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**SOCIAL SECURITY REFORMS AND THEIR IMPLICATIONS  
FOR THE CARIBBEAN**

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## **Abstract**

As in many other countries, the viability and sustainability of social security systems in the Caribbean is of concern to policy makers. Although systems in the region remain relatively young, liquid and healthy at this time, timely reform is necessary to prevent a crisis in the future. Reform is required to grapple with population ageing, a fairly large informal (non-contributing) sector in some countries, high open unemployment and the impact of Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS). Caribbean social security systems (pension branch) are defined benefits pay-as-you-go (PAYG) systems that are largely publicly managed. The performance of the systems has been creditable on average, with the accumulation of substantial reserves though administrative costs are too high.

Some countries in the region have pursued parametric reforms-mainly increases in contribution rates and retirement age and adjustment to wage ceilings to maintain the viability of the systems in the future. These reforms could, through various transmission effects, impact on sustainability of social security systems themselves, but also labour markets, capital markets and economic performance.

Importantly, in considering reform options, countries should not rule out including a structural reform pillar, similar to an individual retirement account, which could allow contributors to match their appetite for risk with desire for higher returns. Moreover, there is the possibility that this could have a beneficial effect on savings and investment. Overall, what is clear is all countries should move expeditiously to reform their social security systems and not delay until crisis is on their doorsteps.

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## **SOCIAL SECURITY REFORMS AND THEIR IMPLICATIONS FOR THE CARIBBEAN**

### **1. Introduction**

In the last few years, Caribbean policy makers, like their counterparts around the world, have come to view social security reform as an issue of concern. Nevertheless, while some countries in the region have translated concern into actual steps at reform, others have failed to do so. Across countries it is beyond moot that social security systems are critical to sustainable social welfare and development. However, actuarial projections indicate that flat rate contributions and adverse demographic transition, the result of population ageing, are undermining the sustainability of social security systems in many countries. Since most societies are not prepared to leave the poor and aged at the mercy of Darwinian “survival of the fittest” type economics, social security systems are set to be an important plank of the social compact in many societies. As a result, in most countries the issue is not whether reform is an option, but what will be the form and scope of reform.

Indeed, the debate over social security reform, particularly pension reform has been heated and, at times, vexing, with much confusion over economic and political economy arguments. Nevertheless, overall, as Federick Douglas<sup>1</sup> alluded, perspective, rather than objective economic arguments, often account for much of the difference of views among economists. Ultimately, much of the altercations stem from views on the role and function of the State versus the market mechanism in the operation of social security systems. Indeed, the State-market debate is often so well covered that it is difficult for one to recognise it.

In a way, the demographic transition justifies some form of social security or protection. Since consumption continues after retirement and, in particular, the individual might be confronted with significant spending on medical treatment and other forms of care, it is imperative that he saves during his working life towards this end or that the State or other systems provide for him. Given the propensity of some citizens to free ride on the social security system, most governments have instituted some form of compulsory social insurance contribution system (payroll taxes) to ensure that persons save towards old age, sickness, disability and other expenses and contingencies.

Traditional social security systems were modelled on the Bismarck or Beveridge models or combinations of both. Bismarck developed the “insurance concept” of social security, whereby the system insured workers against the risk of loss of income and enabled income smoothing over their lifetimes. For the most part these schemes were financed by premiums or payroll taxes, which along with benefits depended on earnings.

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<sup>1</sup> Federick Douglas in “My Bondage, My Freedom,” noted that the longer he lived the more he recognised the importance of perspective on issues.

Traditional social security systems were designed to perform two main functions. In the first place, social security is a system of social insurance that provides coverage for sickness, disability, old age pensions, maternity and other contingencies. Secondly, social security acts as a mechanism for redistributing income from higher income to lower income groups. In more recent times, particularly in developing countries, a third function has been assigned to these systems. That is, social security systems are also charged with catalysing saving and investment and enhancing both financial deepening and economic growth. This stems from the view that in developing countries with imperfect or missing markets, major institutions cannot be tasked only with meeting market conditions or meeting pricing and output targets, but must go further to promote economic transformation and growth. There has been some dispute as to whether and to what extent the insurance function conflicts with the redistribution and economic growth functions. Nevertheless, the three functions: insurance, redistribution and economic growth are interrelated, and virtuous processes in any one can have positive externalities on the others. This more than ever, underscores the need to examine the potential virtuous or adverse impacts of policy in any given one of these areas on the others.

Social security reform, as hinted at before, is a world-wide trend, stemming from socio-economic developments at the global level. Ageing, the result of the demographic transition, is a major structural driver of reform. The demographic transition has accelerated in most countries during the last century because of sharp declines in both birth and death rates. World population grew from 1.6 billion in 1900 to 2.5 billion by 1950 and to over 6 billion by 2000. In spite of rapid growth, declining mortality is also resulting in population ageing in many countries, a trend that is set to accelerate in the next few decades. For instance, the proportion of the world population over 60 is projected to increase from roughly 9% in 1990 to over 16% by 2030<sup>2</sup>. Since most social security systems depend on the working population to provide for pensioners, a higher number of pensioners relative to the working population (the pensioner support ratio) naturally places financial pressure on these systems. The demographic transition combined with factors, such as the increasing use of short-term work contracts, large informal sectors and high open unemployment continue to impinge on contribution income in social security schemes in the Caribbean and other countries. These factors, combined with over-leveraged governments with weighty fiscal constraints and uncertainty about the long-term trajectory of growth in countries such as the Organisation of Eastern Caribbean States (OECS), make it incumbent that social security reform is undertaken in a timely manner to ensure that schemes can meet their obligations to members, especially retirees.

This study analyses social security reform and their implications for Caribbean countries. Although other aspects are mentioned, the main focus is on the pension or retirement plank of social security, the most important component. The rationale for the study is the limited research on scope of reforms and what their potential impact on Caribbean economies and societies. The study provides an initial foray in this area. The study is divided into seven sections. Section 2 provides a broad overview or typology of

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<sup>2</sup> See James, Estelle (2002). "Social Security reform Around the World: Lessons from other Countries", National Center for Policy Analysis.

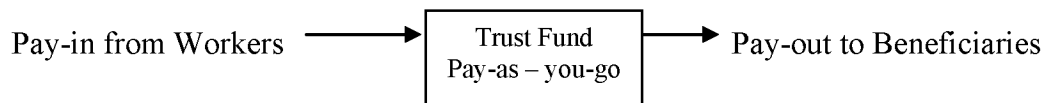
the structure and rules of the systems. Section 3 is a big picture of the performance of the systems. The next section, examines the reforms undertaken by social security systems in the region, while section 5 analyses the implications of these reforms for the systems and the wider economy. Section 6 provides pointers on the way forward for social security and section 7 concludes the study.

## 2. Overview of Caribbean Social Security Systems: Structure and rules

Social security spread from Britain to her former colonies in the Caribbean in the form of provident funds based on contributions. These funds were similar to today's funded, defined contribution schemes<sup>3</sup>. With the move to self-governance, governments enacted full social security legislation based on the principles of solidarity and redistribution to guarantee a minimum level of welfare for persons aged, the sick, women on maternity leave, retirees and other categories of workers. National insurance or social security schemes were implemented, spreading from Jamaica in 1965 to St. Vincent and the Grenadines in 1986. Full social security was deemed particularly necessary in light of intractable poverty among large segments of the population, dualistic economies with skewed distribution of income and wealth and the need to move beyond insurance to redistribution and consumption smoothing for lower income groups.

Caribbean social security systems, like those in most countries are variants of the pay-as-you-go (PAYG) system. One of the earliest models of social security, PAYG is structured such that the current workforce pays the benefits for the current group of retirees. In this system, the social security trust fund acts as a checking account from which payments are made to the beneficiaries. Therefore, no funds are allocated in advance and benefits and administrative expenses are met from current contributions. This structure leads to costs of funding the scheme that are low at the beginning, but which increase steadily as it matures.

A simple PAYG works as follows:



The major issue of concern in a PAYG is long-term structural balance or equilibrium and sustainability. Balance and stability is achieved where:

Annual pay in = Annual pay-out

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<sup>3</sup> In a defined contribution scheme, the outstanding liability of the scheme is the value of the assets in the scheme. This implies that if the funds in the scheme are depleted through poor management or other reasons, pensioners might not receive any benefit payments. By contrast, in a defined benefit scheme, the liability is the present value of the benefits forecasted by the scheme, which is worked out by actuaries. The risk sharing in this scheme often means that the State is prepared to bail out schemes facing financial difficulties.

That is:  $N_w \cdot W_m \cdot T_p = N_b \cdot B_m$

Hence,

$$B_m = N_w / N_b (W_m \cdot T_p)$$

Where:

$N_w$  is the number of workers

$W_m$  is the Average annual wage

$T_p$  is the payroll tax rate

$N_b$  is the number of beneficiaries

$B_m$  is the average annual benefit

The above formula suggests that social security benefits are tied to the current national average annual wage. Therefore to maintain fiscal balance, at a fixed payroll tax rate, the system must maintain a stable ratio (steady state) of workers to retirees. If the steady state condition is not maintained due, for example, to the ageing of population or higher unemployment or the effects of HIV/AIDS, the scheme would soon be thrown into fiscal deficit with benefit payments exceeding contributions. To prevent this, contributions would have to be raised, benefits reduced or the retirement age increased.

