







An Assessment of the Impact of the Domestic Debt Exchange Program (DDEP) on Ghana's Pensions Sector

Benjamin Boakye Godfred Alufar Bokpin Charles Gyamfi Ofori Gifty Asantewaa Nkrumah





About ACEP

The Africa Centre for Energy Policy (ACEP) was established in 2010 to contribute to development of alternative and innovative policy interventions through high quality research, analysis and advocacy in the energy and extractives sector in Africa. The focus of the organisation is to create strong connection between research evidence and advocacy which was limited at the time to increase transparency and accountability around energy and extractive sector governance in the region. After over a decade of existence, the organisation has established itself as a thought leader in the sector.

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We earnestly anticipate that the findings presented herein will serve as a valuable contribution toward fostering a sustainable pensions sector in Ghana.

While this report represents our best efforts, the findings, interpretations, and conclusions do not necessarily align with the perspectives of FSD Africa, its members, or the entities they represent.

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List of Abbreviations

Abbreviation	Meaning
AGA	AngloGold Ashanti
CAL	CalBank
CIS	Collective Investment Schemes
CSD	Central Securities Depository
DDEP	Domestic Debt Exchange Programme
ECF	Extended Credit Facility
ESG	Environmental, Social and Governance
ESLA	Energy Sector Levy Act
ETI	Ecobank Transnational Incorporated
GDP	Gross Domestic Product
GHS	Ghana Cedi
GOG	Government of Ghana
GSE	Ghana Stock Exchange
IMF	International Monetary Fund
MTNGH	MTN Ghana
NPRA	National Pension Regulatory Authority
NPV	Net Present Value
PIK	Payment in kind
PLC	Public Limited Company
PV	Present Value
SSNIT	Social Security and National Insurance Trust
USD	United States Dollar Africa Centre for Energy Policy VII

Executive Summary

Ghana has relied on the International Monetary Fund (IMF) for financial assistance since gaining independence. However, in recent times, the debt has ballooned to unsustainable levels, with a debt stock of about \$63 billion as of the end of 2022, representing about 88% of GDP. The debt unsustainability is a key contributor to the country's current macroeconomic instability. In response to the escalating debt crisis, the President of Ghana sought for support from the IMF on July 1, 2022, prompting a Debt Sustainability Analysis (DSA). The results indicated debt distress from a high risk of debt distress status since 2014 as a medium debt-carrying country.

The results of the DSA necessitated a debt restructuring, recognizing the inadequacy of relying solely on fiscal adjustments and structural reforms to restore sustainability by 2028. Consequently, the government initiated the Domestic Debt Exchange Programme (DDEP) on December 5, 2022, with an initial exclusion of the pensions sector. However, a consensus was reached with pension bondholders on September 7, 2023, with a 95% participation rate on terms markedly different from the non-pension holdings. The programme involved exchanging bonds for new ones with lower interest rates and maturities set for 2027 and 2028.

The DDEP appears to have limited impact on the pensions industry at face value, given the arrangement's maintenance of an effective coupon rate for pension funds similar to the original bonds. However, the interconnectedness of the pensions sector with the broader financial sector introduces potential risks. Pension funds, primarily Tier 2 and Tier 3 schemes, have a substantial portion of their investments directly or indirectly tied to government securities. Consequently, the DDEP has had a rippled impact on these pension funds. The debt restructuring also has implications for pension funds' liquidity, deferring principal payments until 2027 and 2028. This delay may significantly reduce projected cash flow, which is particularly risky for Tier 3 schemes that require high liquidity to accommodate frequent client withdrawals. Additionally, the risk of debt default is heightened, given the substantial volumes of principal repayments due in the specified years, thereby affecting the sustainability of pension funds.

The Ghanaian pensions sector, despite its strides in providing a structured framework for retirement savings, requires a thorough examination of investment allocation rules in light of the DDEP. This scrutiny must ensure sustainability and reduce exposure to adverse shocks. Consequently, the following recommendations are offered to enhance the effectiveness of investment operations for pension funds and mitigate potential risks.

- 1. The government must ensure fiscal discipline and efficiency of spending to reduce future debt obligations and consequential risks of default.
- 2. The National Pensions Regulatory Authority should promote a strategic diversification of pension fund investments into international markets, the private sector, and public infrastructure, in line with global best practices.
- 3. The government must enhance its regulatory practices to guarantee adherence to the existing laws and policies on pensions in Ghana.
- 4. The Ghana Stock Exchange must be enhanced to make it a more attractive option for pension fund investments.
- 5. The government must encourage pension funds to incorporate Environmental, Social, and Governance (ESG) criteria into their investment decisions.

Introduction

Since independence, dwarfed domestic revenue envelop, high expenditure rigidity and associated public borrowing have kept Ghana under the direction, supervision, and control of the Bretton Woods Institutions (i.e., the International Monetary Fund and the World Bank). Prior to Ghana's first application to the IMF, public debt had increased from a negligible amount in the early 60s to over \$500 million (about 25.2% of GDP) dollars by the end of 1965¹ and has subsequently increased to unsustainable levels. As of the end of 2022, Ghana's debt stock was about \$63 billion, representing about 88% of GDP. Debt unsustainability has featured prominently in Ghana's IMF-supported programs, from the first programme in 1966 to the recent one whose process began in 2022.

The current macroeconomic instability is largely traceable to the ballooning public debt, as it has been challenging to tame inflation under this weak fiscal regime. Ghana exited the 16th IMF-supported programme in 2019. However, the IMF and World Bank's debt sustainability analysis revealed that Ghana was at a high risk of debt distress and was also classified as having a medium debt-carrying capacity.³ The institutions recommended fiscal discipline to ensure debt sustainability and maintain market confidence.

¹ Osei, B. (1995). Ghana: The burden of debt-service payment under structural adjustment. In External debt and capital flight in Sub-Saharan Africa. International Monetary Fund.

² International Monetary Fund (2023). Ghana: Request For an Arrangement Under the Extended Credit Facility – Debt Sustainability Analysis.

³ World Bank, & International Monetary Fund. (2019). Ghana-Joint World Bank-IMF Debt Sustainability Analysis.

Table 1: History of IMF credit facilities for Ghana

Year of Arrangement	Year of Expiration	Facility	Public Debt Stock (\$ million)	Public debt (% of GDP)
1966	1967	Standby Agreement	2,138.03	24.30%
1967	1968	Standby Agreement	1,748.84	28.26%
1968	1969	Standby Agreement	1,666.67	28.43%
1969	1970	Standby Agreement	1,961.76	25.96%
1979	1980	Standby Agreement	4,020.23	11.17%
1983	1984	Standby Agreement	4,057.28	7.14%
1984	1985	Standby Agreement	4,412.28	16.24%
1986	1987	Standby Agreement	5,735.68	30.35%
1987	1988	Structural Adjustment Facility Commitment	5,074.83	46.55%
1987	1988	Extended Fund Facility	5,074.83	46.55%
1988	1992	Extended Credit Facility	5,197.77	41.32%
1995	1999	Extended Credit Facility	6,464.38	75.97%
1999	2002	Extended Credit Facility	7,718.11	87.38%
2003	2006	Extended Credit Facility	7,632.72	74.55%
2009	2012	Extended Credit Facility	26,048.72	36.09%
2015	2019	Extended Credit Facility	49,406.01	70.82%
2022	2026	Extended Credit Facility	63,332.00	88.10%

Source: IMF Fiscal Monitor

Over the past years, Ghana's fiscal deficit has largely been above her regional and structural peers. After 2017, the gap between Ghana and its peers has widened significantly. Between 2017 and 2022, Ghana's fiscal deficit has ranged from 4% to 17% of GDP (see Figure 1). At 17%, the country's fiscal deficit in 2020 was substantially above her regional and structural peers.4

LIDC Average sub-Saharan Africa Average Ghana 20% 15% 10% 5% 0% 2014 2015 2016 2017 2018 2019 2020 2021 2022

Figure 1: Overall fiscal deficit of Ghana, Lower Income Development Countries and Sub-Saharan Africa from 2014 to 2022 (%)

Source: IMF Fiscal Monitor

Borrowing to finance deficits and subsequent debt accumulation contributed to the crystallization of the country's fiscal vulnerabilities, resulting in the loss of international market access in the 3rd quarter of 2021. Subsequently, the country was priced out of the medium to long-term end of the domestic market. Treasury bill auctions and money printing from the Central Bank became the most suitable options available to the government. The signal of losing market access should have prompted the authorities to engage the IMF, but they delayed it until July 2022.

