

# PRIVATE OCCUPATIONAL PENSION SECTOR ANNUAL REPORT 2014-2017



Insurance Supervision Department **BANK OF GUYANA** 

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#### **Aims of the Report**

This report serves to provide:

- A holistic view of the private pension sector in Guyana, including an overview of the Bank of Guyana's supervisory practices as at end- December 2017. Data tables from 2014 -2017 are used for background information;
- A summary of the sector's current and projected challenges;
- Proposals for the way forward, particularly regarding public sensitisation on the pension sector and the passage of the draft Private Pensions Law in accordance with the World Bank's FIRST Initiative.

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#### 2. REPORT NOTES AND ABBREVIATIONS

- 1. Unless otherwise stated, all dollar values in this report are stated in millions of Guyana Dollars.
- 2. Data contained in this report may vary from the Bank of Guyana's **Annual Report 2017**, due to a revision of information previously submitted to the Bank.
- 3. The data collection methodology used by the Bank of Guyana's Insurance Supervision Department was enhanced in the year 2015. In addition to annual financial statements and triennial actuarial valuation reports, data was now received on a quarterly basis and more private pension plans began submitting data.
- 4. The report also includes sections on micro pensions and pension literacy within Guyana's private pension system.
- 5. Statistics from the Guyana Labour Force Survey 2017 (GLFS) were included in this report to provide some data on the sectorial allocation of the local labour force and categories of employment within the labour force.

#### (a) ABBREVIATIONS

The following abbreviations and acronyms are used throughout the report:

**DAC**- Deposit Administration Contract **NBFI**- Non Bank Financial Institution

**DB**- defined benefit **NPAP**- National Pensions Awareness Programme

**DC**- defined contribution **OECD**- Organisation for Economic Cooperation &

Development

**GDP-** Gross Domestic Product SA- Self Administered/ managed

**GLFS-** Guyana Labour Force Survey **SPP-** Simplified Pension Plan

LAC- Latin America and the Caribbean

#### 3. EXECUTIVE SUMMARY

The assets of 96 reporting private pension schemes totalled \$53.1 billion as at December 2017. This represented a significant increase of approximately \$6 billion or 12.9 percent from the corresponding period of the previous year, reflecting 8 years of steady growth in total pension assets.

The private pension sector saw its assets increase to 7.2 percent of GDP in 2017, retaining relatively small macro-influence as a sector. The sector also showed its influence as an institutional investor by accounting for 22.1 percent of total assets of NBFIs in 2017.

The issue of limited coverage was one of the key findings to be noted for 2017. There were no new pension plans recorded for the year, while the number of reporting plans also decreased. Liquidity risk was also a key concern, as pension funds still held a substantial amount of their total assets in liquid form or held investments with maturities within one year. This was reflected by a ratio of 1703 percent relative to current liabilities.

In 2017, the funding level of reporting plans improved with an overall ratio of 120 percent compared with the funding ratio of 113 percent in 2016. In contrast, large old age dependency ratios worldwide i.e. those aged 65 and above as a percentage of those aged 15-64 (working age) continue to put pressure on publicly funded pension systems, particularly following the 2008 financial crisis<sup>1</sup>.

The sector yielded significantly small, increased real rates of return on invested assets in 2017- 2.9 percent, albeit higher than 2016. This happened despite a higher inflation year, which realised the real values of fixed interest securities and other invested assets. In 2017, total foreign exposure of pension assets slightly increased from the previous year, but remained well within the 30 percent statutory limit. As a percentage of total assets, foreign assets represented approximately 23 percent at the end of 2017; a marginal increase from 2016.

The trend of DC plans becoming increasingly popular among employers was also noted with almost 64 percent of plans being DC. DB plans however, continued to boast higher asset totals accounting for 87 percent of total pension assets.

Overall, a positive financial outlook is forecast for the industry, particularly with the passage of new legislation which would allow increased access to more resilient, longer term investments.

<sup>&</sup>lt;sup>1</sup> The Financial Crisis and Mandatory Pension Systems in Developing Countries, World Bank Human Development Network 2008

A comprehensive law, the Private Pensions Act (draft) is being considered to reform the sector and to mitigate the existing supervisory challenges and poor industry practices. The new law envisages changes that would improve efficiency, sustainability, coverage, adequacy and the security of participants' benefits to ensure that pension plan members have better pensions during retirement.

The Bank is also seeking to undertake a country-wide initiative to tackle pension literacy among Guyanese. The National Pensions Awareness Programme (NPAP) seeks to assist members of the public with their immediate and long term pension literacy and will aim to build trust and improve public confidence in the industry.

#### 4. PENSION SECTOR HIGHLIGHTS 2017

\$53.1
BILLION
TOTAL ASSETS

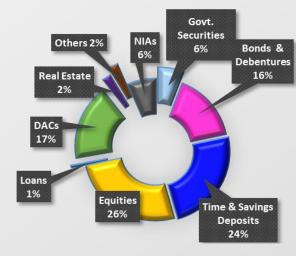
7.2%
PENSION ASSETS
AS a PERCENTAGE
OF GDP

12.9%
INCREASE IN TOTAL PENSION ASSETS FROM 2016

131.6% COMBINED SECTOR SOLVENCY

16,640 TOTAL MEMBERSHIP

\$2.4 BILLION TOTAL LIQUID FUNDS



2017 ASSET MIX

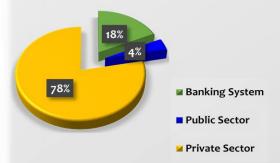
Government Securities

Corporate Bonds & Debentures
Time & Savings Deposits

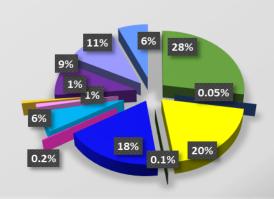
Equities

PRIVATE PENSION MEMBERSHIP TO TOTAL LABOUR FORCE

2017 SECTORIAL ALLOCATION



2017
INDUSTRIAL ALLOCATION



Education
Manufacturing
Health & Soc.Serv
Fin. Services
Construction
Mining & Bauxite
Transportation
Comm./Media
Sales & Ret. Dist.
Utility
Other Services

Loans

**■** DACs

Real Estate

Funds)

Other Investments (Mutual

Non- Invested Assets

■ Agri & Forestry

GEOGRAPHICAL ALLOCATION

Guyana
CARICOM
Rest of the World

### 5. THE REGULATOR AND SUPERVISORY ACTIVITIES 5.1. SUPERVISORY OBJECTIVES

Following the enactment of the Insurance (Supplementary Provisions) Act 2009, the Bank of Guyana-Insurance Supervision Department has served as the regulator of the private occupational pension sector in Guyana, and all supervisory statutes are contained in Part XVI of the Insurance Act 1998.

The 1998 Act encapsulates several areas of regulatory concern including registration and the requirements thereof for all private pension plans; statutory contents of plan documents; winding - up provisions for private plans and the submission of annual statements pertaining to plans.

Despite current legislation there is still need for regulatory reform, and this was taken into account in the **Bank's Strategic Plan for the period 2015-2017**. The Bank's objectives, target dates and outcomes pertaining to the pension sector for this period were as follows:

OBJECTIVE	TARGET DATE	OUTCOME
Work on draft of new Pensions Act	Quarters 1 – 3 - 2016	Commenced and ongoing
Work on new regulations to implement the new pensions Act	Quarters 1 – 3 - 2016	Commenced and ongoing
Elaboration of reporting forms and systems to implement electronic filings of supervisory returns	End of 2016	Completed- Revised Quarterly Forms created and to be implemented First Quarter 2018.
Training and capacity building so that the capacity of the supervisor, employers, trustees and industry are enhanced to ensure compliance with the Act.	Phased implementation of risk based supervision. Expected outcome – enhanced knowledge by the industry of new pension and regulatory requirements.	Commenced and ongoing
Engage with private pension sector stakeholders on changes to regulatory environment	As necessary	Ongoing
Elaboration of internal systems and procedures to ensure compliance with the Pensions Act and track pensions outcomes; and of best practice guidance	End of 2016	Ongoing

#### 5.2. REGULATORY CHALLENGES

The local pension industry is experiencing an ongoing predicament, due to many wide ranging constraints. One of the more pressing challenges is the limited regulatory powers resulting from the absence of comprehensive pension legislation. Compliance issues were often flagged by the regulator, however without effective mandatory controls or a penalty regime in place, some were not efficiently resolved.

Local coverage among private plans remained limited due to the system's voluntary nature, where reporting pension plans cover only **5.5% of the total labour force**, **compared with over 40% in ten (10) OECD countries**<sup>2</sup>. There is insufficient public information relating to the pension sector, also limited regulatory resources pertaining to private pensions, thus contributing to the sector's slow development.

Many private pension plans have lengthy vesting periods, some as many as twenty five (25) years, coupled with limited portability of pension benefits when changing employers, provisions for which are not included in current legislation. Other challenges plaguing the sector in 2017 included high administrative costs charged by plan administrators, when compared with the lower than expected investment returns. There is room for growth with regards to investment, as opportunities continue to be limited locally compounded by investment restrictions stipulated in Section 112 of the Insurance Act 1998. These factors would have negatively affected the sustainability and efficiency of some pension plans, and may have contributed to the sector not providing adequate retirement income for some members in 2017.

#### REGIONAL CHALLENGES

Limited pension coverage is not unique to Guyana, rather is experienced throughout the LAC region and can be attributed to several factors. According to the IDB, these factors include the design and poor performance of pension systems in the region, mainly their mimicry of the European continental systems; the region's inability to create formal employment opportunities; lower income levels compared to developed countries and difficulties in generating long term saving opportunities<sup>3</sup>.

Coverage of the working age population in OECD countries far outweighs that of the LAC region, particularly in the UK where coverage increased from 34% in 2012-13 to 43% in 2015-16, where automatic enrolment (with an opt-out clause) is practised at the national level. By 2025, the portion of Guyana's population aged 60 -79 would have increased on average by approximately 194 percent from 2005 (17.8% of total projected population), and aged 80+ would have increased by approximately 109 percent (1.4% of total projected population)<sup>4</sup>. This indicates the exposure to longevity risk, and highlights the urgent need for sufficient pension coverage.

<sup>&</sup>lt;sup>2</sup> Pensions at a Glance 2017,OECD and G20 Indicators

<sup>&</sup>lt;sup>3</sup> Better Pensions, Better Jobs, Inter-American Development Bank 2013

<sup>4</sup> POPULATION PROJECTIONS GUYANA 2005 - 2025, Bureau of Statistics Guyana, 2006

#### **5.3. THE PRIVATE PENSIONS ACT (DRAFT)**

The Bank was well on its way to achieving its Strategic Plan aims for 2015-2017, as a re-draft of the Private Pensions Act was distributed to industry stakeholders in October 2017 by the Insurance Supervision Department. Plans for public consultation with several key industry stakeholders including plan administrators and sponsors have already been made for the first quarter of 2018, and the accompanying regulations are a work in progress.