Caribbean social security systems are partial PAYG systems. That is, in regional schemes part of the fund is used to finance benefit payments, administrative and other costs and the other part is invested to provide income that could be used to defray future benefit and other costs. Caribbean schemes are relatively young by world standards. As a result, contribution revenue exceeds benefit payments and surpluses have accumulated in the social security trust fund. By their very nature, PAYG schemes follow a growth curve with an excess of contributions over expenses in the early rising phase of the system, followed by an equilibrium or plateau phase where contributions approximate payments, and finally a post-equilibrium declining phase where expenditure exceeds contributions. Temporary measures, such as the transfer of funds from other government budget sources or from other branches of social security, for instance industrial injury, can be put in place to postpone the post-equilibrium effects (system not able to meet payments to pensioners). In the long run, however, these measures only delay the inevitable collapse of the system. Often, radical and fundamental reforms are required to ensure the long-run sustainability of PAYG schemes.

Although the basic structure of most Caribbean social security systems is the same, the rules governing the flow of funds, investments and governance vary according to perception of individual country needs. In the public schemes, mandatory contributions are collected from employers and employees as a flat tax at source. Usually, employers are required to contribute more than workers, although in some countries, contributions are distributed equally.

Countries display wide disparities in their contribution profiles. Contribution rates range from 5% in Jamaica to 16.25% in Barbados (*see* Table 1 below). The relatively

high variability is further indicated by a standard deviation of contribution rates of 2.5. There is little or no harmonisation of the insurable wage ceilings across the region. Wage ceilings<sup>4</sup> range from 1.2 times average insurable wages in Trinidad and Tobago to 3.4 times average insurable wage in Saint. Lucia. The low wage ceiling in Trinidad and Tobago might mean that pensions will be quite inadequate to meet the cost of living when they become due. There is a need for an objective and independent criterion for adjusting wage ceilings in a timely manner to reflect living costs and to ensure adequate pensioner living standards. Currently, only Guyana adjusts the wage ceiling automatically, in line with changes in its minimum wage.

In Jamaica, wage-based contributions of 21/2% by employees are matched by an equal rate by employers. The maximum insurable amount per annum is J\$250,000, giving maximum contributions per week of J\$120.

Persons qualify for a pension on average after about 10 years of contributing or 500 weeks of contribution. However, to forestall future funding problems, some schemes such as Trinidad and Tobago and Guyana have set higher qualifying contributions of 15 years.

With respect to pension benefits it is critical that pensioners' living standards are maintained at a level similar to that during their working lives. This is determined to some extent by the pension replacement rates, which is the percentage of a pensioner's average insurable wages that he receives as his pension. Across the region, pensioners receive an average of 31 % of insurable wages after 10 years of contribution. To prevent persons falling through the safety net, minimum pensions ranging from 6% in Antigua and Barbuda and 31% in Barbados are provided for persons who do not qualify for a full pension.

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<sup>4</sup> The wage ceiling is the cut-off amount, above which no contributions are paid- it partly determines the level of social protection that is provided to contributors.

**Table 1: Broad Indicators of the Structure of Caribbean Social Security Systems**

Countries	Year started	Benefits offered	% of Employed population Covered	Contribution rates	Replacement rates		
					After years		
					10 yrs	30 yrs	Maximum
Anguilla	1982	SBP without employment injury	85% to 100%	10	30%	50%	60%
Antigua and Barbuda	1973	SBP without employment injury	85% to 100%	8	25%	45%	50%
Bahamas	1974	SBP without long-term grants	70% to 85%	8.4	30%	55%	60%
Barbados	1967	SBP and unemployment benefit	85% to 100%	16.25	40%	60	60
Belize	1981	SBP	70% to 85%				
British Virgin Islands	1981	SBP	>100% a/				
Dominica	1976	SBP	70% to 85%	9.75	30%	55%	70%
Grenada	1983	SBP	70% to 85%	9	30%	50%	60%
Guyana	1969	SBP plus Sickness benefit and Medical care	50% to 70%	13	40%	55%	60%
Jamaica	1966	SBP less Sickness and Maternity (Maternity for domestics only)	20% to 25%	5	Flat rate pension plus 1.5% of avg. career earnings		
Montserrat	1986	SBP	85% to 100%	9	30%	50%	60%
St. Kitts and Nevis	1978	SBP	>100%	11	30%	55%	60%
St. Lucia	1979	SBP and Hospitalisation benefit	50% to 70%	10	*	58%	60%
Trinidad and Tobago	1972	SBP	50% to 70%	8.7	**		
Turks and Caicos Is.		SBP	>100%	8	30%	55%	60%

Source: Official information and Osborne (2004)

### 3. The performance of regional social security schemes

Having looked at the structure of regional social security schemes, it is useful to assess the extent to which it has influenced conduct and performance of the schemes. Conduct and performance are critical since the ultimate test of the validity and viability of the schemes is the extent to which they are capable of meeting benefit payments when they become due. This capacity to meet obligations would obviously depend heavily on the administration and management of the schemes, including the timely collection of contributions, coverage and benefit promises, prudent investments and the maintaining of a balance between liquidity and long-term capital adequacy.

Caribbean social security systems are young by international standards. This has been an important factor influencing the performance indicators and health of the systems thus far. Importantly, as young systems, contributions exceed benefit payments and administration costs by factors of five or more in some cases. Therefore most of the systems are fairly liquid with a good reserve base. In addition, the regional population remains relatively young as countries have not made the demographic transition to an ageing population. This leads to a scenario where the ratio of contributors to pensioners remains high and ranged from 3.4 in Barbados to 16.3 in the British Virgin Islands in 2003. As a result of the relatively high ratio of contributors to retirees, Caribbean social security schemes remain fairly liquid-meeting, an important requirement of these systems. On a note of caution though, this situation is expected to change in the coming decades. High and persistent unemployment, rapid growth in the non-contributing informal sector in some countries, the 'brain drain' abroad and the deleterious effects of HIV/AIDS on the workforce and contributions should be provisioned for by timely and adequate reform.

Currently, reserves remain adequate on average. In 2003, for example, reserves to Gross Domestic Product (GDP) ranged from a low of 6% in Jamaica to a high of 73% in St. Kitts and Nevis, reflecting the fairly healthy position of the systems. Critically, relatively high reserves to GDP also underscore the potential social security funds hold for financing productive activity. However, the funding levels of the PAYG systems tend to decline as they mature, the consequence of increasing benefit pay-outs relative to income. However, funding levels as measured by the fund ratio<sup>5</sup> for most of the schemes have been relatively healthy, as income has surpassed expenditure. The reserve expenditure ratio for Barbados has trended downwards on average since the 1960s, dropping from over 20 in 1970 to just above 5 in 2003. In Guyana, funding ratio was around 18 in 1970, but remains robust at over 10 times yearly expenditure in 2003.

For the region as a whole, expenditure averaged 7.1% of insurable wages in 2003, which was moderate. However, administrative expenditure as a proportion of contribution income of 17.7% was fairly high by international standards. In the OECS for instance, administrative expenses were over 19% of contribution income in 2003, a significant proportion by any standards. Arguably, Caribbean social security schemes are

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<sup>5</sup> The fund ratio or reserve-expenditure ratio is the end of year reserves divided by total expenditure during the given year.

using too large a portion of contributors' funds to manage and administer the schemes. Schemes need to make better use of information and communications technology and improved rationalisation, organizational and management systems to bring down operating costs.

The pensioner support ratio (number of active contributors per pensioner) is an important measure of the 'carrying capacity' of Social security. As Table 2 shows, the pensioner support ratio remains strong at 8.2 contributors per pensioner. However, the standard deviation at almost four indicates a fair degree of variability among countries, ranging from a low of just over three in a faster ageing country, Barbados, to over 16 in the British Virgin Islands, which has a younger population. For the OECS as a whole, the pensioner support ratio stood at 7.9 in 2003. This could be eroded over time if the loss of preferences for bananas is not followed by development of new activities to improve employment.

Income protection is another critical barometer of the performance of the schemes. Income protection measured by the average pension a person receives as a percentage of his/her average insurable wage averaged 26.9% in the region. This is relatively low by international standards. Moreover, there is little harmonisation across the region in terms of income protection, with the ratio as low as 16% in Trinidad and Tobago and as high as 49% in Barbados. Meanwhile, the OECS countries' ratio was close to the regional average at 27.5 providing income protection on the face of it of just more than half that of Barbados. There seems to be a case for social security systems to move closer to the Barbados welfare State model to ensure decent living standards for the aged population in the region. This of course would necessitate reforms and greater sacrifices by workers (in terms of higher contributions) during their working life.

As expected, individual social security performance varies. In Barbados, pensions account for about 80% of benefit expenditure, sickness benefit 9% and other spending allocated among other heads, including maternity benefits, and disablement grant. The scheme has remained liquid; for instance in 2003, benefit payments totalled over \$270 million roughly 5% of GDP.

Further, the stock of reserves at the end of 2003 stood at over 30% of GDP. However, even though reserves seem high in nominal terms, they are only five times annual expenditure and are significantly less than the total benefits accrued to past and present contributors. Without reform the future portends ill for the scheme, reserves are projected to more than double by 2018, but will be depleted rapidly thereafter, indicating that investments will have to be liquidated to meet benefit payments, which is an unfavourable prospect.

