JAMAICA CIVIL SERVICE ASSOCIATION

IN COLLABORATION WITH

THE JAMAICA CONFEDERATION OF TRADE UNIONS

REVIEW OF GREEN PAPER ON PUBLIC SECTOR PENSION REFORM IN JAMAICA

November 30, 2011

EXECUTIVE SUMMARY

The Jamaica Confederation of Trade Unions in consultation on the Green Paper for Public Sector Pensions Reform in Jamaica has considered the following realities and raised fundamental arguments to contextualize the trade union response:

1. Jamaica's current economic environment is characterised by:
    a. Slow economic growth
    b. Poor tax collection
       15% of self-employed persons pay tax
       1% of corporations in Jamaica pay 99% of tax
       $134 billion waived in taxes in 2010
    c. Myth of free education and healthcare
       Education and Healthcare cost in Jamaica is paid by tax. PAYE persons pay for the services that everyone now enjoys. Gone are the days that the Government receives contributory fees for education and healthcare from the persons who could normally escape the tax net. This fall all is replaced by PAYE persons, so in reality education and healthcare in Jamaica is not free.
    d. IMF conditionalities in respect of inflation management, reform of taxation strategies, trade and foreign exchange liberalization, privatization and decentralization

2. An assessment of pros and the cons facing Jamaica are as follows:

PROS	**CONS**
Low inflation	Jamaica's economic struggle for the last 15 consecutive years
Low interest Rate	Unemployment of 12 %
Declining murder rate	½ Million Jamaicans below the poverty line
	Jamaica's record of average economic growth of 2% per year
	Total factor production decreased by 1.74% in comparison to 1973
	Amongst the highest crime rates in the world
	All competitive indicators going backwards
	3rd Most Indebted country percapita in

	the world
	Consumable payment imbalance
	Poor educational performance

3. In considering the reform of public sector pensions it is imperative that it be considered in the context as part of the strategy for overall economic reform. Therefore, public sector pension reform cannot be treated in isolation from the reform of the National Insurance Scheme (NIS) and Reform of the Tax System.

   What we are to concern ourselves with first and foremost is the creation of an effective platform for social protection of Jamaicans, to include public sector workers. Many of the models of pension reform including…………. sought to address the matter of social protection in order to ensure that a minimum standard of living is protected.

4. The Green Paper on public sector pensions reform weighs heavily on the establishment of this platform, referred to as the first tier of pension for public sector workers. This discussion cannot be isolated from the wider considerations for reform of the National Insurance Scheme (NIS) and other forms of social protection.

The Trade Unions recognize that the Government of Jamaica is challenged economically, the sum required for the payment of public sector pensions is large, and the country is incurring liabilities that continue to be serviced by incurring greater governmental debt. Therefore our actual situation may be even worst that the statistics reflects. We also recognize that approximately 90% of private sector workers are not in pensions plans. The discussion of social protection becomes more evident as the Government will figure prominently in assisting these persons to live above the poverty line, a cost to the government that is estimated at $600 billion annually.

What is the primary driver of this Public Sector Pension Reform?

I. Cost
II. Adequacy

We are therefore asked to make a choice in respect of the options set forth for consideration. It is also recognized that the Parametric Reform 2 is the government's recommended option.

Jamaica has been asked by its International funding partner the IMF to gain agreement on the reform of pension. The government by way of the Green Paper on Pension

Reform has indicated that it is seeking a parametric reform of pension that will enable it to reduce the pension liability relative to GDP and have a more sustainable basis on which to pay pensions to public sector workers.

Whilst the system that supports pensions in Jamaica is totally out of step with a modern society, we see the fundamental problem as not the relative cost of pension now but the impact that pensions have in allowing retirees to remain above the poverty line. Pensions Reform should be pursued as part of the Government's agenda for macro-economic development, one that will effectively create a mutually beneficial environment, and not one that spontaneously creates a new category of poor persons. We must start at creating the environment for investments in the productive sector, and improving the administration of the tax system in Jamaica geared at greater success in collections and simultaneously critically examines the tax waiver policy. We advocate a strategy for sustainable growth in GDP- based on producing more, this growth model must be balanced and long term in its approach while solving the immediate problem related to the cost of pensions. As we seek to achieve these objectives for macro-economic growth we must do so with funding at lower rates of interest.

