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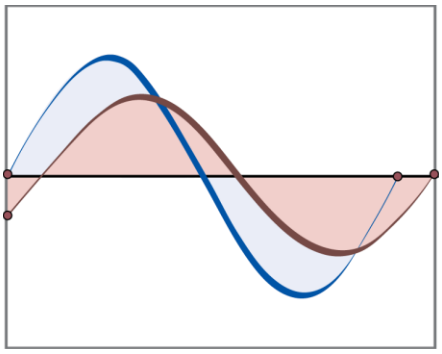

National Pension Reform: Initial Considerations for Trinidad and Tobago

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Many countries have, within the last decade, actively pursued pension reform. Significant changes in many territories have become necessary to preserve retirement income systems, the sustainability of which is threatened by ageing populations, constantly fluctuating economic conditions and increasing labour informality. Retirement savings/system arrangements have also gained attention domestically; in Trinidad and Tobago, the reform of the national pension system is urgently needed. This is evidenced by dwindling labour force participation and contributions to the National Insurance Scheme (NIS), increasing government (non-contributory) pension liabilities and growing challenges in transmitting pensions to retired public servants. Noting that incomplete information on national retirement income arrangements delays restructuring plans and may result in more drastic corrective actions, this study is designed to systematically explore the National Pension System in Trinidad and Tobago and outline some considerations for the pension reform agenda.

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1.0 Introduction

Many countries have, within the last decade, pursued active pension reform. In recent years, notable changes in several territories have become necessary to preserve retirement-income systems, the sustainability of which is threatened by ageing populations, constantly fluctuating economic conditions and increasing labour informality. On the other side of the debate, alongside the growing apprehension about the financial viability of pension systems, is the adequacy and coverage of pension benefits for retirees. Early estimates highlighted that around 90.0 per cent of the world's working-age population was not covered by adequate pensions (Gillion, et al. 2000), suggesting a propensity towards increasing poverty, particularly among the elderly. Pension reform, therefore, requires careful thought when balancing opposing objectives – sustainability on the one hand and adequacy and coverage on the other.

Retirement savings/system arrangements have also gained attention locally; in Trinidad and Tobago, reform of the national pension system is urgently needed. This is evidenced by dwindling labour force participation and contributions to the National Insurance Scheme (NIS), increasing government (non-contributory) pension liabilities and the growing challenges in the timely transmission of pensions to retired public servants. At the centre of the public debate over the last decade is the concern over the solvency of the NIS, whose contributions are no longer sufficient to cover expenses, necessitating withdrawals from realised investment income. Notably, the latest estimates suggest that total asset depletion can be as early as 2035 if significant reforms are not made[1]. Simultaneously, there is a growing concern over the degree of vulnerability among the elderly, whose (non-indexed) pension benefits may be inadequate to sustain a minimum standard of living.

Incomplete information on national retirement income arrangements delays restructuring plans, resulting in the need for more drastic corrective actions in the future. In this vein, this study is designed to systematically explore the different tiers of the National Pension System in Trinidad and Tobago and proffer considerations for its improvement. The study is structured as follows. Section 2 reviews the literature, with specific emphasis on the classification of different pension schemes and the different types of reforms. Section 3 provides the stylised facts for Trinidad and Tobago. Here, the discussion will be based on the World Bank conceptual framework approach to pension reform, which assesses initial conditions and the country's capacity to improve the economic environment. Section 4 provides recommendations to balance the primary pension reform criteria of sustainability, adequacy and coverage. Section 5 concludes.

[1] See the Tenth Actuarial Valuation of the National Insurance System of Trinidad and Tobago, conducted in 2018.

2.0 Literature Review

In recent years, particularly during the COVID-19 pandemic, there has been considerable interest in the architecture and sustainability of social security and pension systems. The goal of this literature review is three-fold. First, to review the conceptual framework of retirement-income (pension) systems. While the literature describes numerous classifications of pension system plans, this research will discuss the World Bank's multi-pillared approach and the tiered approach used by the Organisation for Economic Co-operation and Development (OECD). Both approaches take a holistic view of retirement income systems, organising the pensions discussion in a structured way that can be easily understood. Second, to evaluate the types of pension reforms, namely, parametric, systemic, regulatory and administrative reforms, with some insight into the potential implications of each. Third, to briefly analyse the implications of COVID-19 on retirement savings and pension assets. Given the qualitative nature of the research, this section will rely primarily on case study analysis.

2.1 World Bank and OECD Typologies of Retirement Income Systems

Retirement income systems reflect each country's various cultures, histories and economic situations (Podger, Stanton and Whiteford 2014). However, while the designs of pension systems vary, the various old-age protection programmes and design elements can be categorised using either the World Bank's five-pillar approach, or the OECD's three-tier approach.

The World Bank's multi-pillared classification was borne out of the social system reform support rendered to developing countries since the mid-1980s (World Bank 2008). In mid-1990, the Bank established a *prescriptive*[2] classification of pension schemes through its three-pillar model (World Bank 1994), which was later revised to five pillars (Holzmann and Hinz 2005). These five pillars are a non-contributory "zero pillar" in the form of a basic or social pension floor; a mandatory "first pillar" in the form of a publicly managed pension plan; a mandatory "second pillar" in the form of an occupational pension; a voluntary "third pillar" which can be either occupational or personal; and, a non-financial "fourth pillar" in the form of formal and informal social programmes (Holzmann, Hinz and Dorfman 2008). Alternatively, the OECD adopted a *descriptive* typology of retirement income systems, referring to each level as a tier. There are two mandatory tiers. Tier one, redistributive pensions, is further categorised into four main types – social assistance, separate targeted retirement-income programmes, basic pension schemes and minimum pensions within earnings-related plans – all provided by the public sector (OECD 2005). The second tier functions as insurance, and is further categorised into defined benefit plans[3] and defined contribution plans[4]. There is also a third tier that refers to voluntary contributions towards retirement-income schemes and other forms of savings. Although differing in labels, the classifications and concepts used by the World Bank and OECD overlap. **Figure 1** simplifies the similarities between the two taxonomies, which can be separated into three major categories: the first pillar, which is publicly managed; the second pillar based on occupational earnings, which can

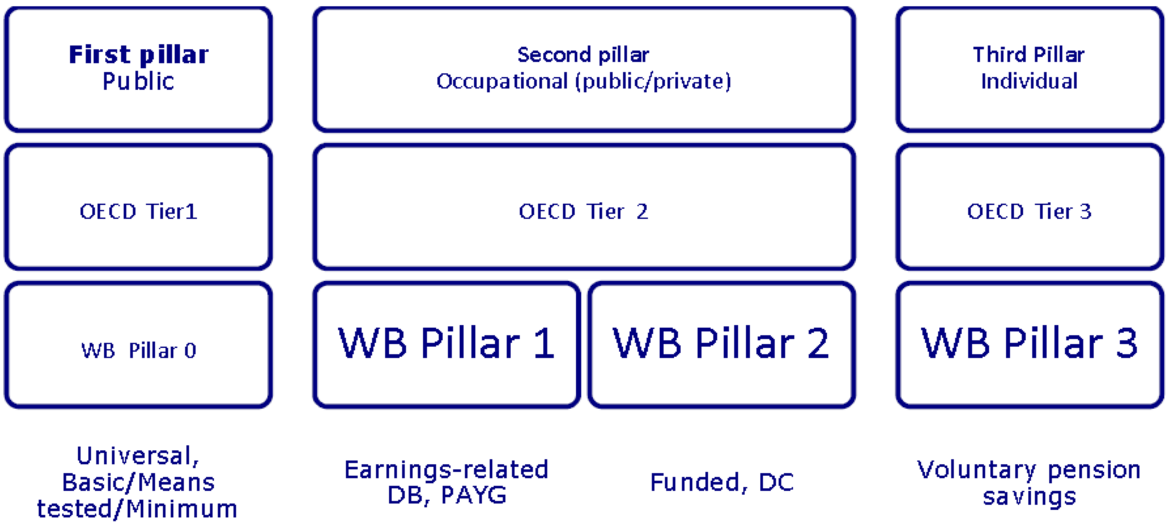
[2] The literature distinguishes between prescriptive and descriptive pension system typologies. As the labels suggest, a prescriptive classification of the pension system proposes a model to be attained (Yermo 2002), while a descriptive classification highlights characteristics of the pension schemes that are consistent across the largest possible number of countries (Lannoo, et al. 2014; Yermo 2002).

[3] Under a defined benefit plan (also called final salary scheme), benefits to members are fixed or guaranteed and are linked to members' wages and length of employment (Yermo 2002; Public-Private Infrastructure Advisory Facility n.d.). Financial and other risks are borne by the provider/sponsor of the scheme (Lannoo, et al. 2014; Yermo 2002). Pension schemes of this type are typically run by the state or public sector (Public-Private Infrastructure Advisory Facility n.d.).

[4] Under a defined contribution plan (also called accumulation or money purchase schemes), risks are borne by the members of the scheme, as pay-outs at retirement are pre-determined and amount to the sum of total contribution plus investment earnings (Lannoo, et al. 2014; Public-Private Infrastructure Advisory Facility n.d.).

be privately or publicly managed; and the third pillar which includes individual, voluntary contributions toward retirement (Lannoo, et al. 2014). Notably, **Figure 1** excludes the World Bank's non-financial fourth pillar, which can arguably be included in the first pillar (public).

Figure 1: World Bank and OECD Taxonomy



Source: Lannoo et al. 2014
Note:
WB - World Bank; DB - Defined Benefit; DC - Defined Contribution; PAYG - Pay-as-you-go

Using the above delineation, the first pillar (World Bank zero pillar and OECD tier one) guarantee a minimum income level by redistributing income, with the aims of alleviating poverty and ensuring a minimum standard of living in old age (OECD 2009; Holzmann and Hinz 2005). Pension schemes under this pillar are typically state or budget-financed, of a non-contributory, pay-as-you-go[5] nature. They can either be means-tested (based on all other sources of income, among other factors), or universal (based on age and residency criteria) (Lannoo, et al. 2014; Holzmann and Hinz 2005; OECD 2005). As previously mentioned, pension schemes that form part of the first pillar are managed by the public sector[6], and are mandatory[7]. Though this pillar allows for the redistribution of income from the rich (or more formal economy) to those with minimal earnings and/or labour force participation, it is subject to fiscal constraints, as well as demographic, political and sustainability risks. These risks are typically borne by the taxpayer (World Economic Forum 2013). Notably, while pillar one may prioritise coverage, that is, the extent of access to retirement income by all retirees, pensions under this first pillar may only provide modest benefits (World Economic Forum 2013).

[5] Kit (2015) described a pay-as-you-go (PAYG) pension scheme as a plan in which current pension liabilities of the elderly are financed by contributions from the current working population. PAYG schemes are also referred to as unfunded pension plans (Yermo 2002). The opposite of a PAYG scheme is a funded scheme, whereby dedicated pension assets are allocated today against some (partially funded) or all (fully funded) future obligations (Public-Private Infrastructure Advisory Facility n.d.).
[6] Tier one of the OECD typology includes pensions schemes that may be classified within the World Bank's mandatory "first pillar", which refers to a publicly managed, earnings-related, mandatory pension plan.
[7] A mandatory pension scheme refers to benefits the government and/or employers mandate or require, established by legislation, regulations or collective agreements (ILO 2014). Mandatory pensions can be contributory (such as national insurance schemes) or non-contributory (such as state pensions offered to the most vulnerable).

Pillar two (World Bank first and second pillars and OECD tier two) is intended to supplement the first pillar, and adequately replace income from employment (Lannoo, et al. 2014). The second pillar encompasses many different designs but largely involves working individuals and/or employers contributing to occupational pension schemes. Pension plans under this pillar are: structured as a pay-as-you-go or (fully or partially) funded scheme with *defined benefits*[8] or a fully funded scheme with *defined contributions*; can be publicly or privately managed; and can be mandatory (that is, required by state or where enrolment is automatic) or voluntary[9]. Similar to pillar one, and whether defined benefit or defined contribution, risks are attached to this second pillar. The risks associated with defined benefit schemes – such as investment risk[10], longevity risk[11] and inflation risk[12] (if an automatic inflation adjustment is included) – are typically borne by the sponsor of the plan but may also fall to the taxpayer if the defined benefit plan is state (or government agency) sponsored and underfunded (World Economic Forum 2013). In contrast, risks associated with defined contribution plans – business cycle risk[13], inflation risk, longevity risk and investment risk – are borne by the retired individuals (World Economic Forum 2013).

Pillar three (World Bank third pillar and OECD tier three) is also complementary to pillars one and two but is voluntary. As the term implies, there is typically no legal or employee obligation to pay towards a voluntary pension plan, but is based on each individual's economic capacity to contribute (ILO 2018). However, voluntary pensions can be enforced, encouraged (through tax incentives) and regulated by the state (World Economic Forum 2013). Voluntary pension plans (including annuities to be paid out when retired) are generally privately managed without a limit on contributions. Risks are borne by the individual but may also be borne by the insurer if a fixed annuity is guaranteed. Voluntary pensions provide for the adequate replacement of earnings in retirement, but usually do not cover a substantial portion of workers.