**Table 2: Social Security in the Caribbean-Broad Indicators**

Countries	No. of Active Contributors per Pensioner, 2003	Average Pension as a % of average insurable wage 2003	5-year	10-year	Expenditure	Admin	Admin	Investment
			Average real yield on investments 2003	Average real yield on investments 2003	as a % of insurable wages 2003	Expenditure as a % of insurable wages 2003	Expenditure as a % of Contribution Income 2001-2003	Income as a % of insurable wages 2003
Anguilla	11.9	31	1.5	2.5	6.2	2.3	23.0	6.8%
Antigua and Barbuda	6.3	22	1.5	0.8	5.7	1.4	17	2.1%
Bahamas	4.9	25	4	4.8	9.1	1.7	19	4.7%
Barbados	3.3	49	5.2	5.2	14.1	0.9	6	4.3%
Belize	10.4	25	7.5	7.4	7.7	2.2	34	3.4%
British Virgin Islands	16.3	21	2.8	2.2	3.1	1	14	5.8%
Dominica	4.5	28	4.6	4.7	11.2	1.7	16	5.3%
Grenada	7.3	25	4.9	5	5.7	1.1	12	5.7%
Guyana	3.4	28	4.1	4.8	11.7	1.9	15	2.3%
Jamaica			9.8	3.5	3.8	0.7	12	6.1%
Montserrat	5.7	17	2.4	2.4	9.1	3.7	41	4.9%
St. Kitts and Nevis	7.5	28	4	3.2	6.3	1.6	15	7.7%
St. Lucia	11.4	39	4.1	3.8	6.9	1.3	13	7.8%
St. Vincent and Gren	8.9	30	5.6	4.3	5	1	17	4.6%
Trinidad and Tobago	6.4	16	4.7	4.7	4.6	0.6	7	6.3%
Turks and Caicos Is.	14.1	19	0.9	1.6	3.6	1.6	22	0.2%
<b>Average</b>	<b>8.2</b>	<b>26.9</b>	<b>4.2</b>	<b>3.8</b>	<b>7.1</b>	<b>1.5</b>	<b>17.7</b>	<b>4.9</b>

Actuarial forecasts suggest that reform is the only means of guaranteeing the long-term viability of the scheme. The projections indicate that benefit expenditure will surpass contribution income, while benefit payments and administrative costs are expected to exceed income by 2018. Without reform, National Insurance Fund (NIF) reserves will be depleted before 2030. Critically, if the funds are exhausted, annual contribution rates of 25% to 30% will be required to maintain the fund in balance. Incidentally, these rates compare with Organization of Economic Cooperation and Development (OECD) countries, such as Norway, Denmark and Sweden that have passed the demographic transition. Also, the number of contributors per pensioners (the pensioner support ratio) is forecasted to fall from 3.4 in 2000 to 1.3 in 2060.

The payment of unemployment benefits distinguishes Barbados from most other Caribbean countries. Contributions to the fund are shared equally employer and employee at the rate of ¾%. The benefit amounts to 60% of average insurable earnings for a maximum period of 26 weeks. The Unemployment Fund has been fairly healthy with reserves of \$109.5 million in 1999 equal to 4.4 times benefit expenditure. Ironically, though unemployment fell between 1995 and 1999, unemployment benefit payments still increased. As at 1999 the 1.5% contribution rate was enough to cover benefit payments and, with investment income, resulted in a surplus for this branch. The Severance Payment Scheme provides compensation for workers who are made redundant. Coverage is provided for all employees between the age of 16 and 65, with the exception of some categories, including public service employees and partners and independent contractors, among others. The employer is responsible for paying the severance payment and can then recover a rebate of a proportion of the payment from the Fund.

Up to 1999, the Severance Fund had reserves of \$44.4 million, more than seven times annual benefit expenditure. Even with a contribution rate of 0.5%, the Severance Fund should still be solvent by 2010. Therefore, actuarial recommendation is that a portion of the reserves of this fund could be transferred to the NIF to strengthen this fund.

Belize has a relatively young national insurance scheme, which, without reform reserves, would erode over time on account of population ageing and a reduced pensioner support ratio. For the long-term branch<sup>6</sup>, the partial capitalisation funding increased from BZ\$128 million in 1999 to BZ\$166 million in 2002. However, from 2005, contributions less expenditure (net contributions) are projected to decline steadily despite an increase in the contribution rate of 1%. In spite of the expected unfavourable out-turn in net contributions, reserves are projected to increase steadily for about 14 years, due to dynamic investment income and to exceed BZ\$300 million by 2016.

The short-term branch<sup>7</sup> is expected to be relatively healthy until the next actuarial review. Higher benefit payments and National Health Insurance (NHI) charges have been met from contributions and investment income. The fund's projected average costs

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<sup>6</sup> The long-term or pension branch in Belize comprises retirement benefits, invalidity benefits and survivor's benefits.

<sup>7</sup> This includes medical, maternity and temporary incapacity benefits.

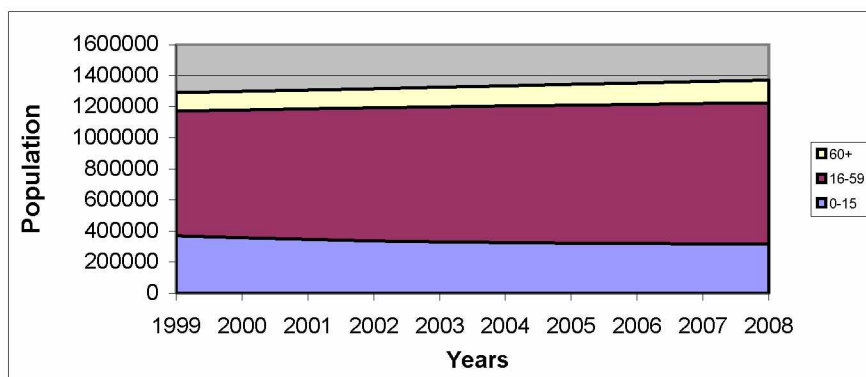
of 1.95% of salaries are surpassed by the contribution rate of 1.50%, but the deficit is met by contingency reserves. The real pressure point is reflected in a fund ratio that has slipped from 6.9 times to 2.9 times forecasted annual branch expenditure between 1999-2002 and is set to continue on this declining path. Moreover, although reserves exceed the statutory minimum, they are expected to fall steadily over time. All these factors point to the need for reform, which the scheme is now embarking on.

In Belize's Employment Injury Branch, the cost amount to 2.65% of salaries, compared with a contribution rate of 2%. At present, the deficit is covered by contingency reserves, although this is a somewhat precarious position to be in. There is a recognised need to implement a cost containment strategy to bring costs in line with contributions.

The National Insurance Scheme of Jamaica provides benefits under its short-term and long-term branches as in other countries of the region. The short-term branch of the national insurance system provides benefits for temporary contingencies and includes medical, maternity and temporary incapacity benefits among others.

At March 2003, the National Insurance Scheme of Jamaica had an accumulated fund of J\$25.1 billion. Between 1999 and 2003, pension benefits grew on average by 16.4% in the face of sluggish growth performance, a factor that clearly pointed to the need for reform. Old age pension payments posted average growth of 16.7%, rising from J\$761.2 million in 1999 to J\$1.3 billion in 2003. Short-term branch benefits registered weaker average growth of 6.1% to reach J\$13.7 million in 2003.

Similar to other Caribbean countries, the National Insurance System (NIS) is an important player in the economy of Trinidad and Tobago. Between 1995 and 2000, for example, NIS income averaged almost 19% of GDP, while expenditure averaged 13% of GDP. Moreover, The Trinidad and Tobago Scheme remained relatively liquid during the period. Total income recorded a robust growth of 11.6% per year, moving from TT\$490.01 million in 1995-96 to TT\$1,076.28 million in 1999-2000. Contribution income posted particularly strong average growth of 19.9% jumping from TT\$200.52 million in 1995-96 to TT\$583.03 million in 1999-2000. Investment income registered more a modest growth of 8% to reach TT\$493.15 million by 1999-2000. With respect to the labour market, the pensioner support ratio averaged 6.84 between 1999 and 2003, indicating that pension payments have been backed by a strong contingent of working contributors. However, in the next decade, as population ageing continues, the pensioner support base will be eroded over time (see Figure 1 below).

**Figure 1: Trinidad and Tobago Projected Population**

Source: Actuary Report of the National Insurance System of Trinidad and Tobago 2000.

The financial health of the fund was bolstered by the fact that expenditure grew sluggishly (4.4%), compared with income (11.6%), a reflection, in part, of a relatively youthful population. This led to an average surplus of TT\$223.06 million over the period. A favourable feature of the Trinidad and Tobago Scheme compared with a number of others in the region is its relatively lower administrative costs. Administrative costs averaged 5.9% of total expenditure over the six years, while expenditure on long-term benefits averaged 50.4% of expenses. Administrative costs as a percentage of contribution income have been reduced significantly to about 7% in the last few years partly due to the rationalisation of operations. This compares favourably with over 12% for Jamaica, 13% for Saint Lucia and 19% for the Bahamas, but is unfavourable compared with 6% for Barbados.

A critical aspect of social security performance, particularly for pension schemes is the extent to which they impinge on government fiscal operations. The reality is that although some social security liabilities are not explicit, but implicit, they nevertheless have to be borne by the State, as payroll taxes and investment returns are often inadequate to fully meet benefit obligations. Although most schemes have a fairly liquid long-term or pension branch currently, short-term non-contributory branches continue to put stress on governments' finances, as these have to be funded out of tax proceeds. In countries such as the OECS, where liberalisation is followed apace by declining border tax receipts, the continued funding of non-contributory and even some contributory aspects that suffer from high evasion and non-compliance, might be in jeopardy unless tax rates are raised, alternative taxes are implemented or benefits reduced.