⁴ International Monetary Fund (2023, April). Fiscal Monitor - On the Path to Policy Normalization

1.1 The IMF Program and Subsequent Debt Restructuring

On July 1 2022, the President of Ghana reached out to the IMF for support, which triggered a Debt Sustainability Analysis (DSA). The DSA is a key part of IMF negotiations and forms the basis for the broad fiscal framework under the revenue enhancement measures and expenditure restraints. The resulting DSA confirmed the country as being in debt distress.

The critical indicators for debt sustainability are the Present Value (PV) of the total public debt to GDP ratio and external debt service to revenue ratio. Whereas the former measures the country's ability to service its long-term public debt obligations (a solvency measure), the latter examines the ability of the country to meet its short-term foreign debt obligations (an external liquidity measure). The DSA showed that Ghana had practically breached the thresholds for solvency and external liquidity for a country with a medium debt-carrying capacity. These indicators were almost twice the maximum thresholds, further increasing the country's risk of debt distress.

Threshold Ghana's Status

109%

100%

80%

60%

55%

40%

20%

PV of Debt/GDP

External Debt Service/Revenue

Figure 2: Ghana's state on debt sustainability before the 17th IMF bailout

Source: IMF Debt Sustainability Analysis

The results of the DSA imply that the country could not restore debt sustainability on the back of fiscal adjustment and structural reforms alone, as the level of taxes and expenditure cuts in the next three years would be unbearable for Ghanaians. Without debt restructuring, fiscal adjustments would need to deliver a minimum primary surplus of 12% of GDP in the next three years as a debt-stabilizing tool, which was almost impossible without causing social unrest. Additionally, past IMF-supported programs had been unable to deliver a debt-stabilizing primary surplus of more than 1.5% of GDP. The government's first IMF-inspired 2023 budget statement only promised to deliver a primary deficit of 0.5% of GDP rather than a positive balance.

The call for an IMF credit facility triggered the need to take comprehensive steps to restructure the country's public debt. This was essential before the Extended Credit Facility (ECF) proposal could be submitted for executive board approval. The government had to restructure the domestic debt, a litmus test of its commitment to secure the IMF Supported Program while taking advantage of the G20 Common Framework to restructure its external debt component.

The government officially launched the Domestic Debt Exchange Programme (DDEP) on December 5, 2022, amidst several agitations and concerns reflecting a lack of broader consultation. Although the original version of the Programme did not include the pensions sector, the government subsequently announced a successful consensus with bondholders to include the pension sector.

Previous research on the impact of the DDEP on banking institutions in Ghana revealed significant impairment losses, liquidity constraints and solvency risks. The effects were particularly acute for smaller, less-capitalized banks, which struggled to absorb the losses. This precedent raises important questions about the potential impact of the debt exchange on the pension sector.

This report aims to bridge the information gap by assessing the implications of the DDEP on the pensions sector. It examines the total fiscal space that the government of Ghana stands to gain and assesses the potential risks to pension funds. Additionally, the study provides empirical evidence to support or challenge existing assumptions about the impact of the DDEP on the pension sector.

⁵ International Monetary Fund (2023). Ghana: Request for an Arrangement Under the Extended Credit Facility – Debt Sustainability Analysis. Request for an Arrangement under the Extended Credit Facility – Debt Sustainability Analysis

⁶ International Monetary Fund (2022). IMF Reaches Staff-Level Agreement On A \$3 Billion, Three Years Extended Credit Facility with Ghana

1.2 The Pension System in Ghana

Ghana's pension system underwent significant reforms following the establishment of the Presidential Commission on Pensions in 2004. The Commission was tasked with evaluating global pension systems and recommending enhancements to address the shortcomings of the Social Security and National Insurance Trust (SSNIT) scheme to ensure sufficient retirement savings. This led to the creation and implementation of a three-tier pension structure in 2010.

The first tier (Tier 1), managed by SSNIT, involves a 13.5% contribution from an employee's basic salary, with 11% allocated to their defined benefit pension plan and 2.5% directed towards the National Health Insurance Scheme. The second tier (Tier 2), the Occupational Pension Scheme, requires a mandatory 5% contribution of the worker's basic salary. These contributions are overseen by pension trustee firms authorized by the National Pension Regulatory Authority (NPRA).

Both employers and employees have the option to contribute an additional portion of their basic salary to the Occupational Provident Fund Scheme (Tier 3), which provides tax benefits. These contributions are made on a pre-tax basis, thereby reducing the contributor's taxable income. Although participation in Tier 3 is voluntary, it is designed to enhance workers' retirement prospects by further diversifying their retirement savings, contributing to their overall stability.

The NPRA periodically issues guidelines governing funds' investment strategies from the Tiers 2 and 3 pension schemes. These guidelines define the permissible asset classes and their respective investment limits shown in Table 2:

Table 2: NPRA guidelines on investment strategies of Tiers 2 and 3

Asset Class	Maximum Allocation per annum
Government of Ghana Securities (Treasury Bills, Treasury Notes, Treasury Bonds e.g. Including Infrastructure Bonds & Eurobonds, Green Bonds)	75%
Local Government and Statutory Agency Securities (Municipal and Local Government Bonds/Bills, Statutory Agency Bonds/Bills, Cocoa Bonds/Bills)	25%
Corporate Debt Securities (Bonds, Debentures, Notes, Redeemable Cumulative Preference Shares, Mortgage/Asset Backed Securities, Commercial Papers, Green Bonds)	35%
Listed Ordinary Shares / Non-Redeemable Preference Shares NB: Max. of 10% of Market Capitalization of any one corporate entity	20%
Bank Securities (Fixed deposits, Negotiable Certificates of Deposits, Bankers Acceptances, Repurchase Agreements (Repos)) NB: Max. of 10% of the shareholders' funds of the issuer bank	35%
Collective Investment Schemes (CIS) (Unit Trusts, Mutual Funds, Exchange Traded Funds)	15%
Alternative Investments (Real Estate Investment Trusts/Funds, Private Equity Funds, External Investment in securities, etc)	25%

Source: NPRA⁷

Ghana's Domestic Debt Restructuring

In response to the IMF's directive for Ghana to undertake debt restructuring to enhance debt sustainability, the government has executed a series of restructuring phases. These are elaborated in the subsequent paragraph and summarised in Table 3.

