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(Financing Healthcare after retirement) Pre-funding of Undefined Benefits



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I. Introduction



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HEALTH CARE IS A HUMAN RIGHT

UN Article 25 (1) Universal Declaration of Human Rights

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including ... medical care and necessary social services.

WHO Constitution

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being **without the distinction** of race, religion, political belief, economic or social condition.

UNDERSTANDING HEALTH CARE SYSTEMS

World Bank Five-pillar Social Protection Framework

PILLAR	0	1	2	3	4
Description	Basic, social pension, or social assistance	Public pension plan (Publicly managed)	Occupational or personal pension plans	Private schemes (Individual savings)	Informal support, other formal social programs (e.g. health) & other individual assets
Who is covered	Life-time poor, Informal and formal sector	Formal sector	Formal sector	Middle & higher income persons	Life-time poor, informal and formal sector
What is covered	Basic protection for the elderly & the disadvantaged	Basic benefit replacing a portion of pre-retirement income (40%)	Additional benefit replacing an extra portion of pre-retirement income (+30%)	Savings & investments	Non Financial: Health , Homeownership, lands
Participation & Funding	Universal / General budget	Mandated / Contributions linked to earnings	Mandated / Defined Contributions	Voluntary / Contributions, Ind. savings or employer sponsored	Voluntary / Government and Individual assets

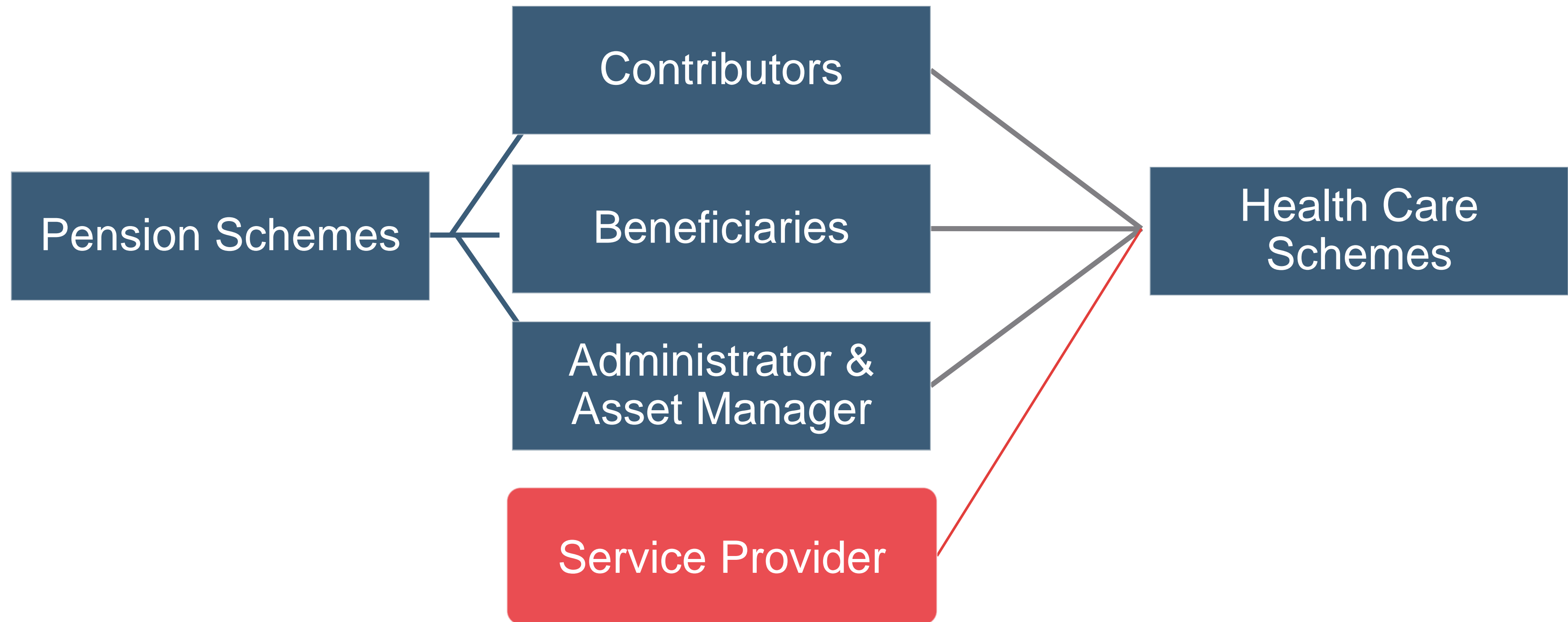
UNDERSTANDING HEALTH CARE SYSTEMS

Muhanna Proposed Pillars of Health Care

PILLAR	0	1	2	3
Description	Welfare and Basic Health Care Benefits	Social Insurance Benefits	Occupational Health Care Benefits	Private Health Insurance and OOP payments
Who is covered	Low income, Informal and formal sector	Formal Sector	Formal Sector	Middle & higher income
What is covered	Basic and primary health care services, (Preventive care, Maternity & Chronic Diseases)	Medical necessities, secondary, and tertiary care benefits with co-pays, class C	Top-up insurance, covering the co-pays, & costs not covered by pillar 1 & 2, Class B	Benefits covering extra amenities, elective coverage, Class A
Participation & Pre-Funding	Universal / General budget	Mandated / Contributions linked to earnings & sometimes General Budget	Mandated / Sponsor's and member's contributions	Voluntary / Individual Savings and OOP payments

