## NATIONAL PARLIAMENT WORKSHOP CENTRAL BANK, GOVERNMENT BORROWING \& LENDING AND GENERAL BUDGET OF THE STATE 2010

## Investment Management of the Petroleum Fund

## By:

Abraão Vasconselos, General Manager

## Outline of presentation

1. Investment strategy versus ESI determination
2. Current investment benchmark
3. Summary financial information and performances
4. External borrowing versus spend the PF

## Current Investment Strategy

The PFL provides specific investment strategy:

- Not less than $90 \%$ invest in USD cash and fixed interest, rated AA- or higher and average duration less than 6 years.
- Not more than $10 \%$ invest in other assets, provided that:
- It is issued abroad;
- Liquid and transparent
- Traded in well-regulated financial markets

Mercer in 2007 has advised the BPA that the current permissible universe may not be appropriate for the future.

## Framework to transfer from the PF

The PFL provides the maximum annual drawdown on the Fund - the Estimated Sustainable Income unless otherwise approved by National Parliament.

- ESI $=$ r\% of the Petroleum Wealth, where

Petroleum Wealth = Asset value of the PF
Present value of the future expected petroleum receipts of fields in production.
and
r\% = 3\%

## Framework to transfer from the PF

- This transfer rules link the Estimated Sustainable Income (ESI) determination to the expected long term real returns i.e. returns in excess of CPI (domestic price inflation). Since r\% is the long term expected real return on assets.
- Maintaining the real value of the Petroleum Fund under this ESI calculation policy (i.e. 3\% spending rule) requires pursuit of at least a CPI $+3 \%$ p.a. on the PF over the long term. This implies that accepting some short term volatility and the risk of a negative return in any given year.
- This is to say, if the intention is to grow the real wealth for future generations - a return target of more than $3 \%$ will be required.


## Investment strategy versus ESI

Probability of generating 3\% real return over different periods


$$
\longrightarrow-5 \mathrm{yrs} \simeq 10 \mathrm{yrs} \simeq-20 \mathrm{yrs}
$$

## Average Fund Value versus "worst case" Fund at t = 20

Petroleum Fund at 30 June 2027, $\mathbf{t = 2 0}$ ( $\$$ 'millions) Average "terminal value" vs 5 th percentile "terminal value"


Source: Mercer Report on Investment Strategy, 2007

## Return Target versus Risk of Negative Return

Return in excess of CPI $+3 \%$ target vs Risk of negative return


Source: Mercer Report on Investment Strategy,
2007

## Outline of presentation

1. Investment strategy versus ESI determination
2. Current investment benchmark
3. Summary financial information and performances
4. External borrowing versus spend the PF

## Current Investments Benchmark

## - Eligible instruments

| Qualifying fixed interest investments under Art. 15.1 of <br> the PFL | Up to $100 \%$ |
| :--- | :--- |
| Fixed interest instruments meet the conditions of Article <br> 14 of PFL | No more than $10 \%$ |

Eligible currencies for fixed interest investments are USD, AUD, EUR, GBP and JPY

## Current Investments Benchmark

## - Global Benchmark

- US Government 0-5 years 90.4\%
- US Government 5-10 years 2.0\%
- Governments/Supranational USD AAA 2.6\%
- Governments/Supranational USD AA 1.4\%
- Australian Government 1.4\%
- Euro Governments 1.4\%
- United Kingdom Gilts 0.4\%
- Japan Government 0.4\%


## Current Investments Benchmark

## Subsidiary Benchmarks

- BPA Internal Management (80\% of global portfolio)
- US Government 0-5 years 100.0\%
- Bank for International Settlements (20\% of global portfolio)
- US Government 0-5 years
- US Government 5-10 years
10.0\%
- Governments/Supranational USD AAA 13.0\%
- Governments/Supranational USD AA 7.0\%
- Australian Government 7.0\%
- Euro Governments 7.0\%
- United Kingdom Gilts 2.0\%
- Japan Government 2.0\%


## Current Investments Benchmark

- Bank for International Settlements may invest at least $80 \%$ of the portfolio in accordance with the qualifying instruments defined in Art. 15.1.
- $20 \%$ of the portfolio may be invested in deposits with, or debt instruments denominated in the currency allowed.
- The expected outperformance of the portfolio gross of management fees is 25 bps over the benchmark performance, on an annual basis over a rolling three year period, while maintaining ex ante tracking error within $1 \%$.