Initial invitation for GHS-denominated domestic bonds: On December 5, 2022, the Ministry of Finance extended an invitation for holders of old domestic debts to partake in a voluntary exchange program. This programme offered a package of four new bonds featuring exchange consideration ratios⁸ ranging from 17% to 41%, with maturity periods from 2027 to 2037. The accompanying debt exchange memorandum outlined that the first interest payments on the new bonds would commence in 2024 at 5%, increasing to 10% in 2025. The principal repayment plans for the four new bonds varied, ranging from two to five equal instalments over the bonds' lifespan. Eligible bondholders, including domestic banks, Bank of Ghana, various institutions, retail investors, insurance companies, foreign investors, Rural and Community Banks, and the Social Security and National Insurance Trust (SSNIT), were given until December 19 to participate in the debt exchange program. However, the program was overwhelmingly unpopular amongst bondholders due to lack of consultation, necessitating pushbacks, amendments, and deadline extensions.⁹

First amendment of GHS-denominated domestic bonds: In response to stakeholder criticisms, the government issued a revised memorandum on December 30, 2022. The updated program involved the exchange of bonds maturing in 2023 for seven new bonds, with maturities spanning 2027 to 2033. The exchange consideration for these new bonds was set at 15% for 2027 and 2028, and 14% from 2029 to 2033. Bonds with maturity dates beyond 2023 were eligible for exchange with 12 new bonds, maturing from 2027 to 2038, featuring an exchange consideration of 9% from 2027 to 2030 and 8% from 2031 to 2038. The new bonds had staggered coupon rates, starting at 5% in July 2024 and gradually increasing to a maximum of 10.65% over the maturing period. All the bonds were scheduled to have their principal repayments made in full on their respective maturity dates.¹⁰

⁸ In bond restructuring, the bond exchange consideration ratio is a key metric that determines the terms of the exchange between old bonds and new bonds. It specifies how much of the new bond (or other securities or assets) the holders of the old bonds will receive in exchange for their existing holdings.

⁹ Ministry of Finance (2022, December 5). Exchange Memorandum – Invitation to Exchange the Domestic Notes and Bonds of the Republic of Ghana, E.S.L.A. Plc, and Daakye Trust Plc Specified Below under "The Eligible Bonds" (collectively, the "Eligible Bonds") for New Bonds of the Republic of Ghana (the "New Bonds").

¹⁰ Ministry of Finance (2022, December 20). Amended and Restated Exchange Memorandum – Invitation to Exchange the Domestic Notes and Bonds of the Republic of Ghana, E.S.L.A. Plc, and Daakye Trust Plc Specified Below under "The Eligible Bonds" (collectively, the "Eligible Bonds") for New Bonds of the Republic of Ghana (the "New Bonds").

Second amendment of GHS-denominated domestic bonds: The currently active debt exchange program operates under updated terms introduced by the government. Similar to the second proposed programme, eligible bonds due in 2023 are being exchanged for seven new bonds, each maturing annually from 2027 to 2033. The exchange consideration for these new bonds stands at 15% for 2027 and 2028, and 14% from 2029 to 2033. For bonds due after 2023, the exchange involves 12 new bonds maturing from 2027 to 2038, with an exchange consideration of 9% from 2027 to 2030 and 8% from 2031 to 2038. These new bonds also include staggered coupon rates, starting at 5% in August 2023 and gradually increasing to a maximum of 10% during the maturing period. Again, all the bonds are slated to have their principal repayments made on their respective maturity dates.¹¹

Domestic debt exchange in respect of USD-denominated domestic bonds: In July 2023, the government extended another invitation debt exchange for holders of USD-denominated domestic bonds. Under this invitation, the government offered to exchange eligible bonds valued at about \$809 million for two new bonds due to mature in 2027 and 2028 with respective exchange considerations of 50%. It involved semi-annual coupon payments of 2.75% and 3.25% for the two bonds, which mature in 2027 and 2028, respectively. Subsequently, the government announced that it had successfully restructured about 91.69% of the bonds valued at about \$741 million. 12

Domestic debt exchange in respect of pension funds: On July 31 2023, the government of Ghana extended another invitation for pension funds holding investments in various GHS-denominated government bonds to exchange for a package of new bonds. Hitherto, pension funds had been excluded from the domestic debt exchange after a public uproar from trade and labour unions. The new package comprised four bonds, consisting of two new tranches with exchange consideration ratios of 57% and 58%, with maturities of 2027 and 2028, respectively. Additionally, they offered coupon payments at an average rate of 8.85% per annum. Again, the government provided interest-only instruments that yielded a cash interest rate of 10% per annum. The government subsequently announced that about 95.3% of the bonds (about GHS 25.2 billion) were successfully exchanged.¹³

¹¹ Ministry of Finance (2023, February 5). 2nd Amended and Restated Exchange Memorandum – Invitation to Exchange the Domestic Notes and Bonds of the Republic of Ghana, E.S.L.A. Pls and Daakye Trust Plc Specified Below under "The Eligible Bonds" (collectively, the Eligible Bonds) to all Registered Holders of Eligible Bonds that are not Pension Funds (as Defined Below)

¹² Ministry of Finance (2023, July 14). Exchange Memorandum – Invitation to Exchange The United States dollar (U.S.\$)-denominated notes and bonds issued domestically by the Republic of Ghana and governed by Ghanaian law, as further specified below under "The Eligible Bonds" (collectively, the "Eligible Bonds") to All registered holders of Eligible Bonds (the "Eligible Holders").

¹³ Ministry of Finance (2023, July 31). Exchange Memorandum– Invitation to Exchange the Domestic Notes and Bonds of the Republic of Ghana, E.S.L.A. Pls and Daakye Trust Plc Specified Below under "The Eligible Bonds" (collectively, the Eligible Bonds) to all Registered Holders Of Eligible Bonds That Are Pension Funds.

Debt exchange in respect of cocoa bills: The government, through the Ghana Cocoa Board (Cocobod), extended another invitation to exchange its cocoa bills that were invested in various GHS-denominated GoG bonds for a package of five new bonds. The new bonds had exchange consideration ratios of 5% maturing in 2024, 20% maturing in 2025, and 25% maturing from 2026 to 2028. The interest rate for each of these bonds was 13% per annum. The government announced a successful settlement and completion of the exchange, which resulted in a 97% subscription rate.¹⁴

Debt exchange in respect of Bank of Ghana non-marketable debt: In September 2023, the government restructured the non-marketable debt of GHS70.978 billion held by the Bank of Ghana to a marketable security at a new value of GHS35.489 billion. The exchange offered new GoG bonds maturing in 2038 with a coupon rate of 10%. The government subsequently announced that 100% of the bonds were successfully exchanged.¹⁵

Cumulatively, the government has restructured about GHS203 billion of domestic debt out of an outstanding principal of approximately GHS229 billion. These represent an average participation rate of about 89% (See Table 3). After completing the debt exchange, the government has consistently and fully serviced the holdings of individual and retail investors who did not participate in the debt exchange. In contrast, institutional investors have not had their old debt serviced consistently.

¹⁴ Ghana Cocoa Board (2023, July 14). Exchange Memorandum Relating to the Invitation to Exchange by the Ghana Cocoa Board and the Admission of New Bonds (as defined) to the Ghana Fixed Income Market of the Ghana Stock Exchange

¹⁵ Ministry of Finance, Ghana (2023, November 15). The Budget Statement and Economic Policy of the Government of Ghana for the 2024 Financial Year

Table 3: Overview of phases of Ghana's domestic debt restructuring programme

Date	Eligible bonds	Outstanding principal	Amount settled (success rate)
Dec 2022	GHS-denominated treasury bonds, Energy Sector Levy Act (ESLA) ¹⁶ and Daakye Plc bonds ¹⁷ (excluding pension funds)	GHS 110.15 billion	GHS 86.99 billion (79%)
July 2023	USD-denominated bonds	~ GHS 9.10 billion (\$ 808.99 million*)	~ GHS 8.30 billion (91%) (\$ 741.77 million)
July 2023	Pension funds	GHS 31.02 billion	GHS 29.57 billion (95.32%)
July 2023	Cocoa bills	GHS 7.91 billion	GHS 7.7 (97%) billion
Sept 2023	Bank of Ghana	GHS 70.9 billion	GHS 70.9 billion (100%)
Total		GHS 229.08 billion	GHS 203.46 billion (89%)

Source: Ministry of Finance¹⁸

Ghana's domestic debt restructuring in 2022/2023 stands out in Africa's history of sovereign debt restructuring. The government of Ghana reported that it had achieved substantial savings of about GHS60 billion (approximately 30% of domestic debts and 7% of GDP)¹⁹ with minimal financial disruption using the domestic debt exchange program.