#### Investment portfolio management

Investment income is a vital source of revenue for regional social security systems. Moreover, although reform entails raising contributions - there is a limit to the pace at which contributions can be raised - it is therefore crucial to invest these funds in financial instruments and activities with long-term high yielding returns. In the past, it has been all too easy for fund managers to place social security funds in short-term low-yielding investments that create a mismatch between these assets and the long-term

liabilities that they are obligated to meet. Investment obviously presents the trade-off between risk and return, and all the more demands the use of experienced fund managers and adequate use of information and knowledge of the economic environment.

In the past, the relatively underdeveloped nature of money and capital markets in the region limits the options for financial investment of social security funds. This has led, in some instances, to second best investment options as first rate instruments such as stocks, shares and private bonds are in limited supply. The characteristic feature of social security investments in the region is the holding of relatively low-yielding government paper and commercial bank time deposits.

The average yield on social security investments for the five years up to 2003 was only 4.2%, much lower than the returns in mutual funds, stocks and other investment options. Meanwhile, investment income averaged 4.9% of insurable wages, in 2003, another indicator of the relatively low rate of return.

In 2003, for example, roughly 70% of investments were in bonds, debentures and loans. In Saint Lucia, for example, at the end of September 2002, fixed deposits and money at call and government bonds and securities accounted for 32.2% and 10.6%, respectively, of the National Insurance Corporation's portfolio. Moreover, the Scheme's investment policy stipulates a range of 20-25% of total investments for fixed deposits and government lending each.

The capture of the social security funds by government might very well divert funds that could have been used for the development of private sector activity in tourism, agriculture and light manufacturing, even while management strategies seek to limit the risks associated with these activities. This is all a part of balancing the development and insurance (social protection) functions of social security and finding virtuous links between them. The reality is that there is need for stronger linkages between social security investments and real sector development. In this respect, social security reserves could provide critical funds to finance development in high productivity activities, since ultimately the rate of return on these funds is linked to the rate of growth of productivity in the economy.

With increasing financial innovation and integration in the region in recent years a wider array of investment options is becoming available. This should help social security systems to have more balanced investment portfolios that consider relative risks and returns and match liabilities and assets.

Importantly, the legislation needs to be made more flexible to allow fund managers to invest a portion of their portfolio in foreign markets. Although it must be done prudently, investment abroad has a number of merits to recommend it. In the first place, it would provide a wider pool of financial instruments to invest in, with varying risk and return profiles. Secondly, contributors would be able to hold a diversified portfolio that reduces country-specific risks, such as proneness to natural disasters and terms of trade shocks in the Caribbean. Thirdly, it could curtail the political risk of

governments using pension funds to finance public deficits, sometimes in inefficient activities as has been done in some countries in the region.

#### **4. Social security reforms and plans in the region**

##### Parametric reforms

Countries have adopted two approaches to social security reform worldwide. These are the more conservative parametric reforms or the more radical structural reforms. Parametric reforms accept the basic/structural logic of current systems, be they PAYG or partially-funded systems, and attempt to make them sustainable by adjusting the key parameters, including contribution rates, pension and other benefits, the retirement age or administrative costs, among other variables. Essentially, this is reform within the system. Structural reform, on the other hand, is a change in the structure of the systems, usually the move to some form of privatised funded system. This could be deemed a revolutionary change that is adopted when it is believed that the PAYG system will not be able to meet obligations to contributors.

The root of the debate over publicly operated PAYG schemes and funded privatised schemes harks back to the political economy question of whether social protection is better provided by the State or by private individuals provisioning for their own future within private sector-operated annuity systems. Although this debate could be pursued *ad infinitum*, the fact is that both approaches have their merits and demerits. What is required in a given case, such as the Caribbean, is for countries to attempt to assess holistically the overall net benefits of both prospective approaches and to choose the one that is most dynamic, sustainable and beneficial to beneficiaries and the economy as a whole. In fact, the best approach for the region might be a combination of both approaches- that is a basic PAYG pillar and a funded individual retirement account, with allocations as fit the needs of countries.

A number of Caribbean countries have undertaken actuarial forecasts and national surveys to examine the prospective state of their schemes and public opinion on the preferred reform option. Coming out of the analysis, most countries have gone the route of parametric, rather than structural reform. Parametric reforms have largely entailed a combination of raising contribution rates and insurable ceilings and increasing the retirement age. Structural reform is counterfactual since this approach has not been adopted in the region. However, structural reform usually involves a change in the social security system itself. In most cases it entails the privatisation of social security through the movement to a fully-funded defined contribution system, where benefits are based on contributions and actual investment returns. A change from a PAYG to a fully-funded system entails an important transition cost that is the debt that is owed to the current generation of beneficiaries that must be provided for. This debt would have to be paid by the government from fiscal revenue.

Some countries in the region are moving forward with reform on the advice of actuaries. Barbados is pursuing relatively wide-ranging reforms to set its social security scheme on a sounder footing. After widespread consultation and surveys, the final

reform option is a mixed package. This package entails increasing contributions from 14% to 18 percent of insurable earnings over four years. The employer and the employee will share this increase equally. The retirement age will be raised by six months every four years beginning in 2006, up to the revised retirement age of 67 years by the year 2018. Retirees have the option of drawing an early pension as of 2003, but this will be subjected to a reduction in benefits at the rate of ½% per month early, from age 64 in 2003. The objective is to permit those who desire to do so, to retire at age 60, with a concomitant reduction in pension earnings. There is also flexibility on the upside with persons allowed to defer their NIS pensions until age 70 with increases of ½% for each month after the standard pensionable age. To ensure the long-term ability of the fund to meet benefit payments, the actuary has proposed a target reserve to expenditure ratio of five.

The 1999 actuarial report on Belize's social security system noted that current contribution rate is insufficient to meet long-term benefit obligations. Therefore, in 2003, a number of reform proposals were advanced to strengthen the sustainability and equity of the scheme. As of 1 July 2003 social security contributions were increased by 1% from 7% to 8%. Employers will contribute 6½% and employees 1½% up to \$130 of weekly insurable earnings. Persons must pay a minimum of 50 contributions to qualify for retirement grant, up from 26 contributions. Moreover, to capture higher income earners, government has raised the insurable earnings ceiling from \$320 per week to \$640 per week. This, however, is still too low to provide adequate income protection. In addition, sickness, injury and maternity benefits will be doubled from a maximum of \$256 to \$512.

Retirement pension is also earmarked for a 100% increase to \$384 per week. As of 1 January 2003, the new basis for calculating pensions will be 2% of final average earnings for the first 20 years, thereafter, 1.25% up to a maximum of 60% of final average earnings. Also, final average earnings, the basis for calculating pensions, will be raised from the average the best three years to the best five years earnings to provide a more representative<sup>8</sup> pension.

To cope with demographic changes, the retirement age will be increased. The voluntary retirement age will be raised from 60 to 63 years, while mandatory retirement will move up from 65 to 67 years. In addition, an employed widow who receives survivor's benefit will also be able to claim retirement benefit. This reform should ease the hardship faced by a number of poorer widows, who barely make ends meet.

With respect to investment, the 2002 Actuarial Review proposes a focus on high liquidity instruments and avoidance of long-term commitments. This seems somewhat strange, however, given the need to balance long-term and short-term liabilities. Moreover, some long-term commitments are precisely the kind of development activities in infrastructure and productive sectors that could contribute to development. This is important since the long-run rate of return for beneficiaries under a PAYG scheme is

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<sup>8</sup> It was felt that in many instances, the three best years average led to inflated pensions and did not reflect well the average earnings of the beneficiary.

equal to the rate of economic growth, that is, workforce growth plus productivity growth.<sup>9</sup>

The Belize Scheme has also embarked on institutional reforms aimed at prudential regulation and streamlining of its operations. A system is being put in place to monitor financial and actuarial developments so that timely parametric adjustments can be made where needed. The Scheme is set to design key performance indicators (KPI) to benchmark performance. Importantly, plans are afoot to revise the government pension scheme and the self-employed scheme to capture a wider pool of households. This is critical to preventing this group from free-riding on government provision during their pension years without making contributions.

In Jamaica, adjustments have been made to benefits offered on the NIS Scheme from July 2003. The weekly rate for full rate for Old Age, Invalidity and Widow's and Widower's Pension has been raised from \$600 to \$900. Dependent Spouse's Allowance has been raised from \$200 to \$300. Also, Disablement Pension has been raised from \$39-\$1,740 to \$100-\$1740. To increase aggregate contributions, government has doubled the insurable wage ceiling from \$250,000 to \$500,000, from October 2003. This has implications for the future benefit expenses of the scheme, as under the PAYG plan the higher ceiling would mean higher wage-based payments for persons in the higher brackets. Ironically, in spite of an increase in benefit allowances and the raising of the insurable ceiling, the contribution rate remains constant at 2.5% each by the employer and employee. In addition, 20% of the contributions are to be transferred to the National Health Fund and a National Health Plan for pensioners was to be implemented in October 2003.

