The non-energy fiscal deficit climbed from less than 10 per cent of non-energy GDP to over 40 per cent in the early 1980’s.

2. The collapse of oil prices in the 1980’s met the country unprepared for fiscal adjustment, for which the economy suffered for almost a decade.

3. The consequences were years of economic decline; balance of payments problems resulting in (a) an IMF standby arrangements; (b) a World Bank structural Adjustment Programme.
Selected Data from 1st Oil Shock

**Government Revenue and Expenditure**

- **Benchmark Oil Price**
  - **US$ per barrel**
    - 1972: 5
    - 1976: 10
    - 1980: 20
    - 1984: 35
    - 1988: 25

- **TT$ Millions**
  - 1974: 0
  - 1976: 2,000
  - 1978: 4,000
  - 1980: 6,000
  - 1982: 8,000
  - 1984: 10,000
  - 1986: 12,000

**Government Revenue**

- **Total Revenue**
- **Total Expenditure**

**Notes:**
- Data reflects changes in government revenue and expenditure from 1974 to 1986.
- Benchmark oil price shows significant increases in the 1980s.
Selected Data from 1st Oil Shock

Non-Energy Deficit and Real GDP Growth

Foreign Reserves and Imports
The Fund

1. As oil prices began to recover in the late 1990's, the Government introduced an Interim Revenue Stabilisation Fund (IRSF) in 2000.

2. The Fund was formalized in March 2007 with the passage by Parliament of the Heritage and Stabilisation Fund (HSF) Act.

<table>
<thead>
<tr>
<th>Period End*</th>
<th>Value (US$ Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>66.1</td>
</tr>
<tr>
<td>2001</td>
<td>162.9</td>
</tr>
<tr>
<td>2002</td>
<td>162.5</td>
</tr>
<tr>
<td>2003</td>
<td>248.9</td>
</tr>
<tr>
<td>2004</td>
<td>453.9</td>
</tr>
<tr>
<td>2005</td>
<td>870.8</td>
</tr>
<tr>
<td>2006</td>
<td>1,396.8</td>
</tr>
<tr>
<td>March 15, 2007</td>
<td>1,402.2</td>
</tr>
<tr>
<td>2007</td>
<td>1,788.3</td>
</tr>
<tr>
<td>2008</td>
<td>2,909.7</td>
</tr>
<tr>
<td>2009</td>
<td>2,992.7</td>
</tr>
<tr>
<td>2010</td>
<td>3,702.0</td>
</tr>
<tr>
<td>2011</td>
<td>4,191.2</td>
</tr>
<tr>
<td>April 30, 2012</td>
<td>4,426.3</td>
</tr>
</tbody>
</table>

* End of Year except where otherwise indicated
The HSF Act – Compromise Legislation

1. Compromise legislation - There was a view that given the many needs (infrastructure etc) .. we shouldn’t be putting money aside..

2. That what was needed was a special infrastructure fund (we had something like that before)

3. That future generations will be better served by accelerated development rather than by putting resources aside.

4. No likelihood that oil and gas would run out soon so that future generations would be provided for.
The counter-arguments were:

(i) Obviously, one could not guarantee how long oil would last … oil and gas are wasting assets … and thus there are the practical and ethical issues.

(ii) All countries have absorptive country constraints. Small developing countries like ours have acute constraints and when we overspend (we open ourselves to wanton waste, corruption and all that goes with it – Dutch Disease phenomenon).
(iii) Thus the compromise legislation that resulted in:

- A hybrid fund (Stabilization and Heritage)
  
  A stabilization component to insulate fiscal policy and the economy, from adverse swings in international oil and gas prices;

- The Heritage Element – to accumulate savings from the country’s exhaustible assets of oil and gas for future generations.
Consistent with these principles the HSF Act provides for, inter alia, the following:

- savings Rule;
- withdrawal Rule;
- as well as a clearly defined governance and disclosure or reporting regime.
Main Provisions of the HSF Act

- **Savings Rule:**

  - 60 per cent of excess energy revenues (actual minus budgeted revenues) shall be credited to the Fund.
Main Provisions of the HSF Act

Withdrawal Rule:

- Draw-downs are permitted if actual tax revenues in a given fiscal year are at least 10 percent below budgeted revenues.