## Current works...

- The BPA is in the process of appointing additional two external managers based on the Minister request.
- The IAB is exploring also investing in different asset classes.


## Trading mechanism of the Petroleum Fund



## Outline of presentation

1. Investment strategy versus ESI determination
2. Current investment benchmark
3. Summary financial information and performances
4. External borrowing versus spend the PF

## Summary Financial Information

## PETROLEUM FUND MOVEMENT SINCE INCEPTION

## OPENING BALANCE

Transfer from "Timor Gap" ..... 79.6
Transfer from CFET ..... 125.0
Total Opening Balance ..... 204,6
TOTAL RECEIPTS SINCE INCEPTION

| PFL Article 6.1 (a) Revenue Receipts | $2,470.0$ |
| :--- | :---: |
| PFL Article 6.1 (b) DA Receipts | $3,115.0$ |
| PFL Article 6.1 (c) Revenue Receipts*) | 408.0 |
| PFL Article 7.1 Transfer to General State Budget Account | $\mathbf{( 8 9 6 . 0 )}$ |
| Total Receipts since inception | $5,097.0$ |
| TOTAL PF BALANCE AS AT 30 SEPTEMBER 2009 | $\mathbf{5 , 3 0 1 . 6}$ |

*) Net return

## Performance of the Fund up to 30 September 2009

| CURRENCY USD | $\%$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | QTR | FYTD | 1 YEAR | 3 YEARS | SINCE |
|  | 1.35 | 1.35 | 4.02 | 5.29 | 4.74 |
| Total Fund | 1.34 | 1.34 | 4.15 | 5.37 | 4.80 |
| Benchmark | 0.01 | 0.01 | -0.13 | -0.08 | -0.06 |
| Excess |  |  |  |  |  |

## Outline of presentation

1. Investment strategy versus ESI determination
2. Current investment benchmark
3. Summary financial information and performances
4. External borrowing versus spend the PF

## External borrowing versus spend the PF

Should Timor-Leste spend the PETROLEUM FUND or use EXTERNAL DEBT for infrastructure investments?

## A simple note...

- Timor-Leste should consider to BORROW if the interest rate on the loan is lower than the expected return of the Petroleum Fund.
- Remember that the return on the Petroleum Fund is more risky than the lending rate, especially if the proportion of stocks is high. More volatility or variations in the short term.


## Take the following simple example

- Timor-Leste will get a loan with either $0 \%$ interest rate in the next 10 years, or an interest rate $2 \%$ lower than the market rate of $4 \%$.
- The Petroleum Fund will give a return of $4 \%$ or $5 \%$ the next 10 years. Both are very conservative estimates and doesn't imply much stocks in the portfolio
There will be four possibilities:
- C1,R1 $=0 \%$ interest on the loan and $4 \%$ return on the Fund.
- C1,R2 $=0 \%$ interest on the loan and $5 \%$ return on the Fund.
- C2,R2 $=2 \%$ interest on the loan and $4 \%$ return on the Fund
- C2,R2 $=2 \%$ interest on the loan and $5 \%$ return on the Fund


## Accumulated Cash Flow



## To conclude...

- As long as the interest is below the market rate it is, from a purely financial standpoint, better to borrow.
- If the risk in the Petroleum Fund is too high there will be a higher possibility that the return on the Fund will be lower than the interest rate paid in the short run.
ofrigara!

