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Social protection in the English-speaking Caribbean

Oliver Paddison

In recent years, issues concerning social protection (particularly pension systems) have become important items on the economic and political agenda in developed and developing countries alike, as demographic projections cast doubt on the financial sustainability of many pension systems currently in place. Substantive reform of pension systems in the Caribbean, however, has yet to materialize. In part, this may be a consequence of the limited amount of research that has been done on pension systems in the Caribbean, since this means that the authorities have not been able to refer to the literature to obtain information about how to tackle the issue of social protection in an environment with similar geographic and geo-climatic characteristics. This paper aims to fill this gap by examining the current status of public pension systems, analysing their recent performance and the challenges faced by schemes in the region, and suggesting ways forward.

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I
Introduction

Social protection systems are a crucial fundament of society. Since consumption continues after retirement, particularly as individuals may be confronted with significant spending on medical treatment and other forms of care, saving for this consumption during one's working life is imperative. However, individuals are unlikely to make sufficient precautionary savings when working. For one, they may lack the ability to act with perfect foresight and/or therefore not fully recognize the need to set sufficient resources aside when working. Others may in fact consciously refuse to take any precautionary measure as they plan to free-ride on the benevolence of governments by assuming that they will not be left to their own devices in old age. Besides those who put forward such short-sighted and morally dangerous arguments, many individuals may simply be unable to save when working due to low income, lack of access to saving mechanisms, or the negative impact of external events that may have wiped out any accumulated savings.[1] Consequently, it is generally accepted that governments should institute some form of compulsory social insurance system. Social protection systems were therefore designed to provide coverage for sickness, disability, old age, maternity and other contingencies.

Whilst social protection systems still maintain these principal functions, they have also been recognized as an appropriate tool for redistributing income from higher income to lower income groups.[2] Despite their initial success, pay-as-you-go (PAYG) schemes, where current expenditure is financed by current contributions, have come under intense scrutiny in recent years as demographic projections cast doubt over their financial sustainability. In particular, whilst life expectancy at birth is increasing in most parts of the world due to improved access to healthcare facilities and advances in medical science, changes in behavioural patterns concerning work have not kept pace. Consequently, the proportion of one's life spent in retirement has increased relative to the proportion spent working. In combination with decreasing fertility, this means that disequilibrium is looming for many public social protection schemes.[3]

Just as the debate on pension reform has intensified in many countries, substantial reform has already been implemented in a large number of countries. In Latin America, structural reform has been enacted (or is in the process of being enacted) in 13 countries: reforms have consisted in either replacing the PAYG scheme with a fully funded one (as in Chile, the Dominican Republic, El Salvador and Mexico),[4] or in introducing a fully funded scheme alongside the PAYG one (as in Argentina, Colombia, Costa Rica, Peru and Uruguay).[5] Overall, however, no significant reforms have been undertaken in the English-speaking Caribbean.

One reason may be that, despite the flurry of research into pension economics over the last three decades, the resulting conclusions and policy recommendations are only of limited use in a region of such particular geographic and geo-climatic characteristics that is prone to natural disasters and where all countries are small island developing States (SIDS).

The need to reform social protection is, however, particularly relevant to the Caribbean as the potential rewards can be considerable. Whilst national pension schemes represent a sizeable part of the respective economies, the fact that each member State has its own scheme limits the potential to exploit economies of

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[1] This is especially true in many developing, rural economies where wealth is particularly vulnerable to natural disasters, such as those based around livestock.

[2] Whilst the term "social protection" usually refers to old age, sickness and disability benefits, this study focuses only on its role in providing pensions. Throughout this study the term social protection thus relates to pension systems, unless otherwise stated. The two terms will be used interchangeably.

[3] The difference between publicly provided and privately provided pension schemes will be elaborated upon below.

[4] In a fully funded scheme contribution revenue is invested such that each generation essentially finances its own pension bill.

[5] See Gill, Packard and Yermo (2005). Note also that implementation of structural reform does not necessarily solve sustainability issues, as many countries in Latin America are finding out.

scale. This is even more relevant since, although current legislation restricts (to varying degrees) international investment of reserve funds, eventual combined investment abroad could reduce costs considerably and strengthen schemes through improved diversification. While pension systems have already been coordinated, thereby improving pension portability within the region, a fresh impetus to regional integration must now take the form of further reductions of labour mobility restrictions.

This study seeks to present an overview of social protection in the Caribbean. In so doing, it presents the structure of social protection schemes, evaluates performance of the schemes and discusses which reform measures, if any, have been taken. Section II looks at the status quo of social protection in the region. Section III presents challenges in relation to social protection that are being faced in the region. Section IV discusses reform options. Section V presents the study's conclusions.

II

Social protection in the Caribbean

Social protection is not a new phenomenon in the Caribbean.[6] Having initially spread from the United Kingdom in the form of provident funds, the majority of *national* social protection schemes were implemented shortly after independence.[7] Whilst only Antigua and Barbuda and Dominica implemented national insurance schemes prior to independence, the oldest national social protection scheme in the region was founded in Jamaica in 1966; the youngest schemes were founded in 1987 in Saint Kitts and Nevis and in Saint Vincent and the Grenadines.

By and large, however, social protection systems in the region have remained largely unchanged ever since. Other than parametric changes made at irregular intervals, no real reform has taken place and there is little evidence that significant reform is currently being considered due to a number of factors that will be presented in this study. One reason for complacency vis-à-vis pension reform in the region may be that national insurance schemes have not yet reached a mature stage due to their relatively recent implementation. This is reflected in the low old-age dependency ratio and in low social protection payments amounting on average to 2% of GDP across the region —a significantly lower rate than in other regions. In addition, over the years all schemes have managed to accumulate rather substantial reserves, equivalent to approximately 19% of total regional GDP, with reserves amounting up to 30% of GDP in individual countries.

Such substantial reserves should, however, be viewed as a window of opportunity for tackling the sustainability of social protection before it becomes more acute.

Understanding these challenges requires an understanding of how social protection functions in the region and which parameters define performance. Given the number of countries in the region, any analysis of schemes in each member State will necessarily imply sacrificing some detail. Without losing sight of the general picture, this section presents an overview of social protection in the region and explains how pension schemes are structured, what contributions are levied and how benefits are calculated. It will also present the costs incurred by national insurance boards and how surplus funds are currently invested.

1. Contributions and benefits

(a) *Contributions*

All public social protection schemes in the region are defined-benefit PAYG schemes.[8] These are characterized

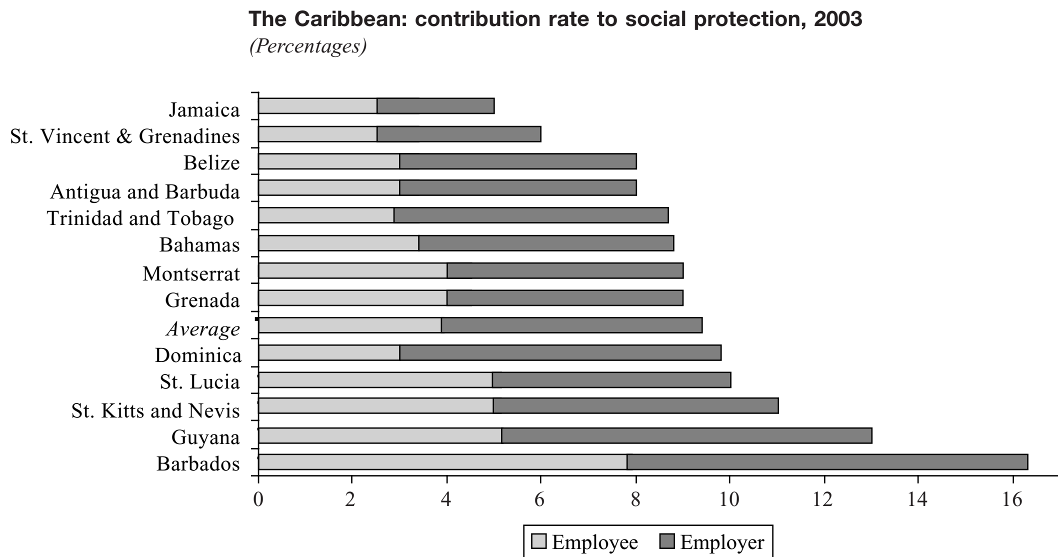
[6] References to the *Caribbean* or alternatively to the *region* refer to the English-speaking members of the Caribbean Development and Cooperation Committee (CDCC) and Suriname, excluding associate members, unless otherwise stated. These core members are Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

[7] Several occupational social protection schemes covering various sectors of the economies were introduced during the late 1960s and early 1970s. These were consequently replaced by the newly established national social protection schemes.

