

Pensions Industry Trends & Caribbean Experience

Presented by:

Varsha Panday, MSc. &

Simon Johnson, MSc.

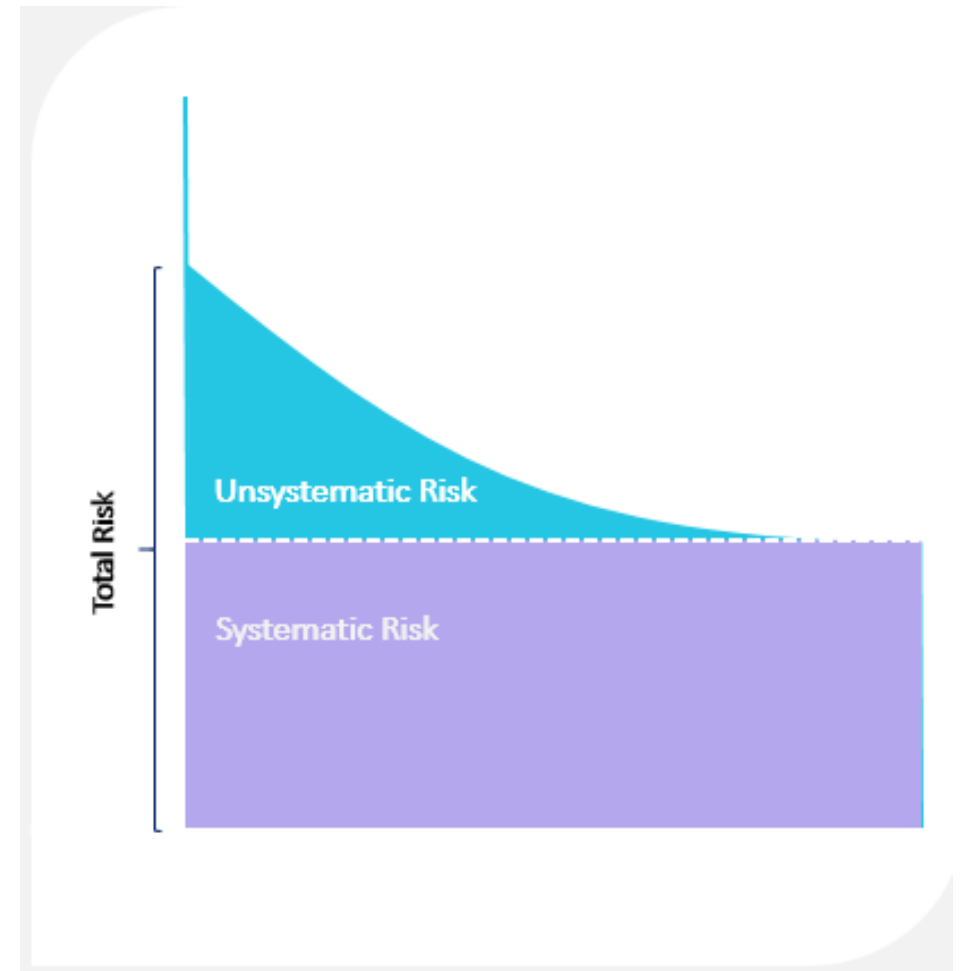


Risk Adjusted Returns

- A risk-based profitability measurement. This measurement focuses on the level of risk that is involved in achieving a certain level of return. There are three key measures to assess a portfolio's return with respect to its risk:

Measures of Performance

- **Sharpe Ratio** – measure of total risk
- **Treynor Ratio** – measure of systematic risk
- **Jensen Ratio** – measure of excess return