The current draft is a comprehensive revision of the draft Private Pensions Act produced in 2013, a project undertaken in collaboration with the World Bank through its Financial Sector Reform and Strengthening (FIRST) Initiative. This project was one of several solutions presented by the World Bank to address Guyana's deficiencies in the supervision of non-bank financial institutions amongst other regulatory shortcomings. The 2013 draft was also presented to several industry stakeholders and was consensual, however it was never made into law. The revised draft contains twenty one (21) comprehensive Parts and is a major improvement to the minimal requirements contained only Part XVI of the Insurance Act 1998. It makes expansive statutory provisions for every faction of the sector's activities requiring supervision.

Key features of the proposed legislation include an effective penalty regime; improved portability provisions, which would allow members to transfer accumulated benefits from one pension plan to another with the aim of having all monies from successive employers consolidated into a final plan at retirement. The new Act also aims to reduce vesting periods, a provision that will enhance individual retirement savings through earlier access to both employer and employee contributions. Enhanced transparency within pension plans' operations will also be an expected outcome of the proposed legislation, with features such as annual benefit statements and general meetings, giving way to a more inclusive and transparent process for all pension plan stakeholders.

#### 6. PENSION PLANS AND MEMBERSHIP

#### 6.1. PENSION PLANS

There were ninety six (96) private pension plans reporting to the Bank on a quarterly basis, as at December 31, 2017. Thirty five (35) of these plans were classified as defined benefit (DB) and sixty one (61) are defined contribution (DC). The plans collectively covered 16,892 members and were managed by five (5) licenced life insurers, two (2) trust companies and two (2) plans were self-administered by their respective sponsors.

TABLE 1: PENSION PLAN MEMBERSHIP (2014-2017)										
G\$ millions										
YEAR	2014	%	2015	%	2016	%	2017	%		
Number of Reporting Plans	65*		96		97		96			
TOTAL MEMBERSHIP	10,93		13,40 9		16,259		16,892			
Active	10,932	-	12,468	93.0	13,551	83.3	13,905	82.3		
Deferred	-	-	172	1.3	208	1.3	193	1.1		
Pensioners	-	-	769	5.7	2500	15.4	2,794	16.5		
Members in DB Plans	7,649	70	7,124	53	9,764	60	10,465	62		
Members in DC Plans	3,283	30	6,285	47	6,495	40	6,427	38		
Pension Coverage**	4.0%		4.9%	-	6.0%	-	5.5%	-		
Annual Membership Growth Rate	4.2%		22.7%	-	21.3%	-	3.9%	-		

Membership growth steadily increased from 2014 to 2017, the largest increase equalling 22.7 percent for the period 2014 to 2015. This sudden spike could be attributed to the implementation of quarterly reporting forms by the Bank's Insurance Supervision Department. The forms provided more accurate asset, liability, income and membership data for a greater number of private pension plans, thus a more comprehensive picture of the sector was achieved.

<sup>\*</sup>Only aggregate data available for 2014

<sup>\*\*</sup>Coverage specifies the ratio of private pension coverage to that of the total labour force according to the GLFS Q3 2017

FIGURE 1: PENSION PLAN MEMEBRSHIP 2014-2017 82.3% 1.1% 16.5% 2017 Z 2016 1.3% 15.4% 83.3% 93.0% 2015 0% 20% 80% 100% 40% TOTAL PENSION PLAN MEMBERSHIP (%) ■ Active ■ Deferred ■ Pensioners

Source: Insurance Supervision Department, Bank of Guyana.

Note: No data for 2014 active membership breakdown

Defined benefit (DB) plan membership was significantly greater than that of defined contribution (DC), where DB membership accounted for more than half of total membership in both 2016 and 2017. Historically, despite having a fewer number of DB plans, these pension plans have a greater combined membership than DC plans for the same period. From 2014 to 2017, there has been a noticeable shift in sponsoring employers opting to offer DC pension plans in lieu of DB plans. This is due to the significantly reduced liability for the sponsoring employer of a DC plan, wherein pension benefits are not determined using a formula but are based on both employer and employee contributions.

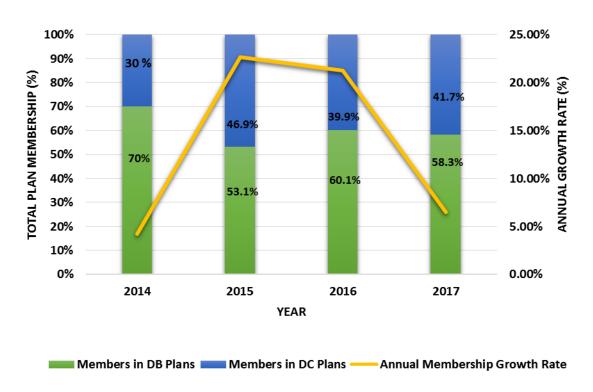


FIGURE 2: DB vs DC PLAN MEMBERSHIP 2014-2017

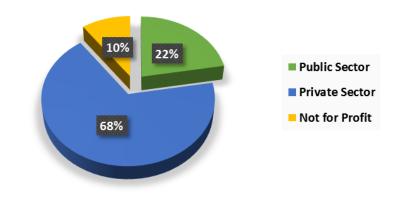
Growth in the number of private pension plans remained relatively stagnant for the period, thus contributing to the limited overall coverage of the private pension sector. Despite a 3.9 percent increase in total membership from 2016-17, the rate at which memberships grew experienced retardation for the same period, due to 38 percent of all pension plans losing a combined total of 435 members. This was compounded by 46 percent of all plans reporting no changes in membership between 2016 and 2017. Sponsors such as the Guyana Sugar Corporation (GUYSUCO) would have gradually been downsizing due to declining company performance, hence a smaller pension plan membership in the related pension plan, Guyana Sugar & Trading Enterprises directly correlates.

#### 6.2. REGISTRATION AND COVERAGE

During the period 2014- 2017, twenty two (22) plans were registered, eight (8) completely wound up and eight (8) plans expressed interest in being wound up. As at December 2017, there were forty one (41) active and registered plans, thirty nine (39) active and unregistered plans and sixteen (16) plans were classified as unregistered and inactive, however still held assets to be paid out at a later date.

The private sector accounts for approximately 68 percent of the employed labour force<sup>5</sup>, wherein only 5.5 percent of the total employed population is accounted for in all private pension plans.

FIGURE 3: Sectorial Allocation of the Employed Labour Force 2017



Source: Guyana Labour Force Survey 2017, third quarter

<sup>&</sup>lt;sup>5</sup> Guyana Labour Force Survey, 2017 Q3, Bureau of Statistics

#### 7. ASSETS AND ASSET ALLOCATION

#### 7.1. MACRO- INFLUENCE OF THE PRIVATE PENSION SECTOR

Given that the majority of the Guyanese labour force is employed within the private sector, the private pension industry could be a significant source of retirement income for many Guyanese. In contrast, large old age dependency ratios worldwide continue to put pressure on publicly funded pension systems. Governmental pension spending in advanced economies is projected to rise to 4-5 percent of GDP over the next 20 years<sup>6</sup> and in Guyana an amount of \$3.3 billion for pension increases or 24 percent of the total pensions and social assistance budget has been allocated for 2018, according to the Government's Financial Plan 2018. <sup>7</sup>

TABLE 2: Macro-Influence of Private Pensions 2016-2017

	2016	2017
	%	%
Pension assets as a percentage of GDP (%)	6.50	7.23 <sup>8</sup>
Pension assets as a percentage of total financial assets (%)	5.16	5.68
Pension assets as a percentage of total NBFIs (%)	21.05	22.09

<sup>6 &#</sup>x27;From Red to Gray', Chapter 4: Aging and Pension Expenditures, World Bank Group 2007

<sup>&</sup>lt;sup>7</sup> Estimates of the Public Sector for 2018 Volume 1, Ministry of Finance

<sup>8</sup> Revision from data published in 2016, 2017 Annual Reports, Bank of Guyana; see Report Note 2

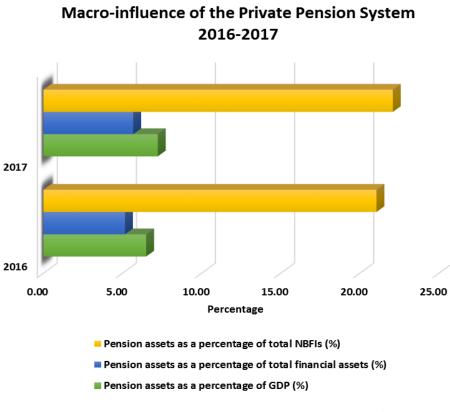


FIGURE 4:

Source: Insurance Supervision Department, Bank of Guyana

The private pension sector saw its assets increase from 6.5 percent in 2016 to 7.23 percent of GDP in 2017, retaining relatively small macro-influence as a sector. The industry showed its influence as an institutional investor by accounting for 22.1 percent of non- bank financial institution (NBFI) assets and 5.7 percent of total financial assets. With the impending passage of the Private Pensions Act, there is some expectation of more efficient and robust pension plans, along with more flexible limits on overseas investments thus creating more investment opportunities for pension plans.

#### 7.2. TOTAL ASSETS OF REPORTING PENSION PLANS

The total assets of 96 reporting private pension schemes totalled \$53.1 billion as at December 2017. This is a significant increase of approximately \$6 billion or 12.8 percent for the corresponding period of the previous year which reflects 8 years of steady growth in total pension assets. This growth can be attributed to a combination of factors which include an increase in the total number of reporting private plans and increases in total investment values throughout the same period.

#### 7.3. ASSETS OF REGISTERED VS. UNREGISTERED PLANS

Approximately 76 percent of total private pension assets belonged to registered pension plans, as at December 2017. This reflected a 15.9 percent increase in registered plans' assets from 2016 and demonstrates a positive growth trend in these assets from 2014 to 2017. Unregistered plans in comparison accounted for approximately 24 percent of total private pension assets, however there were fluctuations in the asset growth trend of the unregistered plans

A 17.5 percent decrease in unregistered pension plan assets from 2015-2016 was mainly due to the winding up of the John Fernandes Insurance Group Pension Scheme with assets totalling over \$438 million and the Demerara Tobacco Ltd. Pension Plan which accounted for over \$90 million in assets.

Investment returns for several unregistered plans were also not favourable for this period. The Guyana Telephone and Telegraph Company saw a decrease of approximately \$600 million from 2015-2016. The registration of the Bank of Guyana Pension Scheme, whose assets totalled approximately \$1.7 billion in 2015 also attributed to the decrease in unregistered pension plans' assets.