Saint Lucia has also embarked on a reform programme, in response to actuarial forecasts of the unsustainability of the fund. Projections indicate that reserves plus future contributions will be able to meet benefit payments for some years yet, but without adequate reform, the fund will become bankrupt in the future.

The sixth Actuarial Review conducted in 2000 has pointed the way forward for reform of the National Insurance Scheme in Trinidad and Tobago. The reforms are parametric as in other Caribbean countries, but are deeper and wider than in countries such as Belize and Saint Lucia. On the contribution (income) side, the 12 classes of contributions remain in force. However, from 5 January 2004, earnings limits of each class of contributors will be indexed to earnings inflation to retain their real value. To capture a wider contribution pool, the effective income ceiling will be raised to TT\$4,377 per month and the minimum contributory earnings will rise to TT\$433 per month. Importantly, the overall rate of contribution will increase from 8.4% to 9.9%, to be phased in from January 2004 to January 2006. This relatively small increase at this time means that contribution rates will have to be increased periodically.

Benefits will also change to accommodate modifications in contributions. From March 2004, basic pensions will be indexed to earnings inflation to maintain their real

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<sup>9</sup> See Krugman, Paul, "Notes on Social Security", <http://web.mit.edu.krugman/www/socsec.html>

values. This will be achieved by increasing basic pension rates by 24%. Increment rates will also be increased to lead to roughly a halving of the difference in accrual rates between basic and increment pensions. This would result in a further increase in increments of 71.6% and an overall increase of 112.8% when indexation is included.

An important welfare-improving change to retirement benefits was the introduction of a minimum pension of TT\$1000 per month from 1 October 2003. In addition, pensions will be payable for persons who retire at age 60. Pensioners who return to work will still be entitled to their pension and will be eligible for employment injury coverage by paying class Z contributions.

In contrast to the English-speaking Caribbean, the Dominican Republic has followed the Chilean model of structural reform. This reform entailed the move to multi-plank pension system designed for three categories of workers. In the first place, the elderly, the poor and workers with incomes below the minimum threshold, will benefit from a subsidised social assistance or non-contributory scheme. Secondly, a subsidised contributory scheme has been set up to cover self-employed contributors with incomes above a minimum threshold. Finally, a non-subsidised contributory scheme will be set up for workers earning above the minimum income threshold. Importantly, both contributory schemes will be operated as funded defined contribution schemes. Accumulated contributions and investment returns during a person's working life will be used to purchase a price indexed annuity which fund retirement payments. This is effectively an individual retirement account.

The gross contribution rate will be increased gradually over five years to 10%. This is at the lower end of the range for other funded schemes in Latin America. In Chile and Bolivia the contribution rate is over 12%, whereas in Eastern Europe, Kazakhstan's is about 10%. An interesting feature of the Dominican Republic's reform is the attempt to attract the self-employed by government subsidising their contributions.

#### Structural reform: Issues for consideration

The foregoing analysis centres on parametric (system adjustment) reforms since this is the approach that has been adopted in almost all Caribbean countries. These reforms are largely State driven, that is, non-market in nature. However, the combination of non-market and market reforms might provide a stronger catalyst for social security saving, investment and beneficial impact on growth and development. As in most things, the option should not be an all or nothing one, but should be configured to meet the structure of the social security systems, their conduct and the stage of development of the countries of the region.

Although confronted by some of the same structural constraints, the reality is that Caribbean economies are not at the same stage of development as they were when their social security and pension systems were first designed. Moreover, the level of knowledge of what should constitute an efficient, effective and development-enhancing

system has also improved. Therefore, social security reform in the region should be informed by these two considerations.

An important consideration with respect to the stage of development is progress made in the development of money and capital markets and also in achieving macroeconomic stability in the region. The Caribbean financial sector of today is more sophisticated than at the time of the development of social security systems. Improved prudential regulation, risk assessment systems and financial innovation now provides the platform for wider options in the investment of social security funds. In addition, citizens are now more investor savvy and concerned about the rate of return that they can receive on their investments.

Given that reform would have to be undertaken on a graduated basis over time, there is no reason why countries should not consider the costs and benefits of implementing some structural reform to the system in the future if there are net benefits in doing so. It seems that apart from the PAYG component that addresses the issues of equity and solidarity, some countries might benefit from a private pillar, similar to the Individual Retirement Account (IRA)<sup>10</sup> and 401 accounts in the United States that allow individuals more options in saving and investing. For example, some persons might prefer to opt for a part pension and part endowment fund that allows them to redeem funds for the education of their children. The reality is that social security payroll taxes still suffer from relatively high levels of evasion, especially among certain categories of occupations. Therefore, adding a private IRA pillar might act as an incentive for people to save for their future well-being. This could stem from individuals having greater ownership of the investment of their pension funds and being better able to plan over the long term. This is particularly so for the self-employed who, because of the nature of their activities, tend to have more unstable incomes. An endowment fund from which they could draw to smooth their income and consumption could help in improving the welfare of the self-employed. They would of course contribute to the first pillar to get their base pension, but the additional pillar would allow them much needed flexibility.

In addition, as the financial systems in the region become more sophisticated, competition for funds could improve the supply of competent fund managers who are capable of efficiently managing retirement accounts, while ensuring both stable and adequate earnings for retirement. Indeed, in the private sector, a number of persons, especially in the larger countries, such as Jamaica, Barbados and Trinidad and Tobago, already utilise private retirement funds to save/invest for their retirement. These instruments tend to complement State pension systems that are often deemed inadequate.

Moreover, it is anticipated that the partial structural reform advocated here, unlike the fully funded approach undertaken in Chile and other countries, will entail relatively

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<sup>10</sup> An Individual Retirement Account (IRA) allows a person to save a portion of his income for retirement. The funds are usually invested in some instrument that is often managed by a private fund manager. Unlike, a PAYG account, where government might bail out an insolvent fund the IRA holder faces a greater risk that his saving could be wiped out by imprudent fund managers or adverse economic circumstances.

low transition costs. As suggested by Charles Herbert<sup>11</sup>, structural reform could be based on allowing current pensioners to receive current benefits and providing an initial defined contribution credit for outstanding benefits for current contributors. This will reduce the transition costs. In addition, mandatory fixed defined contribution payments would have to be made, which would determine benefits. Retirement benefits can be converted into an annuity to provide a stream of income over the course of the person's retirement.

Social security systems, like central banks and private insurance systems in the region are faced with a paradox. That is, how to manage their funds and maintain the security and stability aspect of their function, while at the same time contributing to the development process, which in some cases might conflict with the very goal of security and stability. However, the development function cannot be ignored otherwise it will undermine the other two.

## **5. The implications of social security reform for the region**

It is self evident that the impact of social security reform on regional economies would depend on the type, extent and timeliness with which reform is undertaken. Parametric reform, which is the option, preferred by most countries, is not expected to have the same impact as structural reforms; further, even within parametric reforms options that entail changing contribution rates alone will have different implications from those that involve changing contribution rates and the retirement age.

The parametric reforms that are being undertaken by the majority of social security schemes in the region will stabilise the funds in the next three to four decades. Without reform, most funds will be faced with negative reserves after about 2030 according to actuarial forecasts. This disequilibrium situation would mean that governments might be forced to meet pension and other social welfare payments from the general budget.

Generally, maintaining the partially funded PAYG systems, instead of moving to funded systems could lead to a trade-off in favour of equity and redistribution rather than efficiency. The reality is that fiscal balance or equilibrium can be attained under both systems, but political economy factors such as government control of the investment decisions, limited portfolio diversification, especially in foreign investments and the dampening effects of higher contributions on business investment decisions might mean that PAYG could have some sub-optimal effects on domestic savings and investments.

Social security reform will have varying impacts on countries in the region depending on depth and scope of reform in individual States and the transmission effects on financial and labour markets and on economic growth. Countries such as Barbados and Jamaica seem to have made adequate reforms to ensure sustainable trust fund balances in the medium to long term, based on the extent of increases in contribution rates and retirement age.

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<sup>11</sup> See Herbert, Charles (2003). "Impact of Parametric and Structural Reforms on the Pensions Systems of Four (Caribbean) countries", Eckler Partners Ltd./Internationally Milliman Global.

**Table 3: Retirement Age Contribution Option for Barbados**

Contributions				Retirement Age
Years	Employee	Employer	Total	
2002	6.75%	7.50%	14.25%	65yrs
2003	7.25%	8.00%	15.25%	..
2004	7.75%	8.50%	16.25%	..
2005	8.25%	9%	17.25%	65yrs...6mths
2006	..	..	..	..
2007	..	..	..	..
2008	..	..	..	66yrs
2009	..	..	..	..
2010	..	..	..	..
2011	..	..	..	66yrs...6mths
2012	..	..	..	..
2013	..	..	..	..
2014	..	..	..	67yrs
Projected reserve Ratios Under Retirement Age/Contribution Option				
Years	Present position	Retirement Age/Contribution		
2000	5	5		
2005	5.8	6.3		
2010	5.8	7.8		
2020	3.2	7.7		
2030	Negative	5.1		

Source: Pension Reform: Report of the Sub-Committee Appointed by the National Insurance Board, December 2002.

Table 1 above for Barbados is indicative of the kind of position in which regional policy makers would like their pension funds to be in the next decades. The increase in contribution rates by 3% spread over three years is complemented by a gradual increase in the retirement age for a cumulative increase of two years spread over 12 years. This scenario leads to projected fund reserves of 5.1 compared with negative reserves under the present non-reform option by 2030.