Pension Industry Statistics

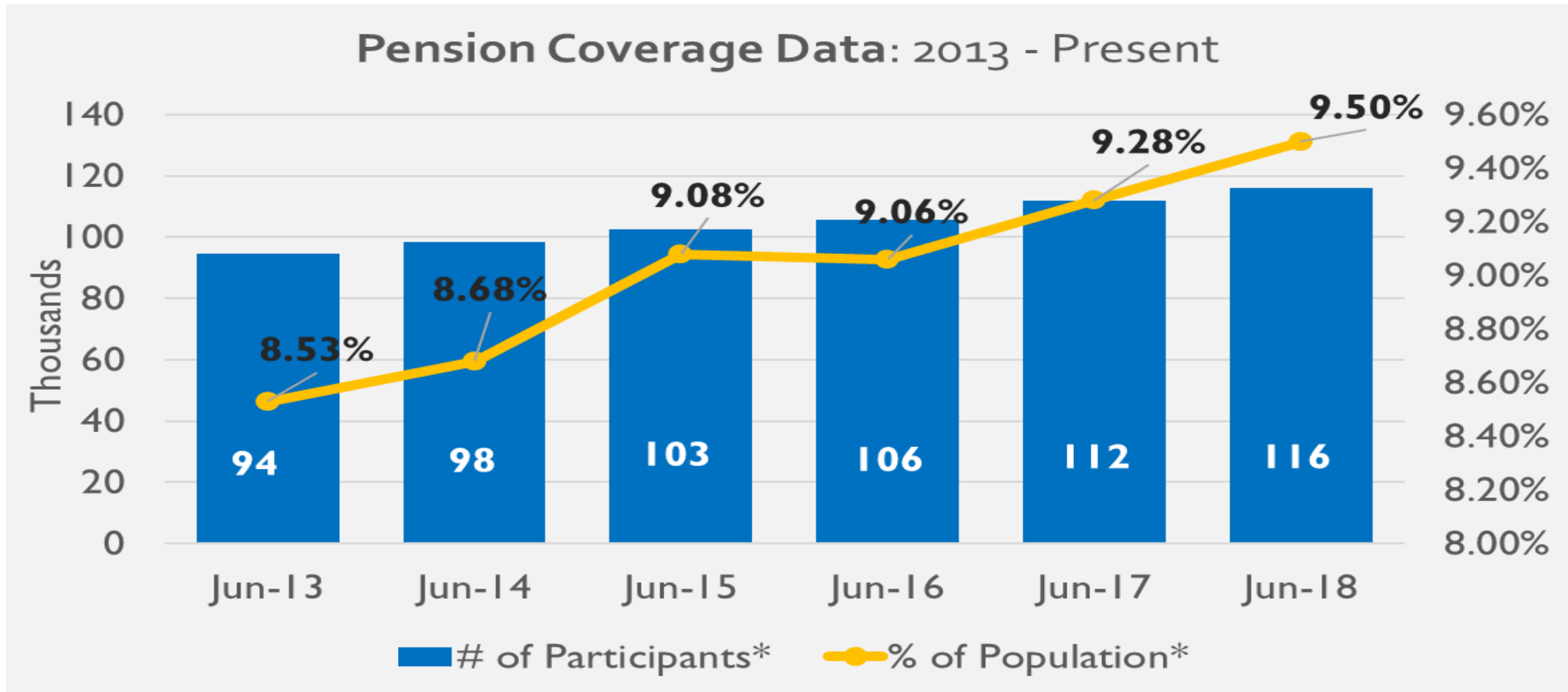
- *Low Coverage remains an issue locally*

	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18
Assets Under Management (J\$B)	303.48	323.69	363.07	425.17	482.82	552.72
# of Plans*	445	436	420	412	402	397
# of Participants*	94,462	98,355	102,515	105,832	111,761	116,073
% of Population*	8.53%	8.68%	9.08%	9.06%	9.28%	9.50%