Tables 1 and 2 briefly overview the characteristics of the World Bank multi-pillared approach and the OECD's multi-tiered approach.

[8] Defined benefit schemes are typically run by the state, can be entirely funded by employer contributions, are of a PAYG nature, and/or may provide higher income replacement in retirement (Lannoo, et al. 2014; Gillion, et al. 2000).

[9] While pension schemes classified under the second pillar are generally mandatory, not all countries' pension systems are designed this way.

[10] Investment risk is the probability of sustaining losses on your investment (Self 2022).

[11] Longevity risk is the probability of living longer than expected, that is, underestimating one's life expectancy (Carlson 2021).

[12] Inflation risk or purchasing power risk refers to the adverse consequences associated with the increasing goods and services on nominal income (Thakur n.d.).

[13] Business cycle risks refer to the possibility of business and economic fluctuations adversely affecting investment returns (Volk 2015).

Table 1: Characteristics of the World Bank's Multi-pillared Approach

Pillar	Essential Characteristics
Pillar 0	Non-contributory minimal assistance to the poor that is financed by the state and is typically means-tested.
Pillar 1	Public (government) pension (social security) schemes to provide for basic needs; contributory and linked to earnings, redistributive, and typically financed on a pay-as-you-go basis.
Pillar 2	Private occupational pension schemes (may be fully or partially sponsored by employers) to supplement Pillar 1; can be voluntary or mandatory (i.e., required by the state or where employees are automatically enrolled); and can comprise defined benefit or defined contribution plans.
Pillar 3	Individual savings to provide for future withdrawals and/or annuities in various forms, which can be voluntary, but can also be enforced, encouraged or sponsored by the state or employers.
Pillar 4	Includes informal family support, formal social programmes such as health care and housing, other individual assets such as home ownership, and labour market policies to extend work life and enable more part-time work for the formally retired.

Sources: Robert Holzmann and Dorfman (2008) and World Economic Forum (2013)

Table 2: Characteristics of the OECD's multi-tiered approach

Tier	Essential Characteristics		
First Tier, Redistributive Pensions, (Mandatory)	**Basic**		Can be a flat-rate pension or based on years of service. Typically a universal pension plan, not means-tested.
	Resource-tested (targetted)/social assistance		A pension scheme that is typically means-tested. Benefits can be pension-income-tested (where the value depends only on the level of pension income a retiree receives), broader-income tested (which considers other income, such as from savings) or broader means-tested (reducing the pension to take account of both income and assets).
	Minimum pension (linked to second tier)		Aimed at ensuring a minimum pension, but are based on rules of the second tier, namely as it regards earnings, as well as a minimum number of contributions.
Second Tier, Insurance Penions (Typically Mandatory)	**Public**	**Defined Benefit**	Defined benefit publicly managed pension schemes typically depend on the number of years of contribution and individual earnings.
		Points[1]	Under a points scheme, workers accumulate points for each year of contributions. To arrive at a retiree's pension, the sum of points is multiplied by a pension point value.
		Notional Accounts	Often referred to as notional defined contribution plans, employee contributions exist in an individual account to which a rate of return is applied. At retirement, pension payouts are based on contributions and investment earnings (notional capital), and an estimation of life expectancy.
	Private	**Defined Benefit**	Defined benefit private occupational pension schemes typically depend on the number of years of contribution and individual earnings.
		Defined Contribution[2]	Typically operated by the private sector, whereby employee contributions and investment interest earned are converted at retirement to pension payouts.
Third Tier, Savings (Voluntary)	**Voluntary, Savings**		Individual savings or voluntarily sought pension schemes and/or annuities to provide for retirement.

Source: OECD (2009) and OECD (2005)
Notes:
[1] Not a commonly seen pension scheme in the literature.
[2] May be organised differently across countries.

Each pillar/tier is evaluated against several principles. The literature generally converges on a combination of primary criteria, including adequacy and coverage, whereby benefits are sufficient to smooth lifetime consumption and are available to the vast majority of the population; sustainability, whereby benefits can be maintained over the foreseeable future; equitability, whereby income is redistributed from the lifetime rich to more vulnerable sections of society; predictability, whereby the calculation of benefits is legally binding, with expectations for periodic price adjustments to be based on the changing cost of living; affordability, whereby contribution rates are reasonably set for both employees and employers, and without sustainability risks for fiscal authorities; and robustness, whereby pension systems are largely shielded from socio-economic and political volatility. Each criterion is linked, and policymakers must seek to balance trade-offs, using a multi-pillared approach, to deliver a robust pension system (ILO 2018; Holzmann, Hinz and Dorfman 2008). A multi-pillared system balancing these primary objectives should assist in meeting secondary objectives, which include the minimisation of labour market distortions and the contribution to the development of the financial market (Holzmann, Hinz and Dorfman 2008).

Against these criteria, there is room to improve retirement income systems in Latin America and the Caribbean (LAC), whose pension systems rely heavily on state involvement as opposed to privately-managed plans (Carrera and Angelaki 2021; Brunton and Masci 2005). According to a joint report by the OECD, Inter-American Development Bank (IDB) and the World Bank in 2014, the main challenges faced by several countries in the LAC region are low coverage and adequacy of formal pension plans and, resultantly, the expanding role of non-contributory government/social pensions with the associated risk of insolvency. Specific to the Caribbean, a review of six countries' pensions systems (The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago) highlighted challenges related to high labour informality, minimal non-contributory social pensions, high administrative costs for social protection programs, and large gaps between the pensions of civil servants and other employed persons (Schwartz and Zegarra 2021).

As it regards coverage and adequacy, 2010 household data for 19 LAC countries[14] revealed that on average, roughly 45 out of 100 workers (between the ages of 15 to 64 years) were affiliated with or actively contributing to a pension scheme, ranging from less than 20.0 per cent in Bolivia, Peru, Paraguay, Guatemala, Honduras and Nicaragua, to around 70.0 per cent in Chile, Uruguay and Costa Rica (Bosch, Melguizo and Pages 2013). This phenomenon is mainly attributed to large numbers of non-standard or informal employees: household data suggests that while salaried workers are more likely to actively contribute to pension plans, self-employed persons were less likely to do so (Bosch, Melguizo and Pages 2013). Other factors include the lack of enforcement of mandatory contributions; income and education gaps, whereby higher levels of income and educational attainment are linked to formal employment and contributions, the size of the firm, which is positively linked to the formal labour force and salaried workers, and therefore, contributions; public versus private sector employment, whereby coverage is typically greater among the public sector workers, and gender differences, whereby the average labour force participation for women is less than that for men (OECD/IDB/World Bank 2014; Bosch, Melguizo and Pages 2013; Rofman and Olivieri 2012). Moreover, a prominent feature of LAC pension systems is heavy state involvement. In the wake of Chile's pioneering pension privatisation thrust, several LA countries underwent similar reforms in the 1990s and early 2000s, before "re-reforming" towards a greater state role since 2005[15]. Increasing fiscal pressures due to state pension schemes are directly related to the challenges of low coverage and adequacy, and the changing demography (ageing population), (Schwartz and Zegarra 2021; Carrera and Angelaki 2021; OECD/IDB/World Bank 2014). Without reform, estimates suggest that fiscal expenditure on public pension programmes for the Caribbean could reach up to 15.2 per cent of GDP by 2050 (Schwartz and Zegarra 2021).

2.2 Types of Reforms

The scope and size of the problems facing pension schemes are not unique to one region. Several developed and developing countries have implemented or are in the process of implementing reforms to remedy concerns of sustainability, adequacy and coverage. Pension reforms can be grouped into four different categories. These include parametric reforms; systemic reforms; regulatory reforms and administrative reforms.

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[14] Specific to Caribbean pension schemes, which are not greatly accounted for in the LAC analysis, early reports suggest a higher replacement rate for full-term workers, therefore greater adequacy of pension benefits for covered/formal employees when compared to advanced economies (World Bank 2010).

[15] Countries that re-reformed since 2005 include Chile, Bolivia and Argentina. Argentina completely removed its private pillar and resumed a public pillar for all workers in 2008, while Chile and Bolivia introduced non-contributory social pensions (Carrera and Angelaki 2021). Interestingly, in a study of 18 LAC countries Rofman and Oliveri (2012) found that, despite reforms throughout Latin America in the 1990s, the number of persons affiliated with or actively contributing to pension plans decreased to 32.0 per cent in the 2000s from 42.0 per cent in the early 1990s, before increasing to 37.0 per cent in 2010.

While a holistic approach is necessary to balance competing objectives, recent reforms have been driven by the need for financial sustainability and fiscal consolidation (OECD 2015), and have been centred around parameter changes of current pension systems, **or Parametric reforms.** Pension systems rely on three sub-groups of parameters. These include contribution parameters, benefit parameters and eligibility conditions for receiving pensions (Schwarz 2006). Many parametric reforms involve changes in all three sub-groups. Each of these parameters has a distributive impact within the group of contributors and beneficiaries. Parametric reforms also affect the fiscal sustainability of the pension system.

Contribution and benefit parameters are closely linked and apply to both mandatory defined benefit and defined contribution systems, and voluntary systems. Parameters include the following:

I. *Contribution rates* – rising contribution rates lowers the take-home salaries of workers and the net benefits that workers receive from the pension system. Rising labour costs may reduce or cause stagnation in employment in the formal sector. These hurt workers, but may be necessary to maintain fiscal balance. However, according to Schwarz (2006), contribution rates above 15.0 per cent are likely to have negative labour-market impacts.

II. *Wages that are subject to contributions* – raising the ceiling of the wages that are subject to contributions tends to be positively distributive, in that higher-salaried workers pay more of their incomes into the pension fund. However, in the longer run, they will usually receive higher benefits.

III. *Accrual rate* – this is the rate at which future benefits accumulate. It is usually part of the pension benefit formula. The accrual rate amounts to a proportion of the final salary and for its estimation, it takes into account individual's pensionable membership and final earnings. The accrual rate varies for each individual depending on dates and type of service. Decreasing the accrual rate will lower the benefits received by employees. However, when the system runs deficits, a lower accrual rate helps avoid transfers from younger workers and those persons not covered by the system.

IV. *Averaging period for wages* – this is referred to as the working history of the individual that is used to calculate retirement benefits. Average contributions are aligned with average benefits. While in many countries, pension benefits may be calculated based on lifetime earnings. Some countries may use a limited number of years. For example, the public scheme in France is based on the best 20 years' earnings, while in Spain, the final 15 years' earnings are used (OECD 2015). This strategy tends to be progressive and favours high-income employees if the benefit formula is based on the final working years.

V. *Revalorisation of wages* – valorisation refers to the actuarial adjustment of the accumulated contributions to the present value of current pension benefits. The actuarial adjustment should reflect changes in costs and standards of living at the time of retirement. The most common practice is to revalue earlier years' pay with the growth of average earnings. Valorisation of past earnings may not seem obvious in pension systems, but its impact on retirement incomes is large. The majority of OECD countries revalue accumulated contributions for wage growth. Belgium, France, Greece and Spain revalue accumulated contributions to price growth. Estonia, Finland and Portugal use a mixture of the two, whereas Turkey uses a mix of price and GDP growth (OECD 2013). Lower revalorisation theoretically could improve the sustainability of pension schemes, but usually results in increased evasion since workers earn low rates of return on early contributions and thus ends up undermining fiscal sustainability.

VI. *Indexation of pensions* – pension indexation can provide a reasonable insurance of pension benefits against wage or price inflation. In the Netherlands, indexing pension benefits to either wage or price increases has long been considered a guaranteed right. Germany indexes public pensions according to income developments. Denmark indexes pension benefits according to wage developments. Finland uses a mixture of both wage and price indices (Hansen 2006). Lack of indexation results in the older elderly receiving substantially lower pensions and less protection than the younger elderly who might be able to work (Schwarz 2006). Women, who generally live longer than men, are also disproportionately disadvantaged by a lack of indexation since their real pensions will fall over a greater number of years.

VII. *Minimum pension* – minimum testing benefits aim at the poor retiree population who live at a subsistence level or have special needs in the form of social assistance and support. The value of benefits is usually limited to the unemployed beneficiaries who satisfy certain criteria considering income from other sources, such as supplementary income, assets and family resources. Furthermore, numerous countries adopt minimum income requirements to improve the adequacy of retirement incomes. In 2011, Finland launched minimum pension requirements to supplement to the universal type allowance. Greece and Mexico introduced new means-tested benefits during the 2009 to 2013 period. In 2013, Portugal introduced means-tested requirements for eligibility for Income Support Allowance, whereas Spain increased survivor benefits for those without a pension (OECD 2013). The minimum pension level is set too high in most countries, and may be as high as or higher than the minimum wage. Lowering the minimum pension might put some pensioners into poverty, but this has to be balanced against limiting out-of-system transfers and the goal of tying contributions to benefits to encourage individuals to contribute.