[8] In a defined-benefit scheme, contributions are endogenous to the system and vary to balance the pension budget as benefits are defined *a priori*. This is in contrast with a defined-contribution scheme where benefits are endogenously determined by contributions.

FIGURE 1

The Caribbean: contribution rate to social protection, 2003
(Percentages)



Source: Official data.

by parameters relating to how revenue is generated and how benefits (pensions) are calculated. The two most important parameters that define revenue generation are contribution rates and wage ceilings (the wage level above which contributions are no longer levied).

Benefits are financed by contributions from employees and employers, expressed as a percentage of the employees' wages. These rates are on average equivalent to 4% and 6.8%, respectively, in the region. On a country basis there is, however, a wide variation in these rates (see figure 1), with the highest levied on employees and employers in Barbados (7.75% and 8.5% respectively) and the lowest levied in Jamaica (2.5% each).[9]

In addition to the variation in contribution rates, there is considerable variation in insurable wage ceilings, which range from an average of 1.2 times the average wage in Trinidad and Tobago to 3.4 times the average wage in Saint Lucia.[10] Overall, there is no "ideal" wage ceiling on contributions; in fact, there are a number of countries that have done away with any kind of ceiling in recent reform processes.[11] One advantage of a high wage ceiling is that fewer individuals will have to arrange their own precautionary savings to smooth consumption variations over their life cycle in response to more income exceeding the ceiling and therefore not counting as insurable earnings. In such cases, well-developed capital markets or broad-based occupational pension schemes may fill the gap in consumption by smoothing variations when ceilings are low. However, the availability of either in the Caribbean region is limited, which strengthens the case for higher ceilings.

Moreover, with the exception of Guyana, all member States adjust their ceilings in an ad hoc manner rather than relying on an automatic mechanism.[12] Furthermore, adjustments take place at infrequent intervals: the wage ceiling has only been adjusted twice in 30 years in the Bahamas, three times in 20 years in the British Virgin Islands and, in the Turks and Caicos Islands, the ceiling has not been increased since the scheme was introduced in 1992. Consequently, when

[9] These rates nevertheless compare relatively favorably to those levied in mandatory funded schemes in Latin America, which range from 2.75% in Argentina to 12.27% in Uruguay (see Gill, Packard & Yermo, 2005).

[10] To have a common denominator, earning ceilings are normalized using average insurable wages, rather than national average wages, for which data is not available in the majority of countries.

[11] Several Central and Eastern European countries, such as the Czech Republic, Estonia and Slovenia, have no ceiling on contributions to pension schemes (European Union, 2002), and neither do Austria, Finland or Portugal (European Union, 2006).

[12] In Guyana, the ceiling on insurable earnings (and pensions) is adjusted in line with changes in public-sector minimum wages.

increases do take place, they are often substantial, as the case of Belize illustrates: in 2001 the ceiling on insurable earnings was increased for the first time since the scheme was established in 1979, raising the ceiling from BZ$ 130 to BZ$ 320 per week. This is still not considered sufficiently high, and the government is therefore considering an increase to BZ$ 640 per week in the near future following a recommendation of the sixth actuarial review (Montas, 2003). In particular, the need to set appropriate ceilings arises from the fact that low ceilings reduce the progressivity of schemes as high-income people only pay a low contribution relative to their income.

(b) *Benefits*

Social protection benefits are to a large degree uniform throughout the region, consisting mainly of sickness and maternity benefits, retirement, invalidity and survivors' pensions as well as funeral grants. Although several countries offer benefits related to work-related accidents and illness (such as disability pensions, injury benefits and coverage of medical expenses), only Barbados grants unemployment benefits to those eligible. However, as noted above, this study only focuses on the role of pensions in the context of social protection.

The overarching principle of retirement benefits in the region is to maintain income during old age and in the event of disability. This is recognizable by the fact that all PAYG schemes in the region are earnings-related and thus based on the social protection principle of maintaining relative income conditions during old age. However, the success of providing income-security to older persons varies within the region. In particular, there is considerable variation in the coverage of retirement benefits. Thus, estimates of the proportion of persons aged over 65 receiving a pension range from a low of 19% for Saint Lucia to a high of 85% for Barbados; the larger economies such as Jamaica, the Bahamas and Trinidad and Tobago exhibit approximately 38.6%, 53% and 56.8% respectively.[13] The factors underlying low coverage rates in some countries include low compliance rates among the self-employed and a sizeable informal sector in many economies. Moreover, high unemployment and the fact that all schemes are contributory PAYG schemes mean that many of those reaching old age may not meet eligibility requirements. Figures do, however, show that coverage has been increasing gradually, albeit at a moderate pace (coverage in 2000 was 45.2% in the Bahamas and 15.9% in Saint Lucia, for instance).

The generosity of earnings-related systems is measured by the replacement rate. The stance taken towards replacement rates is fairly uniform, so that whilst individual accumulation rules vary to some degree across countries, the majority of schemes grant a replacement rate of 30% for contributions made over approximately 10 years (500 weeks to be precise). Antigua and Barbuda grants the lowest replacement rate of 25%, whilst Barbados grants the most generous replacement rate of 40%. Overall, replacement rates in the region increase relatively more during early contribution years than later years in all schemes; following a 30-year contribution period (1,500 weeks) it reaches between 50% and 55%, with extremes in Barbados (60%) and Antigua and Barbuda (45%). In terms of the maximum replacement rates, Dominica has the highest attainable replacement rate of 70% and Antigua and Barbuda has the lowest maximum of 50% (see table 1).

The merits of a non-linear increase in the replacement rate are debatable. For one, it is useful when a pension scheme is initially introduced as it allows for members to rapidly qualify for a higher pension. As such, it can serve older workers well upon introduction of a scheme. However, a more linear pension formula will reduce the overall pension bill, as those retiring earlier will receive lower benefits. Belize is contemplating replacing the current formula of a 3% increase for the first 10 contributing years, followed by a 2% and 1% annual increase for the following five years and each subsequent year respectively, by a flat-rate 1.5% annual increment in the replacement rate up to a maximum of 60%, which would accordingly be attained after 40 years of contributing to the scheme (Montas, 2003). The 2003 actuarial review in Saint Lucia also recommended that the pension accrual rates be revised so that pensions accrue more gradually than is currently the case.

Replacement rates represent just one dimension of the calculation of pensions. Other aspects include average insurable earnings to which the replacement rates are applied and how they are calculated, as well as eligibility requirements.

[13] Coverage here measures the number of long-term pension benefits (excluding survivor and disability benefits) granted relative to the size of the population over 65 years of age. In countries where the retirement age is below 65, such as Saint Lucia (see table 1), coverage of the actual relevant age group will necessarily be lower.