*Active membership



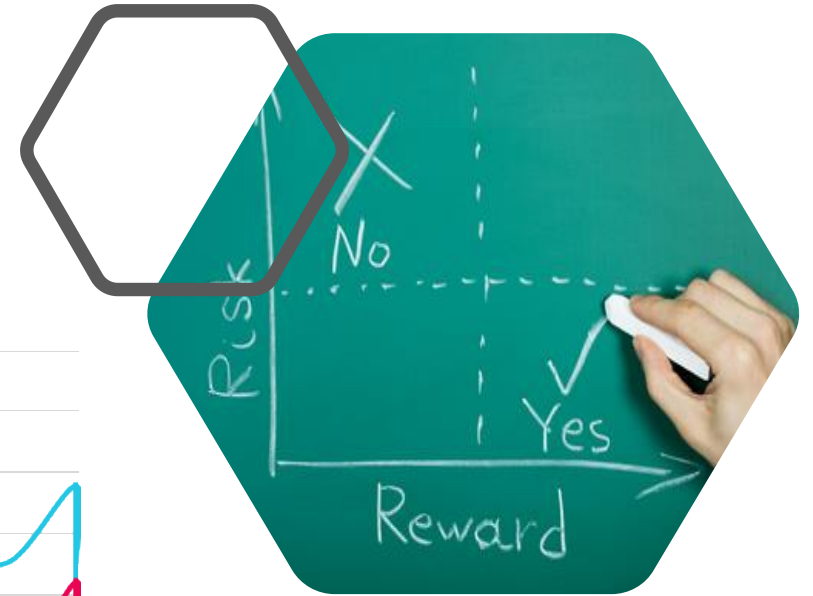
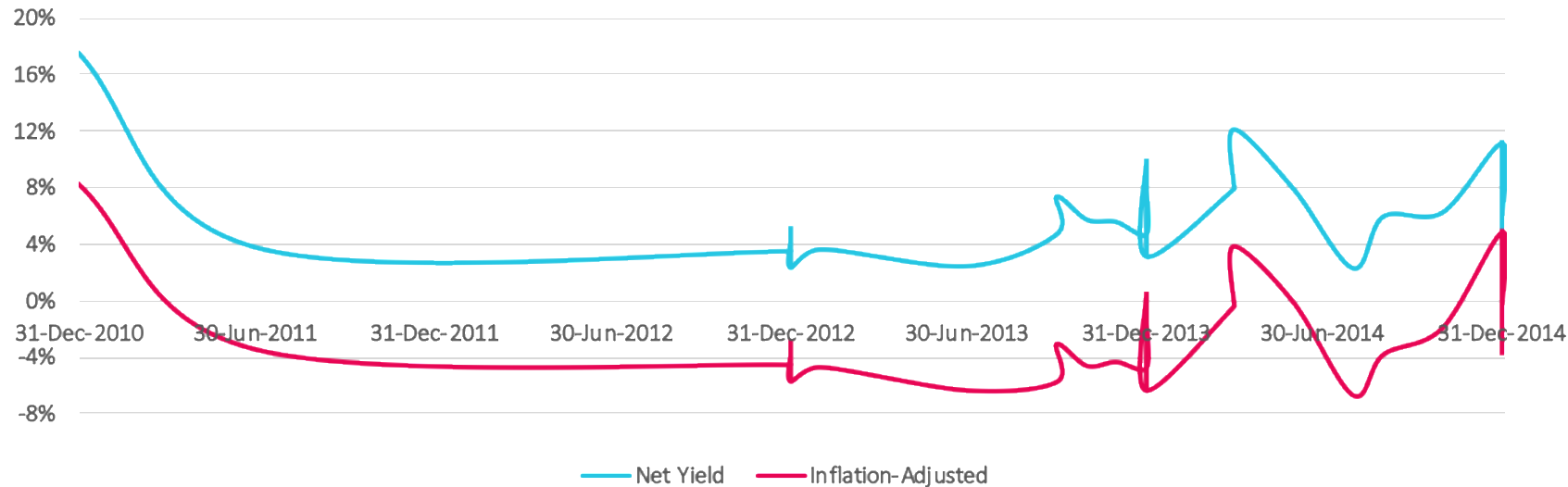
Pension Industry Statistics (cont.)