VIII. *Normal retirement age* – normal retirement age ought to be an endogenous parameter and be adjusted according to life expectancy and production capacity. Several countries raised retirement ages by considering projected increases in life expectancy and the uncertainty surrounding the estimates in those countries. There is a wide range in projected effective retirement ages in 2050, from 60 (Serbia, Turkey and Luxemburg) to 65 (Austria, Belgium, Hungary, Czech Republic, Slovenia, Romania, Italy, Greece, Bulgaria, South Korea and Nicaragua), 67 (Iceland, Norway, Germany, Denmark, Spain, Israel, Australia and United States) and 68 (United Kingdom) (OECD 2011; Federacion International de Administradoras de Fondos de Pensiones 2009). According to Schwarz (2006), pension systems should use the 15-year retirement threshold. An employee who reaches the normal retirement age is entitled to receive his normal retirement benefit. In the case of early retirement, his retirement benefit is his accrued benefit payment.

IX. *Pensionable years of service required* – age and years of service requirements must be met before someone retires. It is possible for someone who meets the service requirement to retire at an earlier age. Thus, a potential increase of years or service will be against low earners whose career, in general, is shorter. In principle, the short service contribution behaviour is actuarially adjusted to normal contribution behaviour: early retirees will receive a fair proportion of what members receive at their normal retirement age.

X. *Early retirement* - early retirement policy was initiated to reduce unemployment (OECD 1998). The level of accumulated contributions, and the member’s age upon retirement, determines the level of accrual rate. The accrual rate is adjusted downward for individuals who want to retire before attaining normal retirement age, and upwards when they decide to delay their retirement. This is beneficial as long as other exogenous factors remain constant. Otherwise, early retirement will shift the financial burden to pension funds (Boeri, Brugiavini and Maignan 2001). The dramatic increase in life expectancy in addition to lower birth rates made early retirement unfavourable.

Eligibility conditions include the following:

I. *Retirement age* – according to Schwarz (2006), an average of 15 years in retirement should be the goal of the pension system. Equalising retirement ages for men and women tends to be pro-women as it substantially raises the pension levels for most women. Retirement age changes affect both defined-benefit and defined-contribution systems and non-contributory benefits and voluntary pension systems. In defined-benefit systems and non-contributory pensions, retirement age changes improve fiscal sustainability. In contrast, in the case of defined-contribution systems and voluntary systems, they raise the level of pensions.

II. *Years of service/contributions required before receiving a pension* – raising the years of service required before an individual receives a full pension may similarly discriminate against lower-income individuals, who generally have shorter eligible working careers. However, providing prorated pensions for shorter working careers may address this issue sufficiently.

III. *Means testing* – in the case of non-contributory benefits, countries sometimes introduce means-testing to reduce fiscal costs or change the threshold for pension eligibility. Both of these measures reduce the number of people eligible for pensions but balance this with lower fiscal costs, requiring fewer transfers from the working generations to the elderly.

Good practice dictates that parametric reforms precede systemic changes to help create proper conditions, including sound macroeconomic policies, an adequate financial sector, and implementation capacity (Andrews 2006). **Systemic reforms** usually entail the composition of a new component or the introduction of a new pillar. Systemic reforms concern mainly with the diversification of redistribution asymmetries arising from demographic imbalances and uneven contributions and benefits, which usually lead to a funding gap or an unfunded liability. Systemic reforms differ for goals and the context of pension pillars. Many less developed and developing countries have expanded their single-pillar systems well beyond the basic redistributive functions (Bloom and McKinnon 2013). In 2008, Chile launched a zero pillar, a new basic solidarity pension plan that integrated with the existing funded pillar and served as a pension supplement to pensioners in the lowest 60.0 percent of the income distribution (Rudolph, Rocha and Vittas 2010). This reform is seen as a benchmark (Rofman, Fajnzylber and Herrara 2008). Most developed countries with defined-benefit schemes proceeded to either parametric or systemic reforms. The development of a second and a third pillar suggests a phased retirement: the gradual transition from full-time employment status to part-time employment status to full retirement in exchange for additional income supplement from the three existing pillars. The mandated second-pillar pension schemes are characterised by defined contribution plans. Chile introduced a second pillar in 1981. Very few emerging and developing countries introduced a second pillar in their existing systems, which are still in the accumulation phase (Holzmann 2012).

Regulatory reforms concern improvements to the quality of governance and regulation. Developments in the regulatory framework are rarely related to redistributive aspects. Regulatory amendments ensure welfare benefits to all individuals and fair treatment of financially unsophisticated individuals. Transparency in investment management and effective communication management is imperative directives for the governing bodies to set out a prudential framework for pension funds, which have a fiduciary duty to their members to act in their best interests. The regulatory framework for privately managed pension funds should also comply with the prudent person principle and/or analogous quantitative portfolio restrictions. The prudent person principle is targeted at the behaviour of pension fund managers in the context of capital markets. The quantitative approach includes security, cash flow management, and risk management concepts (McLeod, Moody and Phillips 1993).

Administrative reforms' main objective is to reinvent social security, advocating a series of top-to-down shifts emphasising how pension administration is organised and managed, producing better performance, and requiring greater transparency and accountability. Its concept was associated with a contracting view of the role of governance moving towards a flexible, less conventional bureaucratic framework introducing performance incentives, private-sector techniques, and market-based strategies to service delivery and administration. This flat-type structure reduces the number of tiers within the organisation, enhances the bottom-to-top information flow, and increases production efficiency (Schwarz 2006).

3.0 Stylised Facts

Noting that a comprehensive examination of social and economic conditions should precede any reform, this section will review the Trinidad and Tobago national pensions system based on the World Bank's approach. Specifically, this section will evaluate initial conditions and the country's capacity to improve the enabling environment, through a review of the demographic and macroeconomic challenges, the current pension system and implemented reforms.

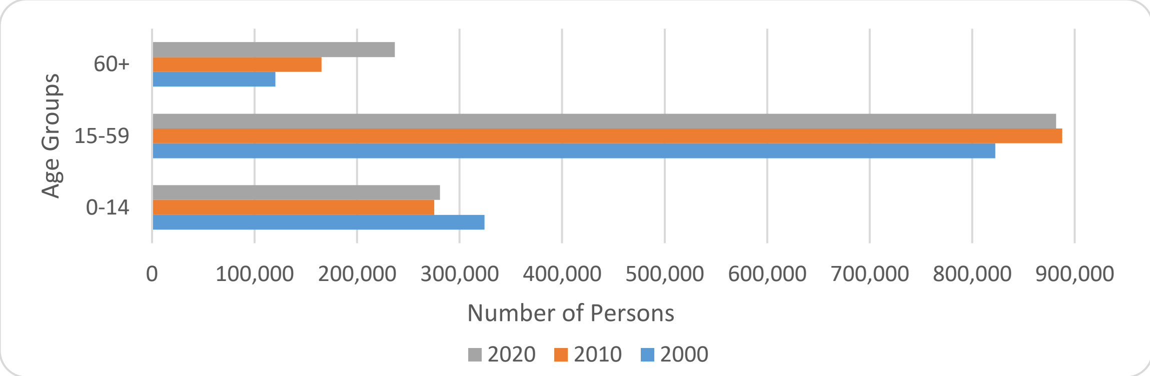
3.1 Enabling Environment

Trinidad and Tobago is a small island developing economy and a mature energy producer. Given the country's heavy reliance on crude oil and natural gas for government revenue, economic growth, particularly within the last decade has been slow, as volatility in international energy markets intensified. As it pertains to fiscal policy, expanding fiscal expenditure in line with increasing revenues is more easily achieved than decreasing expenditure in difficult financial times, as government spending, once established, tends to continue (Piguillem and Riboni 2021). Resultantly, fiscal space is limited, as evidenced by persistent overall and primary deficits and burgeoning debt, which has implications for future government policies, including those aimed at protecting the elderly.

In the last five years, Trinidad and Tobago's population was relatively steady at around 1.4 million persons. Similar to other countries, the country is challenged by an ageing population and decreasing fertility rates. During 2000 and 2020, the number of persons aged 60 and over almost doubled to around 240,000 persons (almost 17.0 per cent of the total population) **(Chart 2)**, with population projections estimating that the proportion of persons over age 60 can increase to 28.0 per cent of the total population by 2050 (Ramrattan 2017). Simultaneously, there has been a noticeable slow-down in births. The crude natural growth rate per thousand persons fell from 6.7 in 2000, to 0.6 in 2021 **(Chart 3)**. This is expected to adversely impact the working age population, which is expected to shrink to 55.0 per cent of the total population in 2050 (Ramrattan 2017), from 63.0 per cent in 2020. Meanwhile, labour market trends may suggest a shift towards greater informal/non-standard employment and/or a discouraged worker effect, as evidenced by a low and declining labour force participation rate which averaged 54.8 per cent in 2021, from 62.1 per cent in 2010 **(Chart 4)**.

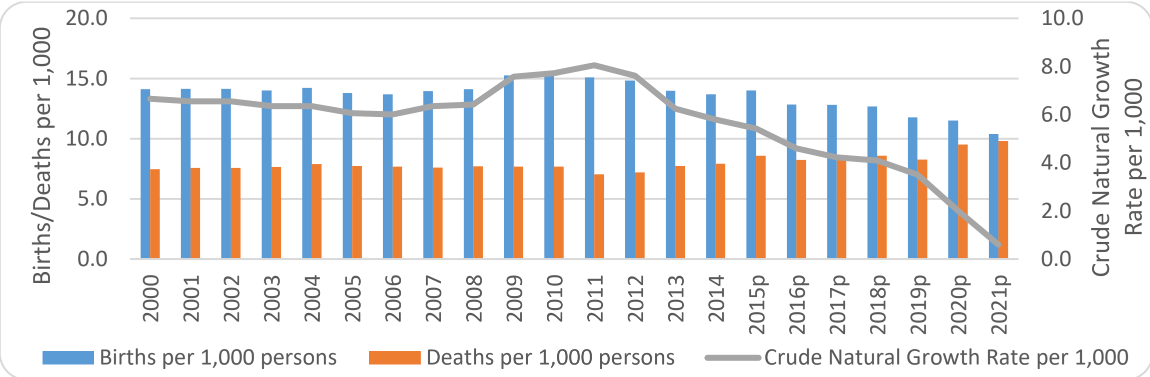
Shifting demographics and increasing non-standard employment will affect the sustainability of pension systems. In Trinidad and Tobago, a combination of the factors is expected to translate into a smaller future working population, and coupled with low compliance and lack of enforcement for mandatory contributory schemes **(Section 3.2.2)**, increased fiscal costs as the Government works to combat old-age poverty are likely. At present, several aspects of the inherited pension system have led to the transfer of responsibility of the adequacy of pensions from the individual to the Government. Standardising employment and enforcing mandatory pension contribution compliance will not be enough to reverse the fiscal requirements already created by changing labour dynamics, cultural and economic factors. Therefore, policymakers must understand demographic, cultural and employment transitions, have flexible reactions to cope with unexpected shocks and consider the policy trade-offs of pension system reform.

Chart 2: Population Statistics – Demography



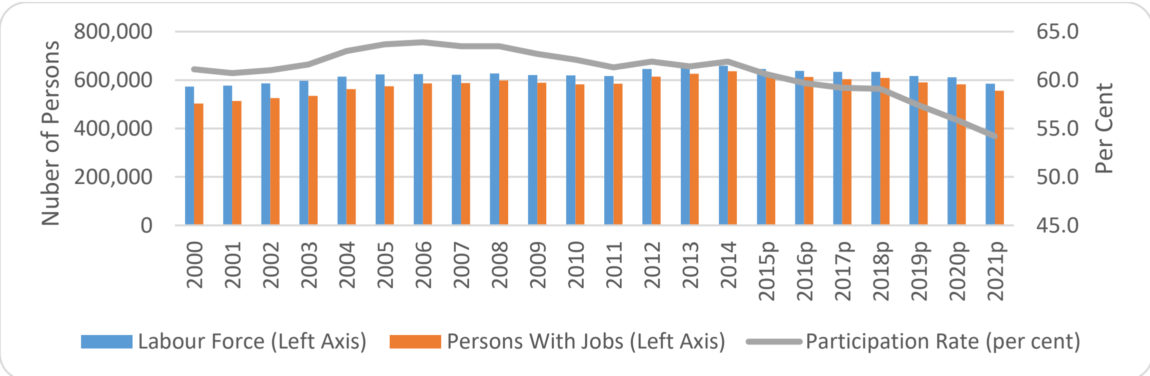
Source: World Databank Update October 2021

Chart 3: Population Statistics, 2000 - 2021



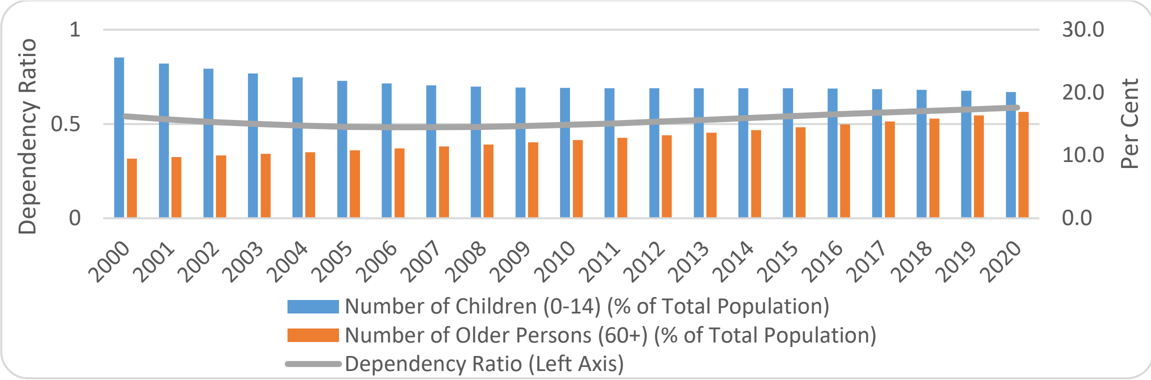
Source: Central Statistical Office

Chart 4: Labour Force Statistics, 2000 - 2021



Source: Central Statistical Office

Chart 5: Dependency Ratio



Sources: World Databank Update October 2021 and Authors' Calculation
The dependency ratio refers to the number of children (aged 0 – 14) and older persons (aged 60 and above) as a per cent of the working age population (aged 15 – 59).