TABLE 1

The Caribbean: social protection statistics, 2003

	Maximum contributable earnings	Pension to average Insurable Wages		Replacement rates (after … years)			Min. Contributions	Retirement age	
		Average	Min.	10	30	Max.	Number of weeks	Normal	Early
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Anguilla	2.02	30.6%	26.3%	30%	50%	60%	250	65	...
Antigua and Barbuda	1.88	22.2%	6.3%	25%	45%	50%	350	60	...
Bahamas	1.36	25.4%	16.0%	30%	55%	60%	150	65	60
Barbados	2.09	49.0%	30.6%	40%	60%	60%	500	65	63
Belize	1.52	25.3%	22.4%	30%	55%	60%	500	65	60
British Virgin Islands	1.42	21.4%	7.5%	30%	50%	60%	500	65	...
Dominica	3.15	28.3%	6.8%	30%	55%	70%	500	60	...
Grenada	2.07	24.5%	12.0%	30%	50%	60%	400 [a]	60	...
Guyana	2.10	28.5%	27.3%	40% [b]	55%	60%	750	60	...
Jamaica				[c]			494	70 [d]	65 [d]
Montserrat	1.26	17.1%	8.4%	30%	50%	60%	350 [e]	60	...
Saint Kitts and Nevis	3.07	28.4%	11.8%	30%	55%	60%	500	62	...
Saint Lucia	3.41	39.0%	13.7%		58%	60%	576 [f]	61	60
Saint Vincent & the Grenadines	3.08	29.9%	19.4%	30%	50%	60%	325 [e]	60	...
Trinidad and Tobago	1.25	37.0%	37.0%	[g]			750	65	60
Turks and Caicos Islands	1.69	19.0%	14.1%	30%	55%	60%	500	65	60
Average	2.10	27.0%	17.3%	33.5%	53.1%	60%	432	63	61

Source: Official data and Osborne (2004).

[a] Increasing to 500 in 2008.
[b] After 15 years.
[c] Flat rate pensions plus earnings related proportion.
[d] Five years less for females.
[e] Increasing to 500 in annual steps of 25.
[f] 144 months, increasing by 12 months every 3 years until 180 is reached on 1 January 2012.
[g] Pension based on average class in which contributions made over career (non-indexed career earnings approach).

Average insurable earnings tend to be calculated by taking the average of the best three to five years of the last 10 to 15 years of each contributor's working life.[14] Calculating benefits in such a way rather than basing pension payments on a complete earnings history is, however, likely to contribute to a scheme's regressiveness by favouring the more skilled who join the labour force later yet also have a wage profile that is higher and rises more quickly than lower-skilled individuals who have a relatively uniform income profile. The Bahamas is, for instance, contemplating moving to a system where the three-year final average pension formula will be replaced by one based on an indexed career earnings approach with a 1.5% annual accrual rate.

(c) *Eligibility*

Across member States the normal retirement age varies between 60 and 65, with Jamaica constituting the sole exception with a retirement age of 70 for men. Although there are no requirements regarding residence or citizenship to obtain a pension, eligibility does depend on having made a minimum required number of contributions. Many countries have set the minimum required to receive a full pension at 500 weeks; workers

[14] Exceptions are Barbados, Trinidad and Tobago and Jamaica. In Trinidad and Tobago, pensions are based on a career average of "earning classes" (income brackets); in Barbados the pension is two-tiered, with a "basic" pension equal to 40% of average insurable earnings (based on the best five years of earning) as well as a supplementary pension equal to 1% of the total weekly insurable earnings represented by the contributions in excess of the first 500; Jamaica also has a two-tier system.

in Saint Lucia are required to contribute for 12 years (144 months). Guyana and Trinidad and Tobago have a minimum contribution requirement of 15 years (750 weekly contributions) before workers are eligible to receive a pension. This is in contrast with Montserrat and Saint Vincent and the Grenadines, where only seven years and six and a half years, respectively, are required, Anguilla, where only five years are required and the Bahamas, where a mere three years (150 weeks) of contribution to the National Insurance Scheme confer pension eligibility (with a replacement rate of 15% of average insurable earnings).

Generally, workers who do not meet the required minimum number of contributions are guaranteed a minimum pension; once again, the generosity of this varies significantly across the region, ranging from 6% of average insurable wages in Antigua and Barbuda, to 31% in Barbados (see table 1).

Several countries in the region have taken steps to address the fact that a relatively low number of contributions confers eligibility to draw a pension. This issue is relevant, not only due to the increasingly globalized environment where labour mobility is on the rise, but also because the Caribbean Single Market and Economy (CSME) will eventually allow for free mobility within the region and could lead to workers' "pension shopping". Montserrat and Saint Vincent and the Grenadines are therefore raising the number of weekly contributions required in steps of 25 annually until a total of 500 required contributions are met. In Grenada the requirement will increase to 500 by the year 2008 and in Saint Lucia the contribution requirement will be raised in increases of 12 months every three years up to a total of 180 months in 2012. In other member States, discussion has commenced on how to tackle this problem. In the Bahamas, the social protection reform commission has recommended that the number of weekly contributions be raised in steps of 50 annually until the requirement is more in line with the rest of the region, i.e. until it reaches 500 contributions.

2. Costs and investment

The success of social protection schemes can be measured in several dimensions. One important dimension relates to the cost of running a scheme, such as those related to financing the managing institutions, paying salaries of its staff, maintaining premises and providing the services expected of the institution.

Operating costs in the region differ substantially. On average, they amount to 18% of income from contributions, although the underlying costs on a per-country basis reveal significant variations, with the highest percentage being 41% of contribution income in Montserrat and the lowest being 6% in Barbados. Overall, a quarter of the sample countries lie more than one standard deviation from the mean. In fact, whilst only Barbados and Trinidad and Tobago have operating expenses that are less than 10% of contribution income, Anguilla, Belize, Montserrat and the Turks and Caicos Islands have expenses in excess of 20% (see table 2).

Costs in this range are clearly too high for PAYG schemes and compared to, for instance, approximately 0.5% of contribution income in the publicly managed

TABLE 2

The Caribbean: administrative expenses as a percentage of contributory income, 2003

Country	Expenses	Country	Expenses
Anguilla[a]	22.8%	Guyana	15.8%
Antigua and Barbuda[a]	17.7%	Jamaica	13.0%
Bahamas	19.9%	Montserrat[a]	48.8%
Barbados	6.1%	Saint Kitts and Nevis[a]	14.6%
Belize	30.5%	Saint Lucia	13.3%
British Virgin Islands[a]	11.9%	Saint Vincent and the Grenadines[a]	16.7%
Dominica[a]	16.7%	Trinidad and Tobago[a]	7.1%
Grenada[a]	12.4%	Turks and Caicos Islands	21.1%

Source: Official data and Osborne (2004).

[a] Figures from 2005.

PAYG scheme in the United States.[15] It comes as little surprise that the region's geographic characteristics play a role in the overall operating expenses: the correlation coefficient between a country's population and its operating expenses for the social protection scheme is significantly negative (-0.47), indicating that social protection systems lack the ability to benefit from economies of scale. In particular, multi-island States, such as the Bahamas and the Turks and Caicos Islands, suffer from proportionally higher costs.[16] Clearly, costs are high due to the inability to benefit from economies of scale.