Historical Returns

➤ Inflation – Adjusted Historical Returns

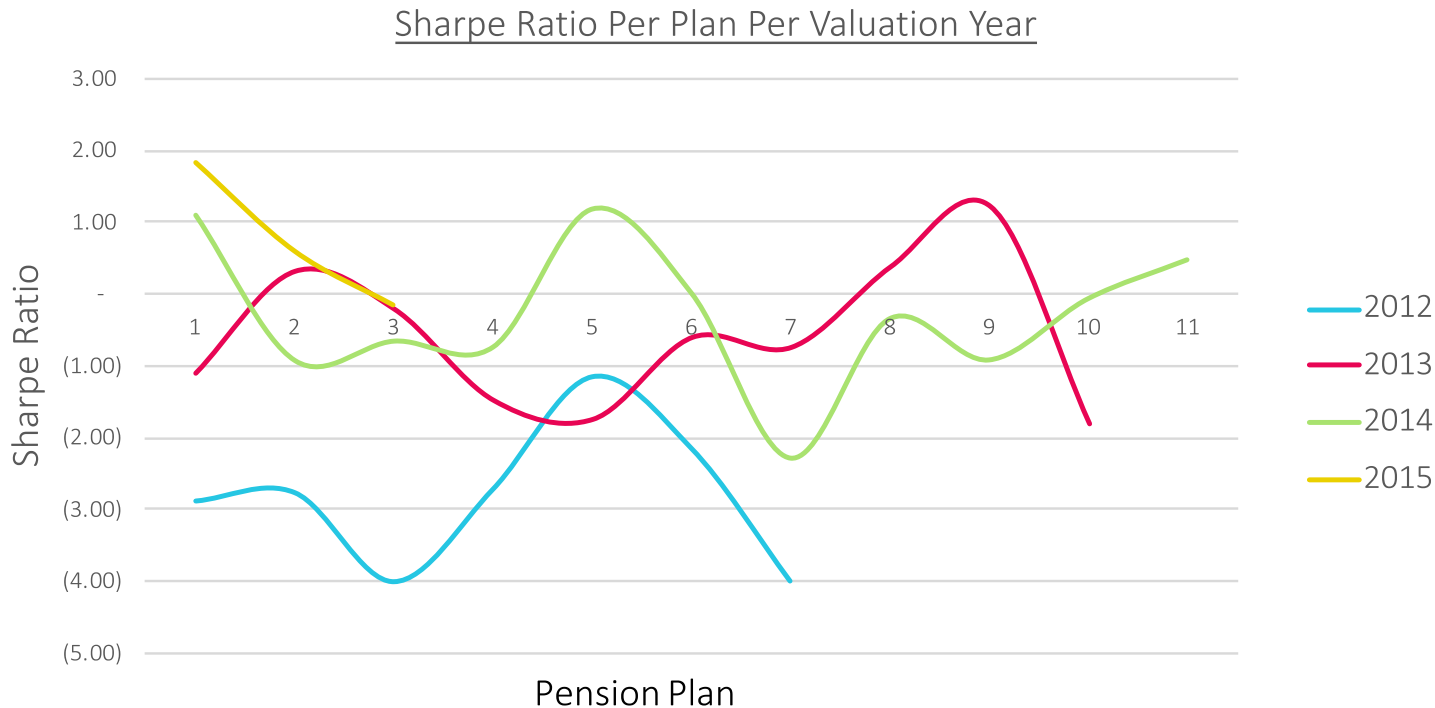
Historical Net and Inflation-Adjusted Returns



- Predominantly negative inflation-adjusted historical returns
- More positive values seen post-2014

Historical Returns Cont'd

➤ Risk Adjusted Historical Returns (Sharpe Ratio)