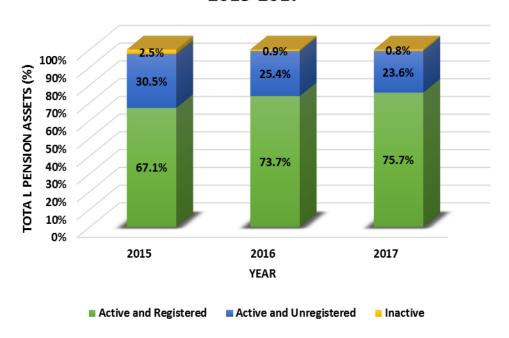
TABLE 3: PENSION PLAN ASSETS BY REGISTRATION STATUS 2014-2017

G\$ billions	2014	2015	2016	2017
No. of Reporting Plans	65*	96	97	96
REGISTERED ASSETS	30,081	30,465	34,663	40,189
Growth of Assets (%)	5.45%	1.3%	13.8%	15.9%
As a percent of Total Pension Assets (%)	69.8%	67.0%	73.7%	75.7%
UNREGISTERED ASSETS**	13,012	15,002	12,350	12,907
Growth of Assets (%)	-0.63%	15.3%	-17.7%	4.5%
As a percent of Total Pension Assets (%)	30.2%	33.0%	26.3%	24.3%
TOTAL ASSETS	43,093	45,467	47,013	53,097

<sup>\*-</sup> Only aggregate data available for some plans

<sup>\*\*-</sup> UNREGISTERED includes unregistered and inactive plans still holding asset balances

FIGURE 5:
PENSION ASSETS BY REGISTRATION STATUS
2015-2017



## 7.4. ALLOCATION OF PENSION FUND ASSETS 7.4.1. ALLOCATION BY PLAN TYPE: DEFINED BENEFIT VS. DEFINED CONTRIBUTION

Defined benefit (DB) portfolios continued to outweigh those of the Defined contribution (DC) type, with higher overall asset totals. This is mainly attributable to larger DB plan memberships and longer asset retention periods given the historical prominence and lengthy vesting periods commonly occurring in these plans. Defined contribution plans however, recorded higher growth rates, given that they are becoming increasingly popular amongst employer sponsored plans.

DB vs. DC ASSET PROFILES 2014-2017 60,000 20.00% TOTAL PENSION ASSETS (MILLIONS) 50,000 15.00% ANNUAL GROWTH RATE (%) 40,000 10.00% 30,000 5.00% 20,000 0.00% 10,000 -5.00% 0 -10.00% 2014 2015 2016 2017 **Axis Title** DB Assets DC Assets **→** DB Growth (%) **→** DC Growth (%)

FIGURE 6:

Source: Insurance Supervision Department, Bank of Guyana

Despite a steady increase in DB assets, DC plans recorded significantly higher growth margins, particularly a 16.7 percent increase in 2016. There was a 6.9 percent decline in 2015 which may be attributed to a 265 percent decrease in gross DAC incomes, and a 343.5 percent decrease in gross DAC returns, considering that the DAC is one of the main investment instruments for DC pension plans.

TABLE 4: DB vs DC ANNUAL GROWTH 2014-2017

G\$ millions	2014	2015	2016	2017
DB Assets	37,413	40,179	40,840	46,219
DB Asset Allocation (%)	87.0%	88.4%	86.9%	87.0%
DB Growth (%)	2%	5.8%	1.6%	13.2%
DC Assets	5,680	5,288	6,173	6,878
DC Asset Allocation (%)	13.0%	11.6%	13.1%	13.0%
DC Growth (%)	16.7%	-6.9%	16.7%	11.4%
TOTAL Assets	43,093	45,467	47,013	53,097

#### 7.4.2. ALLOCATION BY INVESTMENT INSTRUMENTS

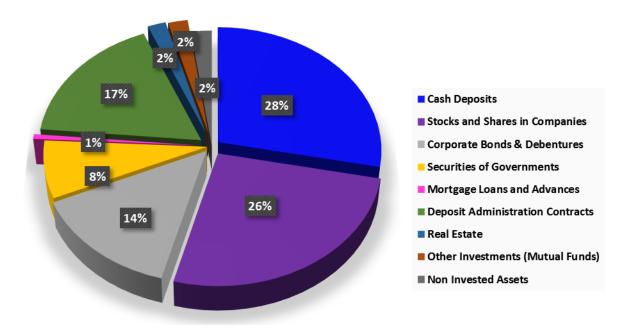
In 2017, there was no significant change in the allocation of pension funds' assets from the corresponding year. The industry's assets continued to be held in a mixture of investment instruments that exemplified a positive relationship between growth and sustainability. Generally, cash deposits and equities continued to represent the highest concentration of invested assets, standing at 28.2 percent and 25.9 percent of total assets, respectively.

Minimally increased allocations were recorded in stocks and shares in companies from 23.4 percent to 25.9 percent for the period 2016-2017. Allocations to cash deposits, real estate, DACs, government securities, mortgage loans and advances, corporate bonds and debentures were all relatively similar to 2016 (see Table 5 & Figure 7).

TABLE 5: PENSION ASSET ALLOCATION BY INVESTMENT INSTRUMENT 2014-2017

	2014		2015		2016		2017	
G\$ millions	Asset Values (\$)	Percentage of Total Industry Assets (%)						
No of reporting pension plans	84		96		97		96	
<b>Asset Growth Rate</b>	3.49%		5.51%		3.40%		12.94%	
Securities of Governments	2,360	5.5%	2,714	6.0%	2,741	5.8%	3,107	5.9%
Corporate Bonds & Debentures	4,522	10.5%	6,627	14.6%	7,822	16.6%	8,411	15.8%
Cash Deposits	12,920	30.0%	9,766	21.5%	12,052	25.6%	12,715	23.9%
Stocks and Shares in Companies	12,868	29.9%	11,536	25.4%	10,987	23.4%	13,794	26.0%
Mortgage Loans and Advances	353	0.8%	279	0.6%	312	0.7%	292	0.6%
Deposit Administration Contracts	6,266	14.5%	7,778	17.1%	8,245	17.5%	9,241	17.4%
Real Estate	913	2.1%	902	2.0%	896	1.9%	1,025	1.9%
Other Investments (Mutual Funds)	1,304	3.0%	744	1.6%	939	2.0%	1,113	2.1%
Non- Invested Assets	1,588	-	5,122	11%	3,019	6%	3,399	6%
TOTAL ASSETS	43,093	-	45,467	100%	47,013	100%	53,097	100%

FIGURE 7: PENSION ASSETS BY INVESTMENT INSTRUMENTS (%) 2017



#### 7.4.3. GROWTH RATES OF INVESTMENT INSTRUMENTS

The growth of the industry in 2017 was largely complemented by a 14.5 percent increase in the total value of investments. Significant growth was recorded for assets invested in shares in companies – 25.2 percent, DACs- 12.1 percent, real estate 14.4 percent and other investments (mutual funds) - 18.5 percent. Growth of assets invested in mortgage loans and advances also increased by 6.1 percent.

In contrast, non- invested assets reduced by a significant 29.5 percent continuing the downward trend from 2016 where a 12.1 decline was also recorded.

TABLE 6: GROWTH RATES OF PENSION ASSETS BY INVESTMENT INSTRUMENT 2015-2017

	20	015	2016		2017	
G\$ MILLIONS	Total Assets (\$)	Growth (%)	Total Assets (\$)	Growth (%)	Total Assets (\$)	Growth (%)
Cash Deposits	13,021	0.78%	13,429	3.1%	15,030	11.9%
Stocks and Shares in Companies	11,536	-10.36%	10,987	-4.8%	13,794	25.6%
Corporate Bonds & Debentures	6,627	46.56%	7,822	18.0%	8,411	7.5%
Securities of Governments	2,714	15.02%	2,741	1.0%	3,107	13.4%
Mortgage Loans and Advances	279	-20.90%	312	11.8%	292	-6.3%
Deposit Administration Contracts	7,778	24.13%	8,245	6.0%	9,209	11.7%
Real Estate	902	-1.19%	896	-0.6%	1,025	14.4%
Other Investments (Mutual Funds)	744	-42.92%	939	26.2%	1,113	18.5%
TOTAL INVESTMENTS	43,600	5.05%	45,371	4.1%	51,981	14.6%
Non Invested Assets	1,867	17.56%	1,642	-12.0%	1,115	-32.1%
TOTAL INDUSTRY ASSETS	45,467	5.51%	47,013	3.4%	53,097	12.9%

#### 7.4.4. ALLOCATIONS BY GEOGRAPHICAL REGIONS

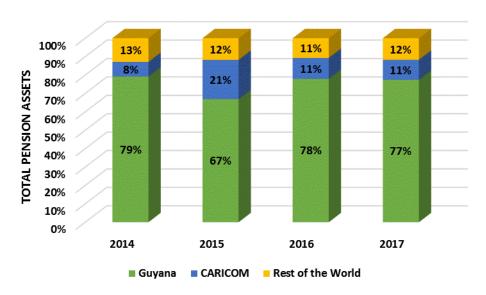
The industry's asset allocation by geographical regions remained within the statutory limit for the period 2014-2017, excluding 2015. Less than 30 percent (approximately 22.6 percent) or \$12 billion of pension assets were invested outside of Guyana in 2017. The latter included investments of 9 percent or \$5.8 billion in CARICOM Member States and 11 percent or \$6.2 billion in the rest of the world. Approximately 77 percent or \$41.1 billion of pension assets were invested domestically in 2017 (see Annex 2: Table 2.2 & Table 7 below).

TABLE 7: PENSION ASSETS BY GEOGRAPHICAL ALLOCATION 2014-2017

Region	2014	Growth (%)	2015	Growth (%)	2016	Growth (%)	2017
Guyana	32,874	-1.15%	30,399	-7.53%	36,641	20.54%	41,086
CARICOM	3,276	-0.61%	9,693	195.86%	5,340	-44.91%	5,773
Rest of the World	5,355	5.92%	5,344	-0.20%	5,032	-5.83%	6,227
Foreign Assets as a Percentage of Total Assets	20.0%		33.1%		22.1%		22.6%
<b>Total Assets</b>	43,093		45,467		47,013		53,097

Additionally, pension assets invested in Guyana demonstrated some fluctuation in growth, following 5 percent and 7.5 percent declines in 2014 and 2015 respectively, followed by a sharp increase in 2016 of approximately 20.1 percent. This may be linked to a five year contraction in the issuance of treasury bills (end 2015), compounded by an \$11 million loss in bond investments (see Table 6). Fluctuations in investment values may also be attributable to in the fair value of some investments such as quoted stocks and shares which experienced a 10.4 percent decrease in value at end 2015.

FIGURE 8:
PENSION ASSETS BY GEOGRAPHICAL ALLOCATION
2014-2017



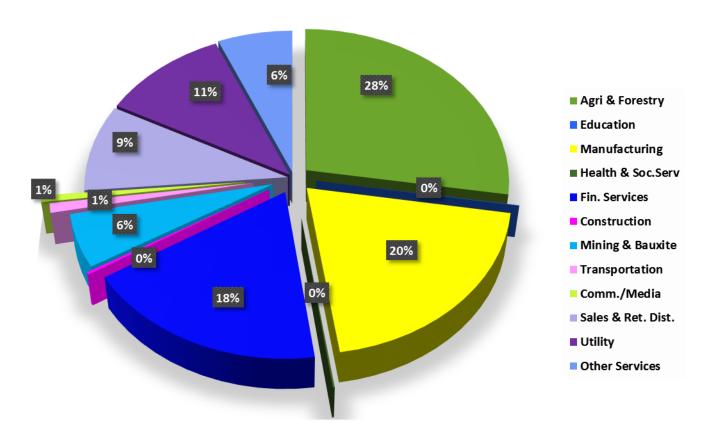
#### 7.4.5. ASSET ALLOCATION BY INDUSTRY

Agriculture and forestry remained the industry to hold the largest share of pension sector assets, continuing a positive three year trend and accounting for 27.5 percent of total pension assets at end-December 2017. Investments in the education, construction and health sectors however were diminutive, particularly in education which remained unchanged from the previous year (\$24 million or 0.05 percent). The manufacturing industry also recorded steady growth and accounted for 20 percent of total pension sector assets.