¹⁶ E.S.L.A. PLC is a Special Purpose Vehicle (SPV) incorporated as a public limited liability company to issue long-term bonds to resolve energy sector debts due to banks and trade creditors. The securities issued are backed by a component of the Energy Sector Levy Act (ESLA) receivables which has been assigned to the company for the settlement of coupons and principal repayments arising under the securities that are issued.

¹⁷ The Government of Ghana, acting through the Ghana Education Trust Fund (GETFund), sponsored the issuance of a GHS 5.5 billion bond to provide funding for the construction and completion of educational infrastructure across the country and also for the settlement of some key outstanding liabilities for ongoing projects. The bond was backed with a portion of GETFund receivables as enacted by the Ghana Education Trust Fund Act, 2000 (Act 581).

¹⁸ These include the exchange memoranda and government press releases on successful debt exchange programmes of respective

¹⁹ Government of Ghana (2023). The budget statement and economic policy of the Government of Ghana for the 2024 financial year.

2.1 The DDEP on the Pension Sector

The first domestic debt restructuring exercise contained a majority of Ghana's GHS-denominated bonds – treasury bonds, ESLA bonds and Daakye bonds. The Pension industry was initially excluded from the DDEP after organized workers protested the inclusion of their portfolio. However, on September 7, 2023, the government announced a successful consensus with pension fund bondholders concerning bond instruments issued by the government, ESLA PLC and Daakye Trust PLC.²⁰ These new bonds had been issued with lower interest rates and had maturities set for 2027 and 2028. Furthermore, alongside the reduced interest rates of the new bonds, the government provided pension funds with an interest-only warrant. This arrangement ensured that the effective coupon rate for pension funds participating in the debt restructuring was similar to, if not better than, that of the previous bonds.

Table 4 outlines the exchange ratio distribution for the bonds maturing in 2027 and 2028. These terms resulted in pension funds gaining an additional 15% in face value for each old bond exchanged, with 8% of this exchange premium set to mature in 2027 and the remaining 7% in 2028. The terms related to the new bonds are straightforward; for bonds maturing in 2027, up to February 18, 2025, the coupon rate is set at 5%, with an additional Payment in Kind (PIK) distribution of 3.35%. After February 2025, the cash coupon rate increases to 8.35%. For bonds maturing in 2028, there is a 3.5% Payment in Kind (PIK) distribution until February 2025, combined with a 5% cash interest. Following February 2025, the cash coupon rate rises to 8.5%.

²⁰ Ministry of Finance (2023, September 7). The Government announces the settlement of its alternative offer to pension funds bondholders [Press Release]. Retrieved from International Monetary Fund (2023, April). Fiscal Monitor — On the Path to Policy Normalization

Table 4: Terms under the alternative DDEP for Pension Funds

Interest rate	Eligible bonds	New maturity date	Exchange consideration
5% cash interest and 3.35% PIK	Bonds maturing from February 21 2023 to but excluding February 18 2025	Single payment on maturity date (February	58%
8.35%	From and including February 18 2025, but excluding maturity date	2027)	
5% cash interest and 3.35% PIK	Bonds maturing from February 21 2023 to but excluding February 18 2025	Single payment on maturity date (February	57%
8.50%	From and including February 18 2025, but excluding maturity date	2027)	
Interest only warrants			
10% cash interest	From and including	No principal payment on maturity (February 2027)	50%
February 18 2025, but excluding maturity date		No principal payment on maturity (February 2027)	50%

Source: Ministry of Finance²¹

Unlike the situation with the banks and insurance companies with more significant NPV losses, the DDEP is estimated to have limited impact on the pensions industry at face value. Assessment of the losses in the other key debt exchange phases shows increasing bond maturities and reduced coupon rates, contributing to the reduction in the net present value of the bonds. For example, the average tenor for eligible bonds under the first phase of the DDEP was increased by 4.5 years with a 10 percentage-point reduction in coupon rates.

²¹ Ministry of Finance (2023, July 31). Exchange Memorandum - Invitation to Exchange the Domestic Notes and Bonds of the Republic of Ghana, E.S.L.A. Pls and Daakye Trust Plc Specified Below under "The Eligible Bonds" (collectively, the Eligible Bonds) to all Registered Holders Of Eligible Bonds That Are Pension Funds.

The restructuring of local USD-denominated bonds also yielded a 2.3% percentage-point reduction in coupon rates and a 3-year increase in tenor. Cocoa bills had applicable rates of about 20% with an average tenor of 0.7 months. However, the DDEP increased its tenor to about 4.4 years with average applicable rates reducing to about 13%. Pension funds, on the other hand, witnessed no substantial change in average tenor and coupon rates. The DDEP was structured to preserve the bonds' tenor and applicable coupon rates so that the NPV would remain unchanged or even better.

Table 5: DDEP impacts on tenor and interest rates

	Pre DDEP		Post DDEP	
Instrument	Tenor	Rate	Tenor	Rate
First phase of DDEP	3.8 years	19.1%	8.3 years	9.1%
USD-denominated local bonds	1.5 years	5.3%	4.5 years	3%
Cocoa bills	0.7 months	Avg 20%*	4.4 years	13%
Pension funds	4 years	20%	4 years	20%

^{*}Computations of Cocoa bill rates from the bills from CSD database

Source: Ministry of Finance: 2024 budget statement

Potential Implications of DDEP on Pension Funds

The retirement savings industry is integral to economic development, with pension funds serving as critical financial intermediaries. Their significant role in national development encompasses economic, social, and financial dimensions, contributing to economies' overall well-being and sustainability. Through financial intermediation, pension funds facilitate capital market development, stimulate investment and economic growth, and impact social stability and the labour market.²² Consequently, studying the effects of debt restructuring on the pension sector is crucial to strengthening the industry and upholding its role in national development. Specifically, it is essential to assess the impacts of the debt restructuring on pensions for the following reasons:

- Implications for Pension Fund Assets: Debt restructuring might involve changes in the terms of government bonds, a common component of pension fund investments. Assessing how these changes affect the value and returns of pension fund assets is critical for safeguarding retirees' incomes.
- Confidence in the Pension System: Public and investor confidence in the pension system is vital for its stability and sustainability. Analysing the impacts of debt restructuring can provide insights necessary for policy adjustments to maintain or restore confidence among contributors and beneficiaries.
- Retirement Income Security: Pension funds play a pivotal role in ensuring that individuals have a stable income in retirement. Understanding how debt restructuring could influence the solvency and sustainability of these funds can help implement measures to protect retirees against potential income disruptions.
- Policy Formulation and Regulatory Framework: Insight into the effects of debt restructuring on the pension sector can inform the development of robust policy and regulatory frameworks. This ensures that pension funds are adequately protected against similar future risks, promoting a healthier financial system.
- Investment Strategy Adjustments: Understanding the implications of debt restructuring enables pension fund managers to adjust their investment strategies accordingly. This might involve diversifying investments or changing asset allocation to mitigate risks associated with government debt instruments.
- Financial Market Stability: The pension sector is a significant player in Ghana's financial markets. The repercussions of debt restructuring on this sector could have broader implications for market stability and liquidity. Analysing these effects helps in taking pre-emptive measures to safeguard financial market stability.