(a) *Surplus funds*

All in all, social protection systems in the region provide pensions to more than a quarter of a million of the region's 6.5 million inhabitants. While approximately US$ 450 million was paid out by these systems in the form of pensions and other benefits in 2003, overall contributions to the schemes amounted to around US$ 650 million, leading to an increase in reserves. Indeed, this has been characteristic of the region, with accumulated funds in excess of US$ 5.2 billion at the end of 2003 (about 19% of total regional GDP, or approximately 30.1% of GDP in individual countries). The financial position of the region's schemes could be considered good. In fact, despite all schemes in the region being PAYG, the accumulated reserves are higher than the assets of *funded* pension funds in every Latin American country (other than Chile), where assets averaged approximately 13.5% of GDP (Gill, Packard & Yermo, 2005). Moreover, all funds are currently accumulating surpluses. This is desirable as, whilst by design they are all PAYG, accumulated reserves can be drawn upon in the future to meet unexpected shortfalls in contributions or increases in commitments.

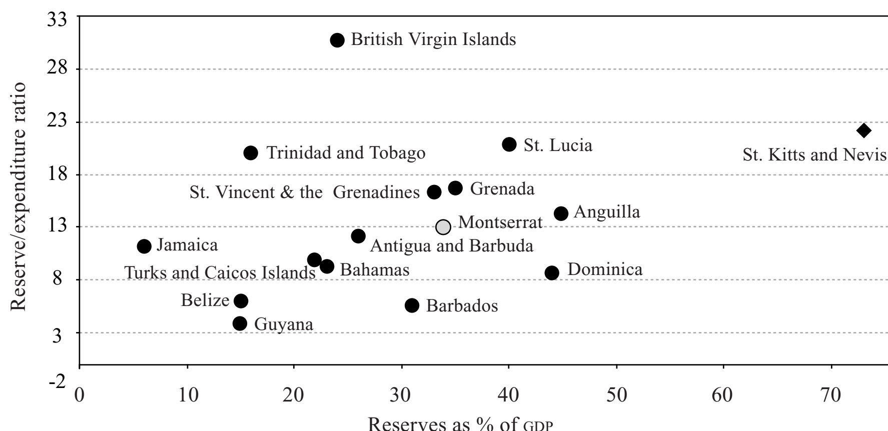
Reserves are negatively correlated (-0.62) with country size. The lowest proportion is in Jamaica, whilst reserves represent more than two thirds of GDP in Saint Kitts and Nevis (figure 2). However, the overall size of accumulated reserves is not an indicator of a financially sustainable scheme as it does not measure any aspect of performance or indicate how long the reserves would potentially cover commitments. A more relevant indicator is therefore the reserve-expenditure ratio, which estimates the number of annual expenditures that could be financed by the reserves. These values, as shown in figure 2, tell a somewhat different story as they reveal that there is seemingly no direct relationship between accumulated reserves as a percentage of GDP and the number of annual expenditures these could potentially

[15] See Thompson (2001, p. 242).

[16] However, Belize, as a non-island economy that is not particularly small in comparison with other countries in the region, also seems to have exceptionally high costs.

FIGURE 2

The Caribbean: reserves and reserve/expenditure ratio, 2003



Source: Official data and Osborne (2004).

TABLE 3

The Caribbean: portfolio investment, 2003

	10-year real yield	5-year real yield	Investment as % of reserves
Anguilla	2.50%	1.50%	91.80%
Antigua and Barbuda	0.80%	1.50%	44.40%
Bahamas	4.80%	4.00%	92.40%
Barbados	5.20%	5.20%	82.40%
Belize	7.40%	7.50%	94.50%
British Virgin Islands	2.20%	2.80%	92.80%
Dominica	4.70%	4.60%	77.00%
Grenada	5.00%	4.90%	92.10%
Guyana	4.80%	4.10%	95.30%
Jamaica	3.50%	9.80%	95.50%
Montserrat	2.40%	2.40%	96.70%
Saint Kitts and Nevis	3.20%	4.00%	94.90%
Saint Lucia	3.80%	4.10%	96.00%
Saint Vincent & the Grenadines	4.30%	5.60%	91.60%
Trinidad and Tobago	4.70%	4.70%	93.40%
Turks and Caicos Islands	1.60%	0.90%	87.50%
Unweighted average	*3.81%*	*4.23%*	

Source: Official data and Osborne (2004).

cover. In fact, actuarial studies have pointed to the need for action to avoid depleting funds. Given the status quo, it has been estimated that expenditure will exceed revenue in 2019 in the Bahamas, leading to an eventual depletion of the fund in 2029. Similarly, the reserve fund in Belize may be depleted slightly sooner (in 2025) if current conditions continue. Likewise, reserves are expected to begin decreasing in 2048 in Saint Lucia, with reserves projected to be depleted by 2062.[17]

(b) *Portfolio investment*

A large proportion of these accumulated reserves are invested (the average rate is 89%). Antigua and Barbuda is the only country where the investment rate, standing at 44%, is below 75%.[18] Consequently, portfolio management is an important aspect of regional social protection schemes and needs to be carefully analysed.

Performance of the various schemes' portfolio management over the last decade has not been particularly outstanding, with an average real return of approximately 3.8%, although returns have increased to around 4.2% over the last five years. Belize and Jamaica performed significantly better than the average, with Belize's 10-year return of 7.4% and 5-year return of 7.5%, and Jamaica's 5-year return of 9.8%. Antigua and Barbuda, Anguilla and the Turks and Caicos Islands scored significantly worse than the average: Antigua's 10-year return was 0.8% (5-year return of 1.5%), that of the Turks and Caicos Islands was 1.6% (0.9%) and Anguilla's 5-year return was 1.5% (table 3).[19]

One reason for such poor performance is undoubtedly the way these investments are allocated. Approximately half of all reserves are invested in fixed-income securities (such as loans and bonds) and a third in fixed deposits. These are investment vehicles that are historically rather stable, yet are also low-yield asset classes. Overall, only 11% of reserves is invested in equities and 4% in real estate (figures relating to the end of 2003).

It should be pointed out that the majority of countries have portfolios that are heavily skewed towards local investment; in fact only the non-independent territories (Anguilla, British Virgin Islands, Montserrat and the Turks and Caicos Islands) have any significant proportion of their assets (i.e. more than

[17] See National Insurance Board of the Bahamas (2001), Montas (2003) and ILO (2005).

[18] This is, however, a result of considerable outstanding receivables to the tune of half of overall assets.

[19] Returns are considered "significantly worse or better", if they are more than one standard deviation lower or higher than the region's average.

5%) invested abroad. In the British Virgin Islands, the figure is more than two thirds of total investment and in the Turks and Caicos Islands more than three quarters. Six countries have exclusively domestic investments, including the larger economies of Trinidad and Tobago, Jamaica, the Bahamas and Belize. Only seven countries have regional investments, which were in each case less than 10% of total investment, except in Saint Vincent and the Grenadines where a fifth is invested regionally.

The reasons for such concentrated portfolio selections are essentially twofold. The principal factor driving such investment decisions is no doubt the fact that legislation in many member States does not allow for social protection funds to be invested abroad. Social protection schemes are seen in many countries as a tool to provide the economy with much-needed funds. Many stakeholders in the region see a large role in economic development for social protection organizations: more than half of all stakeholders interviewed in the Organisation of Eastern Caribbean States (OECS) held this view (see Henry, 2004, p. 194). However, the same study also found that more than 70% of respondents deemed it necessary to diversify portfolios through foreign investment, pointing to the need to review existing legislation. Another reason for such lopsided investment – in particular relating to the concentration on fixed deposits – is that capital markets in the region are, to a large extent, in a nascent stage: there are only three regional stock exchanges, each with a small number of listed securities.[20] This makes any portfolio diversification a daunting task.