To tackle this problem, we must become conversant with an accurate or absolute figure that shows the dollar value of pensions, though we are given an estimated to cost 28 billion per annum. We must all be reminded that presently, there are both contributory pension schemes within the public sector, and for the portability of pensions an equitable relationship should be established.

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Fundamental to achieving the goal of parametric reform it the systemic reform that is necessary to have the efficiency levels of pension administration increased. Systemic errors are abundant in pension administration in the central civil service as it was only recently through the Census of the Public Sector that Government has been able to determine how many persons will become pensionable in the next 5 to 10 years. Through this reform pension administration should be revamped for greater efficiency, and at minimum we should be able to accurately forecast the numbers of persons eligible for pension in upcoming years and ensure an adequate pool of funds.

Therefore, there are certain issues in the reform programme that will need to be carefully studied and analyzed by the Parliamentary Sub-committee, as follows:

1. Backlog of pension payments owing to the archaic system of pension administration. The process for pension administration requires overhauling from the current manual system which is inefficient and takes in some cases 2-3 years just to reconcile one public officer's file. A modern electronic database and processing mechanism must be an output of this reform process.
2. We cannot reform without looking at how this reform will impact the ability of persons to maintain a reasonable standard of living. (Implications for society). Therefore the reform must provide at least a replacement rate of 60% as with the current scheme.
3. Though we support contributions to pension, the defined Contribution Scheme will result in persons being dissatisfied with the amount being received as the period of contribution and your pay level impact what they will receive
4. A policy of indexation must exist, and this should be relativity to current salary. Though mention is made of indexation to salary growth and inflation, the indexation to inflation serves as a partial attempt at smoothing the effect of inflation, but the longer term objective must be the growth of GDP.

5. Whichever option that is chosen we are going to have to look at indexation. The policy for indexation must recognise that?
   - 5.1 There will be additional expenses for persons who live longer, therefore the value of pension income must be maintained to an acceptable level. It is already evident that many senior public officer that are currently receiving pensions find it difficult to cover inescapable expenses without input from other sources.
   - 5.2 IMF should not examine pension solely as a percentage of GDP, rather it must look at public sector workers as part of the human capital of Jamaica, and recognize the value of such resources.
   - 5.3 Factors – Planning
   - 5.4 Contributory pension
   - 5.5 Expand and improve the social safety net (revamp NIS) – Persons unable to survive on the current NIS payments as the first tier of pension payments.
6. The age movement can affect the affordability of pension (it will reduce the pension bill) and set back new entrants. We need to create jobs for young people and moving the age to 65 is not the answer.
   - 6.1 The graduated movement of women's pension age from 60-65 will have impact on other areas.
   - 6.2 Option for early retirement affording persons the opportunity to retire at 55 yrs must remain because a healthy and robust workforce is critical, and cannot be compromised in any section of the public sector.
   - 6.3 Automate the pension for persons who have attained the maximum of 12 years.
7. The new system should see a shortening of the period of processing pension payment, from the four months for the initial payment, as stipulated in the Citizens Charter of the Ministry of Finance. We must move toward the payment of pensions not more than 30 days after the effective date of

retirement, the proviso that all documentation must be in place should be replaced by a mandate to implement a comprehensive database containing the Service Record of all public sector workers by 2015.

8. The reform should focus on both new and existing public sector officers.
   8.1 There should be a 'grandfather clause'. Persons already in the system should be able to elect to transfer to the new pension arrangement or remain on the existing scheme. Such a clause should relate to officers above age 40
   8.2 There should also be a transition period that allows persons who are close to 40 years to be allowed to complete the vesting period.

Option 1

There is no consistency in payment – employee/employer may contribute and contribution may or may not be vested.

Option 2

We disagree with the concept of notionality for pension schemes that are not national schemes. The performance of the Pension fund can be maximized if both employers and employees contributions are in the pool for investments.

Those persons who would have left before being vested will be able to take their Contributions but the fund will not have the benefit of the Employers portion under a notional arrangement.

Option 3

No money being put up by the government. No actual assets, no real money actually in the system.