- International Investor Perspective: For countries reliant on foreign investment, including Ghana, the impact of the debt restructuring on the pension industry can influence investor confidence and investment flows. A thorough examination helps craft strategies to manage global perceptions and ensure continued foreign investment.
- Social Stability and Public Trust: The ability of the pension sector to fulfil its
 obligations is crucial for social stability and public trust in government and financial
 institutions. Understanding the repercussions of debt restructuring can aid in taking
 necessary steps to protect this trust and avoid social unrest.
- Macroeconomic Implications: The pension sector's health is intertwined with the broader economy. Its ability to withstand shocks from debt restructuring has implications for national savings rates, consumption patterns, and overall economic growth. An in-depth examination and understanding of the impact of the DDEP contributes to macroeconomic policy that supports growth and stability.
- Long-Term Planning and Sustainability: Finally, evaluating the effects of debt restructuring on the pension sector is essential for long-term planning and sustainability. It helps ensure that the pension system remains viable and capable of supporting Ghana's aged population.

3.1 Potential Positive Impacts of the DDEP on the Economy

The situation regarding Ghana's Domestic Debt Exchange Program (DDEP) and its impacts, especially on pension funds, is evolving. However, the intended outcomes and perceived benefits and costs of such programs can be discussed in generic terms. For pension funds, the impact of debt restructuring programs depends mainly on the structure of the pension funds' investments. While initial reactions to debt restructuring proposals can be adverse, fearing loss of value or delayed returns, there can be positive impacts in the medium to long term, especially if the alternative scenario is a more chaotic default or unsustainable debt situation. Here are several potential positive effects on pension funds:

• Stabilizing the Economy: The government aims to achieve a more sustainable fiscal path through the debt restructuring process, which can lead to a more stable macroeconomic environment. A stable economy reduces risks for all investors, including pension funds, by fostering a conducive environment for growth and investment returns. Pension fund DDEP helped in preserving cash liquidity for government as close to 41.9% (GHS52.8 billion versus GHS126.01 billion of outstanding government bond issues) of old bonds maturing in 2023 (GHS37.8 billion) and 2024 (GHS15.03 billion) respectively. The government would have been faced with huge liquidity challenges if pension funds had not agreed to have their holdings restructured.

- Preventing Worse Outcomes: Participating in a debt exchange program might result in better outcomes for pension funds compared to a scenario where the government defaults unilaterally. In the case of a default, pension funds might face higher losses and more prolonged uncertainty. A structured exchange provides clearer terms and timelines, potentially preserving more value.
- Improved Government Solvency: The DDEP aims to reduce the government's debt servicing costs, which can improve its solvency and ability to meet other financial obligations. For pension funds holding government bonds, this can mean a reduced risk of default on those instruments in the long term.
- Market Confidence: Successful debt restructuring can restore or improve investor confidence in the country's financial markets, potentially leading to a recovery in bond and stock markets. This benefits pension funds through improved valuations of their investment portfolios.
- Long-Term Returns: By contributing to the sustainability of the government's fiscal position and the stability of the economy, the DDEP can help create a foundation for more robust economic growth in the future. Pension funds, as long-term investors, stand to benefit from the potential for higher returns in a growing economy.

Notwithstanding these potential positive outcomes as the restructuring process evolves, it is crucial to recognize that these positive impacts would unfold over time and may not materialize immediately. Therefore, close monitoring of the DDE's impact is vital to understand the short-term challenges and track the program's long-term effectiveness in achieving its goals while minimizing negative effects on stakeholders like pensioners.

3.2 Negative Impact of Ghana's Debt Restructuring on **Pension Funds**

To preserve confidentiality, we use AA, BB and CC to represent actual pension schemes that participated in the pension fund debt restructuring. An analysis of the impact of the exchange programme on selected pension schemes reveals that the cumulative expected cash flow from restructured bonds tend to exceed their original projections. Table 6 presents details of the impact of the DDEP on the cash flows of the selected pension schemes. The analysis shows that investors in pension plans AA and BB had higher expected coupon payments under their restructured bonds. However, in the case of CC Provident Fund, there is a decrease in expected cash flow after the restructuring program.

Table 6: Impact on the DDEP on expected annual cashflows of selected pension schemes

Bond type	Bond characteristics	AA Pension Plan	BB Pension Plan	CC Provident Fund
	Value of Bonds	GHS 277.64 m	GHS 89.98 m	GHS 297.61 m
Old Bonds	Average Coupon Rate	18.10%	18.24%	19.72%
	Expected Annual Cashflow	GHS 50.25 m	GHS 16.42 m	GHS 58.69 m
	Cumulative Value of Bonds	GHS 319.28 m	GHS 103.48 m	GHS 342.25 m
New	Cumulative Interest- only tranche	GHS 277.64 m	GHS 89.98 m	GHS 297.61 m
Bonds	Average Coupon Rate	8.42%	8.42%	8.42%
	Cumulative Annual Expected Cashflow	GHS 54.66 m	GHS 17.72 m	GHS 58.59 m
Percentage Gain/Loss of Expected Cashflow		8.80%	7.90%	-0.20%

Source: Author's construct

The trend in gains/losses is contributed by the different coupon rates in the original terms of old bonds. These findings introduce the impact of the coupon rate of the original bonds on the gain or loss resulting from the debt restructuring. The lower the original bond's coupon rate, the bigger the potential gain for investors under the new debt restructuring plan. However, as the coupon rate gets higher, these gains shrink and eventually turn into losses for investors. Original bonds with coupon rates above 19.5% result in losses in annual cash flows in the restructured bonds (see figure 3).

60%
40%
20%
0%
-20%
-40%

Figure 3: Relationship between coupon rates of original bonds and percentage change in expected cashflows under the DDEP

Source: Author's construct

The impact of the DDEP on pension funds go beyond the value of annual cashflows under the restructured bonds. Generally, the interconnectedness of the pensions industry with the overall financial sector shows that shocks in other financial sectors could negatively impact the fortunes of the pension funds. The ensuing sections outline other impacts of the debt restructuring on the pension funds.

Coupon rates

14.5% 15.5% 16.5% 16.5% 16.5% 16.5% 17.5% 19.5% 19.5% 20.5% 22.5% 23.5% 23.5% 25.5%

a. The exposure of pension funds to government securities and the banking sector

Pension funds that manage the Tier 2 and Tier 3 schemes (Private fund managers) are much more exposed to the impacts of DDEP than those of the Tier 1 scheme managed by the Social Security and National Insurance Trust (SSNIT). These private entities manage a bigger portion of the assets in the pensions industry. At the end of 2022, all of the pensions industry assets were worth GHS46.6 billion, of which about GHS 34.5 billion (about 74%) were held by private pension funds under the Tier 2 and Tier 3 pension schemes.

Tier 2 and Tier 3 schemes invest a majority of their assets in government securities. Between 2016 and 2021, about 69% of total Tier 2 and Tier 3 pension assets were invested in GoG bonds. Additionally, about 13% of these assets were allocated to Local Government and Statutory Agency Securities. Interactions with stakeholders reveal that investments under the "local government and statutory agencies" are currently held with the Cocoa Bills, the ESLA and the Daakye bonds, which have also undergone debt restructuring. Thus, cumulatively, about 82% of pension fund assets are directly exposed to government securities. Bank securities, mainly fixed deposits, form about 8.2% of total asset allocation. The remaining investment allocations include corporate debt securities, equities, and mutual funds (See Figure 4a).