Key Findings

- Highly volatile Sharpe Ratios among Plans
- Large concentration < 1

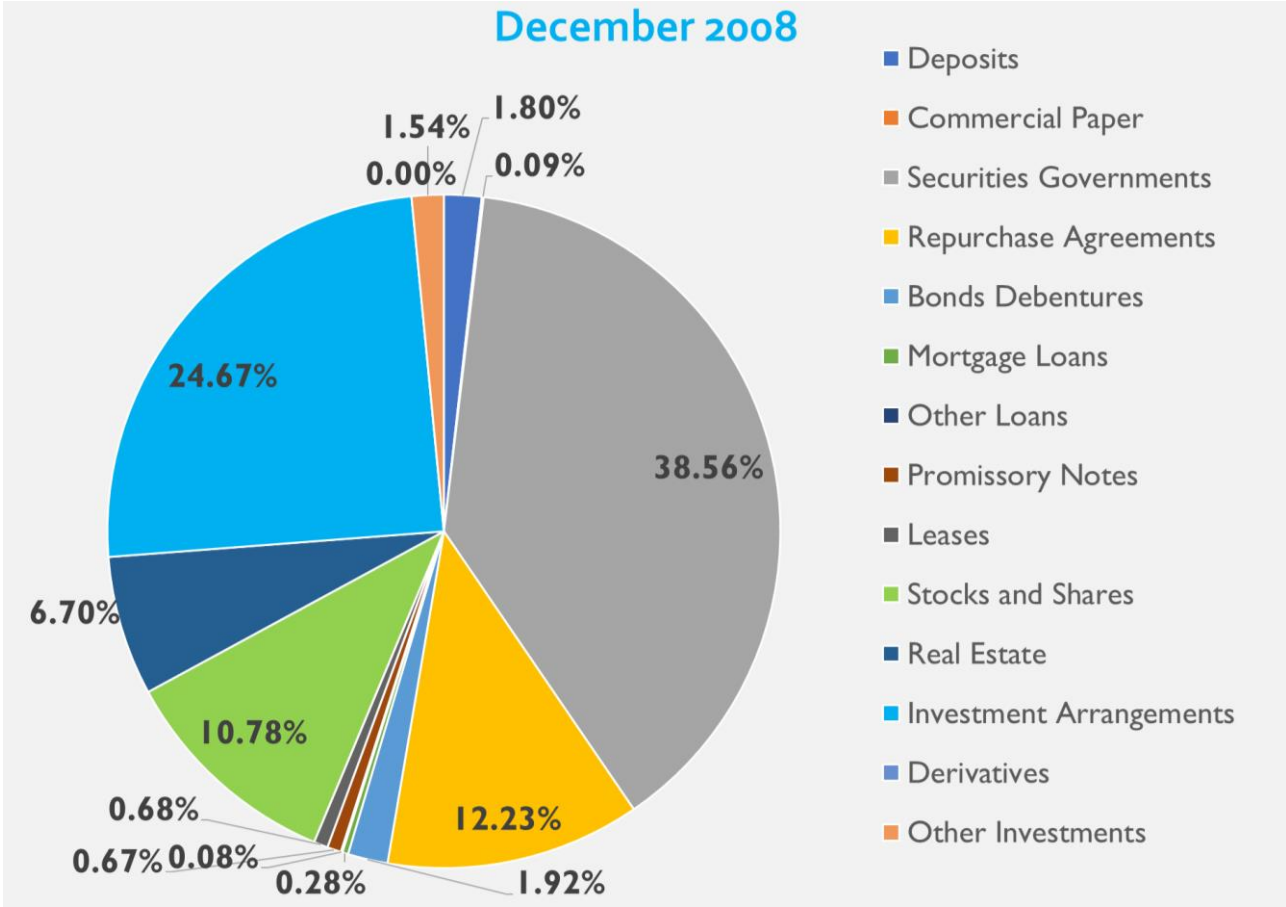
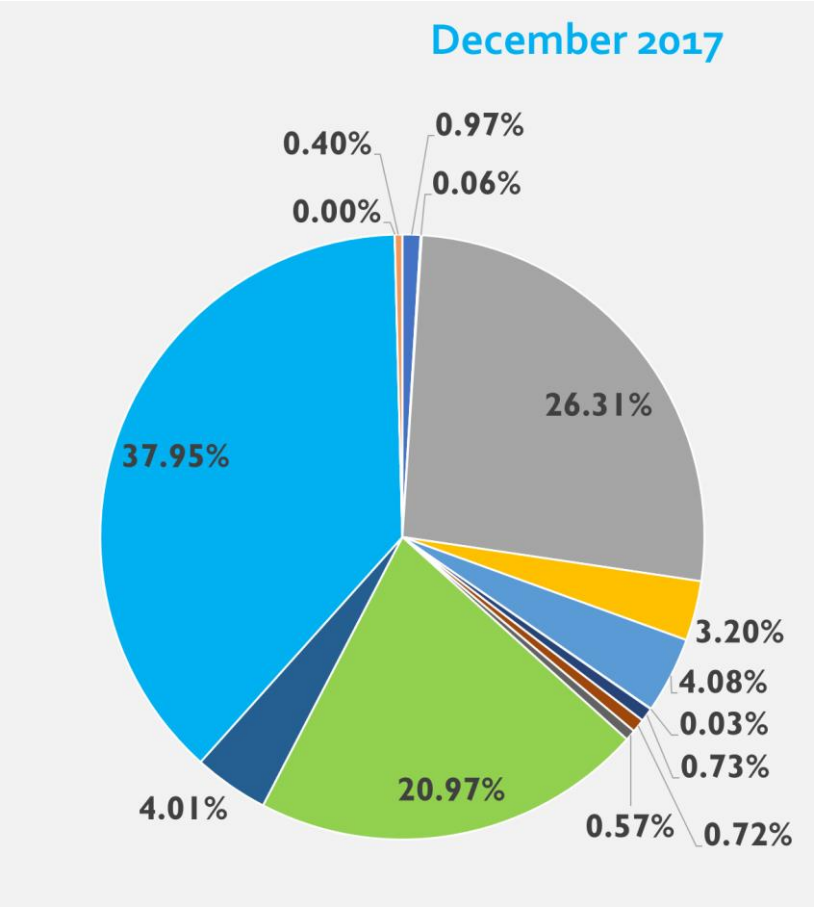