Preferred Parametric Reform Option 2

Reform start date: 2015
Reform End Date: Not clearly defined
Inflation: Assumes an inflation rate of 4.0% p.a.
Indexation: 50:50 salary growth and inflation post 2012

The implications of which are:

1. The country has struggled to achieve at least 2% growth over the last 15 years
2. Every dollar of investment in Government bonds makes a funded scheme unfunded by a dollar – if the Government does not pay into the scheme incrementally. The funds will have to be invested in the productive sector, real goods and services not a financial institution in order to achieve the desired effect. The established pension fund requires an agreed method of management between the Government and the trade unions. The Government will need to cut an annual cheque of at least 0.5% of GDP for this scheme to work.
3. There is a three (3) year hiatus
4. Likely protracted reform period
5. Inflation is understated at 4.0% and is expected to sour above this assumption
6. Indexation to salary growth assumes that the government will not be pursuing a policy of wage restraint. Indexation to salary growth and inflation may appear acceptable at a glance, but in the longer term will lead to little or no real increase given the inflation ravaged pension income.

7. Accrual Rate of 2.2% - 0.04%. The proposal for pension calculation to use the average of the last five (5) years earning to arrive at the base rate for pension is unacceptable. The history of public sector salaries is of such that in large part public sector workers have earned below the market value of the services they provided, coupled with the bottleneck for permanent appointments means that hundreds of persons that worked in acting positions will not benefit from their service at the higher level. We cannot accept less for officers whose present

income cannot facilitate reasonable savings for pension years. What are we hoping to achieve?

8. This proposal will eventually result in the use of a career average, this career average for long serving members will mean that pensions will be computed using what is close to earnings at the mid-point of their career. **This will in effect create a new category of poor persons in Jamaica reliant on social welfare mechanisms, government being the largest employer**. We must therefore maintain the last salary as relevant base for the computation of pensions.

9. Need to determine the cost of establishing and maintaining a Funded Pensions scheme. A funded pension scheme must operate independent of the Government of Jamaica consolidated fund, and requires a Board of Trustees representing workers and the GOJ.

Pre-Implementation Consideration

If the Defined Benefit Plan is retained, and the reform starts in 2015, there will be a three (3) year window to establish the method for management of the pension fund, which must include the views of the trade union as an equal partner. The current investment environment is hostile and we must realize that solutions that work abroad may not work in Jamaica.

Contributions

The contributions of 5% Government must be real contributions and not notional contributions, it is agreed that public sector workers must contribute for the sustainability of a reformed public sector pension scheme. The rate of 5% employee contribution is aligned to the minimum rate at which some public sector workers currently contribute, as well as the current 4% contribution that civil servants make to the family benefit/ widows and orphans scheme. The proposal suggests 1% real increase in the contribution presently being made by civil servants under the family benefit scheme. It is important to give persons options, as within Executive Agencies officers pay between 5% - 10% for greater benefits. Government payment to be fixed but employee can be flexible. Government payment must be graduated 1-10 years = 5%, 11-20 years = 7.5% and above 20 years 10%,

It is recommended that a further reduced rate of income tax be applied to pension income, to protect the value of pensions.

Establishing a Pension Fund

In establishing a pension fund, contributions already made under the Family Benefit scheme should transfer into this fund for greater benefits. The transitory workers will be affected mostly, unless a mechanism is in place for the portability of pensions, this needs to be looked at seriously. We are suggesting that the period for vesting be 5 years to reflect the average tenure of workers in the modern dispensation.

Retirement Age

The grandfathering policy for persons that have attained the age of 50+ in 2015 is a reasonable provision. Whilst the proposed graduated increase in the retirement age is supported in part by members who for personal reasons prefer to work longer, particularly those who need additional years to improve their pension payments, the greater proportion of workers prefer to retain the current terms for an early retirement option.

The suggestion of public sector pension as contributing to public debt should be guided by the realization that the debt that Jamaica faces is largely related to the expensive debt that we have incurred to fix the economy during previous financial crises. Sustainable measures must be to pursue for cheaper funding for debt servicing; replacement of current debt with low cost debt.

Over the years the JCSA have been requesting information regarding Widows & Orphans (Family Benefit Scheme). We had suggested that of the 4% being paid, 2 % be put aside and invested.   How much of it are we willing to give up?