- Withdrawals could be up to 60 per cent of the shortfall, but not exceeding 25 per cent of the Fund.

- There is a capital floor of US$1 billion for the Fund, beyond which draw-downs are not permitted.
Main Provisions of the HSF Act

Other provisions of the Act include:

I. The Fund cannot be used to directly finance capital expenditure or as collateral for government borrowing.

II. In principle, the Fund should be invested in assets not directly related to oil and gas.

III. The Funds are to be invested with a medium-long-term horizon.
HSF Governance Structure

- The Parliament
- Minister of Finance
- The HSF Board
- Central Bank
- Custodian
- External Auditor
- Sub-Investment Manager
- Sub-Investment Manager
- Sub-Investment Manager
HSF Governance Structure

• The Fund has a clearly defined governance structure (Chart 2) as follows:

  ❑ There is the Board of Directors, appointed by the Cabinet whose job is to decide on the;
  a) Investment objectives
  b) The Strategic Asset Allocation (SAA)

  ❑ The Central Bank is to act as fund manager, but outsources the function to external fund managers.

  ❑ There is quarterly reporting by the Board to the Minister of Finance, who in turn provides an annual report to the Parliament.

  ❑ There is an annual audit of the Fund done by the Auditor General’s Office.
Strategic Asset Allocation of the HSF
Strategic Asset Allocation (SAA)

- Consistent with the Government’s return objective, risk tolerance and investment constraints, the HSF Board with technical assistance from the World Bank agreed on a SAA;
- The SAA called for 25 per cent of the portfolio to be invested in fixed income securities with a maturity of 1-5 years;
- 40 per cent in longer-term fixed income securities; and
- 35 per cent in equities, equally divided between US and non-US equities.
SAA Risk and Return Trade-off

- The SAA embodies the well-established principles of higher return, requiring greater risk.

- Thus, while investments in equities have proven to yield higher returns over the long term, these investments also carry a higher degree of volatility.

- The goal of the SAA is to meet a long term real rate of return (of about 3.5 per cent) while recognising that there will be short term fluctuations in the market.
Transition to the Target SAA

- In late 2007, the Board of Governors agreed to a three-year transition plan to the target SAA based on:
  - Operational challenges of investing all at once (price effect)
  - The need to diversify entry exposure over business cycles
  - Volatility of the market at the time

- In the face of the international financial crisis that started in 2007, the decision was made to postpone the transition to the approved SAA until financial markets stabilized. In the meanwhile, all Fund resources were held in short term bank deposits. The actual transition to the SAA began in September 2009.

- The Fund attained the approved SAA target in early January 2011.
### Chart 3. Approved Strategic Asset Allocation

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Asset Allocation (Per Cent)</th>
<th>Benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Short Duration Fixed Income</td>
<td>25.0</td>
<td>Bank of America Merrill Lynch 1-5 Year Treasury Index</td>
</tr>
<tr>
<td>US Core Fixed Income</td>
<td>40.0</td>
<td>Barclay US Bond Aggregate Index</td>
</tr>
<tr>
<td>US Core Domestic Equities</td>
<td>17.5</td>
<td>Russell 3000 Index ex Energy</td>
</tr>
<tr>
<td>Non-US Equities</td>
<td>17.5</td>
<td>MSCI EAFE Index ex Energy</td>
</tr>
<tr>
<td>Allocation Total</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Review of Fund Performance
The Fund

- The Fund was established with an initial balance of US$1,402.2 million on March 15, 2007 – a transfer from the IRSF.

- As at April 30, 2012 the Net Asset Value of the Fund was US$4,426.3 million.

- Total contributions to the Fund from March 2007 amounted to US$2,330.8 million.