Sharpe Ratio Grading Thresholds

- Less than 1: Bad
- 1 – 1.99: Adequate/Good
- 2 – 2.99: Great
- Greater than 3: Excellent

Pension Fund Asset Allocation

- Current vs. Historical



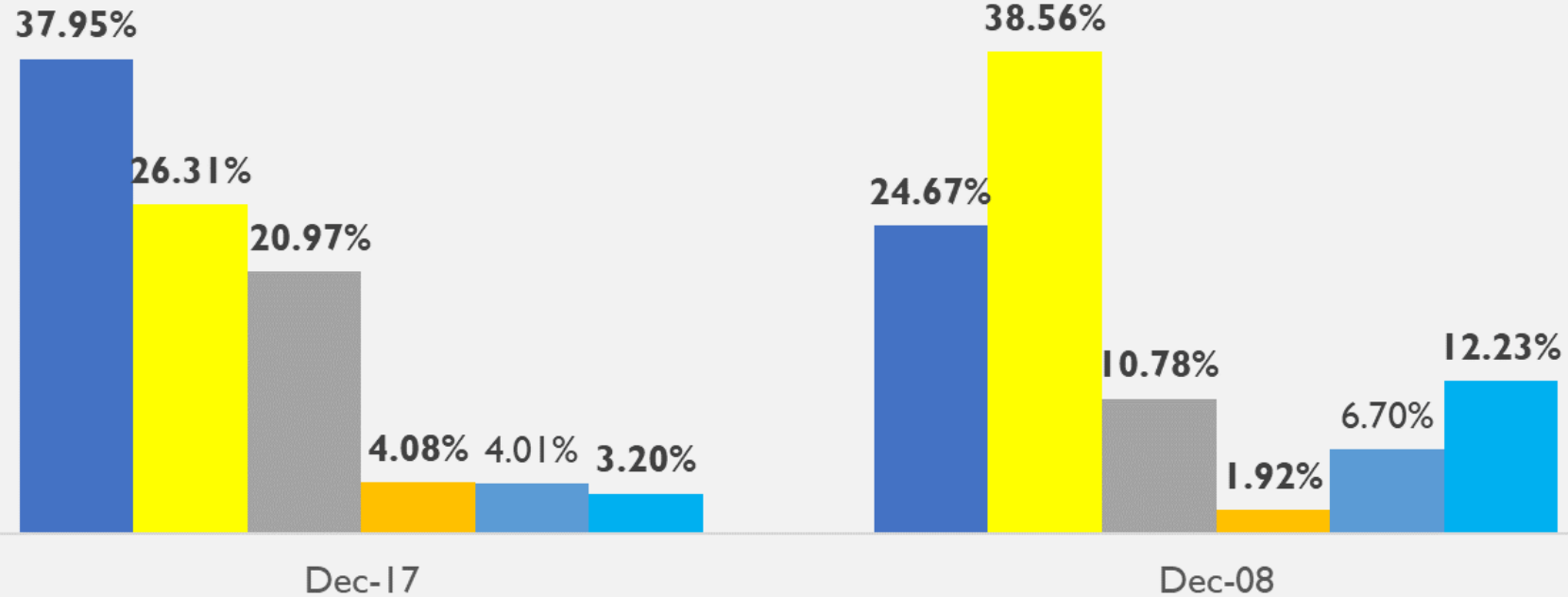
- Deposits
- Commercial Paper
- Securities Governments
- Repurchase Agreements
- Bonds Debentures
- Mortgage Loans
- Other Loans
- Promissory Notes
- Leases
- Stocks and Shares
- Real Estate
- Investment Arrangements
- Derivatives
- Other Investments



Pension Fund Asset Allocation

Current vs. Historical Top 6 Asset Allocations

- Investment Arrangements
- Securities Governments
- Stocks and Shares
- Bonds Debentures
- Real Estate
- Repurchase Agreements



Caribbean Pension Experience

- OECD/IDB/The World Bank (2014), **Pensions at a Glance: Latin America and the Caribbean**
- Study focused on similarities and key findings on pension systems across the Caribbean & Latin America.
- Developing countries continue to make significant progress in extending coverage of pension systems to their citizens.