TABLE 8: PENSION ASSETS BY INDUSTRIAL ALLOCATION 2014-2017

G\$ millions						
Year	2015	2016	2017			
Total Assets	45,467	47,013	53,097			
Agriculture & Forestry	13,130	13,425	14,622			
Education	22	24	24			
Manufacturing	8,422	8,994	10,661			
Health & Social Services	58	67	72			
Fin. Services	8,304	8,855	9,717			
Construction	90	106	132			
Mining & Bauxite	2,354	2,634	2,959			
Transportation	391	466	531			
Comm./Media	304	370	373			
Sales & Ret. Dist.	4,197	3,974	4,856			
Utility	5,526	5,059	5,760			
Other Services	2,670	3,039	3,390			

FIGURE 9: Industrial Allocation of Pension Assets 2017



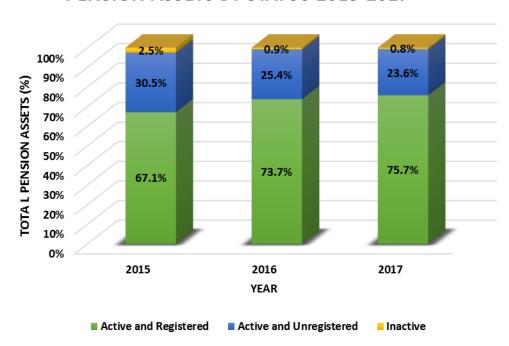
#### 7.4.6. ALLOCATION BY PLAN STATUS

Pension assets of registered plans continued to account for the majority of total pension assets, with approximately 76 percent or \$40.2 billion. The registration of more pension plans is evident through the decline in unregistered pension plan assets from \$13.8 billion in 2015 to \$12.5 billion in 2017, a positive indicator of the Bank achieving its pension specific strategic goals. Further, assets remaining in inactive pension plans continued to decline reaching \$399 million at end-December 2017.

TABLE 9: ACTIVE vs INACTIVE PENSION ASSETS 2015-2017

G\$ millions	2015	2016	2017
No. of Reporting Plans	96	97	96
Total Assets	45,467	47,013	53,097
Active and Registered	30,465	34,663	40,189
Active and Registered/ Total Assets (%)	67.0%	73.7%	75.7%
Active and Unregistered	13,878	11,939	12,508
Active and Unregistered/ Total Assets (%)	30.5%	25.4%	23.6%
Inactive	1,124	412	399
Inactive/ Total Assets (%)	2.5%	0.9%	0.8%

FIGURE 10: PENSION ASSETS BY STATUS 2015-2017



#### 8. FINANCIAL SOUNDNESS AND STABILITY

#### 8.1. FINANCIAL SOUNDNESS INDICATORS

#### 8.1.1. SYSTEMIC RISK

The pension sector's exposure to systemic risk remained diminuitive despite significant growth in the sector's assets in 2018. At the end of December 2018, pension assets represented 6.6 percent of total financial assets and 24.4 percent of NBFIs' assets. The sector's importance as an institutional investor was reflected in the increase in its assets to GDP ratio from 7.2 percent in 2017 to 8.3 percent in 2018.

#### 8.1.2. SOLVENCY RISK

The ability of a pension plan to meet its past service liabilities is reflected in its solvency risk exposure, whereas the ability to meet its past and future service liabilities is measured by its funding risk exposure, particularly for DB plans. If a plan is deemed solvent, then it is able to meet its financial obligations at that date, moreover if the plan is fully funded, then it it is able to meet is long term and future service obligations. In 2017, the funding level of reporting plans improved with an industry ratio of 133 percent compared with 120 percent in 2016. This indicated that plans were sufficiently able to meet their past service liabilities and projected benefit obligations and were not vulnerable to any measurable funding risk. By nature, DC pension plans are fully funded, provided that all due contributions are remitted and DB plans increased their average funding level to 138.3 percent. It is noteworthy however that at end-December 2017 two (2) DB plans were insolvent (unable to meet liabilities at the time of valuation) and ten (10) were in a funding deficit, thus unable to meet their accumulated and projected benefit obligations. Higher than expected salary increases between valuations were the major contributors of these deficits, and although the overall funding level of the industry was positive, the Bank continued regulation to ensure that actuarial reccommendations are implemented to correct these deficits over time.

Fully registered plans continued to have a funding level higher than that of the industry for 2014 -2017, whilst unregistered plans consistently fell below the industry average for the same period.

FIGURE 11: Funding Levels of Pension Plans 2014-2017

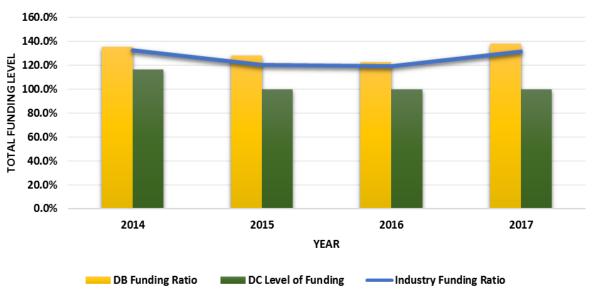


TABLE 10: PENSION PLANS' FUNDING RATIOS 2014-2017

FUNDING RATIOS	2014	2015	2016	2017
Industry Funding Ratio	132.3%	120.4%	119.3%	133.3%
DB Funding Ratio	135.2%	128.1%	122.8%	138.8%
DC Level of Funding	116.4%	100.0%	100.0%	100.0%
Fully Registered Plans	147.8%	133.3%	132.8%	146.3%
<b>Unregistered Plans</b>	107.4%	115.3%	92.8%	101.6%

#### 8.1.3. LIQUIDITY RISK

The liquidity ratio is the ratio of liquid assets to cover immediate liabilities or higher than expected benefit payments without incurring a material loss. The industry's total liquidity as a percentage of total liabilities increased from 33.7 percent reported in 2016 to 32.2 percent at end-2017. This ratio indicated that pension funds still held a substantial amount of their total assets in liquid form or investments with maturities within one year.

TABLE 11: PENSION PLANS' LIQUIDITY RATIOS 2014-2017				
LIQUIDITY RATIOS	2014	2015	2016	2017
Industry Liquidity Ratio	33.9%	34.2%	33.7%	32.2%
DB Liquid Ratio	51.4%	48.5%	47.0%	50.0%
DC Liquid Ratio	8.0%	1.6%	1.3%	1.7%
Fully Registered Plans	12.5%	25.2%	25.0%	28.4%
Unregistered Plans	32.5%	12.2%	9.2%	<b>26.</b> 7%

Source: Insurance Supervision Department, Bank of Guyana

Fundamentally, pension plans' liabilities are long-term and therefore it is not traditional for pension funds to maintain oversized liquid accounts to meet future pension obligations. DB and fully registered plans held a greater share of assets in liquid accounts at the end of the year, recording ratios of 50 percent and 28.4 percent, respectively. DC plans maintained a substantially lower proportion of assets in liquid accounts (see Table 11, Figure 12).

60.0% 50.0% *FOTAL LIQUIDITY LEVEL* 40.0% 30.0% 20.0% 10.0% 0.0% 2014 2015 2016 2017 YEAR **DB Liquid Ratio** ■ DC Liquid Ratio Industry Liquidity Ratio

FIGURE 12: Liquidity Ratios of Pension Plans 2014-2017

#### 8.1.4. INFLATION RISK

The sector yielded significantly small, increased real gross rates of return on invested assets in 2017- 2.9 percent, albeit higher than 2016. This happened despite a higher inflation year, which realised the real values of fixed interest securities and other invested assets. This small growth is due to the significantly lower real rate of return in 2016, which was recorded at a negative 0.2 percent. DB plans strengthened with a rate of approximately 3.6 percent however, real returns experienced by DC plans over the same period continued to fall at negative 0.8 percent. The contrasting returns on invested assets between the two plan types were mainly due to their different investment allocations. DC plans' investments are less diversified compared to DB plans' investments.

TABLE 12: PENSION ASSETS' RATES OF RETURN 2014-2017

G\$ MILLIONS		2014	2015	2016	2017
Nominal Rate of Return on invested assets	Average Invested Assets	40,845	42,553	44,486	48,676
	Nominal Net Investment Returns	278	296	519	2,202
	Rate of Return (Sector)	0.68	0.70	1.17	4.52
	DB Plans	0.8%	0.9%	1.4%	5.1%
	DC Plans	1.4%	0.5%	0.4%	0.7%
	Annual Price Inflation	1.17	(1.81)	1.44	1.53
Real Rate of Return on invested assets	Rate of Return (Sector)	(0.49)	2.51	(0.27)	3.00
	DB Plans	(0.4)%	3.2%	0.0%	(1.48)
	DC Plans	0.2%	3.1%	(1.1)%	(1.52)

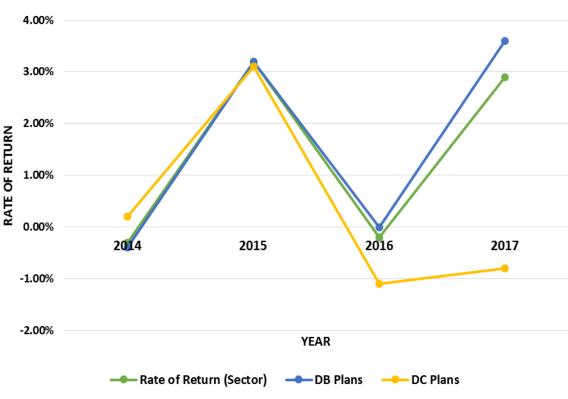


FIGURE 13:
Real Rate of Return for Pension Plan Investments 2014-2017

#### 8.1.5. MARKET RISK

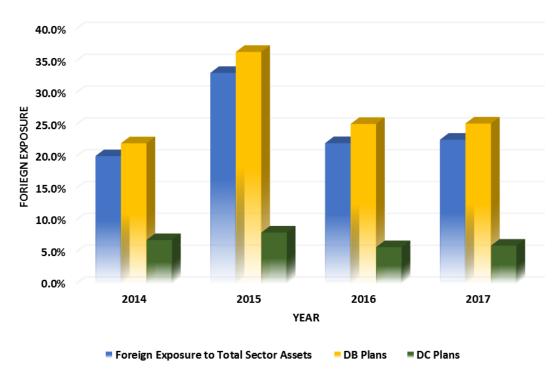
#### 8.1.5.1. FOREIGN EXPOSURE OF PENSION ASSETS

Foreign exposure of pension assets slightly increased in 2017 and remained well within the 30 percent statutory limit. As a percentage of total assets, foreign assets represented approximately 23 percent at the end of 2017; a marginal increase compared to 22 percent in 2016. This was attributed to a 0.3 percent increase in total foreign investments in DC plans; DB plan investments for this period remained unchanged, though continued to be significantly higher than the industry average (see table 13).