- No withdrawal requests were made.
Market Performance

Over the period March 2007 to present, global capital markets experienced historically unique conditions characterized by:-

- Very low interest rates in developed markets
- Financial market crisis
- Dislocation of credit markets
- Unprecedented intervention by governments and regulators
- Increased volatility in post-crisis financial markets
The Fund has averaged an annual return of 5.20 per cent. This compares to a benchmark return 5.21 per cent per annum.
Table 4. Review of Annual Fund Performance

<table>
<thead>
<tr>
<th>Period</th>
<th>Portfolio Return (Per Cent)</th>
<th>Excess Return Over Benchmark (Per Cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2007*</td>
<td>2.97</td>
<td>0.02</td>
</tr>
<tr>
<td>FY2008</td>
<td>3.62</td>
<td>0.13</td>
</tr>
<tr>
<td>FY2009</td>
<td>2.80</td>
<td>-0.38</td>
</tr>
<tr>
<td>FY2010</td>
<td>6.07</td>
<td>0.32</td>
</tr>
<tr>
<td>FY2011</td>
<td>0.79</td>
<td>-0.35</td>
</tr>
<tr>
<td>FY2012**</td>
<td>8.02</td>
<td>0.27</td>
</tr>
</tbody>
</table>

** Returns for the period October 01, 2011 to April, 2012.
HSF Experience

- The Fund performed relatively well despite a low interest rate environment and volatile international financial markets.

- In the earlier years, much of the Fund was invested in fixed deposits with highly rated commercial banks and US treasury bills. While this meant relatively low returns, it avoided major losses during the financial crisis of 2008/2009.

- In 2009, the Fund began investing in equities which since have been the main driver of returns up to April 2012. In fact, the accumulated return on the equity portfolio is approximately 30.95 per cent from 2009.
### Table 5. Cumulative Return (from March 2007) (Per cent)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Market</td>
<td>7.74</td>
</tr>
<tr>
<td>US Short Duration Fixed Income</td>
<td>8.93</td>
</tr>
<tr>
<td>US Core Fixed Income</td>
<td>19.78</td>
</tr>
<tr>
<td>US Domestic Equity</td>
<td>48.08</td>
</tr>
<tr>
<td>Non US Core International Equity</td>
<td>13.82</td>
</tr>
</tbody>
</table>
Table 6. Annualised Returns (from March 2007)

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Portfolio Return</th>
<th>Benchmark Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Market*</td>
<td>2.04</td>
<td>2.05</td>
</tr>
<tr>
<td>US Short Duration Fixed Income</td>
<td>3.26</td>
<td>3.18</td>
</tr>
<tr>
<td>US Core Fixed Income</td>
<td>7.21</td>
<td>7.11</td>
</tr>
<tr>
<td>US Domestic Equity</td>
<td>17.58</td>
<td>17.99</td>
</tr>
<tr>
<td>Non US Core International Equity</td>
<td>5.05</td>
<td>4.58</td>
</tr>
</tbody>
</table>

*Annualised return to December 2010.
The current year so far.....

- The Fund had a positive cumulative return to April 2012.

- The Fund has returned **8.02 per cent** thus far for fiscal 2012 (April 2012).

- However, heightened concerns about the slowing pace of the global recovery and the impact of the debt crisis on growth prospects in the EU, have weighed down equity markets since April 2012.
Peer Perspective
Table 8. Performance of Selected Funds by Objectives: Pension Reserve Fund

<table>
<thead>
<tr>
<th>Fund</th>
<th>FY 2011</th>
<th>5-YR Return (Annualised)</th>
<th>Lowest FY Return (last 5 yrs)</th>
<th>Value of Fund USD’Billion June 2011</th>
<th>Strategic Asset Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia Government Future Fund</td>
<td>12.8 (Jun 11)</td>
<td>5.8</td>
<td>-4.2 (Jun 09)</td>
<td>72.9</td>
<td>Bonds (15%), Equity (40%), Alt. Assets (15%), Cash (5%), Other (25%)</td>
</tr>
<tr>
<td>Norway Government Pension Fund</td>
<td>-2.5 (Jun 11)</td>
<td>1.5</td>
<td>-23.3 (Dec 08)</td>
<td>571.5</td>
<td>Bonds (40%), Equity (60%),</td>
</tr>
<tr>
<td>New Zealand Superannuation Fund</td>
<td>25.1 (Jun 11)</td>
<td>4.5</td>
<td>-22.1 (Jun 09)</td>
<td>12.1</td>
<td>Bonds/MMKT (20%), Equity (75%), Real Estate (5%)</td>
</tr>
</tbody>
</table>
Table 9. Performance of Selected Funds by Objectives: Stabilisation/Savings