III
Challenges for social protection in the Caribbean

In 1994 the World Bank published a report on social protection that dealt with "averting the old age crisis" (World Bank, 1994). This was one of the first publications by an international organization calling for a multi-pillar framework in pension policy. The report advocated the establishment of three main pillars to finance social protection. The first pillar is based on the pay-as-you-go (PAYG) principle. The second pillar is "funded", i.e. mandatory contributions are made by workers into "personal" accounts; these contributions are invested and eventually used to finance workers' pensions. Participation in this pillar is to be mandatory. Finally, a third pillar is meant to encourage savings; this pillar is essentially identical to the second one with the exception that contributions to this one are voluntary (i.e. this pillar replicates private savings).

While this report received some criticism,[21] it had a profound influence on a number of developing countries, notably in Latin America, which has seen a flurry of reforms passed over the last two decades, and it continues to be influential in many regions. In fact, more and more economies are moving away from traditional defined-benefit PAYG schemes, partly due to population dynamics, but also due to the fact that PAYG defined-benefit schemes increase the incentives for early retirement, which has contributed to an untenable situation in terms of financing (see Gruber & Wise, 1999).

Overall, however, these dynamics have had seemingly little impact on the Caribbean agenda of social protection: national schemes in the Caribbean represent the first pillar only. Although all schemes differ in terms of accrual of benefit rights, contribution rates and other parametric features, they are all designed as PAYG schemes in principle. As such, no *mandatory* second pillar exists in the region and there is no clear indication that one will be introduced.

The complacency regarding reform may be due to the current demographic environment, i.e. the fact that populations are relatively young, and the recent inception of these schemes. Thus, national social protection schemes in the region have not yet reached maturity (less mature schemes have a higher ratio of active members to pensioners and deferred pensions) and are consequently receiving contribution income that is more than sufficient to finance current social

[20] The Eastern Caribbean Securities Exchange of the OECS has eight listed securities; the Jamaica Stock Exchange and the Trinidad and Tobago Stock Exchange each have fewer than 50 listed.

[21] See, for instance, Orszag and Stiglitz (1999).

protection obligations; hence they are all currently in the position to invest (*"fund"*) the surpluses.

Although the issue of ageing is not yet as pressing as in other regions, it must nevertheless be addressed as experience shows that the earlier this is tackled, the less painful remedies will be and the lower the political cost of implementing them. There are in fact several challenges to social protection in the region. Some of these challenges pertain to the current schemes, such as how benefits are calculated, a low number of contributions required for eligibility and the lack of automatic adjustment for wage ceilings and wage replacement rates. These challenges (described in the previous section) can be dealt with by changing parameters and/or existing legislation.

Other challenges are, however, more fundamental to social protection and need to be analysed in greater detail. One challenge pertains to labour markets, where particular reference must be made to the Caribbean Single Market and Economy (CSME), which will eventually lead to the free mobility of labour and will necessarily have an impact on social protection. In addition, the general performance of labour markets in the region represents a further challenge to social protection systems: unemployment is high and persistent in some countries, the informal sector is increasing and evasion of social protection contributions is widespread. These are factors that will ultimately lead to an increasing proportion of the elderly being excluded from the benefits of a pension and therefore need to be addressed.

Legislation governing accumulation of social protection assets also needs to be amended. In particular, the issue of whether national investment boards may invest abroad needs to be carefully analysed. For one, the geographic and geo-climatic characteristics of the region —small island economies whose economic fundamentals are only diversified to a limited degree and the fact that the region is extremely prone to natural disasters— may argue for a less restrictive stance on investment of funds abroad. However, any relaxation of legislation must carefully weigh up the benefits of doing so against the cost effects that capital outflows will have on economies' balance sheets in general and on their exchange-rate regimes in particular. These are all issues that will be addressed in the rest of this section.

(a) *Ageing*

As in most regions, ageing is a phenomenon that is affecting populations in the Caribbean. A combination of increasing life expectancy at birth and decreasing fertility rates is leading to a shift in the population structure. Life expectancy at birth increased on average by more than 15 years during the last two decades of the twentieth century alone and currently stands at approximately 73.1 years.[22] It is forecast to increase further to approximately 79 years by the middle of this century (table 4). In addition, the population growth rate will have decreased to 0.1% by this time, down from 1.8% in the mid-twentieth century and from 1% currently.

TABLE 4

The Caribbean: life expectancy at birth

	2000-2005	2025-2030	2045-2050
Bahamas	69.4	75.7	77.3
Barbados	77.2	79.8	81.4
Belize	74.4	77.5	79.7
Guyana	62.4	64.1	71.2
Jamaica	75.7	79.0	80.8
Netherlands Antilles	76.3	79.4	81.0
Puerto Rico	75.6	78.3	80.3
Saint Lucia	73.8	77.2	79.5
Suriname	71.1	75.8	78.6
Trinidad and Tobago	74.8	78.6	80.5
Average	*73.1*	*76.5*	*79.0*

Source: United Nations (2002).

While the causes of such a shift are well-documented,[23] the variation within the region merits closer consideration. Intraregional comparison reveals that the "pensions time bomb" is more relevant in some member States than in others. On an intraregional basis, there is a significant gap between life expectancy in Guyana (62.4 years) and Barbados where life expectancy is the highest at 77.2 years —a gap that is expected to decrease. However, a slowdown in fertility combined with emigration will lead to a substantial increase in the old age dependency rates in countries, as shown in figure 3.[24] The larger this ratio, the greater the number of older adults that the working population needs to support, i.e. the higher the cost of social protection.

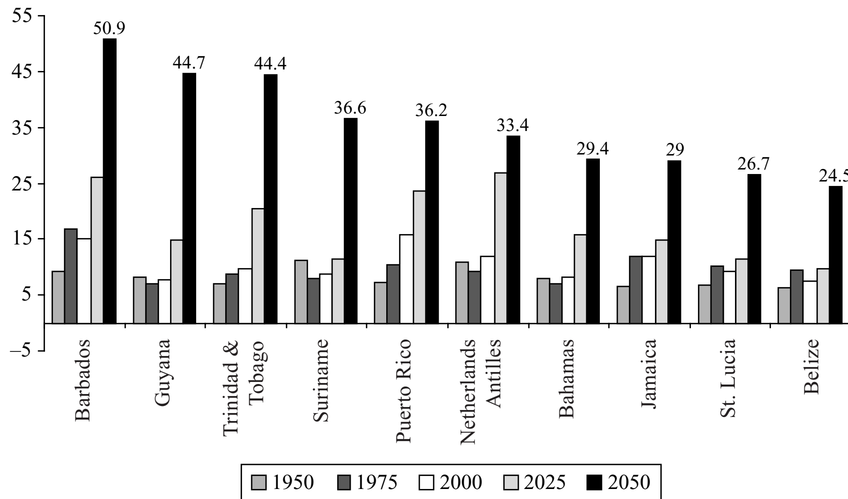
[22] Data pertaining to those English-speaking Caribbean countries with information available (table 4).

[23] See ECLAC (2004) for a recent analysis of population ageing in the region.

[24] The old-age dependency ratio is defined as the number of people aged 65 and above for every 100 people aged 15 to 64.

FIGURE 3

The Caribbean (10 countries): old age dependency ratio



Source: United Nations, 2002.

Other than the Netherlands Antilles, the percentage increase in all other countries will accelerate, with an average increase of 66% during the first quarter of the century and a 118% increase over the second quarter.

The increase in the dependency ratio is expected to continue to accelerate over the next 50 years. While the lowest increase in the old age dependency ratio will be an estimated 130% in Puerto Rico in the first half of the twenty-first century, the ratio will increase by almost 500% in Guyana. This development will have an effect on social protection schemes as an increasingly large proportion of older adults will need to be supported by a shrinking labour force.