TABLE 13: FOREIGN EXPOSURE OF PENSION ASSETS 2014-2017

G\$ MILLIONS	2014	2015	2016	2017
Foreign Exposure	8,628	15,037	10,372	12,001
Foreign Exposure to Total Sector Assets	20.0%	20.6%	22.0%	22.8%
DB Plans	22.0%	36.4%	25.1%	25.1%
DC Plans	6.8%	8.0%	5.7%	6.0%

FIGURE 14:
FOREIGN EXPOSURE OF PENSION ASSETS 2014-2017



#### 8.1.5.2. EQUITY EXPOSURE OF PENSION ASSETS

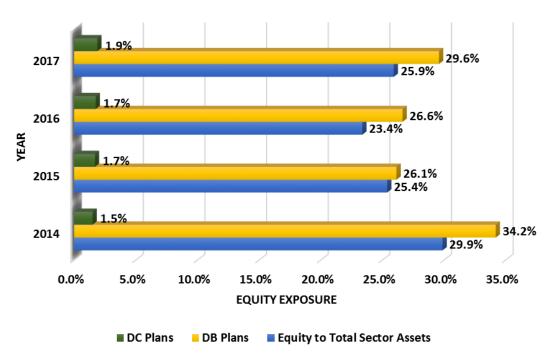
Pension funds' exposure to equity markets decreased from approximately 30 percent in 2014 to 26 percent at the end of 2017 despite an increase in the fair value of equity investments of DB plans from \$10.9 billion to \$13.6 billion, and DC plans from \$107.7 million to \$132 million in 2017. The decrease in proportionality to total pension sector assets is mainly due to increased investments in other instruments particularly government and private securities, other investments and equities invested within deposit administration contracts.

Additionally, as a percentage of assets, DB assets' exposure to equities dominated, and represented approximately 30 percent compared to 1.9 percent of DC assets in 2017. Consequently, the funding positions of DB plans are more likely to be sensitive to market changes than plans with an investment portfolio comprising of a higher proportion of fixed income securities (see Table 14).

TABLE 14: EQUITY EXPOSURE OF PENSION ASSETS 2014-2017

G\$ MILLIONS	2014	2015	2016	2017
Equity	12,868	11,536	10,987	13,759
<b>Equity to Total Sector Assets</b>	29.9%	25.4%	23.4%	26.1%
DB Plans	34.2%	26.1%	26.6%	29.6%
DC Plans	1.5%	1.7%	1.7%	1.9%

FIGURE 15: EQUITY EXPOSURE OF PENSION ASSETS 2014-2017



# 8.1.6. CREDIT RISK

#### 8.1.6.1 ACCOUNTS RECEIVABLE TO TOTAL ASSETS

This ratio measures the potential impact of credit default risk resulting from payment of monies owed to pension funds. The accounts receivable to total assets ratio was stable and relatively low with a ratio of 2.2 percent at the end of 2017. The impact to DB assets resulting from credit default risk was relatively more significant than DC assets, where 2.5 percent of DB assets represented accounts receivable compared to 0.2 percent of DC assets at the end of the period (see Table 15).

TABLE 15: ACCOUNTS RECEIVABLE to TOTAL ASSETS 2015-2017

	2015	2016	2017
Receivables	1,868	1,642	1,156
Receivables to Total Sector Assets	4.1%	3.5%	2.2%
DB Plans	3.6%	4.0%	2.5%
DC Plans	0.3%	0.3%	0.2%

2.5% 2017 Z016 EAR 4.0% 3.5% 0.3% 3.6% 2015 2.0% 0.5% 1.0% 2.5% 4.5% 0.0% 1.5% 3.0% 3.5% 4.0% **ACCOUNTS RECEIVABLE TO TOTAL ASSETS** ■ DC Plans DB Plans ■ Receivables to Total Sector Assets

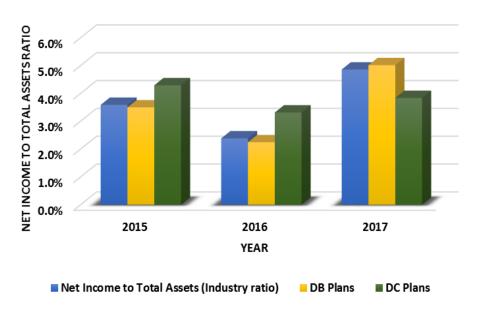
FIGURE 16:
Receivables vs Total Assets 2015-2017

# 8.2. EFFICIENCY & PROFITABILITY RATIOS

# 8.2.1. NET INCOME TO TOTAL ASSETS

Net income to total assets was higher at 4.9 percent compared to 2.4 percent in 2017. This was attributed to an increase in the industry's net income earned at the end of the period by 130 percent, particularly influenced by increased DB plans' net income growth. This is reflected a sustained rise in available resources for pension fund investments. Both DB and DC plans had higher ratios at 5 percent and 3.8 percent, respectively.

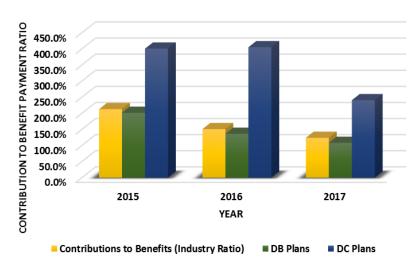
FIGURE 17:
NET INCOME AND TOTAL PENSION ASSETS
2015-2017



## 8.2.2. CONTRIBUTIONS TO TOTAL BENEFIT PAYMENTS

Contributions received increased by 7.1 percent to \$1.7 billion in 2017 that represented approximately 124 percent of total benefit related payments. This indicated that approximately 24 percent of net contributions were added to surplus income, an indication that the profitability of pension plans were not at risk. The analysis also revealed that in 2017, DB plans continued its downward trend mainly due to the decreasing membership of the Guyana Sugar & Trading Enterprises Pension Plan, with a ratio of 108 percent followed by 241 percent for DC plans, which experienced some fluctuation from 2015- 2017.

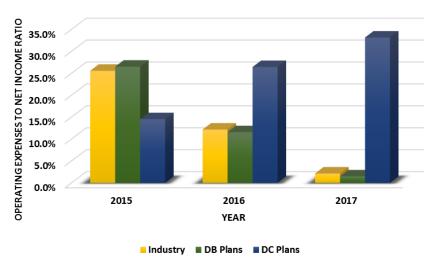
FIGURE 18: CONTRIBUTIONS AND BENEFIT PAYMENTS 2015-2017



# 8.2.3. OPERATING EXPENSES TO INVESTMENT INCOME.

The industry's efficiency, as measured by the total operating expenses in relation to net investment income, improved in 2017 with an average ratio of 2.2 percent. Efficiency continued to vary considerably between plans. DC plans operating costs continued to experience relatively higher ratios (33.2 percent) and were considered less efficient over the period compared to 1.5 percent for DB plans.

FIGURE 19:
OPERATING EXPENSES TO
NET INVESTMENT INCOME 2015-2017



# 9. KEY STATISTICS OF PENSION FUND ADMINISTRATORS 9.1. INSURANCE COMPANIES

The majority of active private pension plans in Guyana are managed by life insurance companies (74 plans, of which 58 are DC and 16 are DB plans). In 2017, the combined asset value of plans administered by life insurers increased by approximately 13 percent to \$12.9 billion, which represented just over 24 percent of the industry's total assets at Dec-2017.

Total membership in these plans amounted to 7,445 participants, an increase from 7,417 participants in 2016 and represented approximately 45 percent of the industry's total membership in 2017. The investment allocations of pension plans administered by life insurers are largely concentrated in deposit administration policy contracts, which represented approximately 92 percent of the total pension assets under life insurers' administration in 2017. The deposit administration policy contracts are pooled investment arrangement products that are issued and sold to pension funds by life insurers. Investments can be further broken down into categories such as equities, government securities, private securities, loans, real estate etc., but are all invested collectively as part of the deposit administration arrangement.

Plans administered by life insurers experienced a fluctuation in average funding ratio, from 85 percent in 2015, decreasing to 77 percent in 2016 then increasing to 105 percent in 2017. This underfunding of pension plans in 2015 and 2016 was experienced due to several significant deficits particularly in some DB plans. Investments performed poorly during the three year period, as reflected in reduced real (net) rates of return from 2.61 percent in 2015 to -1.15 percent in 2016 followed by -1.30 percent in 2017 (see Annex 2, Table 2.3).

# 9.2. TRUST COMPANIES

At the end of 2017, trust companies accounted for just over 53 percent of active membership-8,840 participants in the industry, a 3.6 percent increase from 8531 participants in 2016. Trust companies managed fewer active plans than life insurers (20 plans) in 2017 that were DB dominated (18 DB and two 2 DC plans). The share of pension assets under trust companies' administration continued to account for a sizable segment of the industry's total assets in 2017 (69.1 percent or \$36.7 billion). Over the period in review, these assets remained skewed towards investments concentrated in cash resources in deposit taking institutions (30.6)

percent) and in market equities of traded companies (33.5 percent) and securities of private companies (20.3 percent).

Pension plans managed by trust companies were fully funded at the end of the year, despite experiencing a decreased funding ratio of 124 percent in 2017 compared with a 132 percent in 2016. Investments saw a significant increase in real rates of return from 0.42 percent in 2016 to 4.28 percent in 2017 (see Annex 2, Table 2.3).

# 9.3. EMPLOYER SELF-ADMINISTERED PENSION FUNDS

Pension funds that are employer self-administered recorded no changes in 2017 with respect to the number of active plans (2). Their combined asset value represented a marginal 6.6 percent or \$3.5 billion of the industry's total assets. Additionally, membership in these plans represented only 2 percent of total membership. Investments of self-administered pension funds were mainly allocated in both government securities (treasury bills and government issued bonds and debentures) and corporate bonds, which in aggregate represented approximately 77 percent of their total assets at the end of the year.

In 2017, these plans experienced an average real investment return of 6.3 percent, an increase from -4.3 percent recorded in the previous year. Similarly, the funding level of liabilities of self-administered plans remained strong at 163 percent at the end of the year (see Annex 2, Table 2.3).

#### 10. THE WAY FORWARD

The relative wealth of the private pension sector is expected to continue to increase as a percentage of the integrated financial system and national income at large. The sector's growth is expected to be determined by stronger market outcomes in investment values of major securities and increased coverage from the establishment of new pension plans.

The adverse impact of the low interest yields experienced by DC plans can be mitigated through proper investment policies, with life cycling factors that match investments with pension liabilities. Similarly, DB plans' increasing exposure to equity markets will continue into the future unless alternative investment options are provided.

A comprehensive law is being considered to reform the sector and to mitigate the existing supervisory challenges and poor industry practices. The new law envisages changes that would improve efficiency, sustainability, coverage, adequacy and the security of participants' benefits

to ensure that pension plan members have better pensions during retirement. This is in keeping with the World Bank Group's key outcomes of its new pension framework policy.<sup>9</sup>

Nonetheless, the continued positive performance of the industry will be closely dependent on favourable macroeconomic conditions and indicators. The sector's performance will be determined by stock market prices (general price inflation) and the real interest rates of tradable securities.

One of the core functions performed by private pension arrangements is investment with long-term objectives. Recognising this core function, the sector provides prospects to build a resilient long-term capital market that can facilitate capital investment opportunities and in due course further economic growth and development.

#### 10.1. MICRO-PENSIONS

A micro- pension scheme is a voluntary, defined contribution, individual account plan for the informal sector (or low income earners). It has no plan sponsor and allows for voluntary savings to be accumulated over a long period of time. Micro- pension schemes are usually long term savings products or hybrids between pension schemes and savings products.

