

## 5th Asian Conference on Pensions & Retirement Planning

# The Gold in Sustainable Pensions for the Silver Market

**Governments' role in Financing Pensions  
Schemes and the challenges they face**

**Yves Guérard**

**6<sup>th</sup> November 2008**



**AAI ASSOCIATION ACTUARIELLE INTERNATIONALE**  
**IAA INTERNATIONAL ACTUARIAL ASSOCIATION**

## Fundamental objective

# *Provide financial security during retirement*

- Implies providing pensions for life that meet an agreed target income replacement ratio for the full post-retirement survival period
- Total benefits need not come from a single source
  - Balance between public and private
  - Individual savings
  - Other income generating assets
- Stable Financing path providing for appropriate sharing
- Taxes and expenses often neglected factors
  - Target replacement ratio should be on a net to net basis, that is after taxes
- Expenses increase costs or reduce benefits; need to be minimized through proper plan design and coordination of infrastructure



# Government: key player/decision maker

- National retirement strategy
- Public pension policy
- Labour policy
- Fiscal and Monetary policies
- Legal & prudential framework
- Tax treatment
- Regulatory & Supervisory framework
- Sponsor programs or outsource them
- Financial education and communication
- Safety net, Guarantor or Payor of last resort



# The framework

- The current context
  - Increasing longevity, decreasing fertility impact dependency ratios and sustainability
  - Burden of providing retirement income need to be shared by private and public programs
    - Tax treatment to be supportive of the partnership
- For retirees peace of mind is part of security
  - Use of state power of coercion is justified by wide redistribution and social objectives as opposed to individual equity and wealth generation
  - National scheme can mobilize Law of Large Numbers to mitigate risks and reduce uncertainty by pooling
  - Current constraints make more likely the use of DC formulas
    - DB pensions in public programs offer longevity protection on guaranteed and stable income that mitigate risks in more volatile DCs programs



# Role of Government

- Proper level of basic coverage
  - Not minimize or maximize but optimize given the socio-economic context
  - Design drives costs: optimal financing starts with making the scheme financeable
- Retirement ages are a key design parameter
  - impact the whole economy
  - affect the cost of private pensions
- Diversify financial and longevity risks
  - Private program need real market assets
  - Public programs can rely on the virtual assets that is the capacity to collect taxes or mandatory contributions
  - Mortality is a systemic risks
    - Public pensions should be DB
    - Longevity bonds would be a plus



# Legal and prudential framework

- Mandate the public sector coverage
- Manage the space for private sector contribution to financial security in retirement
- Provide legal certainty for
  - Participants
  - Financial institutions
  - Markets
  - Regulatory and supervisory framework
- Maintain a healthy competitive market
  - Includes international financial reporting standards
  - Important to preserve a level playing field; avoid creating big dominant monopolies in the financial markets
  - Prevent predatory behaviour
    - Standards for comparing Individual Account fee structure and individual choice of portfolio mix





# Strategic challenges

- Increase retirement income through a national program providing basic coverage that is additive to private schemes
  - Poverty alleviation through redistribution
  - Insurance against longevity through life pensions
- Low earners get sufficient replacement rate and may not seek additional coverage
- Other wage earners build up retirement income by earnings related funded programs
  - Public or private, voluntary or mandatory or collective
  - But with professional management on a competitive basis
- Shifting culture from lump sums to retirement income increases both individual financial security and the term of contractual savings



# Mandate of public sector

- Should be limited to what justifies using the coercive power of the state as opposed to commercially sustainable products based on insurance principles
  - Myopia makes individuals forget about their long term financial security
  - Economically disabled population that cannot save for retirement
  - Incomplete markets:
    - lack of secure savings instruments
    - limited coverage for longevity risk
- Target of public schemes should be adequacy by reference to national AVERAGE earnings
- Protecting a standard of living defined by reference to an individual own earnings is not a state responsibility