3.2 The Current Pension System

Trinidad and Tobago adopts a multi-pillared pension system **(Table 3)**, achieving near-universal pension coverage through a mix of contributory and non-contributory pension schemes. According to a report by the Corporación Andina de Fomento (CAF), Trinidad and Tobago has attained 96.7 per cent universal pension coverage. Approximately, 69.0 per cent of the pension system is non-contributory (Corporación Andina de Fomento 2021).

Table 3: Pension Pillars in Trinidad and Tobago based on World Bank's Conceptual Framework

	Zero Pillar	First Pillar	Second Pillar: A	Second Pillar: B	Third Pillar
Program	Senior Citizens' Pension	National Insurance Scheme	Public Service Pensions	Private Occupational Pension Plans[3]	Personal Pensions, Annuities, personal savings
Legislation	Senior Citizens' Pension Act	National Insurance Act	Various relevant Acts, including Pensions Act and Teachers' Pensions Act	Insurance Act; Income Tax Act; 1969 Draft Regulation; Finance Act	Insurance Act; Income Tax Act; Finance Act
Managed by	Ministry of Social Development and Family Services	National Insurance Board, a corporate body that reports to the Ministry of Finance	Ministry of Finance or relevant ministry	Trustees, Financial services firms, with supervision by the Central Bank of Trinidad and Tobago	Financial services firms, with supervision/regulation by the Central Bank of Trinidad and Tobago/ Trinidad and Tobago Securities and Exchange Commission[4]
Financing	General Budget	Investment Income and 13.2 per cent of contributors' salaries (1:2 employee-employer ratio)	Paid from the Consolidated Fund (general budget expenditure)	Employer and employee contributions	Individual contributions, however, employers may contribute
Retirement Age	65+	Flexible, between 60 and 65	Varies from 45 to 60 years of age for an unreduced pension[2]	Based on plan (often 60 years of age)	Based on maturity date, typically chosen between 50 and 60 years of age
Benefits	Means Tested, maximum benefits of TT$3,500, decreasing scale based on monthly income	Minimum retirement pension of $3,000[1], once a minimum of 750 (weekly) contributions are met	Defined benefit	Defined benefit and defined contribution rules vary	Typically defined contribution, no guaranteed indexation, linked to returns.
Coverage	All persons, 65+, subject to residency and income criteria	All employed persons (once contributing)	Membership of relevant profession and plan rules	Membership of relevant profession and plan rules	Based on annuity policies.

Source: Adapted from Reyes and Bronfman (2014), Authors' Construction
Notes:
[1] Minimum pension enacted in February 2012.
[2] The retirement age within the protective services are typically lower than that for civilians, ranging from 45 – 60 years.
[3] Private Occupational Pension Plans are pension plans established under trust by employers for their employees. These employers can be in the private or public sector. For a full list of active private occupational pension plans, see Active Pension Plans in Trinidad and Tobago.
[4] Insurance companies offer annuities and other financial institutions offer annuity savings products. The Trinidad and Tobago Securities and Exchange Commission regulates annuity saving products offered by banks and the Unit Trust Corporation.

3.2.1 Zero Pillar, Senior Citizens' Pension

The Senior Citizens' Pension was established in 1939 (Reyes and Bronfman 2014), is currently managed by the Social Welfare Division of the Ministry of Social Development and Family Services, and covers all persons who meet certain income and residency criteria. The current payout benefits persons with other incomes below $2,500 and who have resided in Trinidad and Tobago for at least 20 years preceding the date of application, with absences not exceeding five years in total. Alternatively, the applicant must reside domestically and have lived 50 years in total in Trinidad and Tobago. In June 2017, there were 92,337 recipients of the Senior Citizens' Pension (SCP), roughly 64.4 per cent of eligible persons aged 65 and older **(Table 4)**. This increased to approximately 109,132 persons at the end of September 2021[16], or roughly 67.7 per cent of eligible persons **(Chart 6)**. *Coverage* of the SCP has always been high, with prior reports suggesting that, on average, 80.0 per cent of persons over 65 years of age "from as far back as 1995" have been eligible for payout under the zero-pillar arrangement (Reyes and Bronfman 2014). In 2011, 82.0 per cent and 78.0 per cent of the male and female population aged 65 and over, respectively, were accessing benefits under the SCP (Reyes and Bronfman 2014).

[16] See the Trinidad and Tobago Social Sector Investment Programme 2022, pp. 163.

The current maximum SCP pay-out is $3,500.00 per month, which is set at a level above the minimum wage (roughly $3,033.00 per month or $17.50 per hour), the World Bank's international poverty line (US$1.90/day), the inflation-adjusted national poverty line[17] (around TT$2,300.00 per month) and the average value of social pensions from select countries **(Chart 7)** (Ministry of Labour 2021; Ministry of Planning and Sustainable Development 2014). Moreover, available data suggests that as at June 2017, roughly 72.4 per cent of all recipients received the maximum payout under the SCP programme **(Table 4)**. The combination of the aforementioned facts suggests more than ample *adequacy* of benefits, particularly considering that social pensions are not linked to one's productive years or previous earnings. Due to the high coverage and adequacy of the SCP, it is likely that the SCP guarantee acts as a disincentive to be economically active.

Regarding *sustainability*, the SCP is the largest single social expenditure of the Central Government and currently averages around 2.5 per cent of GDP, and 7.5 per cent of total government expenditure **(Chart 8)**. This compares to an average of at least 1.0 per cent of GDP in several Latin American countries, 2.0 to 3.0 per cent of GDP for African countries, and 7.8 per cent of GDP in OECD countries[18] (World Bank 2005; OECD 2020; Bando, Galiani and Gertler 2021). Moreover, the ageing population and lower fertility rates will have the contrasting effects of increasing social security spending and reducing the tax base, respectively, which can further compromise overall fiscal sustainability. One estimate suggests that expenditure on SCP can increase to $7.4 billion by 2050 (Ramrattan 2017), almost double the expected FY2022 expenditure.

Table 4: Senior Citizens' Pension, Number of Recipients

Senior Citizens' Pension (TT$)	Number of Recipients June 2016	Number of Recipients June 2017	Year-on-year per cent growth
3,500	65,446	66,815	2.1
3,000	1,420	1,418	-0.1
2,500	404	426	5.4
2,000	18,886	20,362	7.8
1,500	1,289	1,428	10.8
1,000	941	1,431	52.1
500	165	457	177.0
Total SCP recipients	88,551	92,337	4.3
Persons aged 65+	137,877	143,452	4.0
Total SCP recipients (per cent of persons aged 65+)	64.2	64.4	

Source: Tenth actuarial valuation of the National Insurance System, World Databank Update October 2021

Notes:

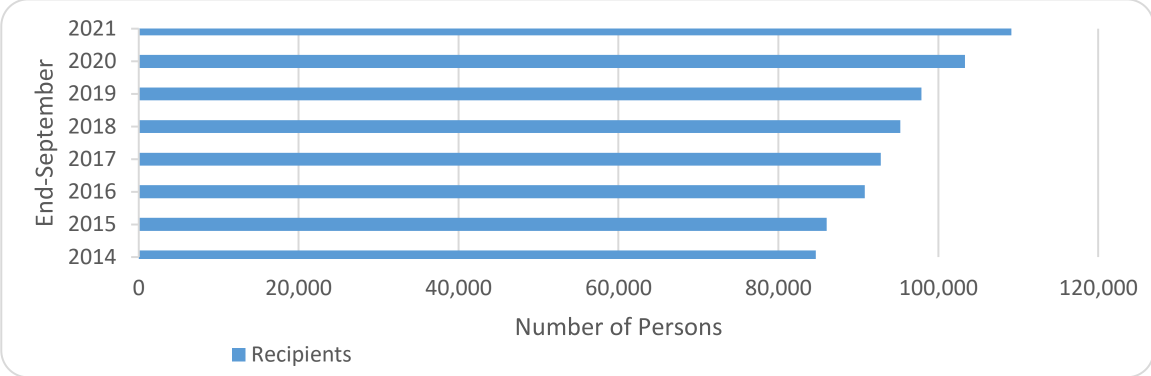
[1] At the time of the tenth actuarial valuation, the maximum statutory limit was $4,500 and the schedule of senior citizens' pension payout was as follows (7-tier schedule): other income ≤$1,500, received $3500; $1,500 < other income ≤ $2,000, received $3,000; $2,000 < other income ≤ $2,500, received $2,500; $2,500 < other income ≤ $3,000, received $2,000; $3,000 < other income ≤ $3,500, received $1,500; $3,500 < other income ≤ $4,000, received $1,000: $4,000 < other income ≤ $4,500, received $500. This schedule was in effect from December 2015 to December 2018.

[2] The maximum statutory limit has since been increased to $5,500. The current schedule of senior citizens' pension payout is as follows (4-tier schedule): other income ≤$2,500, receives $3500; $2,500 < other income ≤ $3,500, receives $2,500; $3,500 < other income ≤ $4,500, receives $1,500; $4,500 < other income ≤ $5,500, receives $500. This schedule came into effect on January 1, 2019.

[17] Latest available poverty line estimates for Trinidad and Tobago, based on the Household Budgetary Survey (HBS) 2008/2009, is US$6.80 per day. Adjusted by average year-on-year headline inflation for the period 2010 – 2021, the inflation-adjusted national poverty line was roughly $2,300 per month.

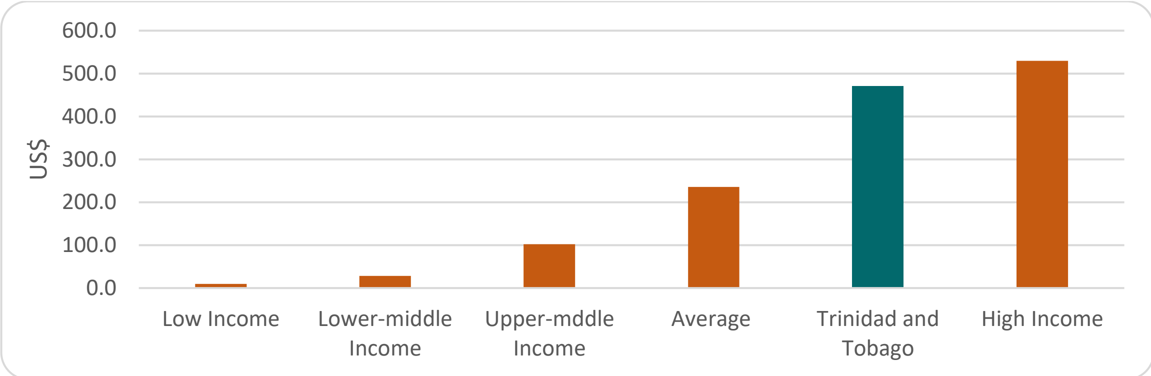
[18] Includes public spending on old-age pensions, as well as survivor pension payments (OECD 2020).

Chart 6: Recipients of Senior Citizens' Pension, as at September 2014 – 2021



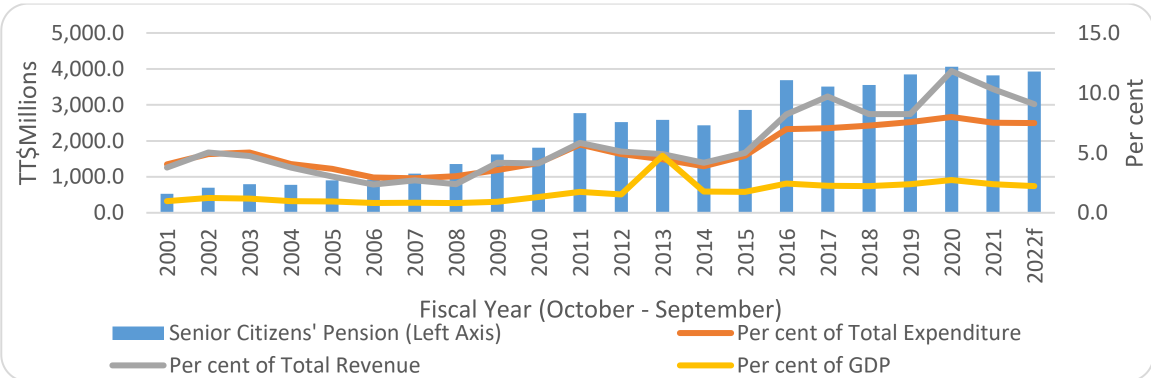
Source: Social Sector Investment Programme, Various Years

Chart 7: Social Pensions based on World Bank Income Classification, 2018



Source: Social Pensions Database, Pension Watch, 2018 and Authors' Calculation
Note: Maximum pension benefit as at 2018 for Trinidad and Tobago was recorded at TT$3,000 (US$470) per month.