The passage of the Private Pensions Act should introduce the Simplified Pension Plan (SPP), Guyana's own micro-pension initiative. The SPP aims to bring flexibility to retirement planning mechanisms locally, by targeting members of the semiformal, informal and self- employed labour force, usually characterised by variable income schedules. The plans will have individual accounts for each member, and will not require any fixed number of contributions. Individuals may choose the value of their contributions, and will receive interest on those contributions at the rate prescribed by the micro-pension operator.

For a strong and thriving micro pension industry, there should exist a well-developed financial services system, a high national internet and mobile penetration rate and a well- informed, sensitised public ready to utilise the services provided. Collaboration with credit card providers, commercial banks, credit unions and building societies would also go a long way in ensuring a robust and accessible micro pension industry. Pre-paid cards, mobile wallets and bank accounts may also facilitate cashless and secure payments to users.

Such technological models have been implemented in India where the Micro Pension Model implemented by Invest India Micro Pension Services ("IIMPS") uses smart phones and card readers on the VISA platform to deliver a range of non-credit financial services to low income earners at an affordable transaction cost. Developing nations such as Jamaica, Vietnam, Indonesia and Kenya also boast similar success stories regarding their micro pension industries. It is hoped that after the successful implementation and functioning of the SPP, the

<sup>&</sup>lt;sup>9</sup> Outcome Based Assessments for Private Pensions Handbook, World Bank Group, June 2016

local pension sector can utilise similar technology based on the model used in India, for ease of access to the public.

# 10.2. GUYANA'S PRIVATE PENSION SECTOR AND FINANCIAL LITERACY

The draft Private Pensions Act aims to holistically improve the local pension sector, particularly with respect to overall coverage and enrolment in pension schemes. More accessible features of the draft Act include the introduction of the Simplified Pension Plan, a flexible savings product primarily targeting members of the informal labour force and self- employed individuals. It is therefore necessary to engage members of the general public on how the proposed legislation will affect them individually and the industry as a whole.

The **National Pensions Awareness Programme (NPAP)** will therefore assist members of the public with their immediate and long term pension literacy and will aim to build trust and improve public confidence in the industry.

The NPAP aims to be a vehicle through which some or all of the Bank's strategic goals may be implemented and in due course achieved. The programme aims to reach citizens in the ten administrative regions of Guyana, targeting an age range of 16-60 years old, and is set to be an ongoing initiative carried out by the Insurance Supervision Department of the Bank. The NPAP aims to incorporate numerous distribution channels including media and social media outreach, pensions education programmes in schools, outreach to unions and workplaces and presentations at job fairs.

Key stakeholders include the Bank of Guyana, insurance companies offering pension services, members of private pension plans, secondary school pupils, and members of the general public.

Upon completion of the NPAP, there should be measurable evidence of an overall, positive shift in public perception of the pension industry, noticeably improved workable habits and disciplined individual behaviours with respect to planning for retirement. This evaluation will be conducted on an ongoing basis.

#### 11. STATISTICS

# 11.1. ANNEX 1- PENSION PLAN LISTS AS AT DECEMBER 31, 2017

#### **ABBREVIATIONS**

# Pension Plan Types Pension Plan Managers

DB- defined benefit DC- defined contribution HIHL: Hand-in-Hand Mutual Life Assurance Company Limited

DML-:Demerara Mutual Life Assurance Society Limited

GTM-:Guyana and Trinidad Mutual Group of Insurance Companies

TCGL: Trust Company Guyana Limited HIHT: Hand-in-Hand Trust Corporation

NALICO: North American Life Insurance Company Limited

ASSURIA: Assuria Life (GY) Incorporated

SA: Self-Administered/Managed

TABLE 1.1: LIST OF ACTIVE AND REGISTERED PENSION PLANS (2014-2017)

No.	Plan No.*	Name of Plan	Plan Type	Plan Manager				
1	135	ANSA McAL Trading Limited Defined Contribution Pension Plan	DC	HIHL				
2	138	Assuria Life (GY) Inc. Pension Plan	DC	Assuria				
3	123	Audit Office of Guyana Pension Plan DC HIHL						
4	32	Bank of Baroda ( Guyana ) Incorporated Pension Plan	DC	NALICO				
5	112	Bank of Guyana's Pension Scheme	DB	SA				
6	119	Banks DIH Limited Defined Contribution Pension Plan	DC	DML				
7	133	Berbice Bridge Company Incorporated Pension Plan	DC	HIHL				
8	39	Courts (Guyana) Incorporated Pension Plan	DC	TCGL				
9	38	Demerara Distillers Limited Pension Plan	DB	TCGL				
10	33	Embassy of the United States of America, Guyana Pension Plan	DB	NALICO				
11	141	E-Networks Incorporated Pension Plan	DC	HIHL				
12	93	Food for the Poor (Guyana) Incorporated Pension Plan	DC	HIHL				
13	125	General Equipment (Guyana) Limited Pension Plan	DC	GTML				
14	118	Grace Kennedy Remittance Services (Guyana) Limited Defined Contribution Pension Scheme	DC	DML				
15	36	Guyana Bank for Trade and Industry Pension Plan (1999)	DC	NALICO				
16	14	Guyana Geology & Mines Commission Pension Plan	DB	HIHTC				
17	111	Guyana Publications Incorporated Pension Plan	DC	HIHL				
18	116	Guyana Revenue Authority Pension Scheme	DC	DML				
19	131	Guyana Water Incorporated Pension Plan	DC	Assuria				
20	70	Hand - in - Hand Trust Corporation Incorporated Pension Plan	DC	HIHTC				
21	46	Hand in Hand Staff Pension Plan	DB	TCGL				
22	117	John Fernandes Limited Pension Plan	DC	DML				
23	29	Laparkan Trading (Guyana) Company Limited & Laparkan Holdings Limited Pension Plan	DB	HIHL				

TABLE 1.1: LIST OF ACTIVE AND REGISTERED PENSION PLANS (2014-2017)

No.	Plan No.*	Name of Plan	Plan Type	Plan Manager
24	134	M.P. Insurance Brokers & Consultants Limited Pension Plan	DC	HIHL
25	41	Massy Distribution (Guyana) Incorporated Pension Plan	DB	TCGL
26	110	Metro Office & Computer Supplies Pension Plan	DC	HIHL
<b>2</b> 7	109	Mings Products & Services Limited Pension Plan	DC	HIHL
28	43	Neal & Massy Group Pension Plan	DB	TCGL
29	42	New Building Society Limited Pension Plan	DB	TCGL
30	35	North American Fire and General Insurance Company Limited Pension Plan	DC	NALICO
31	34	North American Life Insurance Company Limited Pension Plan	DC	NALICO
<b>32</b>	90	P&P Insurance Brokers & Consultants Limited Pension Plan	DC	HIHL
<b>33</b>	19	Republic Bank (Guyana) Limited Pension Fund Scheme	DB	GTML
34	47	Sterling Products Limited Pension Plan	DB	TCGL
<b>35</b>	18	Guyana Sugar & Trading Enterprises Pension Scheme	DB	HIHTC
36	128	TCL Guyana Incorporated Group Annuity Scheme	DC	DML
<b>3</b> 7	21	The Pension Fund of the Guyana and Trinidad Mutual Fire Insurance Company Limited	DB	GTML
38	113	The Caribbean Containers Incorporated Pension Plan	DC	GTML
39	101	The Pension Plan for the Sales Representatives of the Guyana and Trinidad Mutual Insurance Companies	DB	GTML
40	103	U-mobile Incorporated Pension Plan	DC	HIHL
41	40	William Fogarty Pension Plan Scheme	DB	TCGL

TABLE 1.2: LIST OF ACTIVE AND UNREGISTERED PLANS (2014-2017)

No.	Plan no.	Name	Plan Type	Plan Manager					
1	34	Anna Regina Town Council Pension Plan	DC	HIHL					
2	91	Banks DIH Limited Defined Benefit Pension Plan	DB	DML					
<b>-</b> 3	76	Bauxite Company of Guyana Limited Hourly Pension Plan	DC	GTML					
<b>4</b>	77	Bauxite Company of Guyana Limited Staff Pension Plan	DC	GTML					
<del>-</del> 5	75	Bosai Mineral Group (Guyana) Inc.  DC GTML							
6	45	C&S Limited Annuity Scheme DC DML							
7	19	Camex Limited Pension Plan	•						
8	20	Camex Restaurants Incorporated Pension Plan	DC	HIHL					
9	99	Campus Crusade for Christ, Guyana Pension Plan	DC	ASSURIA					
<b>10</b>	66	Caricom Rice Mills Group Annuity Scheme	DC	DML					
11	65	Cheddi Jagan International Airport Corporation Group Pension Scheme	DC	DML					
1 <b>2</b>	28	Citizens Bank Guyana Limited Pension Plan	DC	HIHL					
13	39	Correia Group of Companies Pension Plan	DB	TCGL					
14	64	Davis Memorial Hospital Group Annuity Scheme DC DML							
15	90	Demerara Mutual Life Assurance Society Limited Office Staff Group Annuity Scheme	DB	DML					
16	63	Friendship Slipway Company Limited Group Pension Scheme	DC	DML					
17	62	Gizmos & Gadgets Annuity Scheme	DC	DML					
18	26	Grains Guyana Limited Pension Plan	DC	HIHL					
19	22	Guyana Civil Aviation Authority Pension Plan	DB	HIHL					
20	4	Guyana Electricity Corporation Superannuation Pension Scheme	DB	HIHTC					
21	58	Guyana Forestry Commission Group Annuity Pension Scheme	DC	DML					
22	32	Guyana National Bureau of Standards Pension Plan	DC	HIHL					
23	61	Guyana Office for Investment Group Annuity Scheme	DC	DML					
24	33	Guyana Stockfeeds Limited Pension Plan	DB	HIHL					
<b>25</b>	94	Guyana Telephone and Telegraph Company Limited Pension Fund	DB	TCGL					
<b>26</b>	25	Machinery Corporation of Guyana Limited Pension Plan	DC	HIHL					
<b>2</b> 7	21	Marian Academy Pension Plan	DC	HIHL					
<b>28</b>	57	Moravian Church of Guyana Group Annuity Scheme	DC	DML					
29	31	National Frequency Management Unit Pension Plan	DB	HIHL					
30	81	New GPC Pension Plan	DB	TCGL					
31	73	Omai Services Limited Pension Plan	DC	GTML					
<b>32</b>	56	Rentokil Initial (Guyana) Limited Group Annuity Scheme	DC	DML					
<b>33</b>	36	Roraima Airways Incorporated Pension Plan	DC	HIHL					
<b>34</b>	69	Rosbel Gold Mines N.V Pension Plan	DC	GTML					
<b>35</b>	13	Rubis Guyana Incorporated Pension Plan	DB	NAL					
<b>36</b>	72	Sugar Industry Labour Welfare Fund Committee Pension Scheme	DC	GTML					
<b>3</b> 7	93	The Mayor and City Council of Georgetown Pension Plan	DB	GTML					
<b>38</b>	71	Trust Company (Guyana) Limited Pension Plan	DC	GTML					
39	98	Wieting & Richter Pension Scheme	DB	SA					

