

11<sup>th</sup> Regional Pension & Social Insurance Conference

Overcoming the Actuarial Deficit in  
Pension Fund & Social Security Systems  
in the  
GCC, Yemen & Sudan

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# Agenda

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2. Causes of the Problem

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# Introduction

- Social Security Schemes in GCC, Yemen and Sudan – young and matured schemes
- Military schemes - not included in this presentation
- Defined benefit schemes – insuring old age, disability, death, work injuries
- These schemes represent the largest and possibly the only pillar for pension provision in their country
- Large mandates and high expectations regarding income replacement
- Concerns regarding future scheme viability
- Parametric and structural reforms
- Diagnose the causes, quantify the magnitude of the problem and then discuss possible solutions

# Causes of the problem

## Demographic Factors

- The ageing of the population is not expected to be the most significant factor of the problem but it should not be underestimated for the future
- Falling fertility rates
- Increased life expectancy

	1955	1965	1975	1985	1995	2005	2015	2025	2035	2045
Fert. Rate	7.1	7.2	7.2	6.9	6	4.7	3.7	3	2.5	2.2
Life Exp.	37.6	41.2	47.2	55.1	60	63.6	67.1	69.9	72.3	74.2

Source: United Nations

- Normal Retirement Age remained the same
- Current dependency ratio: 4.6 – it is expected that in 2025 this will fall to 2.4 and to 1.9 in 2050

# Causes of the problem

## Design Structure Factors

- Inequality between benefits and contributions
- Designing stage – this economic inequality was not present
- Continuous benefit increases without equivalent increases in the contribution rate
- Benefit increases without conducting actuarial studies
- Reserves build up after the inception of the schemes were considered to be surpluses and used to pay for benefit increases
- Concept of long term reserving
- Political intervention – instigated by employees, employers, pensioners, board management, lawmakers, government

# Causes of the problem

## An example

- Contribution rate reduced from 21% to 15% in 1986
- Benefit accrual factor increased from 1.67% to 2% and then to 2.2%
- Maximum pension increased from 75% of salary to 88%
- Maximum pension amount was abolished
- Minimum pension was introduced and increased from time to time
- Retroactive pension increases
- Employment/retirement patterns changed

# Causes of the problem

- Unfair and misleading scheme comparisons – private sector schemes with civil service pension funds
- Early retirement – change of employment/retirement patterns mainly due to scheme rules that failed to give members incentives to stay and increase their benefits
- Abuse of the system
- Firms using corporate restructuring as a pretext allowed many employees to retire early – this induced more problems especially if there was a salary increase
- Under most of these schemes early retirement is possible from the age of 35 with 20 or even 15 years of service
- Combination of pension and salary

# Causes of the problem

- Special treatment of women - lower service requirements
- The current financial strain that the special treatment of women is placing will increase as women will live longer and their participation in the workforce will increase
- Minimum early retirement age
- PASI Oman – no member is eligible to retire before the age of 45 – still too young
- PISS Kuwait – minimum early retirement age will gradually increase to 55 for men and 50 for women in 2020
- Exceptional extraordinary decisions in cases of disciplinary retirement, job cancellations, redundancies – early retirement without satisfaction of the minimum conditions

# Causes of the problem

- Minimum pension and early retirement
- A high level of minimum pension gives no incentive to low paid employees to stay in service

	Minimum Pension as a % of Minimum Salary
Kingdom of Bahrain	88%
Sultanate of Oman	80%
Kingdom of Saudi Arabia	75%
Kuwait	65%
Yemen	81%

- Desired level: 50%-70% - anything above that will discourage work

# Causes of the problem

- Violation of scheme rules
- On occasion, the maximum pension rule is not followed
- Certain benefits are still offered that are appropriate only at the initial establishment of the scheme:
  - Maximum of 5 notional years of service granted at or even before the normal retirement age
  - Purchasing years of service at prices lower than the actuarially fair ones
- Benefits paid are based on the final salary
- Manipulation of salaries received before retirement
- Problem is greater for schemes with no ceiling on earnings or no restrictions on salary increases granted

# Magnitude of the financial problem

- All these causes resulted in the increase and/or acceleration of the actuarial deficits
- Most of the schemes are funded on a partially basis with the exception of Kuwait that aims to achieve a full funding financing system and has raised the contribution rate to meet the level of benefits
- “Implicit Debt” Vs GDP

# Magnitude of the financial problem

	Billion USD \$
1. Actuarial Liability of the social security schemes in the GCC, Yemen and Sudan	250
2. Total Assets of the schemes	130
3. Deficit (1-2)	120
4. Total Gross Domestic Product	500
5. Actuarial Liability as a % of GDP (1/4)	50%
6. Deficit as a % of GDP (3/4)	24%

# Magnitude of the financial problem

- Cashflow projections for Bahrain, Oman, Saudi Arabia, UAE, Yemen & Sudan

	Number of years left	Cost rate in that date
Benefits > Contributions	15 years	21%
Total Outgo > Total Income	26 years	30%
Fund is depleted	34 years	37%

- Implicit rate of return

	Return on Total Contributions (Employee, Employer)	Return on Employee Contribution only
Bahrain	8.4%	12.1%
Oman	8.5%	12.4%
UAE	8%	14.4%
Saudi Arabia	8.5%	10.9%
Yemen	5.2%	9.5%
Sudan	10.7%	13.8%
Weighted Average	8%	11.4%