Chart 8: Value of Senior Citizens' Pension, FY2010 – FY2022[f]



Source: Ministry of Finance
Note: FY GDP for FY2022 based on estimates from the Ministry of Finance.

3.2.2 First Pillar, National Insurance Scheme

The National Insurance Board (NIB) of Trinidad and Tobago was established in 1971, with employer and employee contributions towards the National Insurance Scheme (NIS) beginning in April 1972. All employees, including unpaid apprentices, must be registered with the NIB. Notwithstanding this, *coverage* is less than optimal. As at

June 2021, the total number of contributing employees reached 446,116 persons[19] (roughly 75.3 per cent of the labour force or 79.6 per cent of persons with jobs[20]) **(Chart 9)**, while the number of employer contributors have been declining **(Chart 10)**. The *adequacy* of benefits is high for contributors with lower incomes. Since 2012, persons who have made the requisite minimum 750 contributions (equivalent to 14.5 years) are entitled to a minimum pension of $3,000.00 regardless of the value of contributions. In 2015, it was revealed that 98.0 per cent of retirees receive the minimum pension, while only 2.0 per cent received above $3,000.00[21], of which the highest payment was recorded at $3,636.55[22] (Wilson 2015). At $3,636.55, the maximum retirement income payout represents roughly 30.0 per cent of the assumed monthly earnings of the highest insured income-class at the time ($12,000.00). This is in contrast to the initial stated design of the NIS, which was expected to deliver retirement benefits between 50.0 per cent to 73.0 per cent of the average earnings (Weise 1969).

The NIS has been confronting *sustainability* issues for some time. Since 2000, contribution rates have been adjusted eight times, from 8.7 per cent of assumed average weekly earnings in 2004 to 13.2 per cent in September 2016, where it stands today **(Tables 5 and 6)**. The earning classes have been altered less frequently, generally in line with, albeit slower than, increasing real incomes **(Table 6)**. The total value of contributions has increased at an average of 5.4 per cent in the ten years to 2021, however, not enough to surpass the growth in retirement benefit expenditure (on average, 10.6 per cent for the same reference period). Notably, despite a higher customer base in 2021, contribution income fell by 3.7 per cent (year-on-year) during the financial year 2021, while retirement benefit expenditure (retirement pension and grants) increased by 3.7 per cent (year-on-year)[23].

Administrative costs have trended upward, averaging $226.0 million from FY2017 to FY2021 (0.79 per cent of total assets), compared with an average of around $198.4 million in the previous five-year period (0.80 per cent of total assets). Administrative costs for FY2021 amounted to $231.2 million (0.74 per cent of total assets) **(Chart 12)**. As a per cent of total assets, administrative expenses are above the OECD average (for select countries) of around 0.2 per cent[24]. Due to the combination of the above-mentioned factors, the NIB has increasingly relied on investment income to meet all expenses: during FY2021, the NIB withdrew in excess of $1.0 billion to meet expenses **(Chart 11)**.

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[19] The approach to determine insured employee contributors was changed during the NIB's financial year 2021 and includes the number of employees paid for each month. This suggests that, previously, only employees who contributed were reported, while employers who contribute fully on behalf of their employees were excluded.

[20] Based on CSO's average labour force and number of persons with jobs for 2021.

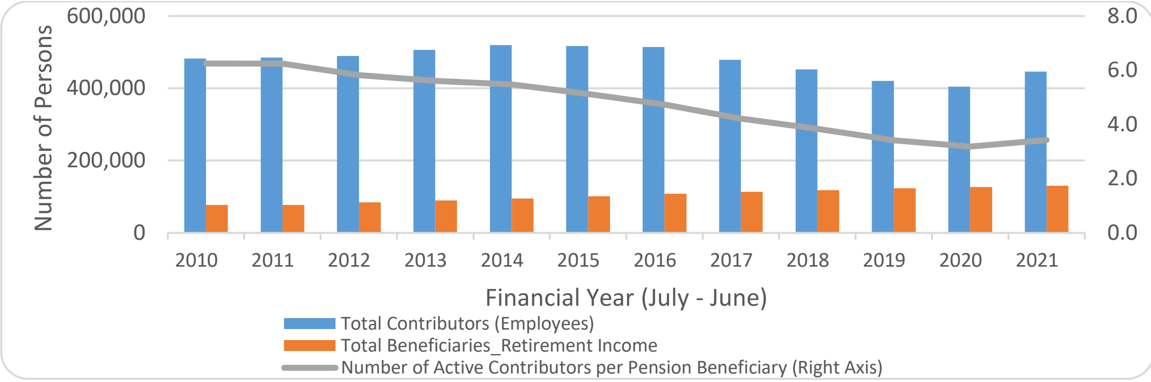
[21] An examination of the 10th Actuarial Review as at 30 June 2016 revealed that "over 95 per cent of pensioners receive the minimum pension".

[22] Payments in excess of 750 contributions are grouped in batches of 25 and provide an increment (between 0.56 per cent to 0.71 per cent of average earnings) above what is owed (OECD/IDB/World Bank 2014). However, the calculation is based on a basic benefit pay-out (see the Trinidad and Tobago Basic Retirement Pension Rates as at 2016), which is typically set between 30.0 per cent to 40.0 per cent of average earnings. Notwithstanding this, the NIB cannot pay below $3,000. For persons who have made less than 750 weekly contributions (the minimum requirement for a basic pension), a one-time (lump sum) Retirement Grant will be paid. For persons who retire on or after January 7, 2008 the Retirement Benefit is equal to three times the value of total contributions, subject to a minimum value of $3,000.

[23] An average of the 10 years to 2021 suggests that retirement benefit expenditure accounts for approximately 84.4 per cent of overall benefits expenditure.

[24] There is heterogeneity across rates, ranging from 0.0 per cent – 0.8 per cent. See Funded Pensions Indicators: Administrative costs as a percent of total assets.

Chart 9: Total Beneficiaries (Retirement Income) vs Total Contributors, FY2010 – FY2021

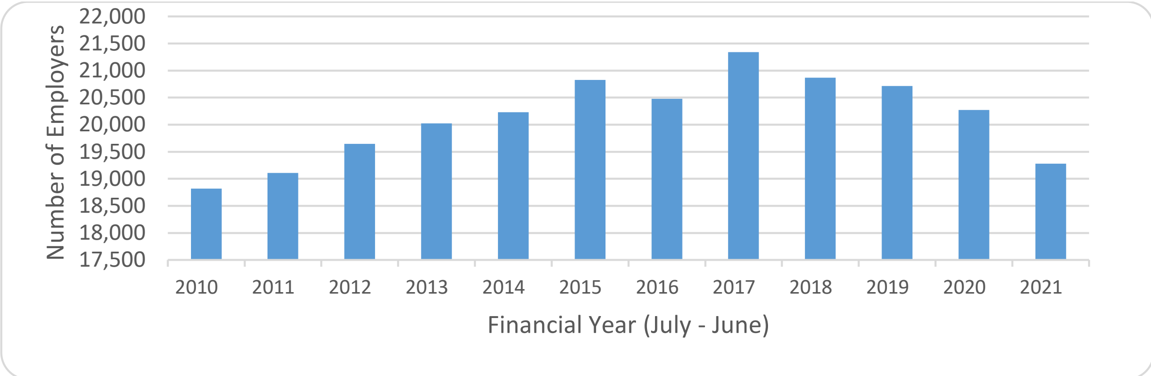


Source: National Insurance Board of Trinidad and Tobago

Note:

[1] Total Beneficiaries (Retirement Income) comprise recipients of Retirement Pensions and Retirement Grants.

Chart 10: Employer Contributors, FY2010 – FY2020



Source: National Insurance Board of Trinidad and Tobago

Table 5: Earning Classes and Contributions from September 5, 2016

Earning Class	Weekly Earnings	Monthly Earnings	Assumed Average Weekly Earnings	Employee's Weekly Contribution	Employer's Weekly Contribution	Total Weekly Contribution
I	200 – 339.99	867.00 – 1,472.99	270.00	11.90	23.80	35.70
II	340 – 449.99	1,473.00 – 1,949.99	395.00	17.40	34.8	52.20
III	450 – 609.99	1,950.00 – 2,642.99	530.00	23.30	46.60	69.90
IV	610 – 759.99	2,643.00 – 3,292.99	685.00	30.10	60.20	90.30
V	760 – 929.99	3,293.00 – 4,029.99	845.00	37.20	74.40	111.60
VI	930 – 1,119.99	4,030.00 – 4,852.99	1,025.00	45.10	90.20	135.30
VII	1,120 – 1,299.99	4,853.00 – 5,632.99	1,210.00	53.20	106.40	159.60
VIII	1,300 – 1,489.99	5,633.00 – 6,456.99	1,395.00	61.40	122.80	184.20
IX	1,490 – 1,709.99	6,457.00 – 7,409.99	1,600.00	70.40	140.80	211.20
X	1,710.00 – 1,909.99	7,410.00 – 8,276.99	1,810.00	79.60	159.20	238.80
XI	1,910.00 – 2,139.99	8,277.00 – 9,272.99	2,025.00	89.10	178.20	267.30
XII	2,140.00 – 2,379.99	9,273.00 – 10,312.99	2,260.00	99.40	198.20	298.20
XIII	2,380.00 – 2,629.99	10,313.00 – 11,396.99	2,505.00	110.20	220.40	330.60
XIV	2,630 – 2,919.99	11,397.00 – 12,652.99	2,775.00	122.10	244.20	366.30
XV	2,920.00 – 3,137.99	12,653.00 – 13,599.99	3,029.00	133.30	266.60	399.90
XVI	3,138.00 and over	13,600.00 and over	3,138.00	138.10	276.20	414.30

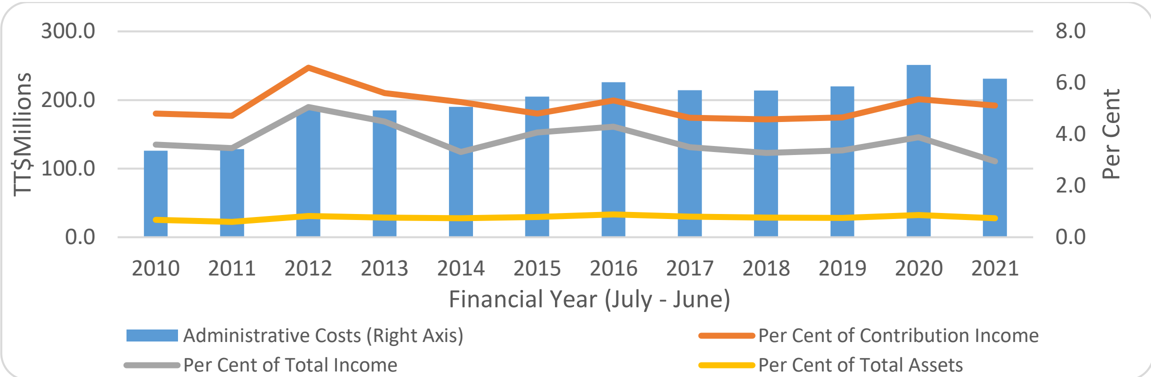
Source: National Insurance Board of Trinidad and Tobago

Table 6: Dates of changes made to Earning Classes and Contributions

Earning classes	Contributions (Contribution Rates)
August 11, 1980	August 11, 1980
May 3, 1999	May 3, 1999
March 1, 2004	March 1, 2004 (8.7 per cent)
January 7, 2008	January 3, 2005 (9.3 per cent)
March 4, 2013	January 7, 2008 (10.5 per cent)
March 3, 2014	January 4, 2010 (10.8 per cent)
September 5, 2016	January 2, 2012 (11.4 per cent)
	March 4, 2013 (11.7 per cent)
	March 3, 2014 (12.0 per cent)
	September 5, 2016 (13.2 per cent)

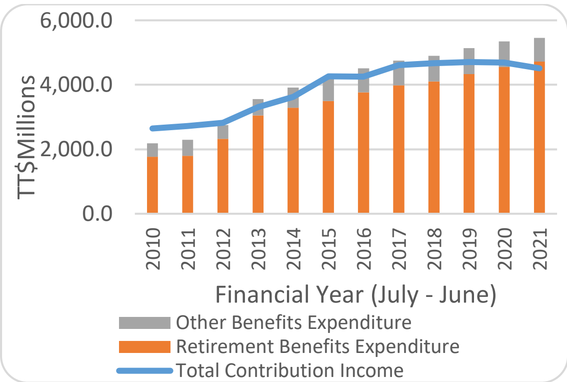
Source: National Insurance Board of Trinidad and Tobago
Notes:
[1] Accounts for changes made after the start of contributions on April 10, 1972.
[2] Standard contribution rates as a per cent of assumed average weekly earnings applied since 2004.