ANALYSIS OF PENSION REFORM THE TRADE UNION VIEWS

The arguments for reforming the current pension system are compelling and without a doubt there is an urgency to act expeditiously. Notwithstanding the dichotomy in the rational, union / government, for the reform of the system there exists a convergence of objectives that will set the platform for finding a resolution. At the root of the problem is that the government is feeling the effects of the spiraling cost of pensions and the workers are feeling the effects of inadequate levels of pension payment. The arguments that the cost of pension is rising rapidly as shown in the statistics moving from 0.4% of GDP in 2002 to 1.4% in 2010 is however expected as economies in recession experience low growth and the consequence is rising wages and pensions with other challenges are usually highly inflationary and hence the vulnerable groups such as pensioners are usually extremely challenged to survive in such hostile economic conditions. Therefore the fate of our pensioners has to be rooted in some level of protection based on a carefully contrived system designed to function in even low growth economies.

There are many models of pension reform that seek to achieve this however, as the green paper implies they all have pros and cons that we must delve into carefully.

The current pension system in based on payments being made from the consolidated fund. This has grave implications considering the state of the economy since the ability to pay would rest on performance of the economy. This "pay as you go"(PAYG) system, a carryover from the Colonial era and provides only a minimum basic payment for pensioners but at the same time it provides a level of comfort because of its predictability. However, the challenge is with its adequacy. Anecdotal evidence shows that majority of pensioners are receiving pensions that are inadequate and insufficient to meet their living needs. In this regard the Unions are in agreement with a reform of the pension system but more so to improve the benefits to pensioners.

Given the conditions that exist and the state of the economy we seek to arrive at a reformed pension scheme that at worst will result in a faster delivery of pension benefit for pensioners and at best better pension provisions to include a high replacement rate and for our pensioners. In this regard we can agree with the definition that a good pension provides pensions that are **adequate, affordable, predictable, equitable and robust.** Hence our deliberations are with a view to pursue a pension system that satisfies these conditions.

Public Sector workers are calling for reform and want this reform to

- eliminate the Contribution to Family Benefits Fund,
- be portable,
- contribute to a dedicated pension fund,
- have the employer contribute to that fund and
- have it managed external to the consolidated fund and the accountant General's Department.
- Transition arrangements. What will be the new role for Pensions Branch and the Accountant General.

- That the funds of the scheme be invested in the development of infrastructure instead of external borrowing and thus increase the level of saving for the country.

In our consultations throughout the public sector the most riveting concerns surrounded the views that the suffering pensioners were to be dealt another blow, the magnitude of which is uncertain as the green paper did not go far enough to examine these issues and this is due to the lack of consultation with Public Sector employees and their Union.

LACK OF CONSULTATION

The recommendations indicate a 2015 implementation date and with those public servants in the cohort now 40 years and younger slated to experience the reforms by 2030. One objective of the consultations must be to this cohort what this means for them. Regrettable the consultation with this group is lacking and government need to move to correct this consultation gap quickly. The short time the unions had to consult with that cohort of public sector workers did not give sufficient time to single out this cohort for the significant sensitization and education that is needed, consequently the government need to move swiftly to correct this omission even in the absence of a clearly defined model. For the consultations that we did have, the challenge was more with the models and the predictions flowing from them than with convincing workers for the need for reform. We note with some consternation that the assumptions in the PROST modeling all reflected models which assumed that the pension bill would grow but the economy would stand still or grow at modest rates. This showed no confidence in the growth of the economy or the ability of the country to mount a successful economic recovery. In this regard we would appreciate a modeling that is predicting successful economic outcomes. However, given the assumptions for a sluggish or worsening economy, the need to protect the pensioner increases. In these circumstances the unions are hard pressed to consider models that show outcomes of reduced pension payments amidst increased contributions.

The arguments that pensions will place a significant burden on the taxpayers who contribute a major source of the revenue, and that it is unfair for all taxpayers to support a small segment of the wider population, lacks merit since it can be argued that public sector workers are the largest group that pay tax in this country and since the system is heavily skewed towards the PAYE, we carrying the burden of the tax paid in Jamaica and thus should benefit. In this regard the unions call for tax reform that must be in tandem with pension's reform to improve the position of the government to afford pensions. In other words no pension reform should take place with tax reform preceding it.

The fact that pension is inadequate is adequately addressed on (page 18 of the green paper) so we will not belabor the point except to say that this underscores the position of the unions that we cannot accept the position of a pension system that will make the pensioners worst off.