Comparatively, SSNIT's assets are diversified among investment properties, equity investments, investment securities, and loans and receivables. The public pension funds are largely in equity investments and investment properties, representing approximately 79% of their total assets. Government securities form about 15% of the investment asset allocations in SSNIT, which show less comparative exposure to the debt exchange.

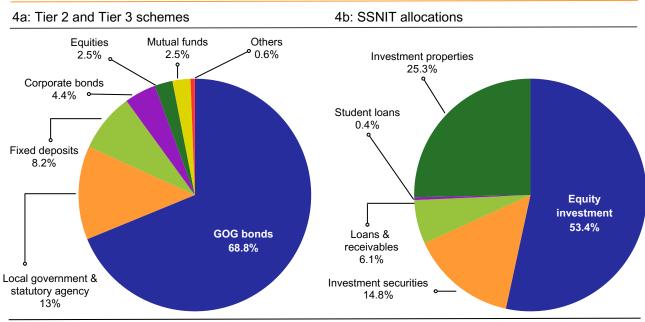


Figure 4: Asset allocation for pension funds (2016 – 2021)

Source: NPRA Annual Reports (2016 - 2022)

The exposure of private pension funds is further exacerbated upon considering the interconnectedness of the financial sector. Private pension funds allocate about 11% of their assets to banks and other asset management companies through fixed deposits, mutual funds, and other collective investment schemes. Largely, these banks and other special deposit institutions invest their moneys in government securities, which are exposed to the effects of the debt restructuring. Consequently, pension funds could have over 90% of their funds directly or indirectly exposed to government securities (See figure 5).

ISSUING VEHICLES / ASSET CLASSES FINAL DESTINATION INVESTMENT INTERMEDIARIES Τ Alternative Investment Investments o Loans Properties & Businesses → Deposits **Mutual Funds Mutual Fund Bank Securities** Governent of Ghana Securities Corporate Debts Equity **Local Government Bonds** Government of Ghana Securities

Figure 5: The flow of invested assets from pension funds to Government of Ghana securities

Source: Author's construct

The interconnectedness of the financial sector also shows that the effects of one sector have rippled impacts on the other sectors. The banking sector was one of the most affected entities within the financial sector. Annual reports of banks reveal huge impairment losses. The assessment of the NPV losses of banks reveals a total loss of about GHS 44.5 billion and a liquidity gap of about GHS 6.59 billion. These losses ripple through all other sectors dependent on the banking sector. The Financial Stability Review for 2022 reveals that the pensions sector is the most exposed financial sector to the banking sector, accounting for about GHS 1.74 billion in deposits and investments. Pension funds could have over 90% of their funds either directly or indirectly exposed to government securities. Thus, banking sector distress affects, to a greater extent, the liquidity of pension funds.

b. Impact on pension fund liquidity

The recent debt restructuring has significant implications for the liquidity of pension funds. These funds hold a substantial portion of government bonds, and the changes in terms affect their ability to meet future obligations, especially for bonds originally maturing within the short to medium term (i.e. 2023-2026). For instance, about GHS6.7 billion outstanding principals due pension fund bondholders in 2023 and 2024 are affected. Cumulatively, approximately 57% of eligible pension fund bonds were set to mature between 2023 and 2026, potentially improving liquidity for fund managers. However, the debt restructuring postpones the payment of these principal amounts until

2027 and 2028, potentially leading to a significant decrease in projected cash flow in the near term.

Table 7: Outstanding pension fund principals due the old bonds (2023 – 2039)

Year	Amount (GHS million)	% of total
2023	3,130.96	10%
2024	3,612.93	12%
2025	4,317.65	14%
2026	7,051.50	23%
2027	3,940.56	13%
2028	1,490.66	5%
2029	1,907.99	6%
2031	1,748.37	6%
2032	2,055.61	7%
2033	953.92	3%
2034	286.65	1%
2039	513.91	2%
Total outstanding bonds	31,010.72	

Source: Ministry of Finance 24

It is crucial to note that the annual interest rates and the new interest-only warrants on the new bonds will be lower compared to expected maturity amounts for the period 2023 to 2026. For example, no interest payments are received in 2023, and 2024 interest

²⁴ Ministry of Finance (2023, July 31). Exchange Memorandum— Invitation to Exchange the Domestic Notes and Bonds of the Republic of Ghana, E.S.L.A. Pls and Daakye Trust Plc Specified Below under "The Eligible Bonds" (collectively, the Eligible Bonds) to all Registered Holders Of Eligible Bonds That Are Pension Funds.

payments are only 20% of the expected maturity amount. This further reduces income for pension funds, potentially impacting their ability to meet future payout obligations.

Interactions with key stakeholders reveal that pension funds generally have the capability to fulfil client withdrawal demands. Nonetheless, a significant risk the DDEP presents is the potential struggle of certain pension schemes to satisfy liquidity requirements. This is particularly associated with Tier 3 schemes governed largely by employer regulations, as they often permit frequent withdrawals by members. Previously, pension funds depended on bond maturities and cash inflows from coupons to address liquidity needs. However, with the extension of bond maturities affecting all funds under the DDEP, numerous Tier 3 schemes have encountered challenges in meeting member withdrawal requests. While it previously took about a month to satisfy client liquidity needs before the DDEP, clients currently experience a waiting period of three to six months to access their funds.

c. Refinancing risks fuelling potential debt default

The government of Ghana announced a successful restructuring of pension funds valued at approximately GHS 29.57 billion. This restructuring initiative revealed a notable adjustment in the maturity periods, originally from 2023 to 2039, with the revised schedule consolidating maturity in 2027 and 2028. However, this move introduces a considerable challenge for the government in terms of refinancing, particularly in addressing imminent debt obligations in the short to medium term.

The government will be confronted with the task of settling outstanding bond principals maturing within the short to medium term. For example, the restructured pension funds maturing in 2027 and 2028 would amount to GHS 17.6 billion and GHS 17.98 billion, respectively. Considering all the instruments that underwent debt restructuring, bond principal settlement obligations will amount to about GHS 33.2 billion and \$371 million by 2027. For the restructured bonds anticipated to mature in 2028, the government's obligations amount to GHS 33.5 billion and \$371 million (See Table 8).

Table 8: Bond principals due across the various phases of the DDEP in 2027 and 2028

Instruments	Unit	2027	2028
Pension funds	GHS (million)	17,676.11	17,986.22
DDEP phase one	GHS (million)	13,580.08	13,580.08
Cocoa bills	GHS (million)	1,923.27	1,923.27
Total	GHS (million)	33,179.46	33,489.57
USD-denominated bonds	\$ (million)	370.87	370.87

Source: Ministry of Finance ²⁵

²⁵ These include all the exchange memoranda that were issued throughout the phases of the debt restructuring

The link with default risk becomes evident if the government encounters difficulties in refinancing or repaying these concentrated debt obligations. Failure to secure adequate funds could lead to a situation where the government may struggle to meet its financial commitments, potentially resulting in a default on its debt obligations. Presently, due to terms set by the IMF programme, the government is not permitted to issue medium to long-term bonds in the domestic capital market. If this restriction persists, or if the IMF program outcomes do not enable the government to successfully roll over the restructured bonds, the risk of default increases. Such instances would restrain the government's capacity to manage its debt, compelling it to seek alternative sources of funds to fulfil its debt obligations.