The reform process in Belize, although a step in the right direction, does not appear to be radical enough to sustain the fund in the next three decades or so. The 1% increase in the contribution rate might be suitable for the pension branch only. In addition, the increase in earnings ceiling to B\$320 per week, although a positive step in providing pensions that are more in line with actual earnings, is inadequate. As a benchmark, the earnings ceiling should be set so roughly 90% of contributors to the scheme will fall under the ceiling. Actuarial indications are that the earnings ceiling would have to be increased to B\$640 to bring it in line with the 90% benchmark. Also, increases in the earnings ceiling should avoid overly beneficial redistribution in favour of persons whose pensions are based on the average of the best three years, and who have contributed on the basis of a lower, more favourable earnings ceiling.

### ***5.1 Impact of social security reform on the wider economy***

Social security reform is not an end in itself, but a means to an end. The more direct goal of social security reform is of course to guarantee the financial viability of the schemes so that they can meet their obligations of benefit payments to contributors when they fall due. However, apart from ensuring financial health, reform must also be geared towards buttressing economic growth and development. This occurs through the potential for positive transmission effects on saving, investment, labour markets, factor productivity, the fiscal balance and other macro and microeconomic variables. There is an important feedback process between social security and growth. In effect, poor growth can jeopardise the success of social security systems, and poor performance of social security systems, given the size of their portfolios can constrain growth in Caribbean type economies. Therefore, there is potential for a vicious or a virtuous cycle depending on which trend prevails. The task of policy makers is, no doubt, to facilitate the virtuous effects.

The reality is that social security schemes hold significant funds that could be invested in productive, growth-generating activities. This would necessitate removing some of the legal restrictions on the investment of these funds. In the past, these funds have been subjected to government capture as evident by the significant holdings of low yielding treasury bills in most countries, and the funding of government projects a number of which have been uneconomic. This diminishes the beneficial impact that the investment of social security reserves could have on the macroeconomy and growth. Moreover, many of the funds seem to suffer from portfolio mismatch in that there is excessive holding of short-term instruments (assets) to meet long-term liabilities. In the OECS, for example, fixed deposits accounted for over 50% of the average investment portfolio of the social security schemes during the 1990s.

Apart from the problems with the financial instruments that social security schemes hold, the management of the funds to ensure safety and good rates of return also presents a major challenge. The shortage of experienced and trained investment analysts and fund managers also affects the efficiency of investment decisions. A major constraint is limited degrees of freedom for undertaking portfolio diversification, particularly the holding of foreign financial instruments. As the World Bank<sup>12</sup> suggested, the best avenue for preventing inflation from eroding the value of the reserves is international diversification of pension fund investments, which is more likely to occur when private investment managers are in charge. Although fund managers have to be vigilant in hedging against foreign currency risks and limited knowledge of external market conditions, a balanced, diversified portfolio with a place for foreign instruments offers the best opportunity for optimising rates of return. Indeed, return on investment assumes even greater significance, as the schemes grow older, since investment income is usually a larger proportion of total income.

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<sup>12</sup> See "Averting the Old Age Crisis-Policies to Protect the Old and Promote Growth," The World Bank

One of the major factors that has been advanced by the pro-reform lobby is the potential for reform to lead to higher savings rates that could augur well for investment. Although the impact of social security in a number of developed countries has proven inconclusive, this does not mean that social security reform in the Caribbean will not affect savings positively. Indeed, the increased contribution rates that are being implemented as a part of the reform package in a number of countries in the region increases compulsory saving. Nevertheless, there is no simple relationship between pension reform and savings and the direction and intensity of the impact depends on a number of factors including the strength of income and substitution effects, the propensity to save of beneficiaries and overall macroeconomic performance. The income effect (wealth effect) of higher contribution rates and increased retirement age could lead to reduced long-term savings as households consume more in earlier years in anticipation of higher future earnings, but the substitution effect might be positive or negative depending on whether investment returns on social security funds are higher or lower than alternative assets.

Reform is challenged by the fact that a number of workers in the region are relatively myopic in providing for retirement, sickness and other contingencies. They make little provision for these expenses because of the expectation that the State will provide for them. Moreover, myopia is often compounded by significant periods of unemployment for many workers over their lifetime and instability of earnings. All of these factors tend to dampen the positive impact of social security reforms. To the extent that the champions of reform can drive home the importance of retirement provisioning through education and information campaigns, reform might have a positive spill-over on savings rates in the region.

Some economists, Feldstein and the World Bank economists among them, argue that savings and investment mobilisation is affected by the very structure of social security schemes. They contend that privatised fully funded schemes with IRAs and other private saving instruments, rather than PAYG, promotes saving and investment. The argument here is that IRAs allow individuals to shop around for the best returns in placing their funds and this stimulates competition and allocation of funds to high yielding productive activities that promote growth. However, even in countries where private fund managers are the norm, such as Chile, there is need for effective public sector oversight and regulation to ensure that funds are not placed in unduly risky speculative investments or are captured by corporate fraud. Indeed, the Asian financial crisis was triggered in part by the negative contagion effects of speculative capital flows that undermined the banking systems in a number of countries.

Important as higher savings rates are, reform would contribute to improved long-run sustainability only if it facilitates the transformation of savings into productive and competitive investment activities. In many countries in the region the investment of social security funds is untenable. Governments have almost free reign over social security reserves and government paper accounts for a significant portion of the investment. Although government borrowing from social security is sometimes used for

infrastructure development in countries such as the OECS, the bulk of these funds are used for current rather than capital expenditure thereby impeding their long-term growth impact. In addition, government borrowing (capture) of these funds depletes the balance that is available for funding viable private sector activities in tourism, agriculture, niche manufacturing and other areas of potential competitiveness in the region. Although the schemes invest in mortgages, housing, education and other social activities, there is no concerted strategy to facilitate the restructuring of stagnant sectors and for investing in bankable new productive activities. Given the long-term nature of the bulk of their liabilities, social security schemes could provide some of the equity finance for dynamic production and service enterprises.

Of paramount concern is the extent to which administrative reform provides experienced and talented fund managers, supported by prudential regulation that could strengthen the efficiency of the investment process. In the earlier years of their operation, most regional schemes had limits on the extent to which they could diversify their portfolios. In particular investment in foreign assets was forbidden in most schemes. The architects of the schemes presumably thought that the capital deficit countries of the region should not be exporting capital to developed surplus capital markets in the United States, Europe and other countries. More importantly though, they feared the exchange rate, market volatility and other risks that were associated with a foreign market, which they neither knew well, nor had any control over. However, excess liquidity in the regional banking sector which has dampened rates of return on fixed and other commercial bank deposits, compounded by the nascent nature of the regional securities market means that foreign investment must be considered a serious alternative source of investment to secure the best returns for schemes. With increasing growth in regional cross-border financial transactions, especially out of Trinidad and Tobago, the regional money and capital markets should be considered as options for diversifying the risks and improving the returns of social security schemes.

Another issue with respect to fund management is whether funds should be managed competitively by a number of private fund managers or centrally by a government fund management agency. Like most things, there are two sides to this story. Governments have chosen to institute an investment board that tends to benefit from economies of scale from the pooling of investment funds. However, it is often argued that a number of competitive private investment fund managers would do a better job of obtaining attractive returns for beneficiaries and also channel the funds to activities that promote growth. Moreover, with regional integration, there might be scope for some regional coordination in the management of the funds in the future.

## **5.2 *Labour market effects***

Social security reform is often intended to strengthen labour markets by increasing employment, wages and labour mobility and labour market flexibility. The reality is that the structure and operation of pension systems can influence labour supply, the elasticity of substitution of capital for labour and labour demand, wage rates and

worker productivity. The difficulty, however, is to ensure that pension reform does not affect these crucial variables in adverse ways that dampen growth and employment.

Regional schemes are robust mobilisers of financial resources. A paramount concern must be to what extent will parametric reform help to galvanise the labour absorptive capacity of the economies. It is anticipated that functional reform could have one of two types of effects on regional labour markets. In the first place, the increased pay-roll taxes that higher contribution rates represent could act as a disincentive to firms to employ more workers or at least reduce their elasticity of demand for labour on account of higher costs.

It is anticipated that as payroll taxes are increased during the course of reforms in the Caribbean, some firms would substitute capital for labour, as capital becomes relatively cheaper as a factor of production. In fact, in a survey of firms<sup>13</sup> in the Caribbean, high labour costs were mentioned as a major impediment to firm growth and competitiveness. This could be aggravated somewhat by higher payroll taxes. Weakening labour demand on account of higher payroll taxes could exacerbate the unemployment problem in the region, especially in sectors such as petroleum processing and some aspects of manufacturing that are already quite capital intensive.

The impact of higher payroll taxes is expected to vary according to the size and prior viability of firms. For some small firms in the region that are operating close to marginal costs, in the OECS for example, higher payroll taxes could undermine competitiveness and viability. Small hotels and manufacturers in a number of countries might be undermined by the higher effective wage costs that higher contributions represent. Nevertheless at the economy-wide level, the issue must be viewed in perspective as payroll taxes are a relatively small proportion of most firms' total costs and firms would weigh expectations of profit and other strategic goals in their employment decisions. Consequently, the overall fall in employment as a result of higher payroll contributions might be small.