UNDERSTANDING HEALTH CARE SYSTEMS

Stakeholders involved



UNDERSTANDING HEALTH CARE SYSTEMS

Distinctions between pension and health care systems

Factor/Aspect	Pension	Health Care
Earnings	Directly Related	Indirectly Related
Contribution Period	Directly Related	Indirectly Related
Inflation	Indirect Effect	Direct (& Indirect) effect
Mortality	Direct Effect	Indirect effect
Morbidity	Lower effect	Higher effect
Anti-selection Risk due to eligibility	Low	High
Third Party	Little Effect	Large Effect
Benefits	Relatively easy to quantify	Harder to quantify
Eligibility –Anti selection	Manageable	Major effect

HEALTH CARE SPENDING

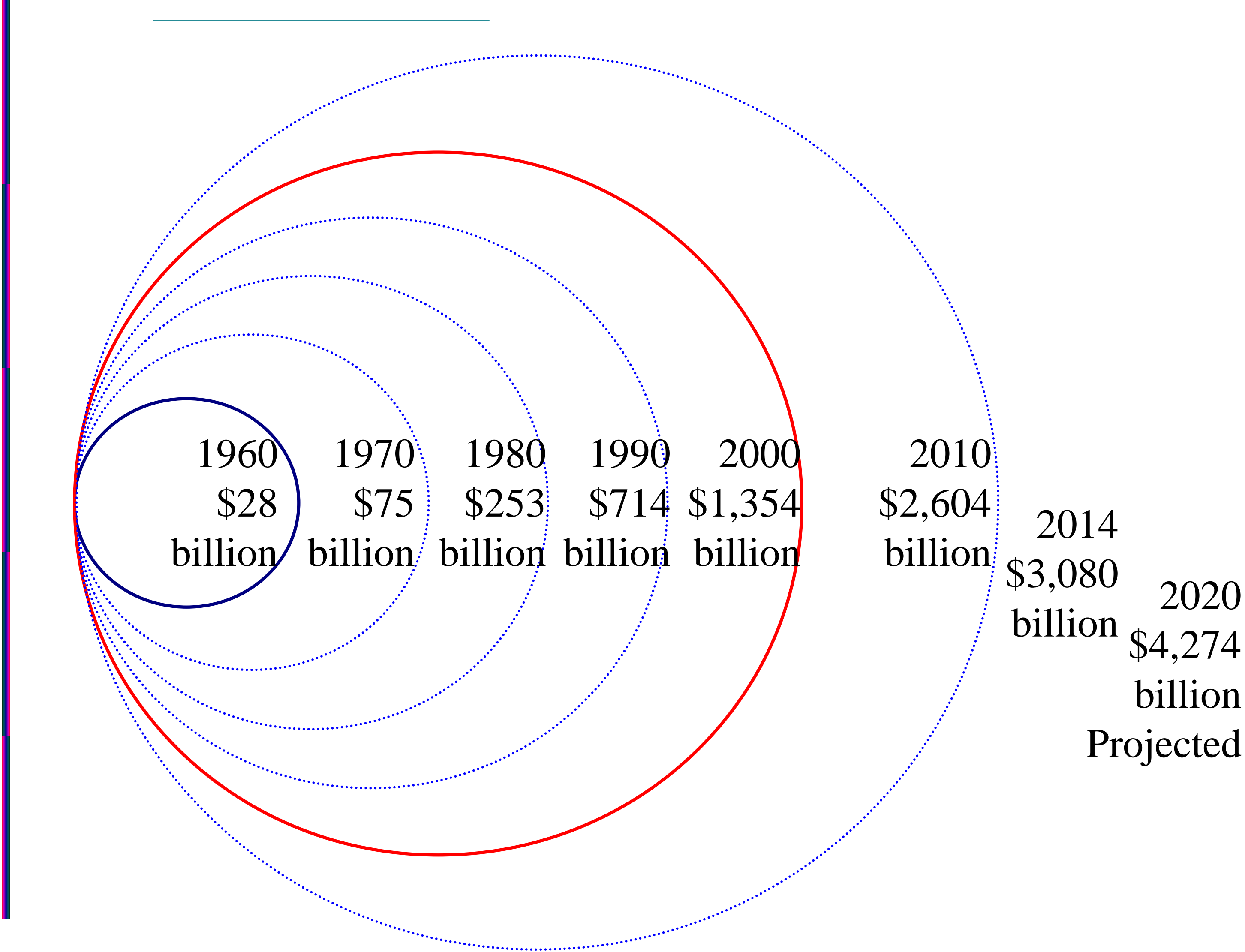
Rise in Health Care Spending

- Increase in the level of general inflation
- Privatization of health providers
- Technological advances
- Prostheses
- Increase of use of pharmaceuticals
- Impact of aging population