The latter point is related to the current state labour markets in the region, as a social protection system needs an effective labour market to function well, especially in a PAYG scheme where today's workers are responsible for those currently retired.

(b) *Labour markets*

Labour markets in the region face several challenges. One major challenge for social protection is unemployment. A second relates to increased labour mobility —both within the region and beyond.

Unemployment is undoubtedly of the most significant economic challenges facing member States in the region. Not only are many member States experiencing unemployment in excess of 10%, but unemployment amongst females is also significantly higher than that of males, while youth unemployment in general is severe. Data from Trinidad and Tobago, Jamaica, Barbados, Saint Lucia and Belize show that the youngest cohorts in the labour force are the most severely affected: every second person aged 15-19 is unemployed in Saint Lucia and Jamaica (see table 6). This holds for every fourth young person in Barbados and Belize and every fifth in Trinidad and Tobago. In addition, figures show that, while more than 60% of the unemployed in Barbados have been jobless for less than six months, and more than 80% have been unemployed for less than a year, in Saint Lucia more than three quarters of the unemployed have been without work for more than a year. In Trinidad and Tobago, the corresponding figure is close to 25%, and in Jamaica it is almost one third of the population (table 7). In fact, approximately a third of Jamaica's labour force has never worked in the formal sector.

The numbers themselves suggest that obtaining employment for labour market entrants is difficult, as is finding reemployment. Preliminary indications suggest that a weak education sector may be the reason behind this (ECLAC, 2005). The implications for social protection are far-reaching. For one, the inability to find employment prevents individuals from meeting eligibility requirements and therefore could have an impact on any future pension claim. In addition, increased unemployment reduces the labour pool that is financing the pensions of those currently retired.

TABLE 5

The Caribbean: unemployment rates

Country	Year	Male	Female	Overall
Anguilla	2002	6.3	9.5	
Antigua and Barbuda	1991	6.4	5.6	
Aruba	1997	6.7	8.4	
Bahamas	2003	5.9	9.6	
Barbados	2002	8.7	12.1	10.3
Belize	2004	8.3	17.4	11.6
British Virgin Islands	1991	3.4	3.1	
Dominica	1997	19.6	27.2	
Grenada	1998	10.5	21.2	
Guyana	1992	8.4	18.1	
Jamaica[a]	2003	9.6	17.5	13.1
Netherlands Antilles	2000	12.0	16.2	
Saint Lucia	2003	17.2	28.1	22.3
Saint Vincent and the Grenadines	1991	18.4	22.1	
Suriname	1999	10.0	20.0	
Trinidad and Tobago[a]	2004	8.0	12.1	10.5

Source: International Labour Organization (2005) and official data.

[a] Second quarter of 2003/second quarter of 2004. According to the ILO definition, overall unemployment would be 7.5%.

TABLE 6

The Caribbean (five countries): unemployment

(Percentage of active cohort affected)

	Trinidad		Jamaica		Barbados		Saint Lucia		Belize	
Age	1991	2004[a]	1991	2001[a]	1992	2000	1993	2003	1993	2004
15-19	43.2	21.2	39.2	50.1	60.9	28.0	41.5	54.3	24.1	24.0
20-24	29.6	15.7	25.3	27.7	33.9	12.8	21.2	31.9	11.0	15.0
25-34	18.6	6.6	14.4	14	23.9	9.9	13.2	21.5	9.3	13.4
35-44	12.4	4.2	8.8	8.3	15.9	6.1	11.2	15.7	4.6	10.1
45-54	9.2	5.0	6.9	5.8	14.8	6.3	6.6	16.7	2.9	9.1
55-64	8.7	4.8	4.7	5.2	10.0	6.5	16.2	15.1	5.6	7.6
65 plus	2.9	2.5	2.9	4.1	4.0	0	11.3	17.6	7.5	6.7

Source: Official data.

[a] Second quarter of 2003/second quarter of 2004.

TABLE 7

The Caribbean: duration of unemployment

(Percentage of unemployed)

	Latest observations	Less than 6 months	6 to 11 months	1 year and over	Never worked	Not stated
Barbados	2002	61.9	21.1	12.9	1.4	2.7
Jamaica	2001	21.8	15.5	31.7	30.7	0.3
Saint Lucia	2000	20.3		77.9 [a]		1.8
Trinidad and Tobago	2002	54.3	9.5	23.7	12.3	0.2
Belize	1999	20.9	23.9	53.8	…	1.9

Source: Official data.

[a] Proportion of unemployed people who worked for more than six months.

Labour mobility both within the region and beyond poses a further challenge to social protection. In terms of the latter, emigration from the region has been substantial, resulting in a significant "brain-drain" phenomenon. Thus, Suriname, Guyana, Haiti, Jamaica and Trinidad and Tobago have the highest emigration rates in the world, at over 80% in the case of the first four. Overall, almost half of the world's 30 countries with the highest emigration rates are Caribbean States. The severity of the situation is underscored by the fact that the equivalent of 10% of Jamaica's current population emigrated between 1991 and 2001 (Docquier & Marfouk, 2004). Significant labour outflows from the region, especially of highly skilled graduates, poses a threat to social protection. Aside from the implications for overall economic growth, such outflows also reduce the pool of labour available to finance the pensions of the current retirees and, in particular, decrease the base of highly skilled, high-income workers.

One reason for the high level of migration out of the region may be the difficulty of migrating within the region. Indeed, anecdotal evidence suggests that workers would prefer to stay in the region were they able to find appropriate employment. Policymakers in the region have recognized this and have reacted by adjusting the institutional framework governing labour mobility. Following a consensus that deepening the integration process in the region, and the establishment of a CSME in particular, would foster growth, the provisional entry into force in May 1998 of the Protocol Amending the Treaty Establishing the Caribbean Community (Protocol II: Establishment, Services and Capital) is a measure that potentially increases the scope for free movement by allowing the free mobility of skilled labour within the region.[25] However, migration within the region remains low compared with immigration from other regions (see ECLAC, 2005).

Regarding social protection and migration, all core member States have entered into the Caribbean Community (CARICOM) Agreement on Social Protection, which was signed in 1993. Prior to this, the OECS member States had entered into the OECS Convention on Social Security; these two agreements co-exist, as do several bilateral agreements between member States and extra-regional States.[26] Although certain shortcomings of the CARICOM agreement need to be addressed (see box 1), these initiatives are laudable for the region as a whole.

(c) *Investment*

As outlined above, performance of investment of social protection reserves in the region has been weak over the last decade. In fact, in many countries in the region the investment of social protection funds is untenable. Governments have considerable reign over such reserves, with government paper frequently accounting for a significant portion of the investment. Although government borrowing from social protection is sometimes used for infrastructure development in countries such as members of OECS, the bulk of these funds is used for current rather than capital expenditure, thereby impeding their long-term growth impact. In addition, the capture of these funds by governments depletes the balance available for funding private-sector activities in tourism, agriculture, niche manufacturing and other areas of potential competitiveness in the region. Whilst the schemes invest in mortgages, housing, education and other social activities, there is seemingly no concerted strategy to facilitate the restructuring of stagnant sectors and for investing in new bankable productive activities. Given the long-term nature of the bulk of their liabilities, social protection schemes could provide some of the equity financing for dynamic production and service enterprises.

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 not allowed in most schemes. One underlying principle of this may have been that capital-deficit countries of the region should not be exporting capital to developed surplus capital markets in the United States, Europe and other countries.