Even if higher payroll taxes do not have a significant direct impact on employment in the region, they might affect employment in the formal sector of the economy. The relatively high incidence of evasion and tardy payment of contributions by a number of firms could increase with the rise in payroll contributions. These higher payroll taxes could drive some firms to operate in the informal sector. The International Labour Organisation (ILO) estimated that informal employment averaged about 15% of total employment in the 1990s, while in Trinidad and Tobago it declined from about 22% in 1993 to 19% in 1999.<sup>14</sup> Given the fact that capital intensity, industrial organization and productivity are generally lower in the informal than the formal sector, this could

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<sup>13</sup> ECLAC, (1999), "Competitiveness of the manufacturing and agro-industrial sector in the Caribbean with a focus on Dominica, Guyana, St. Vincent and the Grenadines and Trinidad and Tobago", Trinidad and Tobago

<sup>14</sup> See Freije, Samuel and Monteferrante, Patricia, (2002), "Common Problems of Back Door Neighbours: Social Security and Informal Employment in Barbados, Trinidad and Tobago and Venezuela"

negatively affect output growth. Also, higher payroll taxes might push some firms to hire more workers on short-term contracts to avoid paying social security contributions. Indeed, the increasing use of contractual labour in the region does not augur well for long-term worker welfare since these workers do not benefit from private pension and other benefits.

Higher payroll taxes could also dampen wage rates in the region. Since firms view payroll taxes as part of their total costs of production, increases in these taxes are likely to encourage regional firms to reduce wages, where possible, or resist demands for higher wages in order to maintain their competitive position in the market place. This, however, would depend on the level of and growth in worker productivity. Therefore, in enterprises and sectors where worker productivity is relatively greater, higher wages might be acceptable even where social security contributions are fairly high.

On the supply side, higher social security contributions also dampen the incentive of workers to work. The labour/leisure trade-off means that the average worker has a kind of threshold, above which contributions might lead to a lower supply of labour. The disincentive to work can be relatively high where workers believe that contribution payments far surpass future benefit payments as occur in some PAYG systems, especially uncertainty about the ability to redeem pensions when they become due.

Of critical importance, is the fact that higher contributions could reduce investment in human capital enhancement, by reducing funds available for spending on training, education and innovation both by workers and firms. This could curtail growth in worker productivity and product innovation, which are essential for achieving international competitiveness. Furthermore, workers' time preference implies that most people generally prefer not to delay retirement for too long as this reduces the options for enjoying retirement income.<sup>15</sup> This time preference problem and the desire for earlier consumption compared with a longer work-life might encourage a sizeable part of the workforce to opt for early retirement where this is available. If this occurs this could lead to a vicious cycle of reduced output, leading to lower social security contribution levels, thereby undermining the sustainability of the schemes. Such a scenario would be the very opposite of the intended result of increasing the retirement age.

Nevertheless, there is another side to the retirement problem, that is, the increase in the retirement age under Caribbean reforms could lead to older citizens remaining in the workforce for longer periods. Although these citizens might have significant experience on the job, their lesser readiness, than younger workers to adapt to new technology, retraining and new organizational techniques could adversely affect Schumpeterian creative change in firms which, in turn, could weaken competitiveness and growth. This is a critical issue in today's so-called knowledge-based economic system, where competitiveness depends on the ability to learn new skills, use new technology and adapt to change. Ultimately it must be remembered that economic growth sets a ceiling on the benefits of social security reform. Consequently, reform

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<sup>15</sup> Workers who value travel and adventure, for instance, might not want to retire too late in their lives when the likelihood of infirmity and ill-health might make them less likely to undertake such activities.

options that fail to consider the wider macro and microeconomic transmission effects are likely to have perverse effects. The flip side of the retirement issue, however, is that in countries in the region where it is difficult for political<sup>16</sup> or other reasons to raise the labour supply, increasing the retirement age might be the most feasible option for maintaining an adequate labour force participation to sustain economic growth.

Much of the research in this area has been informed by the European experience, where it is claimed that a well-entrenched social security system contributes to “Eurosclerosis”<sup>17</sup>. The argument is that European countries, such as France and Germany, have had to accept lower growth and higher unemployment as the price for a liberal “social welfare model”. It could be argued, however, that Caribbean countries should be able to fashion a reasonable social welfare model that is still consistent with high employment and growth. There is no *prima facie* reason why employment and growth must be bought at the price of low social welfare. The key issue is how readily the economy develops new areas of production and raises total factor productivity and levels of efficiency.

In the end, social security reform must be complemented by labour market reform. Labour market reform should be geared towards developing a better skilled and flexible labour market. This demands improved manpower planning; strengthened systems of worker retraining to better adapt to changing technology; and improved labour market information systems to match workers to available jobs. Critically, macroeconomic and structural policies would have to be targeted to reducing long-term structural unemployment, which is a major threat to the sustainability of social security schemes.

### ***5.3 Impact of social security reform on economic growth and development***

Having alluded to the critical role of economic growth as a benefactor of reform, this point merits some development. The reality is that although expenditure management should not be downplayed, it is often given too high a priority in social security reform. Overwhelmingly the focus is on maintaining consumption and containing the costs/expenditure of retirement pensions, health care and other benefits. Of signal importance, though, are complementary measures to liberate production and supply side bottlenecks.

Arguments surrounding social security, especially pensions, have suffered from a kind of myopia that views the elderly as mainly a liability rather than the asset that they can be in the development process. To be founded in realism, the elderly must be viewed not only as consumers demanding expenditure on their needs, but also producers, and often quite experienced producers. Modern medicine combined with improved

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<sup>16</sup> Although under the CARICOM Single Market and Economy (CSME) steps are been taken to liberalise the movement of labour it is anticipated that widespread free movement might not take place due to subtle barriers and the reluctance of many workers to relocate to a new country.

<sup>17</sup> Eurosclerosis is the term used to describe over-regulation of the EU economy including high fiscal deficits, high social security costs and rigid labour markets that have constrained economic growth and competitiveness of their economies.

knowledge of how the human body works enables people to live longer, fitter and healthier lives. The real challenge is for Caribbean societies to unlock the tremendous skills, training, experience, education and entrepreneurial talent that many of its older citizens possess. Returning migrants, in particular, can contribute to economic activity by founding businesses and thereby helping to alleviate the unemployment situation in the region. But apart from higher factor accumulation based on their skills and experience, these migrants can contribute to improved labour productivity and could raise average wages and contributions to social schemes.

A critical issue that can impinge on growth is the trade-off between equity and efficiency. The real issue though is whether this trade-off really exists in the case of social security systems, and if it exists, what strategies can be found to minimise the impact of this trade-off. One viewpoint following Okun's notion of the leaky bucket, argues that much of the expected benefits of social security expenditures are lost before they reach beneficiaries. This view contends that the welfare loss of individuals who pay social security premiums is greater than the welfare gain of those who benefit from social security. Therefore, social security is deemed to be pareto-sub-optimal.

However, there is a different view that bears consideration, especially in the Caribbean context. Economists of this persuasion propose that Okun's<sup>18</sup> leaky bucket analogy is unsuitable to the real world because it assumes transactions in a perfect world with complete information and competitive markets. Far from this, though, markets in developing countries are often underdeveloped, with weak price signals and significant concentrations of market power.

In this patently "second best world", the redistribution function of social security may well promote growth and improved economic welfare. This stems from the view that in imperfect markets, social security may serve an irrigation function, rather than act as a leaky bucket. The reason for this is the view that social security facilitates job destruction and job creation and structural change all of which are necessary to growth. The social security cushion encourages workers to give up their old jobs when it becomes unproductive and facilitates the search for new jobs. Importantly also, social security encourages some older workers, who are unable or reluctant to retrain to keep ahead of the skills and technological requirements, to leave the workplace. This provides room for more productive workers who can galvanise productivity and economic growth. However, as alluded to earlier, many older workers may contribute to growth in productivity through accumulated experience and skills. Using modelling techniques, Marimon and Zilibotti<sup>19</sup> find that a good social security system increases the duration of unemployment, but also leads to considerable increase in productivity because of better matching of jobs to workers skills and experience when skills biased technology shocks hit the economy.

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<sup>18</sup> See den Bultter, Frank, A. G. and Kock, Udo (2001) "Social Security, Economic Growth and Poverty: Theoretical considerations and guidelines for institutional arrangements" in Serie Research Memoranda, Vrije Universiteit, Amsterdam, The Netherlands

<sup>19</sup> Op. cit. above in 12

In the Caribbean where there is very little unemployment insurance, social security is critical to maintaining worker welfare during unemployment and also to enabling workers to search for a reasonable time for jobs that match their skills and experience. In poorer countries in the region, with weaker social security systems, workers tend to limit their search time and accept lower quality jobs that are available, often with adverse consequences for productivity growth in the economy. Indeed, weak social security systems may be one of the factors accounting for the growth in low wage free zone-type activities and also the informal sector in a number of Caribbean countries. In Barbados, the only country with unemployment insurance in the region, it is believed that this benefit has had a favourable impact on the economy by enabling workers to search for better jobs. This might contribute to Barbados' higher rating than other countries in the region I in the United Nations Development Programme (UNDP) Human Development Index (HDI).