TABLE 1.3: LIST OF INACTIVE PENSION PLANS\* (2014-2017)

No.	Plan no.	Plan Type	Name	Plan Manager					
1.	30	Ansa Mc AL Trading Limited Pension Plan DB HIHL							
2.	2	Bauxite Industry Pension Plan	DB	HIHTC					
3⋅	27	entral Housing & Planning Authority Pension Plan DB HIHL							
4.	54	onsumer Goods Complex Pension Plan DC DML							
5.	53	COPS (Guyana) Limited Pension Plan	DC	DML					
6.	89	Francis De Caires & Company Limited Pension Plan	DB	GTML					
7•	52	Guyana Congregational Union Pension Plan	DC	DML					
8.	51	Guyana Management Institute Pension Plan	DC	DML					
9.	9	Guyana National Industrial Corporation Pension Plan	DB	HIHTC					
10.	49	Guyana Rice Development Board Pension Plan	DC	DML					
11.	6	Guyana School of Agriculture Pension Plan	DB	HIHTC					
12.	50	Hotel Tower Pension Plan	DC	DML					
13.	68	John Fernandes Insurance Pension Scheme	DC	DML					
14.	46	John Fernandes Limited Pension Plan	DB	DML					
15.	10	Mahaica Mahaicony Abary Agriculture Development Authority Pension Plan	DB	HIHTC					
16.	8	National Agricultural Research Institute Pension Plan	DB	HIHTC					
17.	48	PBS Pension Plan	DC	DML					

TABLE 1.4: LIST OF WOUND UP PENSION PLANS (2014-2017)

No.	Plan	Plan Name	Plan	Plan				
1.	No.		Type	Manager				
2.	51	Banks DIH Flexible Premium Annuity Pension Plan DC CLICO						
3⋅	<b>53</b>	Clico Life & General Insurance Co.(SA) Agents Pension Plan DC CLICO						
4.	54	Clico Life & General Insurance Co.(SA) Staff Pension Plan	DC	CLICO				
5.	6	Continental Group of Companies Pension Plan	DB	CLICO				
6.	48	Demerara Power Company Pension Plan	DC	CLICO				
7•	55	Guyana Agriculture & General Workers' Union Pension Plan	DC	CLICO				
8.	3	Guyana Bank for Trade and Industry Ltd. Pension Plan	DB	CLICO				
9.	8	Guyana Fertilizers Ltd. Pension Plan	DB	CLICO				
10.	99	Guyana National Co-operative Bank Plan	DC	CLICO				
11.	49	Guyana Office for Investment Pension Plan	DC	CLICO				
<b>12.</b>	52	Guyana Revenue Authority Pension Plan	DC	CLICO				
13.	4	Kayman Sankar and Company Ltd. Pension Plan	DB	CLICO				
14.	50	Linden Power Company Pension Plan	DC	CLICO				
15.	5	Linden Town Council Pension Plan	DB	CLICO				
16.	7	New Guyana Marketing Corporation (DAP) Pension Plan	DB	CLICO				
17.	2	Shell Antilles & Guianas Ltd. Pension Plan	DB	CLICO				
18.	1	Singer Sewing Machine Company (Staff) Pension Plan	DB	CLICO				
Source	e: Insurar	nce Supervision Department, Bank of Guyana.						

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<sup>\*-</sup> Inactive plans receive no contributions but still contain assets

TABLE 1.5: LIST OF PENSION PLANS REGISTERED ANNUALLY (2014-2017)

YEAR OF REGISTRATION	PLAN NO.	PENSION PLAN	PENSION PLAN PLAN EFFECT TYPE MANAGER DATE*				
2014	116	Guyana Revenue Authority Pension Scheme	DC	DML	01-Feb-09		
	35	North American Fire and General Insurance Company Limited Pension Plan	DC	NALICO	1-Oct-98		
2015	123	Audit Office of Guyana Pension Plan	DC	HIHL	1-Jan-11		
	131	131 Guyana Water Incorporated Pension Plan		Assuria	01-Jan-15		
	41	Massy Distribution ( Guyana) Incorporated Pension Plan	DB	TCGL	30-Sep-67		
2016	112	Bank of Guyana's Pension Scheme	DB	SA-Bank of Guyana	15-Mar-67		
	32	Bank of Baroda ( Guyana ) Incorporated Pension Plan	DC	NALICO	1-Apr-89		
	119	Banks DIH Limited Defined Contribution Pension Plan	DC	DML	1-Oct-09		
	135	ANSA Mc Al Trading Limited Defined Contribution Pension Plan	DC	HIHL	1-Jan-15		
	33	Embassy of the United States of America, Guyana Pension Plan	DB	NALICO	1-Jun-89		
2017	93	Food for the Poor (Guyana) Incorporated Pension Plan	DC	HIHL	3-Jan-94		
	103	U-mobile Incorporated Pension Plan	DC	HIHL	1-Oct-03		
	110	Metro Office & Computer Supplies Pension Plan	DC	HIHL	1-Jan-08		
	138	Assuria Life (GY) Inc. Pension Plan	DC	Assuria	01-Jan-16		
	133	Berbice Bridge Company Incorporated Pension Plan	DC	HIHL	1-Oct-14		
	141	E-Networks Incorporated Pension Plan	DC	HIHL	1-Jan-16		
	109	Mings Products & Services Limited Pension Plan DC		HIHL	1-Apr-07		
	134	M.P. Insurance Brokers & Consultants Limited Pension Plan	DC	HIHL	01-Feb-14		
	90	P&P Insurance Brokers & Consultants Limited Pension Plan	DC	HIHL	6-Jul-99		
	111	Guyana Publications Incorporated Pension Plan	DC	HIHL	1-Aug-08		
	29	Laparkan Trading (Guyana) Company Limited & Laparkan Holdings Limited Pension Plan	DB	HIHL	1-Jan-94		
	118	Grace Kennedy Remittance Services (Guyana) Limited Defined Contribution Pension Scheme	DC	DML	1-Dec-11		

Source: Insurance Supervision Department, Bank of Guyana \*Effective date: date the pension plan began operations; contributions initiated

### 11.2. ANNEX 2- ASSET & LIABILITY PROFILES

TABLE 2.1: ASSETS AND LIABILITIES OF REPORTING PENSION PLANS (2014-2017)

G\$ millions	2014	2015	2016	2017
No of reporting pension plans	84	96	97	96
TOTAL INDUSTRY ASSETS	43,093	45,467	47,013	53,097
<b>Asset Growth Rate</b>	3.49%	5.51%	3.40%	12.94%
Cash Deposits	12,920	13,021	13,429	15,030
Stocks and Shares in Companies	12,868	11,536	10,987	13,794
Corporate Bonds & Debentures	4,522	6,627	7,822	8,411
Securities of Governments	2,360	2,714	2,741	3,107
Mortgage Loans and Advances	353	279	312	292
Deposit Administration Contracts	6,266	7,778	8,245	9,209
Real Estate	913	902	896	1,025
Other Investments (Mutual Funds)	1,304	744	939	1,113
TOTAL INVESTMENTS	41,505	43,600	45,371	51,981
Non Invested Assets	1,588	1,867	1,642	1,115
Total Industry Liabilities	32,533	36,632	39,422	40,330
Actuarial Liabilities (DB plans)	27,603	30,887	32,818	32,818
Accumulated Account Balances(DC plans)	4,352	5,279	6,164	7,016
Operating Liabilities*	578	466	440	497
NET ASSETS	10,560	8,835	7,591	12,767
REGISTERED PLANS	22	24	25	34
Total Pension Assets	30,081	30,465	34,663	40,189
Total Pension Liabilities	20,352	23,522	26,085	27,382
Net Pension Asset	9,729	6,943	8,578	12,808
UNREGISTERED REPORTING PLANS	62	<b>72</b>	<b>72</b>	<b>62</b>
Total Pension Assets	13,012	15,002	12,350	12,907
Total Pension Liabilities	12,118	13,030	13,259	12,761
Net Pension Asset	894	1,972	(909)	146
DB PLANS	27	<b>36</b>	<b>35</b>	<b>35</b>
Total Pension Assets	37,413	40,179	40,840	46,219
Total Pension Liabilities	27,660	5,288	33,248	33,293
Net Pension Asset	9,753	8,803	7,592	12,926
DC PLANS	<b>5</b> 7	60	62	61
Total Pension Assets	5,680	5,288	6,173	6,878
Total Pension Liabilities	4,873	5,288	6,173	6,180
Net Pension Asset	807	0	0	697

#### Source: Insurance Supervision Department, Bank of Guyana.

Note: Registered Plans – This represents plans fully registered under the Insurance Act of 1998.

Unregistered Plans – Plans with incomplete or pending applications.

DB – means defined benefit plans and DC – means defined contribution plans.

Investment arrangements describe investments in deposit administration contracts and group pension funds sold by life insurance companies.

Cash deposits are inclusive of certificates of deposits and cash held at commercial banks. Government securities comprise of treasury bills and government issued bonds & debentures.

Non-invested assets represent receivables (debtors, interest and taxes recoverable

TABLE 2.2: GEOGRAPHICAL ALLOCATION OF PENSION ASSETS (2015-2017)

# In G\$ millions

Year	Region	Total Assets	Non- Invested Assets <sup>10</sup>	Total Investments	Securities of Government <sup>1</sup>		Cash Deposits <sup>12</sup>	Stocks & Shares in Companies	Loans & Advance s	Deposit Administration Contracts	Real Estate	Other Investments	Other Assets
2014	TOTAL	43,093	O <sup>14</sup>	32,874	112	2,211	12,149	10,612	353	6,145	913	379	O
	Guyana	34,461											
	CARICOM	3,276											
	Rest of the World	5,355											
2015	TOTAL	45,467	1,750	43,600	2,714	6,627	13,021	11,536	279	7,778	902	744	116
- 0	Guyana	30,967	1,690	29,161	705	2,203	6,828	10,007	279	7,718	902	517	116
	CARICOM	9,622	39	9,583	1,698	1,465	5,432	702	0	59	0	227	0
	Rest of the World	4,878	21	4,857	310	2,959	761	827	0	0	0	0	0
2016	TOTAL	47,013	1,565	45,371	2,741	7,822	13,429	10,987	312	8,245	896	939	77
2010	Guyana	36,697	1,562	35,058	515	3,318	11,899	9,468	312	8,186	896	465	77
	CARICOM	4,913	0	4,913	1,867	1,335	810	568	0	59	0	272	0
	Rest of the World	5,403	3	5,400	359	3,170	719	950	0	0	0	202	0
2017	TOTAL	53,097	903	51,981	3,107	8,411	15,030	13,794	292	9,209	1,02 5	1,113	212
	Guyana	41,041	864	39,964	658	3,169	13,510	11,595	292	9,161	1,025	553	212
	CARICOM	<b>5,773</b>	21	5,752	2,362	1,653	499	947	0	48	0	243	O
	Rest of the World	6,283	18	6,265	87	3,588	1,021	1,252	0	0	0	317	0

<sup>10</sup> Non- Invested Assets represent Receivables (debtors, interest, taxes recoverable) and any non-invested amounts (cash in hand)

<sup>&</sup>lt;sup>11</sup> Securities of Government include treasury bills, government issued bonds and debentures