The risks and exposures detailed above have a cascading effect on the sustainability of pension funds. The ensuing potential impacts on the pension sector are elaborated below:

- Reduction in Investment Value: Pension funds often hold significant amounts of
 government bonds as the latter are considered to be safe investments that provide
 predictable returns. The restructuring under the Debt Exchange Program typically
 means that these bonds are exchanged for less valuable ones either because they
 yield lower returns, have a longer time to maturity, or both. This reduces the overall
 value of the pension funds' investments.
- Decreased Returns for Pensioners: Lower interest rates on the new bonds mean that the returns on investments for pension funds are reduced. This directly impacts the income these funds generate to pay current and future pensioners, potentially leading to lower pension payouts.
- Increased Financial Risk: The restructuring introduces additional financial risks for pension funds. The value of their holdings becomes more uncertain, and the mismatch between the assets and liabilities may widen, especially if the maturity profiles of their assets and liabilities are not well aligned. This can jeopardize the financial stability of these funds.
- Loss of Confidence: The indirect effects of such a program can also be substantial.
 There may be a loss of confidence among contributors to pension schemes, fearing that their retirement savings are at risk. This could lead to reduced participation in pension schemes or increased withdrawals, where permissible, further straining the funds' financial health.
- Administration burden and cost: Pension funds faced the administration burden and associated costs of revaluing new bonds and crediting members' accounts with the exchanged securities. In some instances, the government granted a higher value than was warranted to the pension fund after the exchange. The subsequent reversal of the excess value credited to pension scheme members' accounts during reconciliation resulted in dissatisfaction among some pension contributors, causing an uproar.

- Interest rate risk (mark-to-market risk): The debt restructuring brought into serious focus the severe interest rate risk pension funds faced. The long adoption of the amortized cost valuation approach masked the true value of securities held by pension funds when examined at in light of average coupon rate of pension fund bond holdings of 19% and the yield to maturity of above 35% before the announcement of the debt exchange. Prior to DDEP pension funds were sitting on huge unrealized losses from their government securities holding. These losses were not immediately recognizable because pension funds relied on generous coupons and maturities from fairly laddered portfolios to meet liquidity needs. However, the DDEP has exacerbated the interest rate risk pension fund face, as in the absence of maturities to meet funds liability funds may resort to selling the new bonds whose coupon are low at huge losses especially as secondary market yield is about thrice the coupon rates.
- Liability risk: The private pension system in Ghana is organized as a defined contribution (DC) schemes and not defined benefit (DB). For DC plans, what a contributor gets is a function of their contributions and investment performance over the period of the investment. Private pension schemes (Tier 2 and 3) do not promise future benefits and therefore may not be subject to a typical liability risk which is present in many social security and defined benefits retirement systems. However, 2023 coincided with the tenth anniversary of the setup of most pension schemes. To encourage long term savings the pension law allowed for the contribution of 16.5% of employees' basic salary into the voluntary tier 3 schemes pretax. Withdrawal from the pre-tax contributions prior to the tenth anniversary attracts 15% tax on the withdrawal amount. With most employees having contributed for 10 years and most scheme rules allowing for withdrawal out of the Tier 3 schemes, the industry grappled with a lot of withdrawal requests. This coupled with the bond restructuring exacerbated the liability risk faced by most pension schemes. Whereas it took between 2 weeks and 4 weeks to meet liquidity needs prior to the debt restructuring, now post DDEP it takes most pension schemes between three to six months to meet client's liability request.
- Inflation risk: Often referred to as purchasing power risk, is the danger that the value of financial assets or income will be eroded as inflation diminishes the purchasing power of money. This means that over time, the same amount of money will buy fewer goods and services. Inflation risk is a particular concern for investors and savers, as it can significantly impact the real returns (adjusted for inflation) on investments or savings. All over the world, treasury securities have not presented themselves as effective inflation hedge. Given the very high exposure to government securities in pension funds holding, inflation risk is the biggest risk post-DDEP. To mitigate inflation risk, investors seek assets that are considered to be good hedges against inflation, such as certain types of stocks, real estate, commodities, and inflation-protected securities. The lack of a deep, efficient, and liquid capital market means pension schemes are unable to effectively hedge inflation risk.

Discussions

4.1 Coping Strategies for Pension Fund Managers

The second and third tier pension schemes are managed by trustees, fund managers and custodians, in line with the National Pensions Act (2008). The National Pensions Regulatory Authority, in its capacity as regulator, has instituted mechanisms to ensure the entities under its oversight remain fit for purpose. Its responsibilities encompass routine government and private pension scheme inspections, auditing their financial statements, and ensuring compliance with the Pensions Act. Additionally, the NPRA plays an advisory role to pension fund managers and assists them in addressing operational issues when they arise.

The NPRA carefully assesses new applicants, ensuring adherence to specific requirements before admission into the system. Existing entities undergo annual reviews to guarantee that they remain in good standing. The NPRA also employs both on-site, involving financial record and operational audits, and off-site surveillance protocols, involving the analysis of statutory annual reports. To enforce standards, the NPRA imposes sanctions on pension fund managers who violate the Act or disregard established protocols. This compels institutions under their purview to remain effective and prepared to mitigate the impact of unforeseen circumstances, such as volatilities and macroeconomic shocks.

Pension fund managers are generally well-versed in dealing with and adapting to the volatile macroeconomic conditions. Discussions with stakeholders show that pension funds are currently focused on improving their diversification away from government bonds. As highlighted in the previous section, most pension fund assets find their way back to the government's bond market, through direct investments into GoG bonds or indirectly through banks and other collective investment schemes. Generally, the interaction with funds managers shows their current focus on exhausting diversification limits available in the other asset classes. While exhausting these diversification limits, fund entities are careful to ensure these instruments do not end up in government bonds. For example, pension fund managers are looking into the direct equity market and collective investment schemes that are not money markets or fixed income trusts, as these funds generally end up in government bonds.

Another potential area for diversification under examination is the alternative investment markets such as hedge funds, private equity markets and commodities. However, interactions with fund managers emphasize a cautious approach to these alternative

investments, recognizing the potential for private institutions to exploit the situation. The focus is on scrutinizing alternative investments to identify those that will effectively preserve pension fund investments while exhausting diversification limits.

Again, pension fund managers have recognized the sustained high T-bill rates. Average T-bill rates reduced from 14.7% to 12.8% between 2019 and 2021. However, T-bill rates surged almost twofold, jumping to about 23% in 2022 and 26% in 2023. Despite the desire to reduce exposure in that space, there is a strategic intent to capitalize on the elevated interest rates and generate returns. However, the overall strategy involves considering these investments on a short-term basis, allowing for easy recouping of funds and flexibility to explore other areas beyond government involvement. This approach reflects a balanced strategy, combining caution in exploring new investment avenues with an opportunistic stance towards existing high-return options.

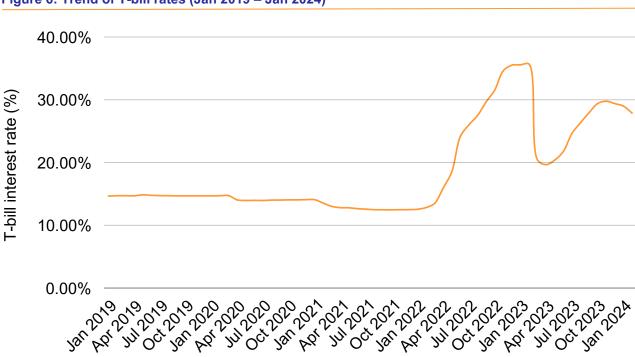


Figure 6: Trend of T-bill rates (Jan 2019 – Jan 2024)

Source: Bank of Ghana

A lot of corporate trustees can hire talented investment professionals with the right credentials to help with investment functions. Trustees also work closely with external investment managers as advisors in asset allocation and securities selection for pension schemes. Pension trustees were also instrumental in the negotiation with the Ministry of Finance and were the main proponents of the interest-only warrant that was issued to all pension schemes resulting in no loss of coupon receipt despite haircut suffered by all other institutional investors categories.