The approach to providing adequate pension must be seen in a holistic way. Taking into consideration a two pillar pension scheme with NIS being reformed to provide suitable first tier benefits to cover the gap left by the derisory pension payments and I quote "The reform to the National Insurance Scheme (NIS), so that the retiree can improve or at worst maintain their current standard of living. It is proposed that the basic Social Security System (NIS) should be enhanced through the development of improved funding arrangements and more efficient administrative procedures. This will facilitate the provision of more meaningful benefits on a national scale". But of course if we have to pay increased NIS contributions so as to increase the benefits this means that our overall contribution to pension may become more onerous and taxing.

Notwithstanding the above, the unions are not oblivious to the concerns of the government that the cost of pension is becoming burdensome in terms of affordability but we are also concerned that even though all reform options (parametric and systemic) reduce the cost to the employer, even more advanced economies than Jamaica have been forced to reform pensions for it to remain sustainable.

In regards to the welfare of the workers, all the reform options resulted in the replacement rate being reduced. It should be noted that the current system provides benefits with an average replacement rate of over 60%, which is in the range of international best practice. This speaks well for Jamaica. The concern is that 60% replacement rate of a low income earner does not leave much room to tinker with and adjustment downward will make this pension inadequate therefore a 40% replacement rate without substantial increases in wages and salaries will leave pensioners destitute even with a minimum pension of $15,000.00

VESTING PERIOD

To be eligible for a pension in the public service one must serve for at least 10 years. The vesting period of 10 years should be maintained however the consideration of an appropriate pay off can be considered for persons who leave the service early because of post abolition or reorganization. 60 years retirement period can be considered for review considering that this is one of the parameters that when adjusted could result in savings and hence reduce the cost to the government. With the life expectancy at age 60 projected to be 20 years the upward review of the pension age is even more advised. However this has to balance against the need for the public sector to renew itself through new entrants to the service and the attraction to the service of new and younger persons.

INDEXATION

Apart of the reason for the rapid decline in the adequacy of the pensions is the lack of adjustments in pensions in regards to inflation and consumer price index increases. In the existing "pay as you go" system high inflation and lack of appropriate adjustments to pensioners' pension have caused the pensioners to experience a worsening of their economic situation the longer they live. In this regard any review of the pension system must address this situation in a sustainable and robust way. Perhaps, indexation would be the most appropriate adjustment mechanism to use, however the case for indexation has to be considered with due regards to the impact on affordability and sustainability. higher life expectancy mean that pension payments will continue to rise rapidly, while persistently high rates of inflation will reduce the value of pension benefits if adjustments are not made for inflation. The green paper argues that although a defined contributory scheme would seem to be an appropriate alternative pension system, factors such as fiscal deficits, demographic profile of the public sector workers, depth of the capital market and existing contractual arrangements between the Government and employees must be taken into consideration before the most viable policy options can be determined. The recommendation (page 29) showed two scenarios parametric 1 and 2 and the introduction of an offer of a 50/50 indexation to wages and inflation. The indexation makes for sense however we would love a 60/40 indexation wages and inflation as this could lead to more efficiencies and a better position for pensioners since wages according to the model will increase pass inflation by 2012.

The argument that speaks to a contributory pension in regards to the level of contributions must be vigorously scrutinized. In the current PAYG system the government foots the entire bill for pension benefits, from the consolidated funds. Using a know formula pensions are calculated based on years of service, the last paid salary and other variables all multiplied by the actuarial rate. This amounts to the pension benefit paid to all government workers however there are variation across the groups according the legislation that applies to that group.

REFORM

Parametric reform

The green paper identifies the **defined contributory** scheme to be an appropriate pension system. This however has implications for variables that would result in unfavorable economic out comes that the employer would not be comfortable with. This scheme requires no contribution from the employer, however, the low wages, long hours of work, dedication, commitment, loyalty and in some cases service for more than 25 years can be considered ample contribution for pension. If the government is seeking to reduce its payment how will it compensate to make up for its lost contributions when workers are constantly contributing and in addition asked to contribute into the funding for pension?

We believe that the government has a obligation to ensure adequate pension benefits for its employees retirement. A cost of 1% of GDP should be set aside to pay pensions. The remainder of funding can be made up from contributions.

The strongest recommendations are in favour of parametric reforms 1 where there are define contributions and define benefits combined and the benefits are predictable from an established equation. While there is merit in this hybrid system further tweaking of the parameters are needed for example movement of the retirement age form age 60 to 65 could yield substantial reduction in the pension bill. The tweaking could be the retention of the options for exits that you can go at 55 you may go at 60 but must go at 65 . This will help to give the workers option for retirement and could lead to easier acceptance by the workers.