HEALTH CARE SPENDING

US National Healthcare Expenditure

Source: Centers for Medicare and Medicaid Services - www.cms.hhs.gov



HEALTH CARE SPENDING

Health Care Implicit Debt of the US Government

- \$65 Trillion in 2006
 - \$51 Trillion – based on high discount rate
 - \$86 Trillion – based on low discount rate
- \$68 Trillion in 2007
- \$70 Trillion in 2008
- \$72 Trillion in 2009
- \$75 Trillion in 2010
- \$90 Trillion in 2014 estimated

KEY PLAYERS IN THE HEALTH CARE SYSTEMS

- 1 Ministry of Health
- 2 Physicians
- 3 Suppliers
- 4 Health professionals
- 5 Hospitals & Clinics
- 6 Insurance companies
- 7 Administrators
- 8 Patients and their families
- 9 Government Regulators
- 10 **Actuaries**, Auditors, and Researchers

III. Financial Sustainability of Health Care Systems



IMPLICATION OF AGEING ON HEALTH CARE SYSTEMS

- Increased life expectancy means a growing number of people living beyond retirement age.
- The increase in cost of health care for those in the third age bracket is larger than the average increase in wage of the workforce.
- Moreover, the dependency ratio is reducing.
- Thus tax funds to support the elderly will reduce.
- Governments must find alternative means of meeting benefit obligations

ILLUSTRATING THE EFFECT OF AGEING POPULATIONS

- Young and middle-aged populations show a future tendency in demographic changes towards becoming ageing populations
- The increase in retirees leads to an increase in burning costs, irrespective of all other parameters
- The medical inflation increases at a faster rate than normal due to the ageing of populations which causes additional increases to the burning costs
- **Prefunding** for post-retirement health care benefits
- Health care costs of active population continue to be paid on a pay-as-you-go basis

MAIN COMPONENTS HEALTH CARE COSTS

- Average cost of procedure – age sensitive
- Utilization rate – age sensitive

Medical Inflation is:

- age sensitive
- Provider sensitive (public vs private)

Example: Healthcare Cost indexed at age 45

AGES Up to	Average Cost	Utilization Rate	Burning Cost	Medical Inflation
15	520	15%	78	3%
25	670	8%	54	2%
35	1090	10%	109	1%
45	1000	13%	130	0%
55	1270	15%	191	1%
65	1690	23%	389	2%
75	2150	26%	559	3%
85	2700	29%	783	4%

Example: Healthcare Cost Individual

Now Age 45 until Age of 85

Assumptions:

- Inflation 3.5%
- Salary Increase 5%

Example: Healthcare Cost Individual

Now Age 45 until Age of 85

AGES Up to	Average Cost	Burning Cost Now	Burning Cost at Age x	Salary & pension at Age x	Average Cost
				@ 5%	
45	1000	130	130	6,000	2%
55	1270	191	375	9,773	4%
65	1690	389	1,505	15,919	9%
75	2150	559	4,255	9,551	45%
85	2700	793	11,725	9,551	123%

Partial Pre-funding of Undefined Benefits is **the / an** answer for Financing Healthcare after retirement

Ibrahim E. Muhanna

Discussions





Eastern Mediterranean & Europe

Cyprus, Greece, Turkey, Malta, Russia.

Middle East

Algeria, Bahrain, Egypt, Iraq, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, UAE, & Yemen

East Africa

Gambia, Tanzania, Kenya, Uganda, Rwanda, Burundi, South Sudan, Zanzibar, Malawi, Zambia and Zimbabwe

SOCIAL INSURANCE

**PENSION
HEALTHCARE
UNEMPLOYMENT**

PRIVATE INSURANCE

**LIFE
NON-LIFE
MEDICAL**

EMPLOYEE BENEFITS

**PENSION
HEALTHCARE**

SERVICES OFFERED

Market and Feasibility Studies, Business Plans for Application for License, Funding Valuation of pre and post health care benefit funds, Health benefit and rating structure, Periodic review of rates, benefits and cover, Management monitoring and analysis Reports, Management Consulting, Actuarial Audit, Feasibility Studies for the Design and Establishment of Pension/Provident Funds/Schemes, Set-Up of Pension/Provident Funds/Schemes, Merger of Pension Funds and Privatizations, Statutory and ad hoc Valuations for Funding and Accounting purposes, Feasibility Studies for the Alterations of Pension/Provident Funds/Schemes & Scheme Reforms, Administration Services, Investment Managers Selection Advice, Asset Liability Modelling, Statutory Actuarial Reviews, Statutory Short/Medium/Long term projections of income and expenditures, Feasibility Studies for Scheme Reforms, Product Design and Product Profit Testing, Valuation of Assets and Liabilities including Embedded Value Calculations, Valuations for Merger/Acquisition, Valuations for Expert Witness Testimony, Illustration and Administration System software, Appointed Actuary duties, Business Plans and Application for License, Complete and Total Set-up of Life Insurance operations

Thank You

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