4.2 Asset Diversification – The Challenge with the Ghanaian Stock Market

The central insight from the discussion around the debt exchange and its impact on pension funds is the unparalleled value of diversification in investment strategies. Diversification stands as the singular "free lunch" within the investment realm, offering a unique opportunity for asset allocators to obtain returns that exceed expected returns from government bonds. The NPRA's investment guidelines outline a structured approach for pension funds to broaden their investment horizons. However, this potential for diversification remains largely untapped, primarily due to the historically high yields that government securities have offered trustees. As noted in the previous section, pension funds are anticipated to leverage current challenges as a catalyst to delve into a wider array of investment opportunities, as outlined in the investment guidelines.

However, the diversification of pension funds within the local context has faced obstacles, primarily attributed to the underdeveloped nature of Ghana's capital market and a scarcity of investable asset classes beyond government securities. Concerning local equities, the GSE breadth is not wide enough. It has too few desirable companies to accommodate the influx of cash that may come into the market from implementing the new investment guidelines. With just about 36 listings across both the main and alternative boards, the GSE cannot provide the breadth needed when pension funds decide to invest a minimum of 5% of their asset under management in the market, considering that more than half of the 36 listed equities hardly trade.

A few companies exert significant control over trading activities on the Ghana Stock Exchange, rendering many listed companies inactive. Data from the GSE demonstrates a trend of decreasing diversity, with fewer companies exerting significant influence over trading volumes and values. For example, in 2017, nine companies dominated 90% of trading volumes, while eight companies constituted about 90% of the total traded value. Over subsequent years, these figures have decreased. In 2023, a mere three companies out of the 36 listed took command of up to 90% of both traded volume and value. Furthermore, an analysis of traded volumes and values reveals a persistent trend: more than half of traded volumes and over a third of traded values are typically overseen by a single company. In 2023, MTNGH presided over approximately 85% of traded volumes and 71% of the total traded value.

Table 9: Companies with controlling trading volumes and values in the GSE (2017 – 2023)

Year	companies controlling up to 90% of trading		Companies with highest trading	
	Volume	Value	Volume	Value
2017	9	8	CAL (59%)	CAL (36%)
2018	10	10	CAL (59%)	AGA (33%)
2019	1	5	ETI (92%)	ETI (56%)
2020	3	5	MTNGH (85%)	MTNGH (63%)
2021	2	5	MTNGH (80%)	MTNGH (69%)
2022	1	2	MTNGH (95%)	MTNGH (73%)
2023	3	3	MTNGH (85%)	MTNGH (71%)

Source: Ghana Stock Exchange Market Reports (2017 – 2023)

The concentration of trading activities among a select few companies can hinder the overall liquidity of the stock exchange. This lack of diversity may restrict investors, including pension fund managers, from effectively diversifying their portfolios, posing challenges for risk management. The overreliance on a few companies poses risks to the exchange's resilience. If these dominant players face financial challenges or significant market fluctuations, the entire stock exchange may experience heightened vulnerability to volatility and downturns. Investors and pension fund managers must carefully navigate this landscape, balancing the benefits of liquidity and stability with the challenges associated with limited diversification and potential market fragility. Adaptability and strategic decision-making become crucial in managing investments within a market influenced by a concentrated group of key players.

Stock exchanges facing challenges in attracting new listings risk losing their competitive edge and becoming obsolete. Unfortunately, this trend is noticeable in the stock markets of Sub-Saharan Africa. To enhance liquidity in the Ghana Stock Exchange, the government should encourage listed companies, particularly those with significant parent company holdings, to increase public shareholding. Additionally, the Ghana Stock Exchange should firmly enforce its minimum public float requirements, which indicate that at least 25% of the company's shares must be issued to the public.

Furthermore, promoting the listing of banks exceeding a specific asset threshold, profitable state-owned enterprises, promising Fintech companies, and broadly held private companies through streamlined processes and eliminated fees would increase the pool of tradable shares. Finally, implementing tax incentives for listed companies would serve as a further incentive for participation, ultimately fostering a more liquid and vibrant stock market. Some of these recommendations may seem bold, but they are necessary to elevate the Ghana Stock Exchange and create a more diverse investment landscape for pension funds and their beneficiaries.

Conclusions and Recommendations

The recent economic downturn has posed significant challenges for Ghana's financial sector, including the banking, insurance, and pension sectors. The DDEP introduced additional pressure to a sector which had not recovered fully from the 2018 financial sector clean-up. The mere announcement of the DDEP caused immediate concern due to the high level of exposure financial institutions had to government debt. The program's combination of moratoriums, maturity extensions, and reduced coupon rates resulted in impairment losses for these institutions, putting their profitability and solvency at risk.

It is important to acknowledge that stakeholder intervention mitigated the DDEP's initial impact, particularly on pension funds, as evidenced by the program's revisions. The initial impact on the pension industry is perceived as it is felt more through delayed coupon and principal payments. However, the interconnectedness of the financial system means the DDEP's effects will ultimately ripple through and impact pension returns.

Furthermore, the DDEP raises concerns about Ghana's future debt sustainability. The government faces increased refinancing risks and potential default due to its heavy debt obligations in the coming years. Without robust fiscal reforms and strict control over government expenditure, the DDEP may simply postpone debt obligations rather than achieve its long-term debt sustainability goal.

The Ghanaian pensions sector has made significant strides in providing a structured framework for retirement savings. The DDEP has revealed the need to thoroughly examine the rules around investment allocation for pension funds to ensure its sustainability and reduce exposure to adverse shocks. Below are proposed changes and recommendations for enhancing the effectiveness of investment operations for pension funds to prevent such exposures and shocks.

- 1. The Government of Ghana must ensure fiscal discipline and efficiency of spending to reduce future debt obligations and consequential risks of default. The lack of fiscal discipline would only render the touted success of the DDEP illusive.
- 2. NPRA should promote a strategic diversification of pension fund investments into international markets, the private sector, and public infrastructure, in line with global best practices. This strategy requires a comprehensive risk assessment, considering factors such as currency fluctuations, market volatility, liquidity risks, credit risks, and political instability. Additionally, a clear regulatory framework must be established to oversee these investments, ensuring transparency, accountability, and regular reporting to stakeholders.

- 3. The government must enhance, supervise and provide oversight on its regulatory practices to guarantee adherence to laws and policies on pensions in Ghana. It must create a process for constant evaluation of the pension system's performance, focusing on the sufficiency of benefits, the rate of contributions and the sustainability of investments to ensure its continued relevance and viability.
- 4. The Ghana Stock Exchange must be enhanced to make it a more attractive option for pension fund investments. The government must strengthen the regulatory framework to ensure transparency, protect investors, and build confidence in the market. GSE must enforce its minimum public float requirement, which mandates that at least 25% of a company's shares be publicly issued. Listed companies should also be encouraged to increase their public shareholding, ultimately creating a more liquid and dynamic stock market.
- 5. The government must encourage pension funds to incorporate Environmental, Social, and Governance (ESG) criteria into their investment decisions. This involves requiring fund managers to disclose and report their ESG practices and considerations, alongside providing incentives for institutions that comply with established guidelines. Enhanced disclosure enables a thorough evaluation of ESG factors, guiding more informed and sustainable investment choices. This contributes to the long-term sustainability and potential profitability of investments.



- ② 26 Lemming St. || North Legon || GM-058-1968
- P. O. Box CT 2121 || Cantonments || Accra
- **9** +233 (0) 302 900 730
- info@acep.africa
- acep.africa

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