/Per Cent/

<table>
<thead>
<tr>
<th>Fund</th>
<th>FY 2011 (Annualised)</th>
<th>5-YR Return (Annualised)</th>
<th>Lowest FY Return (last 5 yrs)</th>
<th>Value of Fund USD’Billion</th>
<th>Strategic Asset Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska Permanent Fund</td>
<td>20.6 (Jun 11)</td>
<td>4.9</td>
<td>-18.0 (Jun 09)</td>
<td>40.3</td>
<td>Bonds (21%), Equity (59%), Alt. Assets (18%), Cash (2%)</td>
</tr>
<tr>
<td>Alberta's Heritage Fund</td>
<td>10.4 (Mar 11)</td>
<td>3.8</td>
<td>-18.1 (Mar 09)</td>
<td>14.3</td>
<td>Bonds (20%), Equity (50%), Alt. Assets (30%)</td>
</tr>
<tr>
<td>Trinidad and Tobago’s HSF</td>
<td>0.8 (Sep 11)</td>
<td>5.2</td>
<td>0.8 (Sep 11)</td>
<td>4.4</td>
<td>Bonds (65%), Equity (35%)</td>
</tr>
</tbody>
</table>
HSF Review
The HSF Act calls for a review after five years...that is about now.

After 5 years of operation there are many administration and technical aspects of the Act that need to be clarified or amended.
Technical Issues

1. Clarify the deposit rules
   - Quarterly calculation or Cumulative during the year basis

2. Clarify the formula used to determine the reference commodity price
   - To align with price used in the budgeting process.

3. The need to clarify or to make more transparent the existing procedures.
Conceptual Issues

- Given changed reality and outlook there are some more fundamental issues to be revisited.
  - (i) are we **saving enough**, and if not what are the implications of saving more?
  - (ii) Should we have only a saving (**Heritage**) Fund or meet the stabilising and saving objectives with separate funds? What are the implications of these options?
  - (iii) should we consider a more **comprehensive approach** and look at a asset-liability management approach from a country’s perspective?
The world has changed

- The economic conditions and assumptions at the time (2006/2007) influenced the structure of the Fund and its operations.

- At the time:
  - The country was experiencing fiscal surpluses
  - Abundant oil and gas revenues would continue to generate fiscal surpluses
  - Lower volatility of financial market and higher expected return
  - There was a brighter outlook for oil and gas reserves.
The world has changed

- Outlook for oil and gas reserves is less optimistic.
- Greater Market Volatility
- Slower Expected global growth over the Medium Term
- Greater Fiscal Challenges
- A major challenge concerns low gas prices because of increased competition (from shale deposits in the US and other producers).
## 2. Selected Economic Indicators

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Real GDP Growth (%)</td>
<td>8.8</td>
<td>-0.5</td>
</tr>
<tr>
<td>Energy (%)</td>
<td>12.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Non-Energy (%)</td>
<td>5.7</td>
<td>-1.6</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Oil Production (bbl/d)</td>
<td>123,288</td>
<td>92,350</td>
</tr>
<tr>
<td>Fiscal Surplus/ (deficit ) (TT$Mn)</td>
<td>2,299</td>
<td>-5,058</td>
</tr>
<tr>
<td>Balance of Payments Surplus/(Deficit)(US$Mn)</td>
<td>1,541</td>
<td>418*</td>
</tr>
</tbody>
</table>
Are We Saving Enough?

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HSF Savings to Total Revenue</td>
<td>5.1</td>
<td>11.6</td>
<td>6.9</td>
<td>6.2</td>
<td>7.4</td>
</tr>
<tr>
<td>HSF Savings to GDP</td>
<td>1.5</td>
<td>3.8</td>
<td>2.3</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>HSF Savings to Energy Revenue</td>
<td>11.4</td>
<td>24.0</td>
<td>19.6</td>
<td>15.8</td>
<td>17.7</td>
</tr>
<tr>
<td>HSF Savings to Energy GDP</td>
<td>3.3</td>
<td>7.4</td>
<td>5.2</td>
<td>4.4</td>
<td>5.1</td>
</tr>
<tr>
<td>HSF Savings to Energy Exports</td>
<td>2.8</td>
<td>6.5</td>
<td>5.2</td>
<td>8.8e</td>
<td>5.8</td>
</tr>
</tbody>
</table>

- Estimate.
- NB: No contributions were made to the Fund in 2009.
Are we saving enough, and if not what are the implications of saving more?