Key Measures of Pensions Systems:

- ∇ Coverage
- ∇ Financial Sustainability
- ∇ Adequacy



Caribbean Pension Experience (*cont.*)

OECD/IDB/The World Bank (2014), **Pensions at a Glance: Latin America and the Caribbean**

Key Findings

✓ **Low coverage of formal pensions systems**

- Low participation; Typically concentrated among workers in the formal economy
- On average in the region, only 45 in 100 workers are contributing to or affiliated with a pension scheme
- Linked to socioeconomic conditions i.e. unemployment, education, income, etc.

✓ **Unfavourable Demographic Changes**

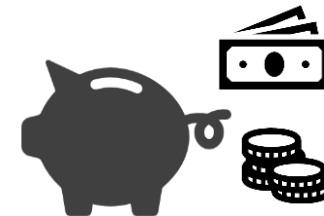
- Lower Fertility rates, higher life expectancy, etc.
- Ageing population leads to higher funding requirements
- Urbanization & Rising employment

✓ **Type of Employment**

- On average, 64 out of 100 salaried workers contribute to a pension scheme in LAC compared to only 17 out of 100 self-employed workers
- Employment Transitions create system irregularities & gaps

✓ **Reliance on additional source of Income**

- Post-Retirement individuals unable to rely on solely pension income.



Caribbean Pension Experience (cont.)

▽ Restrictive Regulations

- Concentration limits
- Asset class exclusions

▽ Pension System Inefficiencies

- Gaps present inconsistencies in pension coverage

▽ Heavy Concentration in Sovereign Debt & Debt Exchanges

- Barbados (2018)
- Jamaica (2010 & 2013)

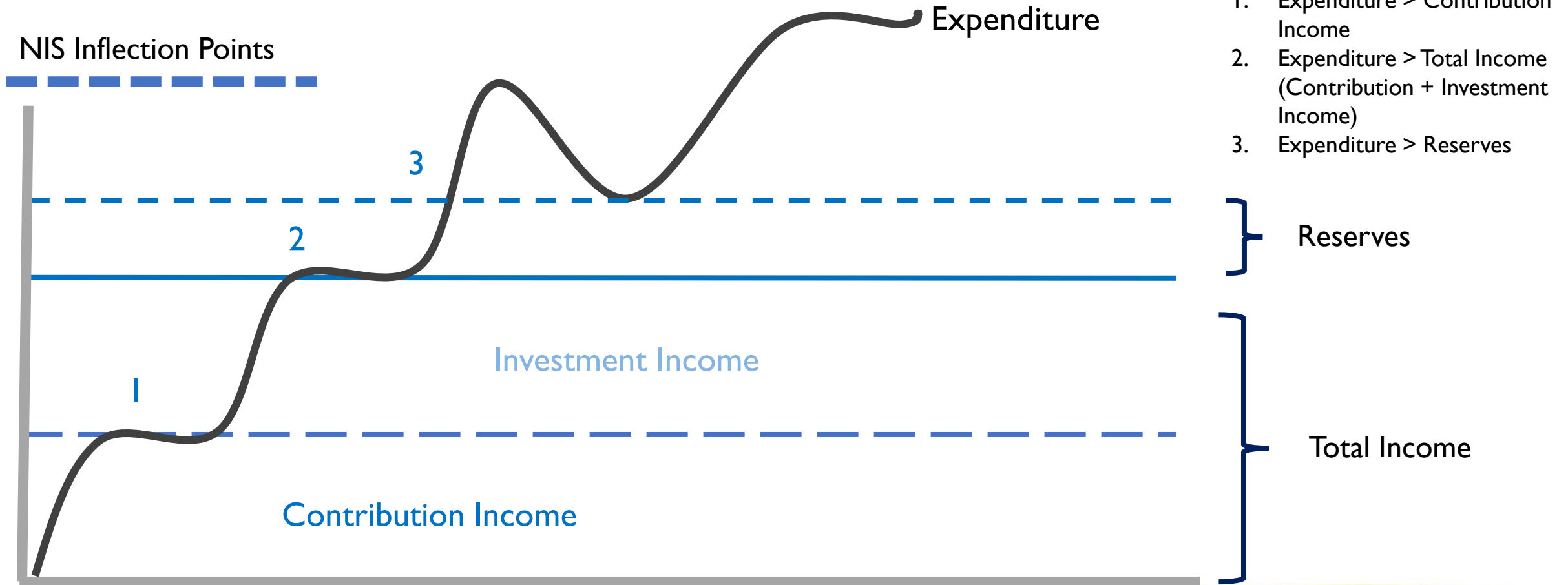
▽ Threat to long-term sustainability

- Many Caribbean schemes, overall expenditure exceeds contribution income. Consequently, investment income would be expected to meet any shortfall in contributions



Caribbean Pension Experience (cont.)