# The centrality of output

- The Law of Composition applies to economic functions of a retirement scheme
  - For individuals: transfer consumption over time
  - In aggregate: divide total production between workers and retirees
  - Pensions are claims on future output: money is irrelevant unless the production is there for retirees to buy
- Need to look more critically at the “politically correct” bias towards funding that rests on a variety of myths and disregards the centrality of output to the macroeconomic viability of pensions
- High dependency ratios cause a shortage of output in good or services that either reduces
  - the purchasing power of pensions
  - the value of capital hence amount of pension that can be paid
- Retirement ages are key drivers of dependency ratios
  - More funding is a poor substitute to a sustainable dependency ratio
  - Impact not only the public schemes but
    - The whole economy
    - The cost of private programs
  - Retiring people early does not create jobs nor increase output



# Delivering on the promises

- Financing methods are ways to ensure availability of funds to make timely payments but each presents different challenges
  - The underlying promise is goods and services
- A given actuarial method can be a financing method, a reporting method or both
  - The choices are independent and can be different
  - Financing paths do not change the costs, only allocate different contributions to different years
- Neither Funding or Pay go are perfect solutions in all cases and neither makes costs disappear
  - both are methods for allocating future outputs between workers and retirees
  - The centrality of output applies equally to both



# Financing by sovereign governments

- To reflect unique characteristics of sovereign governments
  - Expectation of indefinite duration
  - Power to mandate contributions
  - Full control of fiscal and monetary policy
  - Debt rating that is the country benchmark for lowest financial risk
- Unlinking financing and reporting allows both to be optimal
- Operating a basic social security program on a Pay go basis while reporting on a fully funded basis is a best practice that matches expenses with services rendered and promotes
  - Good governance,
  - Transparency,
  - Financial discipline,
  - Intergenerational equity
- Best practice segregates financial cost of servicing prior pension obligations from value of current benefit accruals
  - Segregating the cost of capital shows clearly that money is not free: no miracles!
  - Financing decisions can then factor in the opportunity cost of capital



# Financing Public Schemes

- Fuller funding of social security
  - Does not solve the problem of providing retirement income security to an aging population; not the best way to increase savings and future output
  - Does not result in more stable contributions but increases exposure to market risks
  - May result in procrastination delaying essential reforms
- Pay go can be an optimal financing method to ensure long term sustainability of the delivery of benefit promises
  - No inflation, markets or mismatch risks; lower expenses
  - Can reduce mismanagement risks, increase equity, facilitate indexation and annuitization, accelerate the coverage
  - Need proper reporting to enhance discipline and transparency; other conditions to be appropriate to the circumstances
- Financing paths are not a binary choice between Full funding and Pay go; there are intermediate methods to fit different circumstances
  - Level % financing stabilizes annual costs to be recognized as the minimum ensuring indefinite solvency
  - Targets directly intergenerational equity
  - Stability can be achieved through dynamic parameters rather than higher assets



# To Fund or not to Fund Public Schemes?

- For some people funded programs are a *“safe haven after escape from the trap of paygo systems”* both for public and private schemes
- Others question the *“curative powers of funding”* rather than revising the parameters towards sustainability
- No victor yet in the debate of *“virtues and vices”* but recent difficulties in financial market *“clipped the wings of most ardent advocates of funding”* (this quote is from 2006!)
  - Many of the intrinsic virtues of pay go appear to have been underestimated
- The funding versus pay go debate no longer limited to DB schemes since the *“genetic innovation”* that put forward the concept of Non-financial Defined Contributions (NDC)
  - Many actuaries consider these schemes as DB wearing DC clothing since they are equivalent to career averaging or unit repartition formulas





# Unlink public and private paths

- Funding requirements for private programs need not govern financing strategy of sovereign governments
- Ratios of assets to liabilities are more important for private programs
- For social security, actuaries watch critical ratios like trends in longevity, participation, dependency, % of GDP, benefits/contributions, evasion and other advance warning signals
- Contractual savings are a by-product not an objective
  - May generate long term assets that increase the relative share of Non-bank financial institutions thus reducing risks in the market
  - But future retirees should not subsidize development incentives through reduced pensions or higher risks





# Real funding vs. Virtual funding

- Real funding is marketable securities freely traded in open capital markets and generating returns that will not be financed by future taxes
- Virtual funding can be
  - An entry in liability side of balance sheet
  - IOUs or Government bondsAll of which can be deemed equivalent to Pago
- Public Implicit Pension Liabilities (IPD) are virtual assets that diversify risks of real assets in private programs
- Virtual assets can be converted into real assets as circumstances may change