[25] However, the treaty differentiates between wage-earners and non-wage earners. Whereas the latter group enjoys free labour movement —meaning that any (natural or judicial) person can set up a business and be own-account workers in CARICOM member States (the Treaty refers to this as the Right of Establishment), only certain wage-earning categories will enjoy the freedom of free labour mobility. In particular, wage-earners that are university graduates, media workers, sportspersons, artists and musicians are the persons that currently enjoy mobility (Article 46 of the Chaguaramas Treaty). Furthermore, the treaty does not specifically address modalities required by countries to obtain full labour mobility within the region —including a well-defined timeline for the implementation. Consequently, the scheduled launch date to establish and form the CSME in 2000 has passed. The CSME has only been implemented between Jamaica, Barbados and Trinidad and Tobago since 1 January 2005.

[26] Bilateral agreements between member States and non-member States do exist, these are however limited essentially to agreements between the respective member States and Canada and/or the United Kingdom.

Box 1
CARICOM Agreement on Social Security and OECS Convention on Social Security

In principle, two main social security agreements exist in the region: the Caribbean Community (CARICOM) Agreement on Social Security and the Organisation of Eastern Caribbean States (OECS) Convention on Social Security. Overall, the OECS Convention on Social Security is the more comprehensive of the two, as it covers additional short-term social benefits (such as maternity benefits, sickness benefits, funeral grants etc.), whereas the CARICOM Agreement only covers long-term benefits relating to pensions (invalidity, disablement, survivors and retirement benefits). In addition, contributions made in any of the signatories of the OECS Convention are *cumulative*, thus workers will receive a pension as long as their cumulative number of contributions satisfies the eligibility requirements in the State in which they are applying for the pension. This holds even if they do not meet the eligibility requirements in the form of a minimum number of contributions in a *single* country due to having moved between members.

Under the CARICOM Agreement, the total number of contributions is only cumulative if workers do not meet the eligibility requirements in any of the countries in which they have worked. Should they meet the minimum requirements in several countries, they are eligible for a pension in each of those countries; consequently, receiving a total of several pensions from different States may result in an overall pension that is higher than the maximum pension in any of the States. Furthermore, the CARICOM Agreement is not clear on the procedure to be followed in cases where the minimum pension eligibility requirement is met in one State but not in others. This issue needs to be addressed.

More importantly, however, risks associated with the exchange rate, market volatility and other potential dangers associated with a foreign market are feared as they are unknown quantities over which countries have no control.

However, excess liquidity in the regional banking sector has dampened rates of return on fixed and other commercial bank deposits. Compounded by the nascent nature of the regional securities market, foreign investment should 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, regional money and capital markets could be considered as options for diversifying risk and improving the returns of social protection schemes. Simultaneously, extra-regional capital markets need to be available to social protection reserves.[27] For one, as pointed out above, there are only a limited number of stock exchanges in the region, each of which carries only a relatively low number of listings. In addition, the considerable vulnerability of the region to natural disasters has profound risk implications for any portfolio located exclusively in the region.

That said, exchange-rate fluctuations remain an issue. Whilst it is possible to hedge against exchange-rates, to a certain extent, outflows of financial resources would nevertheless place pressure on the financial system, given that the majority of countries in the region have either fixed exchange rates or exchange rates fluctuating in a narrow band (fixed *de jure* and *de facto*). In particular, given the significant size of social protection funds in the region, this may well be a potential problem in the short run as funds are invested abroad, placing considerable stress on the reserves of central banks.

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 public agency. Governments have chosen to institute national investment boards that tend to benefit from economies of scale from the pooling of investment funds. It has, however, been argued that these boards are not entirely independent (see Osborne, 2004 and Henry, 2004) as many countries' board members are appointed by the government. In addition, several board members simultaneously hold political office. This clearly has implications for the impartiality of investment decisions taken. Thus, it may be argued

[27] This was in fact the opinion of the majority of specialists interviewed in OECS, namely over three quarters of all board members, or 72% of all those interviewed (see Henry, 2004, p. 194).

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. However, it is important to consider whether individual countries are significantly large enough to cater to several private fund managers, as market size is a particularly relevant consideration in the case of social –protection fund administration, which should benefit from economies of scale.[28]

IV
Reforms of social protection

Reforms can essentially be categorized into two categories: parametric reforms and structural reforms. While the former involves changing the parameters of existing schemes (such as increasing contribution rates, wage ceilings or retirement ages, and/or reducing pensions), structural reform refers to a complete overhaul of the social protection system. Although parametric reforms may be easier to implement, a structural change in the system is usually considered more relevant to the long-term viability of such schemes. This section will look at the different options available and how relevant they may be for the region, considering the challenges outlined in the previous section.

In practice, structural reform has taken the form of a move from the traditional one-pillar approach (i.e. a PAYG scheme) to a broader approach encompassing a multi-pillar structure, as advocated by the above-mentioned World Bank report (World Bank, 1994). Thus, most countries in Latin America have introduced such reforms or are planning on doing so. Several countries in Europe and Central Asia have also introduced such a multi-pillar system. However, in general, pension reform is usually associated with a move to a defined-contribution fully funded scheme where workers are required to save a proportion of their income in individualized accounts, to which they only have access once retired (such a move is often referred to as the "privatization" of social protection). Hence, the essential feature of the multi-pillar approach has been the introduction of a fully funded element —be it a mandatory or voluntary element of the new system.

One of the major factors that have been advanced by proponents of reform is the potential to achieve higher savings rates that could augur well for investment. However, on a theoretical level the impact of social protection on savings is inconclusive. This need not imply that such a move in the Caribbean will not affect savings positively.[29] Indeed, increased contribution rates will raise compulsory saving in an environment where financially short-sighted individuals fail to make the necessary savings for their old-age consumption.[30] In addition, it has been argued that savings and investment mobilization are affected by the very structure of social protection schemes, the argument being that fully funded privatized schemes with individual retirement accounts (IRA) allow individuals to shop around for the best returns in placing their funds; this stimulates competition and allocation of funds to high-yield productive activities that promote growth.[31] Experience from Latin America, however, suggests that individuals have limited financial knowledge. Moreover, despite the importance of cost and return, the long-term nature of fully-funded pension schemes has translated into a low elasticity of demand with respect to performance of fund companies. As such, a viable consideration for the region may be the introduction of a centrally managed

[28] For instance, in Bolivia, with a population of more than 8 million, only two pension funds were initially allowed in the market.

[29] There is no simple relationship between pension reform and savings, as the impact depends on 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, however the substitution effect may be positive or negative depending on whether investment returns on social security funds are higher or lower than alternative assets.

[30] Thus assuming they will not compensate for the lower income by borrowing against their future income.

[31] Such a scheme still, however, requires public intervention in the sense that there is need for effective public sector oversight and regulation to ensure that funds are not placed in unduly risky speculative investments or captured by corporate fraud.

fund (be it at the national or regional level) to undertake investment on behalf of all participants.

