28e CONGRÈS INTERNATIONAL DES ACTUAIRES
Le rendez-vous international de la profession actuarielle

L’actuaire et la Sécurité sociale
Actuarial view of Social Security

Yves Guérard
Secrétaire Général
Association Actuarielle Internationale
Facts or perceptions

- There is no average actuary and no average economist but there are general perceptions
  - How actuaries perceive economists?
  - How actuaries perceive actuaries?
- Simplified generalisations are always somewhat wrong but may get the message across
- If you disagree with my interpretations, don’t worry, it is likely you are not alone!
- And I would like to hear how economists perceive actuaries?
Actuarial perceptions of economists

- Economists approach retirement issues from the asset side
- Pension plans are financial institutions
- Retirement savings are long term assets that
  - help develop capital markets
  - can support economic development
- Cash flows have an impact on fiscal and monetary policy
  - Government budget equilibrium
  - Sponsor solvency
- Impact on labor markets
  - Potential distortions
  - Portability
- Individual equity is important and ownership of assets protected by allocated funding in individual accounts
- Wealth accumulation is an objective
- Promises should be funded
Actuarial perceptions of actuaries

- Actuaries approach retirement issues from the benefits side
- Pension plans are a way to provide financial security during retirement
- Security means protection against risks and volatility
- Mobilizing the *Law of large numbers* through pooling and risk sharing is beneficial
- The product is life time retirement income
- The target is the replacement ratio
- Pension costs are part of total compensation
- Financing path can enhance future capacity to pay
- Benefit formula and conditions should support Human Resources policy objectives
- Retirement income is deferred compensation thus should be predictable
- Benefits should be paid as promised
Comparative views

- Actuaries and economist agree that retirees ownership of « income generating assets » is a plus
  - For actuaries the important word is the first as they focus on the pay-out phase
  - For economists, it is the last as they focus on the accumulation phase
- To link benefits more directly with earnings
  - actuaries think career indexed formula
  - Economists think Notional Defined Contributions
- Actuaries think of financing methods as ways to ensure the delivery of the promise; they watch the evolution of relevant critical ratios
- Economists see funding as the normal way of liquidating a pension debt; they compare with the market value of assets
DB versus DC in basic public programs

- As they focus on predictability, pooling, retirement income, societal utility, actuaries are naturally inclined towards DB formulas that do not expose vulnerable beneficiaries to labor or financial market risks and increasing longevity risks
  - Actuaries believe the implementation of proper actuarial management can control the costs of DB promises and mitigate risks for all stakeholders
- As they focus on national savings, financial institutions, individual equity, wealth creation, mobility of labor, economists are naturally inclined towards DC formulas that prevent deficits and facilitate portability
  - Economists see the accumulation of contributions in individual accounts as safer, more transparent and preventing deficits by imposing a necessary discipline on the Sponsor
Equity issues

- Actuaries consider intergenerational equity can be insured through appropriate financing paths
- Individual equity is measured in terms of retirement income; thus equal capital accumulations generate a gender bias after retirement
- Equalizing expectations rather than pay-outs takes into account the value of insurance protection from pooling
- Variations in actual retirement age can be managed by making actuarial adjustments to the normal DB pension whereas economists rely on the automatic adjustment forced by the cost of the annuity at conversion from a DC
- Economist see the inheritance of the balance in DC accounts as preserving equity; actuaries see it as a diversion of assets away from the basic purpose of maximizing retirement income
Financing considerations

- Both actuaries and economists favor long term sustainability and stable contributions
  - For the actuaries there is a choice of financing methods that can enhance the security of the pension promises, it is not a binary choice between paygo and full funding
  - For mandatory public plans, stability and intergenerational equity can be achieved through level percentage contributions that can integrate variations in retirement age to address longevity issues
  - More assets are not necessarily better, there is an opportunity cost of capital and other risks (especially in a weak prudential framework)

- Stability of the income replacement ratio is also an issue of intergenerational equity
Tax treatment

- Generally both actuaries and economists agree that the EET approach, that is
  - Contributions are before tax
  - Returns on assets are not taxable
  - Benefit payments are taxable
  is optimal for retirement programs and provides a necessary incentive to combat myopia
- They consider that it is better than the TEE approach because it eliminates the risks that governments later cancel the exemption on pay-outs
- They agree that the EET which is equivalent to an interest free loan of the income tax otherwise payable
  - counterbalance the social policy and regulatory constraints usually imposed on retirement programs
  - has the effect of increasing tax collections in retirement thus indirectly helping with the funding growing post-retirement health costs
Civil service unsustainable programs

- Actuaries consider as damaging over-generous and under-financed civil service pension programs that became bad models for private sector pension plans.
- They resent the generalisations that equated DB programs to paygo financing and unmanageable deficits thus indirectly promoting DC over DB.
- They know that these DB programs were not based on actuarial recommendations nor supported by actuarial analyses.
  - therefore they believe they may have been caused by lack of good economic advice to the sponsoring governments.
The shift to DC

- Actuaries view the shift to DC, especially in public programs, as social re-engineering that reduced solidarity, pooling of risks and redistribution while exposing individual participants to increasing market and longevity risks.
- In a DB, the party that is at risk has the power of decision; in a DC the Sponsor retains the power but the risks are shifted to participants who in practice have little capacity to protect their interests.
- Actuaries would like to see a better analysis of gainers and loosers covering a demonstration that the retirement programs are not of greater benefit to the providers or subsidizing costs that should be financed by wider based taxes.
  - DC administration costs, risk averse asset mix, assets management fees and commissions on conversion to life annuities are not conducive to improvements in the social utility of wealth.
The DB model

- Actuaries still favor DB pensions but agree that the model is not universally applicable and that DC savings are better than no savings
- Savings alone do not constitute a pension plan
- Actuaries see pooling vertically within a cohort and horizontally across calendar years as reducing individual and collective risks
- Advantages comprise
  - reduction in the vulnerability of individuals
  - enhanced perception of security
  - better management of retirement age
  - protection against longevity
  - no gender bias
  - lower expenses
  - automatic annuitization
Actuaries consider that economists over-reacted by replacing DB (too risky for the Sponsors) by DC (too risky for the participants)

The main justification for government intervention being to protect the more vulnerable in our society and provide greater security, they see over-emphasis in protecting government budgets and stimulating capital markets.

For actuaries, a better solution, in many cases, would have been to fix the DB program:

- Transparency in reporting real costs
- Price-indexation rather than wage indexation
- Longer averaging period for earnings rather than final pay
- Reductions for early retirement
- Better definition of wages and control on collections

Many of the unsound programs were sponsored by sovereign governments:

- A level percentage financing method would have preserved intergenerational equity
- The switch to full funding through DC accumulations implied a double burden for the current generation which led to the return to a DB pooled approach through an NDC back-door
Is there gradual convergence?

- The dialog has certainly become more active; the public interest will benefit from more partnerships
- Actuaries have integrated more financial economics and revisited the bond/equity equilibrium
- Economists have given more weight to behavioral economics recognizing that individual are not always rational but governments always sovereign
- The growing challenge of DC conversion has been identified, annuities rediscovered and financing need not be full funding
- The merit of the predictability of DB and their greater financing flexibility has been recognized through NDC formulas
- Over all there is convergence towards
  - Meeting the adequacy objective of basic protection and insulating the more vulnerable population segments from risks beyond their control by using DB formulas
  - Creating more incentives for wealth creation for the upper segments through earnings related programs while ensuring professional competitive management of assets