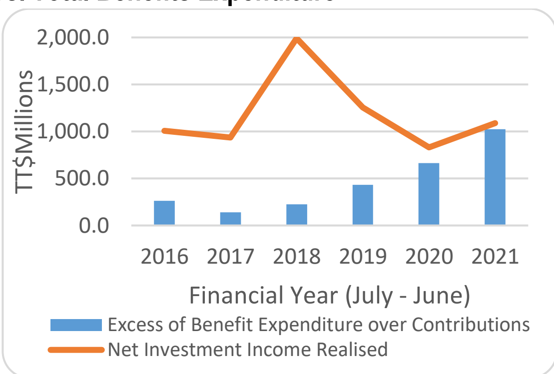
Chart 11: Administrative Costs



Source: National Insurance Board of Trinidad and Tobago, Annual Reports

Chart 12: Total Contribution Income vs. Total Benefits Expenditure





Source: National Insurance Board of Trinidad and Tobago, Annual Reports
Note:
Other Benefits Expenditure include; long-term benefits other than retirement benefits (that is, invalidity and survivor's benefits), short-term benefits (sickness, maternity, special maternity and funeral grant benefits) and employment injury benefits (disablement, medical expenditure, injury and death benefits). Administrative expenses are excluded.

3.2.3 Second Pillar, Occupational Pensions

The second pillar comprises pensions for persons in the public service and the private sector. Referred to in **Table 3** as "Second Pillar: A", public service pensions are paid from the general budget and are non-contributory, while "Second Pillar: B" refers to private occupational pensions which require contributions (from employers and/or employees) and comprises both government-sponsored and private sector occupational pensions.

Without data on the number of beneficiaries, it is difficult to ascertain the *coverage* of public service pensions (Second Pillar A). However, evidence suggests that coverage is less than optimal. The public sector is relatively large in Trinidad and Tobago when compared with other countries within the LAC region[25]; based on available data for 2021, approximately 26.0 per cent of persons with jobs (on average, 145.7 thousand persons) are employed by the Government across the public service and statutory boards[26]. Of the persons employed, daily paid workers are not automatically eligible for pensions and are instead given the option to (voluntarily) contribute to the Provident Fund[27]. It is unclear how many public sector workers are daily rated. Moreover, contract workers, although employed by the public service, are not deemed "public officers", and therefore do not qualify for a pension at retirement. Contract workers are instead eligible for gratuity payments at the close of each contract[28].

Adequacy of public service pensions is high. A review of the Pensions Act[29] (and the Teachers Pensions Act[30]) suggests a common pay-out rule of 2.0 per cent per year (1/600th per month) of the last salary before retirement, until a maximum of two-thirds (400/600) of an employee's pensionable salary is reached. The maximum pension is reached after 33 1/3 years of service[31]. Meanwhile, the *sustainability* of non-contributory pensions for public service employees is being threatened. Non-contributory PAYG pension disbursements have steadily increased, from less than 1.0 per cent of GDP in FY2012, to 1.5 per cent of GDP in FY2021, and from around 3.3 per cent of total government expenditure to 4.9 per cent, for the same period **(Chart 13)**.

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[25] On average, public-sector employment as a per cent of total employment across the LAC region averaged 11.9 per cent in 2018 (OECD 2020).

[26] Includes persons employed by statutory boards, who may be eligible for private occupational (government-sponsored) plans.

[27] For FY2022 (October 2021 – September 2022), retirement (and other) benefits to daily-rated workers were budgeted for in the amount of $175,000, suggesting few beneficiaries and/or inadequate benefits from the Provident Fund.

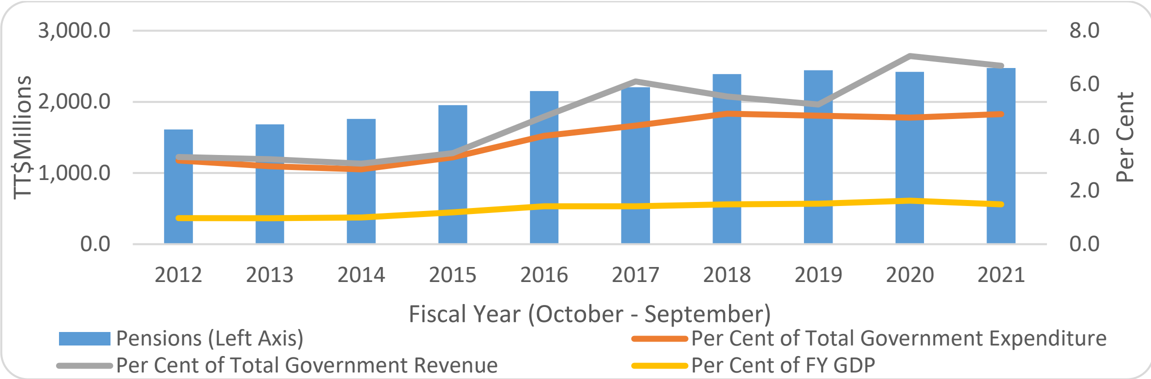
[28] See the Summary of Proceedings of the Trinidad and Tobago Joint Select Committee on Social Services and Public Administration.

[29] Trinidad and Tobago Pensions Act pp. 38.

[30] Trinidad and Tobago Teachers Pensions Act pp. 20.

[31] According to the OECD, the European Union (27 countries) has a gross pension replacement rate of 54.3 per cent of pre-retirement earnings and a net pension replacement rate of 68.0 per cent. See OECD Data.

Chart 13: Public Service Pensions[1] (FY2012 – FY 2021)



Source: Ministry of Finance and Authors' Calculation

[1] Excludes: Public Officers' Gratuities; Assisted Secondary School Teachers' Gratuities; Gratuities to Technical and Professional Officers; Ex Gratia Awards; Judges' Gratuities; Fire Service Gratuities; Police Gratuities; TTDF Gratuities; Port Services Gratuities; VTEP Gratuities; and, Prisons Gratuities. However, few categories comprise both pensions and gratuities and were included: President's Pensions and Gratuities; Heads of Missions Pensions and Gratuities; and Industrial Court Pensions and Gratuities.

Note: FY GDP for FY2022 based on estimates from the Ministry of Finance.

As of December 2021, there are 177 active private occupational pension plans (Second Pillar B) registered with the Central Bank of Trinidad and Tobago **(Table 7)**. Overall *coverage* of private occupational pensions is low. At the end of December 2021, there were 59,714 active members, 14,503 deferred pensioners and 28,002 pensioners **(Table 8)**. Combined, active members and deferred pensioners represent roughly 12.5 per cent of the labour force (based on CSO data for 2021). Meanwhile, the *sustainability* of private occupational pensions may be at risk. Of the 177 active plans, 43 are Government-sponsored[32]. In December 2021, 21 of the 43 government-sponsored occupational pensions plans reported funding deficits on either an ongoing or termination basis. The total funding deficit for Government-sponsored plans approximated $1.0 billion. Meanwhile, 44 (out of 137) privately sponsored plans were in deficit, with a total funding deficit of $0.435 billion for 2021. Typically, employers have several options when dealing with pension plans in deficit. These include: paying additional contributions or a lump sum into the fund; changing the benefit structure to a less costly option; closing the pension plan to new entrants; or, deferring action as pension plans can continue to operate despite a deficit.

It is difficult to ascertain the *adequacy* of benefits from private occupational pension plans. Of the 177 plans, 101 (57.0 per cent) are defined benefits, and therefore retirement benefits are predetermined, based on a set formula. This set formula considers an employee's *pensionable salary* (which can either be the final pre-retirement salary or an average salary), *pensionable service*, and a "*multiplier*", commonly referred to as the accrual rate[33]. Of note, prior research conducted by the World Bank suggests that defined benefit pension payouts typically vary between two-thirds (the maximum pension entitlement for any officer in the public service) and 85.0 per cent of one's final pre-retirement income (Reyes and Bronfman 2014). Meanwhile, defined contribution benefit pay-outs are based on contribution amounts and investment earnings, as well as estimates of one's remaining years, and are therefore more difficult to calculate for persons enrolled in these schemes. A review of a sample number of plans revealed that, combined, the employee and employer contribution rates for defined contribution private-sponsored occupational pension plans are typically around 10.0 per cent.

[32] This compares to the 120 wholly-owned, majority-owned, minority-owned and indirectly-owned state enterprises, and eight statutory corporations (See the Trinidad and Tobago State Enterprises Investment Programme, pages 60-64).

[33] The accrual rate is used to determine what per cent of one's pensionable salary will be paid as the retirement benefit (Equable Institute 2019). An accrual rate of 2.0 per cent is not uncommon in the literature.

Table 7: Selected Pension Sector Data

/As at December 2021/

Total number of active plans	**177**
Government-Sponsored	43
Private Employer-Sponsored	137
Total Number of Defined Benefit plans	**101**
Number of defined benefit plans sponsored by government/government-related entities	35
Number of defined benefit plans sponsored by a private company	66
Total Number of Defined Contribution plans	**57**
Number of defined contribution plans sponsored by government/government-related entities	7
Number of defined contribution plans sponsored by a private company	50
Total Number of Hybrid Contribution plans	**19**
Number of Hybrid contribution plans sponsored by government/government-related entities	1
Number of Hybrid contribution plans sponsored by a private company	18
Total Assets ('000)	**$56,144,728**
Government-Sponsored	$35,333,598
Private Employer-Sponsored	$23,811,130
Defined Benefit	$50,082,434
Defined Contribution	$3,567,153
Hybrid	$5,495,141

Source: Central Bank of Trinidad and Tobago

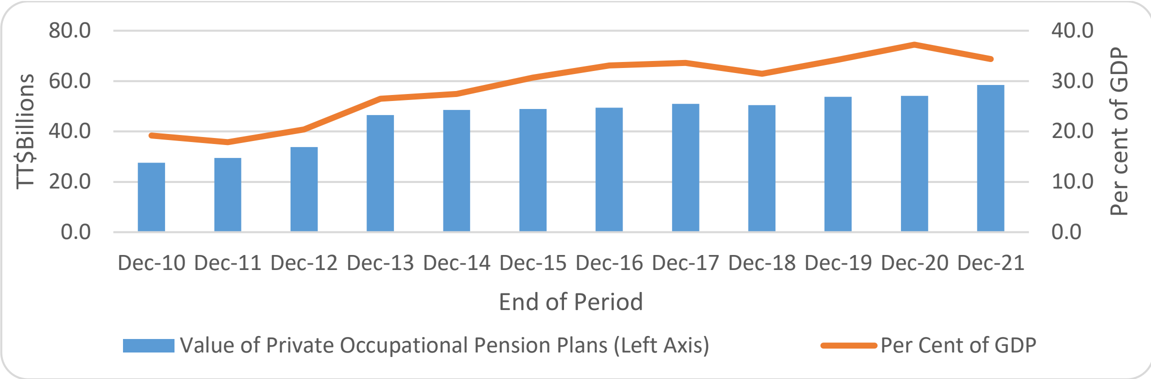
Table 8: Members of Private Occupational Pension Plans,

/As at December 2021/

Pension Plan Sponsor	Active Members	Deferred Members	Pensioners
Government	29,294	2,788	17,142
Private	30,420	11,715	10,860
Total	**59,714**	**145,03**	**28,002**

Source: Central Bank of Trinidad and Tobago

Chart 14: Value of Private Occupational Pension Fund Plans[1, 2]



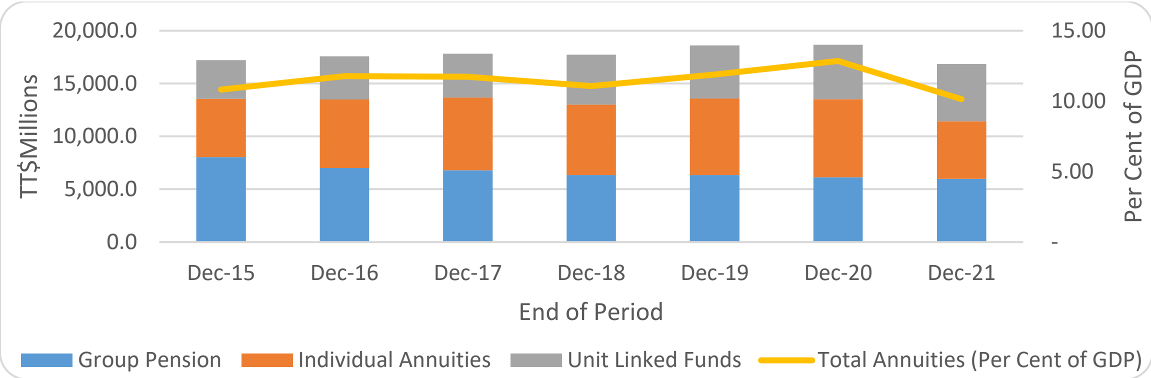
Source: Central Bank of Trinidad and Tobago
Notes:
[1] For periods prior to 2013, coverage of pension funds is approximately 80.0 per cent of total assets. For 2013 and all periods thereafter, coverage of pension funds is approximately 100.0 per cent of total assets.
[2] 2021 CY GDP based on estimates from the Ministry of Finance.