Systemic reform

Systemic reform being more complex and profound will require a more in depth evaluation of the options. One must not forget the lessons learned in the collapse of the Chilean model or the case of our Caribbean neighbours Montserrat who reformed to a Direct Contribution Model and re reformed back to a Direct Benefit system. Moving from a Defined Benefit system that has for a long while provided a stable dependable pension scheme means moving away from a scheme that has certain redeeming qualities that must be retained. Moving to the Defined Contribution Scheme will cause the workers to be worst off having to make a contribution where they were not making one before. In addition the likelihood that they will now be receiving a lesser pension while having to make contributions will certainly give rise to concerns as the situation will now put the worker in a lose, lose situation where benefits are decreased although having to make contributions.

Presently the actuarial value of the government's contribution to the pension benefit of each worker in the pay as you go pension scheme is approximately 22% of the yearly remuneration of each worker. In the parametric 1 recommendation the model shows a 10% contribution by workers and employer. This model is believed projected to provide adequate benefit to the pensioners but may not be affordable by the workers. We are therefore requesting a tweaking of this model to suggest a standard 10% contribution by the government but each worker can contribute between 5% - 10% this of course would depend on the other pillar, NIS being reformed to make up the pension benefit

RECOMMENDATIONS

In parametric reform 2 the decrease in actuarial rate from 2.2% to 1.8 is not acceptable since this will result in a drastic decrease in the benefits to the pensioners and as argued before any lowering of the replacement rate could lead to a worsening of the pensioner's position. why not seek to keep the actuarial rate to not less than 2.0% given however that the other pillar of benefits the NIS system is properly reformed. For example the contributions can be with an option to increase as now holds with the private pension scheme for parastatial bodies and executive Agencies. That is they could start with a 5% contribution in the first place and as they grow older and the need for more real income decreases they could increase their contribution by election to up to 10%. This will be more viable to workers as they age and more income for investment becomes more available.

In parametric Reform 2 it is also projected that replacement income rate would fall from 60% to 46%. Again the unions are opposed to a reduced replacement rate so this is completely unacceptable and hence this option is not considered.

RECOMMENDATIONS

The present pension administration conditions are so poor that some pensioners become beggars before they can access their pension benefits. The horror stories are many notwithstanding no senior officer have gone off on pension without their pension being properly accessed. On the other hand the bulk of pensioners suffer agony and pain because of the administrative bungle and delay. In this regard the green paper recommendations are acceptable and considered to be crucial going forward regardless of the reform initiative that will be agreed on. In particular we welcome an initiative to harmonize the pension schemes as harmonization of the pension scheme across pension schemes is highly desirable as this will help to promote the free movement of skills across government entity to assist in productivity and efficiency. However, care has to taken to ensure that the harmonization does not end up as disadvantageous to any group.

Recommendation 8 requires a more fundamental review. The Family benefit fund has been a source of concern for civil servants over the years. Even as this scheme has provided the kind of benefits that would protect their family in case of their demise the scheme suffers from a lack of public education and is viewed as additional tax so that there is a constant cry for its reexamination in light that civil servants feel that it should be an elective scheme rather than compulsory one. This has been largely so because of the lack of information on the operation of the scheme and the ways in which refunds are made.

A CASE FOR DIFINED BENEFITS

In concluding, the more favoured recommendation seems to be ***Option 1 – Parametric Reform 1*** and I quote **"**Structurally, this system is similar to the existing system and would be fairly easy to introduce. It is also fairly predictable and transparent since participants know the formula used to calculate pension benefits and therefore know what to expect at retirement. **It provides adequate benefits for the pensioner**, but the contribution rate of 10% could prove unaffordable especially for the workers that are in the lower income bracket. In terms of sustainability of the system, the pension debt decreases under this reform falling from 57.7% to 39.7%. This new option would also be more affordable for the Government when compared with the existing system as cost fall from 2.9% of GDP to 1.5% in the long run.

"Before a pension system is put in place, there should be forethought of likely stress and instability that can affect it. **A robust pension system** is one that is capable of withstanding any major shocks. It should also continue to be effective in the face of unforeseen conditions. This condition is judged on the ability of the system to maintain the expected "income-replacement targets" over the long run".