An oft-neglected issue is the impact of social security systems on structural transformation and competitiveness of regional economies. Regional schemes are acknowledged as significant mobilisers of funds that can be intermediated to dynamic new productive activities in the process of Schumpeterian creative destruction. For instance, the organizational and incentive framework could be put in place to mobilise social security funds for diversification away from sugar in Jamaica and St Kitts and Nevis and bananas in the Windward Islands, to stimulate medium technology manufacturing, for example, electronic parts, software development, tropical generic pharmaceutical products, and new niches in tourism. The pension component of social security funds, because they are geared to meeting a long-term obligation, can contribute to capital deepening in Caribbean economies and are well suited to meet economic restructuring and competitiveness financing. To meet this challenge, the regional financial sector needs to galvanise the deepening of capital markets through a strengthened stock exchange, venture capital and merchant capital institutions. Social security schemes can then invest a portion of their funds with these development-financing institutions, which could, in turn, lend to agriculture and industry

In addition, a portion of these funds could be allocated to education, training and retraining of workers, especially to keep them abreast of advances in computer and information technology. To the extent that such social security funds that promote economic diversification and dynamically competitive activities earn good returns for contributors, they provide a win-win outcome for regional economies.

#### **5.4 Other impacts of reform**

It is well received that development is multi-faceted and involves more than economic growth. Among the other dimensions, redistribution is absolutely essential to the quality of development. But redistribution is a problematic area of political economy. Nevertheless, it is a cardinal objective of social security, both within groups in the current generation (intra-generational equity) and between the present and future generations (intergenerational equity). Historically, the move from provident funds to full-fledged

social security in the Caribbean was aimed, in no small measure, at dealing with skewed income distribution in former colonial societies. Early crafters recognised that they had to give effect in both letter and spirit to improved social welfare for the mass of the poor. Unfortunately today, the growing informal sector and recalcitrant unemployment in many Caribbean countries demand a kind of “Marshall Plan” of redistribution of income to enable marginalised groups to contribute to social security schemes for their retirement and other contingencies.

The fact is that there are two broad means of increasing contributions: increased economic growth, especially through higher growth in labour productivity and improved distribution of incomes, particularly for the self-employed and informal sector workers caught outside the schemes. McGillivray<sup>20</sup> makes the important point in criticising the gung-ho attitude of the World Bank towards funded schemes, that the critical issue in reform is whether economic growth is enough to generate sufficient resources to meet the obligations of the retired. Indeed the fundamental issue is how ageing societies will be able to sustain growth so as to provide the goods and services for all their citizens. The World Economic Forum Pension Readiness Initiative notes that rather than focusing on reform of public pension schemes, the focus should be on potential policies that target the deterioration of public budgets as a result of population ageing and high spending on public pension schemes. Thereafter, technocrats should explore policies and institutional changes that would promote economic growth to ameliorate the ageing burden problem.

Nevertheless, although it is concurred that this growth factor is the major driver of the success of reform, improved income distribution could also contribute to success in attracting informal and marginal workers into formal schemes. In addition, better income distribution could lead to virtuous effects by the positive spill-over it might have on growth itself, for instance, by enabling marginalised groups to set up small businesses and other means of self employment. This would enable them to contribute to economic output, where before they were unemployed or underemployed.

### ***5.5 The challenges to social security reform in the Caribbean: HIV/AIDS***

The HIV/AIDS pandemic is now a major catastrophe confronting health and social security systems in the region. The Caribbean is now recording the fastest growth in infection rates in the Western Hemisphere second only to Sub-Saharan Africa on a world scale. Continued exponential growth in the pandemic threatens to eliminate a sizeable portion of the active working/productive population in the region. Indeed, AIDS is now the main cause of death in the 15-44-age cohort of the population. Moreover, 44% of the cases are found among persons 15-34 years old. In addition, it is estimated that this would lead to an average loss of 5% or more in GDP in the region annually.<sup>21</sup> In

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<sup>20</sup> See Mc Gillivray, Warren, “A balancing act: Achieving adequacy and sustainability in retirement income reform”, Brussels, Belgium, March, 2004

<sup>21</sup> See Theodore, Karl, “Social Security Systems and the Macro-economy: A Caribbean Perspective”, in Social Security Financing and Investments in the Caribbean”, Issues in Social Protection, Discussion Paper 9, eds. Plamondon, P. and Osborne, D., ILO, Geneva, 2001.

fact, underscoring the dire implications of the pandemic, the Government of the United States has declared AIDS a security risk.

Therefore given that the ultimate viability of social security systems rests heavily on growth in the active contributing population and productivity growth, the HIV/AIDS pandemic could undermine contribution inflows and augment payments for health and other expenses thereby weakening the sustainability of the schemes.

The adverse impact of HIV/AIDS would also be felt through a kind of “back door” effect on governments. The stark reality is that many eventual sufferers of the disease would have been myopic, failing to save or take out health insurance plans. This moral hazard problem means that governments would have to take up the slack in many cases. Since governments are faced with an inter-temporal budget constraint, they cannot shift resources to care and treatment of the disease without affecting other areas of spending. It is very likely that governments could use the increased costs of HIV/ AIDS treatment as a rationale for not meeting some of its social security contributions, hence dampening the financial strength of the schemes.

## **6. Social security - the way forward**

What then are some of the key issues to be addressed as the region moves forward with social security reform? Although by no means exhaustive, a few issues seem to stand out. Even though reforms are already in train in some countries, there is need for conceptual and policy rethinking of what social security and protection should mean for the region at this juncture in its development and also in light of global trends and evidence. With changes in work patterns and the very meaning of ‘work’, ageing and production and exchange systems, Caribbean countries need to decide what levels of welfare is required and practicable to maintain decent living standards for its citizens particularly pensioners and the sick and infirm. This demands careful balancing of the solidarity, insurance and redistribution and saving and investment functions of social security. Thinking on these issues would help guide reform options, especially PAYG versus funded systems.

A critical factor is that most regional social security systems are now at a mature stage.<sup>22</sup> Given that maturity is a turning point, it is incumbent on those countries that have been delaying reform to move quickly to implement appropriate reforms. The technocrats and policy makers must solicit the opinion of the public at all levels and design a reform strategy that is practicable and addresses the potential imbalances in the systems.

Since there are political-economy issues relating to persuading the public of the benefits of reform and administrative costs in implementing them, initial reforms should be deep and wide ranging enough to prevent the need for frequent changes as the

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<sup>22</sup> See Alleyne, Frank, “The Future of Social Security in the English-Speaking Caribbean.” Maturity is defined as a kind of steady state relation between contribution income and benefit payments, and the actuarial demands on the systems to meet long-term benefits to persons who qualify.

schemes become more mature. For instance, countries that raise contribution rates by approximately 1%, complemented by small changes in the retirement age, might need to update the schemes too often.

Another issue to be addressed pertains to analysing the impact of reforms on the economy as a whole. Countries need to design a dynamic interactive model to assess the impact of changes in the social security on the savings, investment, financial deepening, growth and social welfare. This demands a technical team to carefully assess the transmission mechanisms of changes in social security variables on these other key economic variables. At the outset, there is need for a well-organized and managed data collection system as data shortage remains a major limitation on quantitative analysis of the systems.

At the regional level, the CARICOM Agreement on Social Security needs to provide a blueprint for improved harmonisation of contributions and benefits across the region. This would prevent significant disparities in the levels of welfare of retirees across the region, although individual country differences must remain.

## **7. Conclusion**

Social security/insurance systems in the Caribbean, like their counterparts around the world, will face increasing financial strain in the future. The maturing of the schemes, the demographic transition stemming from population ageing and the adverse future fiscal implications of non-reform mean that social security reform can no longer remain a luxury, but are an urgent necessity.

Fortunately, many Caribbean governments are now rising to the challenge, recognising that the only non-option is not to do anything about their schemes. Interestingly, although the World Bank and other agencies have strongly advocated that countries move to fully-funded defined contribution systems, no Caribbean country seems persuaded to adopt this option. This suggests that the much-touted Chilean model, which has been said to have a significant impact on savings and capital market deepening, has not convinced regional governments to go this route. In any event, it must be remembered that moving from a PAYG defined benefit system to a fully-funded defined contribution system entails significant transition costs (outstanding benefit obligations to the current generation) that would have to be borne by governments. In addition, the prudential regulation and supervision of private fund managers is a major task requiring considerable outlay in human and technical resources. Without such regulation, poor citizens could lose their retirement savings to imprudent investors. Of even greater economic import, though, is the fact that a funded system does not eliminate the problem of how to apportion costs between generations to ensure some degree of intergenerational equity. Even in a funded system, the young still has to pay for the social welfare of the old, as logic suggests.

Therefore, informed partly by theory and their own circumstances, Caribbean governments have opted for parametric or functional reforms of current PAYG systems,

instead of structural reforms. These reforms are centred on increasing contribution rates, adjusting insurable ceilings, changing the retirement age to encourage people to work longer and increasing the number of contributions that one must pay before he/she can receive a pension. One area of concern is the need for timely increases in the insurable earnings ceilings, which determines the level of insurance cover. Where the earnings ceilings are adjusted in line with changes in average wages or some close proxy measure, this helps to bring pensions closer in line with contributions. Measures are also being put in place to strengthen the administrative efficiency and investment management of the schemes to enhance their financial viability.

From a financial standpoint, the reforms being undertaken by Caribbean countries, once maintained as the need arises, should keep the funds in financial surplus. However, this is based on a number of assumptions, some of which are not made explicit by the actuarial projections. These steady State conditions include steady GDP growth rates, a phased population transition, which could be affected by the HIV/AIDS pandemic and reasonable investment returns over time.

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