<sup>&</sup>lt;sup>12</sup> Cash Deposits include cash amounts held at Commercial Banks and certificates of deposit

<sup>&</sup>lt;sup>13</sup> Other investments include amounts invested in Mutual Funds

<sup>&</sup>lt;sup>14</sup> No breakdown available for 2014 assets due to data collection methodology

TABLE 2.3: DETAILS OF PENSION PLANS BY PLAN ADMINISTRATORS (2015-2017)

YEAR	PLAN MANAGER	Total Assets	Total Liabilities	Net Assets	Membership	Funding Level	Nominal Returns (%)	Real Returns (%)
	G\$ millions							
2015	Industry	45,467	37,749	7,718	13,409	120%	0.70	2.51
	Insurers	11,138	13,065	(1,926)	7361	85%	0.80	2.61
	Trust Companies	31,589	22,815	8,774	5698	138%	0.66	2.47
	Self- Administered	2,740	1,869	870	350	147%	0.60	2.41
2016	Industry	47,013	41,759	5,254	16,259	113%	1.17	<b>-0.2</b> 7
	Insurers	11,713	15,183	(3,470)	7417	77%	0.29	-1.15
	Trust Companies	32,324	24,424	7,901	8531	132%	1.86	0.42
	Self- Administered	2,975	2,153	823	311	138%	-2.90	-4.34
2017	Industry	53,097	44,092	9,005	16,640	120%	4.52	2.99
	Insurers	12,905	12,257	648	7,445	105%	0.23	-1.30
	Trust Companies	36,695	29,688	7,007	8,840	124%	5.81	4.28
	Self- Administered	3,497	2,147	1,350	355	163%	7.83	6.30

TABLE 2.4: INVESTMENTS OF PENSION PLANS BY PLAN ADMINISTRATOR (2015-2017)

G\$ millions	Total Assets	Securities of Government	Private Securities	Cash Deposits	Stocks and Shares in Companies	Loans and Advances	Investment Arrangements	Real Estate	Other Investment	Total Investments		Non Invested Assets
2015	45,467	2,714	6,627	13,021	11,536	279	7,778	902	744	43,600	3,256	1,867
Insurers	11,138	390	90	1,271	1,401	171	7,778	0	0	11,102	52	36
Trust Companies	31,589	792	6,537	11,520	9,445	11	0	902	734	29,940	2,973	1,649
Self- Administered	2,740	1,532	0	230	690	97	0	0	10	2,559	230	181
2016	47,013	2,741	7,822	13,429	10,987	312	8,245	896	939	45,371	1,377	1,642
Insurers	11,713	397	1,033	1,373	455	200	8,245	0	0	11,703	64	10
Trust Companies	32,324	588	6,789	11,773	9,835	19	0	896	929	30,829	1,031	1,495
Self - Administered	2,975	1,757	0	282	697	93	0	0	10	2,839	282	137
										2		
2017	53,097	3,107	8,411	15,030	13,794	292	9,209	1,025	1,113	51,981	2,284	1,115
Insurers	12,905	419	964	1,590	524	186	9,209	0	0	12,892	65	13
Trust Companies	36,695	780	7,447	13,134	12,276	17	0	1,025	1,103	35,781	1,912	914
Self- Administered	3,497	1,908	0	307	994	89	0	0	10	3,309	307	188

TABLE 2.5: SECTORIAL INTEGRATION OF ASSETS INVESTED IN GUYANA 2014-2017

In G\$ millions
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YEAR	2014	2015	2016	2017
Banking System	7,379	4,861	5,954	7,155
Cash at Bank	1,738	1,602	450	978
Fixed Deposits	5,641	3,259	5,505	6,177
Public Sector	112	705	515	658
T/bills	112	705	514	658
Bonds	0	0	0.019803	0.019803
Debentures	0	0	0	0
Local Gov't Sectors	0	0.039000	0.039000	0.039000
Private Sector	25,361	23,595	28,589	32,151
Shares	10,714	10,007	9,468	11,595
Mortgage/Loans	369	279	312	292
Bonds/Debentures/ Shared Plan	2,215	2,203	3,318	3,169
NBFIs	4,792	1,967	5,945	6,355
Real Assets	913	902	896	1,025
Pooled Funds (Deposition Administration)	5,979	7,718	8,186	9,161
Others	379	517	465	553
<b>Total Locally Invested Assets</b>	32,852	29,161	35,058	39,964

# 12. ANNEX 3 – CLASSIFICATION DESCRIPTIONS & METHODOLOGIES

PENSION ASSETS RV INVEST	FMENT CATEGORIES		
Cash Deposits	Cash are current account and other short-term savings in the financial system. De		
	are funds 'placed on deposit' with a financial institution that include certificates of deposit.		
Stocks and Shares in Companies	All forms of shares in the capital of enterprises, quoted shares and other equities of list companies on a stock exchange.		
Corporate Bonds	Corporate bonds refer to fixed interest securities or bonds or debentures issued by companies, including financial and non-financial enterprises. These are private sector issued and represent fixed term investments having a fixed maturity date or dates for the repayment of principal.		
Securities of Governments	These are inclusive of treasury bills and bonds issued or guaranteed by central and local governments. They are fixed term investments having a fixed maturity date or dates for the repayment of principal.		
Mortgage Loans	Mortgage loans are inclusive of mortgages and other loans, including other instalment credits and all other types of loans.		
Investment Arrangements	Investment arrangements are also referred to as deposit administration contracts. They represent retirement savings instruments provided by life insurance companies with (usually) a guaranteed investment return (e.g. guaranteed investment contracts). In these insurance contracts the underlying assets belong to the pension plan/fund, not to the insurance company.		
Real Estate	This refers to pension fund investments in real estate or property.		
Other Investments	Pension fund investments not included in the above categories.		
Non-invested Assets	Non-invested assets represent current account assets including all types of receivables (debtors, interest and taxes recoverable). Current account cash at bank is excluded.		
PENSION PLAN/FUND LIABI	LITIES		
Actuarial Liabilities	Actuarial liabilities represent the going concern liabilities of pension plans (mainly defined benefit plans) valued by a plan Actuary. The liabilities calculated are based on actuarial assumptions including demographic and financial assumptions, which represents the present value of the pension benefits accrued in a pension plan.		
Accumulated Account Balances	This represents the accumulated cash contributions (employer's and members' contributions) into to defined contribution pension plans plus accumulated interest earned from the investment of contributions.		
Operating/Other Liabilities	Operating liabilities refer to current liabilities including creditors and accruals, refund of contributions payable, unpaid pensionable benefits and all other types of payables.		
PENSION PLAN TYPES			
Defined benefit	A pension plan where the benefits payable to members or beneficiaries are calculated according to a formula in the plan rules that relates the benefits payable to the salary of each member at a time, or averaged over a period of time, as specified in the plan rules.		
Defined contribution	A pension plan where the benefits payable to each member are determined according to the balance in that member's individual account on the date of leaving the plan, where the method of accrual to that account is specified in the plan rules.		
Fully Registered Plans	Pension plans registered under the Insurance Act of 1998 by the Bank of Guyana and previously by the Commissioner of Insurance.		

RATIOS	DESCRIPTION	METHODOLOGY				
	Financial Assessment/Soundness Ratios					
Systemic Risk	Systemic risk is the possibility that an event at the company level	Pension assets ÷GDP (%)				
Systemic Risk	could trigger severe instability or collapse of the pensions sector or local economy. This is monitored by analysing companies' pension assets and comparing the assets of the pension sector to GDP, total financial assets and total assets of NBFIs respectively, and all ratios are expressed as a percentage.	Pension assets ÷ total financial assets (%)  Pension assets ÷ total NBFI assets				
Liquidity Risk	Liquidity risk refers to the underlying risk wherein short term financial obligations cannot be met. The level of liquidity is the relative value of liquid assets or accounts to liabilities expressed as a percentage figure. The liquidity ratio is the ratio of liquid assets to cover immediate liabilities or higher than expected benefit payments without incurring substantial or material losses.	Sum of liquid accounts (include all pension asset classifications with maturity of one year or less) ÷ total liabilities				
Solvency Risk	The relative value of schemes' total assets and total liabilities expressed as a percentage figure. The ratio measures the adequacy of pension assets in meeting pensionable obligations (liabilities). If a plan is deemed solvent, then it is able to meet its financial obligations at that date, moreover if the plan is fully funded, then it is able to meet is long term and future service obligations.	Total pension assets ÷ total liabilities				
Market Risk	Market risk is the risk that the value of a financial instrument will fluctuate as a result of changes in market prices, whether those changes are caused by factors specific to the individual security, its issuer or factors affecting all securities traded in the market. Foreign exposure and equity exposure are contributing factors of market risk.	Foreign exposure (%)= pension assets held in foreign currency ÷ total pension assets  Equity exposure (%)= pension assets held as equity ÷ total pension assets				
Foreign Exposure of Pension Assets	The proportion of pension assets invested outside of the Republic of Guyana or investments in a foreign currency other than the Republic of Guyana dollar expressed as a percentage of total assets.	Foreign investments ÷ total assets				
<b>Equity Exposure of Pension Assets</b>	The proportion of pension assets invested in shares of traded companies listed on a stock exchange (both locally and overseas) expressed as a percentage of total assets	Equity investments ÷ total assets				
Credit Risk	Credit risk is the risk of loss arising from a counter-party to a financial contract failing to discharge its obligations. A pension plan with material receivable accounts or has material long term investments is exposed to significant credit risk.	Private bonds ÷total bonds				
Accounts Receivable to Total Assets	The proportion of current assets as receivables expressed as a percentage of total assets.	Receivables ÷ total assets				

#### **Inflation Risk**

Inflationary risk **refers to the** risk **that** inflation **will undermine the performance of an investment.** Inflation risk is especially applicable to pension funds when there is volatile domestic inflation that negatively impacts real interest earnings. This is measured by monitoring the rates of return on investments.

# Rate of Return on Investments

ROI measures the performance of pension plan/fund investments at the end of the year. It can be expressed in nominal and real terms for which the latter takes into consideration the influence of price inflation. It is calculated using a common formula for the average nominal net investment return (ratio between the net investment income at the end of the year and the average level of investments during the year). The average real net investment returns have been calculated using the nominal interest rate (as described above) and the variation of the consumer price index for the relevant year.

Nominal rate: net investment income ÷ ((total investments of the current year) + (total investments of the previous year)/2).

Real rate: Nominal rate - price inflation at the end of the year

#### **Efficiency & Profitability Ratios**

## Net Income to Total Assets

The relative value of net income earned at the end of the year and total assets expressed in percentage form. The net income ratio measures the level of profitability of pension plans and its contribution to the accumulated assets

Net income ÷ total assets

# Contributions to Total Benefit Payments

The relative value of contributions received from members and behalf of members and the total benefits paid out of pension funds. This ratio is a measure of profitability and efficiency Contributions received (members' and employer's) ÷ total benefit related payments (pensions, lump sums, death benefits, withdrawal benefits etc.).

## Operating Expenses to Investment Income

The relative value of operating expenses or all expenses related to the administration or management of pension plans and investment income expressed in percentage form. This ratio is a measure of efficiency. Operating expenses ÷ net investment income