Despite the arguments put forward regarding the potential positive effects on investment, there is no doubt that the true motive for moving from PAYG schemes is the financing issues these schemes are facing in the light of shifts in the population structure and population ageing. However, defined-contribution fully funded schemes are not without criticism. For one, such schemes can cause considerable inequality in old-age/pension income, as the redistribution element in such schemes is usually minimal due to the fact that contributors have their "privatized" accounts. This is even more true considering unemployment in general —particularly the high youth unemployment in the region— as in a fully funded scheme *consistent* contributions are required to build up a significant fund, as are contributions *early* in one's career to be able to benefit from compound interest effects. Defined-contribution fully funded schemes also limit the scope for risk-spreading as they place a large proportion of risk of returns on individuals. Although individuals can safeguard against longevity by purchasing an annuity based on their accumulated pension portfolio upon retirement, stock market volatility, particularly towards the end of workers' working lives, can result in large losses if portfolios are insufficiently diversified, resulting in lower annuity payments and hence making individuals significantly worse off.[32]

Whilst progress has been achieved in Latin America following the introduction of fully funded schemes in many countries, at most such a defined-contribution fully funded scheme should form part of an overall comprehensive package and not be considered as the main pillar to provide for one's own retirement income (Gill, Packard & Yermo, 2005). In fact, research in Latin America has shown that, despite the move to such schemes, social protection systems in the region are not necessarily fulfilling their role in providing effective protection to the elderly. Rofman (2005) points out that in only three of 17 surveyed countries are more than two thirds of older adults covered by social protection, and that in 10 countries the coverage rate is less than a quarter of older adults. In terms of the Caribbean, additional challenges face fully funded schemes; these pertain to the lack of depth in financial markets, reflecting the relatively nascent state of regional capital markets, as well as the fact that large outflows of currency may squeeze international reserves, resulting in exchange-rate pressures.

An alternative to the structural reform of social protection schemes are so-called Notional Defined Contribution (NDC) accounts. These have been introduced in, *inter alia*, Sweden, Latvia, Italy and Poland. They are essentially meant to mimic the structure of a fully funded scheme with "personal accounts", without actually establishing a fund and still encompassing an element of risk-reduction through risk-spreading. The underlying idea is that whilst contributions are used to finance the pensions of those currently retired (i.e. a PAYG scheme), each individual's contributions are registered in "notional" individualized accounts. The "return" on these accounts is in turn linked to productivity changes and/or current and prospective demographic changes. This "notional" value is credited to the notional account.[33] It has been argued that such a system can overcome the issues of political feasibility and policy inconsistencies of parametric fixes, whilst simultaneously maintaining the insurance component by linking benefits to contributions. A further benefit is that individuals no longer bear the risk associated with returns of capital markets as the intergenerational financing mechanism is maintained as in a PAYG scheme (Palmer, 1999).

While the overall recent introduction of NDCs may be too recent to comprehensively assess their performance, closer inspection of NDCs on a theoretical level shows that they are essentially only "thoroughly reformed PAYG defined-benefit schemes" (Scherman, 1999). This point is made particularly clear in Disney (1999), who provides a thorough evaluation of NDCs.

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[32] This was in fact the case of workers who retired at the beginning of the 1990s in Chile: many saw large decreases in their fully funded pension wealth

[33] Thus in Latvia the growth of the social insurance contribution wage base is used for the "notional" interest rate; in Sweden it is the growth rate of nominal wages and in Italy it is the growth rate of nominal GDP. In Poland it is the rate of inflation plus three quarters of the growth of the social insurance contribution wage base.

V
Conclusions

While social protection reform has featured prominently on economic and political agendas around the world —both in developed and in developing countries— the Caribbean region seems to have been largely insulated from these developments, such that little reform activity can be observed other than the introduction of relatively small adjustments to existing schemes. One of the reasons for this is undoubtedly the relatively healthy situation of most national schemes: annual surpluses have resulted in an accumulation of social protection reserves that in some cases represent a significant proportion of GDP.

That said, schemes in the region are undoubtedly facing several challenges: while Caribbean populations are, in general, not ageing as rapidly as in other parts of the world, it is nevertheless a phenomenon that will eventually need to be confronted. A wider issue pertains to labour markets in general: unemployment is high and persistent in the region, affecting particularly young people and women. In addition, the informal sector has increased in size in recent years. Such developments impact upon social protection schemes, as neither the unemployed nor those in the informal sector contribute; they may however pose a burden on schemes in the future. Hence, the authorities should react rather sooner than later to confront these issues.

Several options are available to authorities in the region. For instance, they can maintain parametric reforms, move to more structural reform, or indeed combine both. Drawing on experiences from around the world, only a quarter of all countries reforming their pension systems implemented major (structural) reforms, whilst the remainder embarked upon parametric fixes.[34] Rather than advocating a structural reform in the region (such as moving from a defined-benefit PAYG scheme to a defined-contribution fully funded scheme, as advocated in other parts of the world) the characteristics of the region suggest that more nuanced reform may be more appropriate.

[34] According to Schwarz and Demirguc-Kunt (1999), of 82 countries reforming their social security, only 21 undertook "major" reform, involving a substantive change of system.

The reality is that social protection schemes in the region already hold significant funds. However, there is a portfolio mismatch in that there is excessive holding of short-term instruments (assets) to meet long-term liabilities and funds are to a large degree not invested in productive, growth-generating activities, but rather have been subjected to government capture as evidenced by the significant holdings of low-yield treasury bills in most countries. Whilst it is acknowledged that the region needs a deepening of capital markets to create the required tools for investment, the current status quo has led to a low return on these investments, which is having a negative effect on the potentially beneficial impact that the investment of social protection reserves could have on economies. In addition, many parameters in regional social protection schemes need to be reviewed, and current legislation may need amending.

The first step would be to remove some of the legal restrictions on the investment of these funds, taking into consideration the potential effects on the external balance of economies. This could lead to a significantly improved performance of the funds. As a second step, also linked to the current reserve stock, management of funds should be reviewed. As suggested in World Bank (1994), the best avenue for preventing inflation from eroding the value of the reserves is an international diversification of pension fund investments, which is more likely to occur when private investment managers are in charge. However, the shortage of experienced and trained investment analysts and fund managers in the region is a constraint affecting the efficiency of investment decisions and is limiting portfolio diversification. One potential remedy to overcome this could be to pool the portfolio investment of Caribbean countries outside the region. Taking advantage of economies of scale in this way could result in reduced overall costs for individual countries in terms of fund managers' and investment analysts' remuneration. However, the details of how this could be implemented would need to be addressed.

As alluded to above, several parameters and design features of social protection schemes in the region need to be reviewed. Whilst the non-linear increase in the replacement rate may contribute to people retiring early, basing average insurable earnings on, for instance, the

best three to five years of the last 10 to 15 years of each worker's career creates an environment where the link between contributions and benefits may be considered as weak.

On a more general note, the current philosophy of contributory schemes, where contributions to the social protection scheme are required to be eligible for a pension, should be reconsidered. As regional economies are characterized by significant informal sectors and persistent unemployment, particularly amongst young people and women, contributory schemes necessarily exclude large proportions of the population from being able to obtain a significant pension when aged. This has important implications for well-being in a region with extreme pockets of poverty. A more broad-based approach to social protection should therefore be considered, such as a non-contributory system where eligibility is based on residence and/or nationality conditions and benefits are financed by general taxation.[35] The introduction of such a scheme —possibly in conjunction with current schemes— would form an important pillar in the regional fight against poverty

Also, given the large number of countries in the region and hence the large number of social protection schemes, a long-term objective might be to create one umbrella social protection scheme in the Caribbean. Whilst there is little doubt that the diversity of member States in the region results in considerable challenges for such an endeavour, the CARICOM social protection agreement can be considered as a first step to creating such a unified scheme; closer interaction among social protection schemes in the region could potentially be achieved within the CSME. However, until labour mobility within the region is increased, the benefits of such an umbrella scheme, as well as those of the current improved portability due to the CARICOM social protection agreement, will remain limited.

(Original: English)

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[35] Such schemes seem to be successful in Argentina, Bolivia, Brazil and Chile where coverage rates are relatively high. The introduction of such a non-contributory pillar now forms part of the World Bank's revised pillar approach on pension schemes (Gill, Packard & Yermo, 2005). The initial three-pillar approach (see section III) has seen the introduction of two additional pillars: the non-contributory universal pillar and a non-financial pillar corresponding to social policy, as expressed by the availability of housing, health care and other social factors.

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