IMF Working Paper (2016), National Insurance Scheme Reforms in the Caribbean



Caribbean Pension Experience (*cont.*)

IMF Working Paper (2016), National Insurance Scheme Reforms in the Caribbean

• Barbados

- ∇ **Barbados has three separate NIS funds** (old age, unemployment and severance)
- ∇ **National Insurance Scheme Fund**
 - 14th Actuarial Review of the NIS Fund at December 31, 2011, where it was projected that the expenditure on benefits would exceed the contribution income during 2017.
 - IMF Report (2017) Actuarial deficits calculated as the present values of net future benefit expenditure ranging from 0.7% of GDP in Barbados
 - Investment reserves the highest in the Caribbean.
 - According to IMF Report, second inflection point, can be as early as 2024.

Jamaica

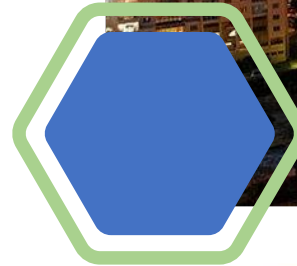
- ∇ **NIS offers both flat-rate and wage-related pension benefits**
- ∇ Pension coverage in Jamaica was 21.4% of the employed workforce as compared with 68.2% in Barbados, 62.1% in Grenada, and 54.9% in Trinidad and Tobago. (*Inter-American Development Bank Report, 2012*)
- ∇ **National Insurance Scheme**
 - Reform to include informal and services sector
 - IMF Report (2017) Actuarial deficits calculated as the present values of net future benefit expenditure ranging from 92% of GDP in Jamaica
 - Actuarial review (Eckler Limited, 2014) projected that the NIS cash flow is at risk of being depleted by 2033.

Caribbean Pension Experience (cont.)

Long-term demography changes will make access to the formal pension system more important.

Initiatives to Shift Caribbean Pension Systems

- ▽ **Significant structural pension & regulatory reforms**
- ▽ **Inclusion of the informal sector**
- ▽ **Risk-based Approach to Supervision of Pension Industry**
- ▽ **Expansion of (non-contributory) Social Pensions**
 - Alternative to traditional contributory pension plans
 - Regular transfers made to elderly
- ▽ **Improving Economic Conditions**
 - Increased employment and economic growth will inevitably lead to an increase in contribution income



Impediments to Higher Risk-Adjusted Returns

Pension Funds will have to seek higher risk-adjusted returns in a low interest rate environment in order to improving long-term funding for pensioners.

▽ **Global Uncertainty**

▽ **Restrictive Regulations**

▽ **Asset Class & Concentration Limits**

▽ **Weak Macroeconomic Fundamentals**

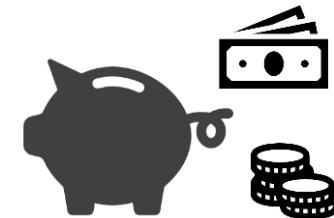
- Rising Inflation impacting purchasing power
- Devaluation
- Fiscal Prudence & Debt Restructuring
- Weak economic Growth

Alternative Investment Options

▽ Private equity

▽ Infrastructure

▽ Derivatives



Conclusion

Suggestions to improve Pension Fund performance and Coverage over the medium-long term time horizon:

- Stronger Macroeconomic Indicators: Controlled Inflation + More Active Capital Markets
- CARICOM's hand in improving the interconnectedness of the Caribbean: Approach to pension regulation across borders, portability of pension fund contributions, risk transference
- Implementing a separate limit for Investable Assets within the Caribbean Region
- Behavioural Economics, Customer Sovereignty and the Caribbean Culture of Retirement
- Addressing Low Participation: Mandatory Contributions to Pension Funds
- Role of the Actuary: Advocacy in influencing Public Policy