# Moving to real market assets

- **Managing real assets more expensive and entails more risks:**
  - **Volatility**
  - **Mismatch**
  - **Mismanagement**
  - **Leakage**
  - **Misappropriation**
  - **Political interference**
  - **Moral hazards**
  - **Corruption (Index ranks 132 out of 180 countries below 5.0 thus at serious risk)**
- **Administering the benefit side is already a big challenge; managing assets requires a different set of qualifications, different organizational structure and stronger governance**
  - **Trend is to delegate management of assets to distinct entity by still unpopular**
  - **Survey of average experience shows returns on publicly administered assets to be 1,8% below returns on bank deposits in same country**



# Financial Debt vs. IPD

- IPD – Implicit Pension Debt/liabilities seen as weakening a country balance sheet
- However August 2008 IMF Working Paper indicates that rating agencies do not take IPD into account when assessing sovereign risks, contrary to private sector practice
- Thus converting IPD into Financial Debt (FD) could hurt rather than improve country's credit rating
- The different rating practices are based on real and perceived differences



## Differences between IPD and FD

- IPD deemed a contingent liability, not a firm commitment
- Long dated, own currency, positively correlated with tax base; FD often not
- FD voluntarily held by creditors, high roll-over risks while mandatory contributions convey stability
- IPD can be unilaterally modified; FD not
- Bondholders and creditors hold senior claims; participants hold junior claims, equity like, subject to residual risks
- Reforms that keep total obligations unchanged but transform IPD into FD increase the riskiness of government balance sheet and dilute other financial claims value



# Broader Long-term Sustainability

- Concept includes fiscal sustainability and real constraints on the availability of goods and services
- *“Effective Government”*, also a key variable while Pay go or funding are *“simply different financial mechanisms for organizing claims on future output”*
- Pay go and funded schemes face similar problems in case of shortage of output but perception is different:
  - If Funded seems a market outcome
  - If Pay go seems a political decision
- In most cases importing a significant proportion of goods and services not a sustainable option
  - Recent food shortages and price increases are a warning
  - Need to control the dependency ratio through adjusting the retirement age to reflect increasing longevity; more difficult to influence fertility and on a global basis immigration is zero sum.



# Solvency vs. Sustainability

- No globally accepted definition of fiscal sustainability or optimal ratio of liabilities to GDP or to country assets
  - Often linked with intergenerational equity but focusing on pensions while neglecting other assets (infrastructures, equipments, etc..) and other liabilities (health, education, etc..) is a very biased measure of “equity”
- Annual pensions as % of GDP easier to compare with similar % going to health, defense, education, infrastructure, etc...
  - 100% is a clear benchmark while liabilities as multiple of GDP are open ended and the need for a discount rate assumption increases margin of error
- Participants are beneficial owners of rights to an income not to a capital
  - Replacement ratio of income more transparent than capital accumulation that generally retirees do not “own” nor control
- Maybe health costs not traditionally capitalized because variations in value of protection is limited and deemed a basic right that is a collective responsibility? A national program offering limited basic protection is of the same nature and can be similarly financed
  - Distortion linked to preferential tax treatment?
  - Fiscal cost often not properly taken into account





# Conclusions

- Primary objective of a national social security system is providing financial security throughout retirement
  - Thus focus should be on sustainability not on increasing savings or stimulating financial markets
  - Sustainability is more than financial but includes the sufficiency of output of goods and services
- Diversification calls for avoiding the accumulation of assets in public entities and for sharing the retirement burden with private sector where funding assets can be competitively managed for economic efficiency
- Increasing the retirement age to enhance sustainability is better strategy than throwing more money at the problem
  - Retirement can be modulated
  - More funding does not resolve shortages and should be a last resort
- If there is surplus capacity, think of increasing leisure time of workers to reduce the difference in life styles between retirees and workers
  - increasing the quality of life of the workers and their family will enhance support for the program, increase the security of promises to retirees and the well being of the society as a whole