- Since 2000 we have saved just over US$ 4 billion
- There are number of metrics that one can use akin to a country’s saving rate

- However if one considers a scenario with a target fund value of US$15 billion in the next 10 years. The current saving rates should be significantly higher
  - Approximately US$600 million per year (currently saving an average of USD470 million since 2007)
  - Assuming no withdrawals and a nominal rate of return of 5 per cent per annum
What are the Implications, if we decide to save more?

- This kind of saving will mean a concerted fiscal adjustment
- The recognition that one may have to forgo current needs for future development
- This is especially challenging in a condition of fiscal deficit and reduce oil production
Stabilisation or Not?

- Given the current value of the Fund and current activity in the energy sector an argument could be made to de-emphasise the stabilisation aspect of the Fund and focus more on savings.
- Of course reduced stabilisation funds, implies more fiscal adjustments or increased borrowing (the latter raises other questions).
- This would mean at least tighter withdrawal rules- currently the Fund allows up to 25 per cent of Fund withdrawal a year to a minimum balance of $1 billion in the Fund.
Implications of more emphasis on Saving

- There would be realignment of the SAA to meet the long term objective. Currently because of the possibility of having 25 per cent of the Fund withdrawn in any given year, a portion of the Fund is invested in low yielding liquid short term instruments.

- A Heritage Fund may present an opportunity to take advantage of growth centres in the world. The Fund will now be able to consider emerging market debt, higher equities exposure and alternative investments.

- Consistent with the risk return trade off, one would expect high return over the long term.
Asset Liability Management (ALM)

- If one considers the total assets available to the government, we would have to examine among other things, the foreign currency reserves managed by Central Bank (USD9.3 billion) and the HSF (USD4.3 billion).
- The reserves and the HSF could be managed to meet the heritage and stabilisation needs of the country.
- To this end some portion of the reserves could be used as a stabilising mechanism.
- The reserves is an ideal candidate because it is currently conservatively managed and levels are arguable above adequacy of the reserves current purpose.
Implications of this Asset Liability Management Perspective

- There are governance issues that will have to be ironed out, as the management of Central Bank assets is governed by legislation.
- The determination of reserves adequacy, while topical is not conclusive, which may present problems as to portion of reserves one use as stabilisation.
- To this end some portion of the reserves could be used as a stabilising mechanism.
- As we saw in the past high national reserves can be dissipated quickly, an integrated ALM approach to managing the sovereign balance sheet, will also have to take into consideration the country’s debt composition.
Comparison of the Reserves and HSF Benchmarks

**Reserves Benchmark**
- Cash and Cash Equivalent: 34.50%
- US Treasury Notes: 17.50%
- Other Sovereign Securities: 40%
- Long Duration Fixed Income: 15%

**HSF Benchmark**
- US Equities: 17.50%
- Non US Equities: 25%
- Long Duration Fixed Income: 40%
A Long Term Perspective

- The HSF is not unique, many Sovereign Wealth Funds (SWFs) in developing countries do not have well established institutional culture.

- It is therefore important that there is “buy-in” at the highest level of sponsorship, with respect to risk and return profile of the portfolio consistent with the Fund’s macro objectives.

- In the short term some assets classes do better than others. For example equities are invariable a key component of Pension plans given their expected high return. But volatility comes on along with this however. For example the Wilshire 5000 Total Market Index lost $US2.8 trillion in value from July 22 to August 11, 2011.
A Long Term Perspective (cont’d)

- This type of volatility however should be balanced by inclusion of other negatively correlated asset classes in the portfolio.

- In short the HSF is a long term fund, geared to maximizing long term risk adjusted returns. This is best achieved through a diversified portfolio.

- It is therefore key for the success of the Fund that stakeholders measure and assess the performance of the HSF by long term benchmarks and stay the course despite short term volatility from time to time.
The End