3.2.4 Third Pillar, Voluntary Pensions, Annuities and Individual Savings

Insurance Companies (including those who write Annuities and Pensions) are required to be registered under the Insurance Act. Since 2004, the Central Bank of Trinidad and Tobago is the supervisor and regulator of this sector, with the main aim of policyholder protection.

Demand for private, individual annuities in Trinidad and Tobago could be stronger. Broadly in line with the consensus in the literature (Rusconi 2008; Lindeman and Yermo n.d.), *coverage* is relatively low; latest estimates suggest roughly 140,000 annuity policies, less than one-third of the labour force (Reyes and Bronfman 2014), which may have since decreased in 2021 due to the COVID-19 pandemic. In particular, individual annuities decreased by roughly $2.0 billion to $5.4 billion in December 2021 when compared to a year earlier, suggesting some liquidation of annuity contracts. It is difficult to assess *adequacy*, given that annuities are essentially defined contribution plans, with benefits linked to contributions and investment earnings. Meanwhile, with appropriate (albeit narrow) supervision by the Central Bank, the financial *sustainability* of the annuities sector should not be wholly compromised in the face of (temporary) adverse socio-economic shocks.

Chart 15: Annuities



Source: Central Bank of Trinidad and Tobago

Notes:

[1] Group Pension include "agreements under which an employer establishes a plan to provide its employees with a pension" (Central Bank of Trinidad and Tobago n.d.). Group Pensions may be voluntary or mandatory.

[2] Individual Annuities refer to "contracts under which one party (the insurer) promises to make a series of periodic payments to someone (called the annuitant) in exchange for a premium or series of premiums" (Central Bank of Trinidad and Tobago n.d.).

[3] Unit-Linked Funds include "Insurance Contracts with an embedded derivative linking payments on the contract to units of an internal investment fund set up by the Group with the consideration received from the contract holders" (Central Bank of Trinidad and Tobago n.d.). Approximately 90.0 per cent of funds included within Unit-Linked Funds are individual annuities, while the remainder is directed towards life insurance plans.

[4] 2021 CY GDP based on estimates from the Ministry of Finance.

3.3 Overview of Enacted Reforms

Domestically, pension system reform has been parametric and regulatory, as pillars have remained structurally unchanged since their beginning. Since its advent in 1939, the Senior Citizens' Pension, as it is called today[34], has remained non-contributory, means-tested and residency-based. To secure a decent standard of living for the elderly, the statutory limit (the maximum SCP benefit) as well as the qualifying income ceiling and tier schedule have been adjusted several times. Most recently, since December 2015, the former was set at $3,500.00, while the latter was set at $5,500.00 in 2019 **(Table 9)**. Other than the adjustments made to the maximum benefit and income ceiling, one other change includes the easing of residency criteria. Currently, applicants for the SCP must reside domestically at the time of application, having lived in Trinidad and Tobago for the 20 years preceding the application or 50 years in total, the latter criterion of which was decreased from 60 years.

Table 9: Maximum Benefit and Qualifying Income Ceiling, 2000 - Present

Effective Date	Maximum Benefit	Qualifying Income Ceiling
January 1, 2019	$3,500	$5,500
December 1, 2015	$3,500	$4,500
September 1, 2010	$3,000	$3,000
May 1, 2010	$2,500	n.a
October 1, 2008	$1,950	$2,800
October 1, 2007	$1,650	$2,500
October 1, 2006	$1,350	$2,150
January 1, 2002	$1,000	n.a
October 1, 2001	$800	$720
October 1, 2000	$720	n.a

Sources: Annual Budget Statements, Various Years; The Parliamentary Debates Official Report (No. 1 of 2009); Old Age Pensions (Amendment and Validation) Bill,2002
n.a. Not Accessible

NIS contribution rates have been changed several times, as have earning classes **(see Table 6 and Section 3.2.2)**, to better align with increasing real incomes and to preserve the financial soundness of the NIS system. Notably, the number of earning classes expanded from eight in 1972, to 12 in 1999, to 16 in 2008. Meanwhile, in October 2003, the NIB first applied a minimum pension for each pensioner, valued at $1,000.00, for persons meeting the minimum contribution requirement (750 weekly contributions). Since then, the minimum pension has increased to $2,000.00, effective January 1, 2008, and to $3,000.00, effective February 1, 2012, where it currently stands. Effectively, the NIS pays a flat benefit to all retirees, regardless of total contributions and pre-retirement income, once the minimum 750 contributions are made. Contribution rates have been standardised since March 1, 2004, based on assumed weekly earnings, while contribution payments have always been in the ratio 1:2 between employee and employer. Notably, the NIS and SCP systems are, de facto, harmonised. This means that for a person whose only other source of income is the NIS, the SCP will make up the shortfall of the cap on joint incomes. Currently, the cap on joint incomes is $6,000.00 (effective January 1, 2019); persons in receipt of the minimum NIS pension ($3,000.00), is eligible for up to $3,000.00 under the SCP, and a minimum of $500.00 once all sources of income do not cross the maximum qualifying pension of $5,500.00. Previously, the cap on joint incomes was set at $5,000.00, which took effect in December 2015.

[34] The Senior Citizens' Pension was previously called the Old Age Pension, and the Senior Citizens' Grant.

The first occupational public service pension arrangement for a subset of public servants was defined by the Pension Act of 1934. Subsequent revisions included broader categories of public servants (teachers, as well as members of the police, fire and prisons services). Public service pensions are non-contributory, PAYG, defined benefit schemes. Notably, a minimum pension is paid to eligible public servants (officers serving a minimum of ten years); effective January 2008, the minimum pension was set at $1,650.00, which was subsequently increased to $3,000.00 in September 2010 and, finally, $3,500.00 in January 2019. However, public service pension rules are fragmented. For example, the Teachers Pension Act outlines that every teacher with service above ten years is eligible for a minimum monthly pension of $3,500.00 effective *October 1, 2014*. This was increased from $3,000.00 in September 2010, $1,950.00 in October 2008, $1,650.00 in October 2007 and $1,150.00 in October 2006.

Occupational private sector pensions have existed since the 1960s, encouraged by the tax concessions under the Income Tax Act. According to Weise (1969), by the end of 1965 there were over 220 approved operational plans covering more than 30,000 members of the private sector. Not much is publicly known about individual reforms for each private pension scheme. However, tax concessions are still used to encourage mandatory and voluntary contributions towards private retirement income arrangements. Effective January 1, 2022, tax relief is granted for contributions of up to $60,000.00 to any approved annuity, tax savings and pension fund plans, including up to 70.0 per cent NIS contributions. This was increased from $50,000.00, which was effecive from January 2015.

In addition to parametric reforms, regulatory reforms are underway. In 2004, the Pensions Act was amended to allow for the regulation of the private occupational pension sector by the Central Bank of Trinidad and Tobago. Prior to 2004, the sector was overseen by the Ministry of Finance. In preparation for the passage and enactment of the Occupational Pension Plans Act, the Central Bank drafted an Occupational Pension Plans Policy Proposal Document[35] in 2012, after widespread consultation with stakeholders. Notwithstanding this, the process is still in the consultation phase[36]. In addition, there is an increasing reliance on tax amnesties which have been legislated to recover tax arrears. Currently, privacy provisions in tax legislation protects the taxpayer as tax information cannot be shared with persons not involved in tax administration or law enforcement (West 2020). Most recently, the National Insurance (Amendment) Act, 2022 was assented to in July 2022. The Act amends the National Insurance Act to grant waivers of penalties and interests for employers not yet registered with the National Insurance Board to do so[37], from July to January 2023[38]. Generally, tax amnesties generally signal to delinquent taxpayers that the measures to mitigate tax evasion are weak and, while revenue collection may improve in the short-term, the literature suggests little or no impact on compliance in the long run (Baer and Le Borgne 2008; Fitrady n.d.).

[35] See Policy Proposals for the Establishment of an Occupational Pension Plans Bill (Central Bank of Trinidad and Tobago 2012).

[36] The next stage will seek to consolidate feedback and present findings to the Minister of Finance. The third and fourth stages are collaboration and completion, respectively, whereby the former proposes the establishment of working groups and the start of the legislative reform process, while the latter will focus on executing reforms.

[37] A similar exercise was conducted in 2012 whereby all penalties and interest were waived on outstanding contributions as at September 2011 to June 2012. See Employers Waiver of Penalty and Interest (The National Insurance Board of Trinidad and Tobago n.d.).

[38] See National Insurance (Amendment) Bill, 2022, Bill Essentials and the National Insurance (Amendment) Act, 2022 and, the most recent release, Minister of Finance extends NIS Amnesty to January 31st, 2023.

4.0 Policy Recommendations

While a multi-pillar pension system is best suited to meet a range of objectives, pension system reform is country-specific. There is no one-size-fit-all template that will appropriately reflect the diversity of each country's circumstances. In Trinidad and Tobago, retirement-income system reform needs are diverse and challenging. A growing ageing demographic and decreasing fertility, changing labour market trends together with low compliance and a lack of enforcement for the mandatory contributory public scheme (NIS) are among the main challenges threatening the financial sustainability of pension systems. Notwithstanding this, reforms that aim to increase the financial soundness of pension systems, such as decreasing benefits and increasing contribution rates and the retirement age, are generally unpopular among the working class and can sometimes come at a high political cost. On the other side of the debate, concerns of old-age income inequality and adequacy persist alongside limited fiscal space and high debt, underscoring the need for credible adjustments to pension systems that balance trade-offs between contrasting objectives. This section provides initial considerations for the Trinidad and Tobago pension system.

4.1 Zero Pillar, Senior Citizens' Pension

Given very generous eligibility criteria, the SCP was designed to improve universal pension coverage. However, it does so at great and increasing fiscal cost, which implies that the *sustainability* of the programme is of foremost concern. Alongside sustainability, the SCP in the coming years must ensure the *adequacy* of benefits – although not at the expense of distorting labour force participation[39] – while ensuring the *coverage* of the most vulnerable. The three objectives may be balanced by:

I. **Review the SCP benefit**. The SCP is currently set at 115.0 per cent of the minimum wage, much higher than the ILO Convention on minimum standards in social security – that is, 40.0 – 80.0 per cent of the earnings of unskilled manual workers (the minimum wage) (Hagemejer 2011) – which can have distortionary impacts on labour force participation. The SCP, therefore, should not be further adjusted until it settles at, or some per cent of, the minimum wage, where it should be pegged. The literature suggests a maximum social security pension of no more than 80.0 per cent of the minimum wage (Smith 2017). Any changes to the SCP should be in the context of adjustments to the minimum wage.

II. **Improved targeting through the harmonisation and automation of SCP and NIS information management systems.** This will help to better monitor the benefits paid to the qualifying recipients of the SCP. The SCP pay-out is dependent on the NIS retirement benefit. With almost 70.0 per cent coverage of persons over 65 years eligible for the SCP, and an estimated 70.0 per cent of qualifying individuals receiving the maximum SCP benefit ($3,500.00) as at June 2017, payment discrepancies due to coordination issues between the Ministry of Social Development and the National Insurance Board cannot be discounted.

4.2 First Pillar, National Insurance Scheme

Successive Actuarial Reviews have recommended numerous parametric changes to the NIS. The last available (tenth) Actuarial Review was completed in 2018 for the period ending 30 June 2016. Also in 2018, an inquiry into

[39] Despite no consensus in the literature, high pay-outs from non-contributory pensions can have adverse effects on the supply of labour and formal employment. It is necessary therefore that policy makers understand the labour market impacts of the SCP.

certain aspects of the NIS was conducted by a Joint Select Committee (JSC) on Finance and Legal Affairs, reiterating recommendations made but not implemented from the seventh, eighth and ninth actuarial reviews.

Of increasing importance, and similar to the SCP, the *sustainability* of the NIS is in question. The Actuarial Reviews and 2018 JSC note that "a long-term strategy of either increasing National Insurance contributions or reducing benefit scales needed to be developed to address the shortfall in current contribution rates compared with long-term benefit costs". More explicitly, recurring recommendations (specific to the retirement benefits and contributions) include:

I. The automatic indexation of maximum insurable earnings and benefit amounts, thereby increasing the real value of contributions into the NIS and the "earned" part of pensions[40];
II. Reducing the real value of the minimum pension (linked to I. above); and
III. Increasing the retirement age to 65 (See Appendix 1 for a review of List of Proposed Recommendations related to Retirement Pensions).