Source: i.e. Muhanna & co

- The average rate of return that employees earn is more than 10% under almost all schemes – World Bank benchmark – 3%

# Administration

- Administration expenses of these schemes as a % of the contribution income – 0.4% to 8%
- Higher than other similar schemes around the world – however it depends on the state of maturity
- Room for improvement – could generate savings by improving efficiency and achieving synergies
- Cost reduction can be achieved by merging the social security schemes of the country
- Even if a scheme is not administered in a fully efficient manner and higher costs are incurred, these costs have not significantly affected the financial position of these schemes
- Administration is a small proportion of the outgo of the scheme

# Investment of Assets

- The same understanding applies for investment returns – even though the level of return affects the development on the fund, if the fund is allowed to diminish the effect of the return will be of lesser importance
- Currently, most regional schemes have high asset allocations in fixed deposits
- Considering that immediate expenditure can be met by contributions this is inexplicably high
- Professional review of investment strategies – match liquidity requirements
- Aim to increase returns – higher investments in bonds and equities and keeping a prudent position against risk
- Issue of geographical concentration of investments

# How to overcome the problem?

- Immediate changes are required either to overcome the current problem or to prevent it from occurring in the future
- Solution – should be technically and socially feasible
- Parametric or structural reform?
- Younger schemes Vs older/mature schemes
- Young schemes – parametric reforms can be initiated in order to reduce the gap between the benefit and the contribution level
- Young schemes should take full advantage of the reserves built up from the inception as well as the investment returns earned
- These schemes should monitor closely the level of reserves - set a target of a certain level i.e. how many times should the reserves cover the level of benefit expenditure of a given year?
- Mature schemes – parametric changes may not be enough
- Combination of parametric and structural reforms

# How to overcome the problem?

## Parametric Reform

- 1 Higher contribution rate in order to reduce the inequality
- 2 Direct reduction of benefits by lowering the accrual factor
- 3 Restrictions to early retirement – use of cost neutral reduction factors and use of a minimum early retirement age
- 4 Increase of normal retirement age
- 5 Increase of the minimum service requirements for pension eligibility
- 6 Use a 5 or even 10 year averaging for the salary to be used for the calculation of the pension and/or set strict limits on the salary increases
- 7 Reducing or abolishing annual pension increases if found that such increases are not warranted by the economic environment of the country
- 8 Reducing or abolishing any lump sums paid together with the pensions
- 9 Abolishing certain additional benefits such as the notional years of service

# How to overcome the problem?

## Parametric Reform

- Objective of parametric changes – improve the balance between contributions and benefits
- Retirement age, accrual factor, contribution rate, life expectancy should be properly aligned
- Immediate or gradual implementation? – depends on the political and social environment
- Speed of implementation – depends on the nature and effect of each parametric change

# How to overcome the problem?

## Parametric Reform

- Examples of other countries that initiated parametric reforms
- PASI Oman – increased the contribution rate, increased the number of years used for salary average, set a minimum early retirement age, implemented higher reduction factors, introduced a maximum salary/pension, introduced a minimum pension
- PISS Kuwait – introduced gradually a minimum retirement age, created a separate fund for pension increases, increased significantly the contribution rates (25% for basic scheme, 6% for pension increases, 15% for supplementary scheme)
- GOSI Saudi Arabia – increased the contribution rate, set a maximum contributory wage, set strict conditions for early retirement, increased the accrual factor, introduced a maximum pension.
- PSPF Sudan – pension is now based on the average salary over the last 3 years before retirement and not on the last salary, accrual factor was reduced from 1/45 to 1/50, reduction factors were introduced in case of early retirement and other minor changes
- GOSI Bahrain – increased the contribution rate

# How to overcome the problem?

## Structural Reform

- Structural Reforms: fundamental transformation of the whole system or part of the system
- Move from a defined benefit to a defined contribution scheme – mandatory or optional
- Up to now none of these countries have moved towards structural reforms
- Such radical reforms may become unavoidable if the governments delay any further the needed parametric reforms

# How to overcome the problem?

- Regardless of the type of reform, the reform process should not be delayed further
- The cost and extent of the required changes will be more extreme in the future
- The gap between contributions and benefits will increase further and the ageing problem will cause heavier financial strains
- Even for young schemes – reform is recommended to be adopted soon so that a crisis is not reached and that the cost of the reform is spread more widely between generations
- Mergers of social security and pension schemes should be considered
- Administration mergers
- Specialized single investment authority

# Success of Reform

- Agreement on a solution must be reached by preparing a simple to understand proposal
- Public and participants must be well informed
- Educate the politicians as well – concept of fund reserves
- Allow reforms enough time to be understood and introduced smoothly – especially for structural reforms
- Train and educate personnel regarding the requirements of the law and necessary skills to implement and enforce the law
- Frequent evaluations of the new system
- Adjust if necessary

# Conclusions

- Urgent need for immediate reform
- Young schemes – parametric changes
- Any delay will require more drastic changes in the future
- Move to a multi-pillar system in order to enhance diversification and spread the risks of meeting retirement promises
- Implementation of additional benefits, sickness, maternity, unemployment – can only be implemented if the long term viability is improved
- Joint effort can make things easier
- All of these countries can publicly recognize the need for reform and actively promote it
- Success lies in educating the management, general public, lawmakers, decision takers and foremost the politicians
- A good understanding of the role of social security and the impact of actuarial deficits is necessary to ensure a successful reform process



**Thank you for your attention**