Further consideration could be given to:

I. **Gradual increases to the number of mandatory weekly contributions to 1,000** (approximately 19.5 years) from 750 (14.5 years). While higher than what typically obtains in other regional counterparts[41], a minimum of 1,000 weekly contributions to qualify for NIS is in line with the residency criteria for SCP eligibility (set at 20 years preceding the application for SCP). The five-year increase in this eligibility criterion is also in line with the proposed five-year increase in the retirement age.
II. **Reconciliation of Companies Registry and tax data collected by the Board of Inland Revenue with employers and employees registered with the NIB.** With the shift towards digitising government services, large volumes of data become more easily accessible. However, data that is collected is only useful if analysed and intentionally applied to improving business operations. Every effort should be made to digitise, centralise and harmonise processes across various ministries and organisations, and legislate the use of taxpayers' data (with the necessary provisions for data privacy issues), to ensure data usage efficiency. Simultaneously, the NIB should be adequately staffed to effectuate the digital transition to improve employer compliance with the NIB.
III. In Trinidad and Tobago, tax non-compliance is high (West 2020), while steep penalties for missed NIS payments may deter contributors who want to comply with laws[42] but may be temporarily unable to. This is evidenced by the increasing reliance on tax amnesties. In 2012, authorities legislated a waiver of penalties and fees in order to collect unpaid NIS contributions. In 2022, this exercise was again used in an attempt to settle outstanding accounts. In light of the above, it is recommended that amnesties be used judiciously in favour of a case-by-case approach of "fair" installment payments, while simultaneously strengthening enforcement to discourage the non-payment of taxes (Baer and Borgne 2008). In the case

[40] The "earned" part of pensions refers to what would be paid to retirees if the minimum $3,000.00 pension was not applicable. See Basic Retirement and Invalidity Pension Rates 2016 (The National Insurance Board of Trinidad and Tobago n.d.).
[41] In other Caribbean jurisdictions 500 to 750 minimum weekly contributions are required for a minimum pension under the National Insurance Scheme. For example, in Barbados and Grenada, a minimum of 500 weekly contributions are required. In Guyana, 750 weekly contributions are needed to qualify for 40.0 per cent of the relevant wage while St. Vincent and the Grenadines is gradually moving towards a minimum of 750 weekly contributions by 2028, from 500 minimum weekly contributions, over a period of 15 years. Meanwhile, 30 years of national insurance contributions are required to be eligible for the Basic State Pension in the United Kingdom (UK).
[42] According to the National Insurance Act, 15 days after the due date, missed payments attract either a penalty of 25.0 per cent on the outstanding sum or 100.0 per cent of the outstanding sum if payments are in arrears for greater than five years. In addition, interest on the entire sum (penalty and outstanding balance) is set at 15.0 per cent per year, until the sum is paid.

of the former, a legislative amendment will be needed, while in the case of the latter, appropriate resources must be directed towards improving compliance.

4.3 Second Pillar, Occupational Pensions

Second Pillar (A) – public service pensions – are non-contributory, paid from the general budget and have been gradually increasing. The public sector is relatively large in Trinidad and Tobago, with the General Government anticipated to have a strong impact on labour market and employment dynamics for the foreseeable future. Assuming a working life duration of around 35 years[43], it becomes necessary to ensure the *sustainability* of PAYG public service pensions. Moreover, with the exclusion of contract workers (approximately estimated at 13,800 persons within ministries and departments, as at 2018)[44] and daily paid workers, *coverage* is less than optimal. Noting that it is important to consider long-term as opposed to short-term policies, the recommendations are as follows:

I. Similar to the residency criteria of the SCP and the above-recommended increase to the number of national insurance weekly contributions (to 1,000 from 750), public officers and teachers should be eligible for a (reduced) retirement pension after 20 years of service, not a minimum pension after ten years as it currently stands, effectively harmonising the eligibility criteria of the SCP, NIS and public service occupational pensions[45].

Regarding the Second Pillar (B) – private occupational pensions – the Occupational Pension Plan Act will extend the regulatory and supervisory powers of the Central Bank, in-keeping with international best practice. Pension assets form a considerable part of the domestic financial market, estimated at around 16.0 per cent of Financial System Assets as at December 2022. Improving oversight and regulation will benefit all stakeholders, particularly the members and beneficiaries.

4.4 Third Pillar, Voluntary Pensions, Annuities and Individual Savings

To a great extent, several aspects of the current pension system have led to the transfer of responsibility of the adequacy of pensions, as well as the risks of pension contracts, away from beneficiaries and unto the Government, the main pension provider. A voluntary pension is typically defined contribution in nature and may therefore be seen as a less attractive option as the cost and risks are borne by the beneficiary. Moreover, despite generous economic (tax) incentives, insufficient disposable income[46] and other issues such as a lack of financial literacy may not allow for the significant buy-in into voluntary pension plans.

The research suggests:

I. **An expanded financial literacy programme**. In particular, early and continuous intervention through compulsory national financial literacy education programmes and specifically developed curricula for primary- and secondary-school-aged children. This can be achieved with the help of the Central Bank of Trinidad and Tobago, through its National Financial Literacy Programme (NFLP). The NFLP was

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[43] Duration of working life is an estimation of the number of years a person is expected to be in the labour force. This research assumes an average working life of 35 years, as employees are expected to enter the workforce around 25, and retire at 60.
[44] Summary of Proceedings of the Trinidad and Tobago Joint Select Committee on Social Services and Public Administration.
[45] Certain members of the Defence Force of Trinidad and Tobago are eligible for retirement pension after 20 years of service and an unreduced pension after 26 2/3 years of service.
[46] In a 2022 survey conducted by the NFLP, it was revealed that 29.0 per cent of respondents did not have money left over at the end of the month. See The National Financial Literacy Survey Results and Planned Interventions.

established in 2007 and was borne out of the need to spread financial awareness, due to “continuous observation of the general public’s tendency to exhibit little regard toward personal savings and retirement” (National Financial Literacy Programme 2022). Since inception, the NFLP has engaged scores of stakeholders through its community outreach and requests for services.

5.0 Conclusion

Many countries have pursued active pension reform to preserve retirement-income systems and to increase coverage and adequacy of pensions. Similarly, in Trinidad and Tobago, retirement savings arrangements have gained attention. In particular, the solvency of the NIS has been under scrutiny, with current discussions surrounding the implementation of parametric changes recommended in the last three Actuarial Reviews. However, to a large extent, solutions for the sustainability, coverage and adequacy of the remaining pillars of the national pension system have been unaddressed. This study systematically explored the various tiers of the National Pension System in Trinidad and Tobago and proposed considerations to address issues of sustainability, adequacy and coverage.

Although design aspects may differ across countries, a multi-pillar or multi-tiered approach is generally recommended to best attain universal pension coverage with appropriate levels of adequacy. Trinidad and Tobago adopts a multi-pillared approach: the SCP or “zero pillar” targets the most vulnerable and is not linked to one’s productive years, while the NIS (“first pillar”) and occupational pensions (“second pillar”) are determined by contributions and/or length of employment. In addition, contributions to voluntary pensions (“third pillar”) supplement retirement income. However, while coverage and adequacy may be high due to the zero and first pillars, the sustainability of defined benefit schemes managed by the Government is in question.

Noting that any pension reform should balance sustainability with social policy objectives, the main recommendation is the harmonisation of the various aspects of the eligibility criteria for the SCP, NIS and occupational public service pensions. Other recommendations include harmonising processes and the removal of any legislative constraints on accessing available tax data strictly to improve tax enforcement.

Reform of any nature is a long-term process, but delays in restructuring will result in the need for more drastic corrective actions in the future. All reforms should be driven from the top; pension system reform requires a firm political commitment, while consistent monitoring and evaluation will be the cornerstone of any successful restructuring.

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Appendix 1: List of Proposed Recommendations related to NIS Retirement Pensions

8th Actuarial Review (Completed in September 2012, for the period ending 30 June 2010)	9th Actuarial Review (Completed in June 2015, for the period ending 30 June 2013)	10th Actuarial Review (Completed in 2018, for the period ending 30 June 2016)
Conversion of the present earnings class system into a system based on a percentage of earnings The present earnings class system should be converted into a career average re-valued earnings system and the following three options considered for their evaluation by stakeholders. - Option 1 reproduces the present NIS retirement pension calculation for earnings classes V and above. - Option 2, fixed-rate per year of contribution. - Option 3, redistributive formula putting more weight on low earnings	**Conversion of the present earnings class system into a system based on a percentage of earnings** The present earnings class system should be converted into a career average re-valued earnings system and the following three options considered for their evaluation by stakeholders. - Option 1 reproduces the present NIS retirement pension calculation for earnings classes V and above. - Option 2, fixed-rate per year of contribution. - Option 3, redistributive formula putting more weight on low earnings Among the three alternative pension formulas presented in the report, it is recommended to adopt Formula 3 which would effect a certain redistribution in favour of persons with low earnings (thus reducing the importance of the minimum pension in the longer term) and would encourage participation to the NIS by rewarding long contribution histories.	**Conversion of the present earnings class system into a system based on a percentage of earnings** It is recommended that the NIBTT moves to a percentage of earnings system to facilitate administrative ease and greater understanding of retirement benefits by ordinary citizens, and to eliminate the inherent inequities of the current system. Any new percentage of earnings pension formula should consider the integration of the entire social security system (SCP and NIS) in Trinidad and Tobago.
Extension of coverage to self-employed persons Suggested contribution rate of 11.2 per cent, entirely paid by the self-employed person (the government could consider the possibility to support part of the contributions of low-income workers).	**Extension of coverage to self-employed persons** The contribution rate for self-employed persons should be established at 11.2 per cent. This contribution rate should be increased to 12.4 per cent on 29 February 2016 for consistency with the increase recommended for salaried workers.	**Extension of coverage to self-employed persons**

8th Actuarial Review (Completed in September 2012, for the period ending 30 June 2010)	9th Actuarial Review (Completed in June 2015, for the period ending 30 June 2013)	10th Actuarial Review (Completed in 2018, for the period ending 30 June 2016)
Automatic adjustment of system's parameters From January 2014, the application of an automatic annual adjustment of the system's parameters, as opposed to the current five-year review based on the actuarial reports, is suggested. Pensions in payment and fixed-rate benefits should be adjusted based on the evolution of the CPI and the maximum insurable earnings should be adjusted according to a wage index.	**Automatic adjustment of system's parameters** Pensions in payment (the "earned part", excluding the minimum pension top-up), fixed-rate benefits and the earnings class limits should be adjusted based on the lesser of the rate of inflation and the rate of increase of the national average wage. The minimum retirement pension should be partially indexed at 50.0 per cent of the indexation rate applied to other benefits. Full indexation could be applied only once the partial indexation will have taken back the level of minimum pension at an appropriate percentage of the minimum wage. The maximum insurable earnings should be adjusted according to a wage index.	**Automatic adjustment of system's parameters** The parameters of the system should be automatically adjusted, and the minimum pension should be frozen to give at most 80.0 per cent of the minimum wage. The parameters to be adjusted include: – the insurable earnings ceiling; – the minimum pension; – pensions in payment; and – earnings class.
Contribution rate The total contribution rate for salaried workers should be increased to 12.0 percent for the period January 2013 to December 2017. Particular consideration should be given to the development of a strategy for gradually increasing the contribution rate over the next three decades.	**Contribution rate** The contribution rate (presently at 12.0 per cent of insurable earnings) should be increased to 13.2 per cent on 29 February 2016.	**Contribution rate** Contribution rate increases should be scheduled in the short term. It is recommended to increase the contribution rate to **16.2 per cent** starting in July 2019.
Retirement age An increase of the NIS retirement age.	**Retirement age** It is recommended to gradually increase the retirement age at which a pension is paid without reduction from age 60 to age 65 over the period from 2025 to 2060.	**Penalty for retirement before 65** It is recommended to reduce the calculated pension, which includes the minimum pension, by 6.0 per cent for each year before age 65. The normal retirement age remains at its current level of 65 until subsequent studies justify its increase.

8th Actuarial Review (Completed in September 2012, for the period ending 30 June 2010)	9th Actuarial Review (Completed in June 2015, for the period ending 30 June 2013)	10th Actuarial Review (Completed in 2018, for the period ending 30 June 2016)
Increase of the maximum insurable earnings (MIE) Pensions in payment and fixed-rate benefits (except the minimum retirement pension) should be increased by 52.3 percent in January 2013 to reflect the increase of the CPI since the last actuarial review. At the same time, the maximum insurable earnings should be increased to TT$11,800.	**Increase of the maximum insurable earnings (MIE)** It is recommended that the MIE be increased by 13.5 percent (to TT$13,600) on 29 February 2016. It is also recommended that the earnings classes limits be increased by the same percentage of 13.5 percent. In addition, the "earned" part of pensions in payment (i.e., excluding the minimum pension top-up) and fixed-rate benefits should be increased by 13.5 percent. There should be an annual adjustment of the MIE starting in March 2017, while benefits and earnings class limits should be adjusted on an annual basis in line with the lesser of price inflation and the national wage increase.	**Better integration of the pension system** It is essential to have a detailed picture of the financial situation of persons aged 65 and over.
Eligibility for the retirement pension Conditional to the conversion of the present earnings class system into a system based on a percentage of earnings, reduction from 750 to 260 weeks for eligibility to the retirement pension.	**Maintaining the minimum pension** The minimum pension $3,000 should be kept unchanged at least until the beginning of 2017.	
Optional contributions to the NIS Before permitting new optional contributions in a new National Insurance Plan, it would be necessary to study the investment instruments already offered by the private sector and the level of their management fees		

Source: National Insurance Board