

# How to organize the payout phase of pension systems: issues and policy options

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### *References*

# The macro background

## Changing demography

In both the US and the EU population aging and declining fertility rates pose significant long-run solvency challenges to traditional public PAYGO systems

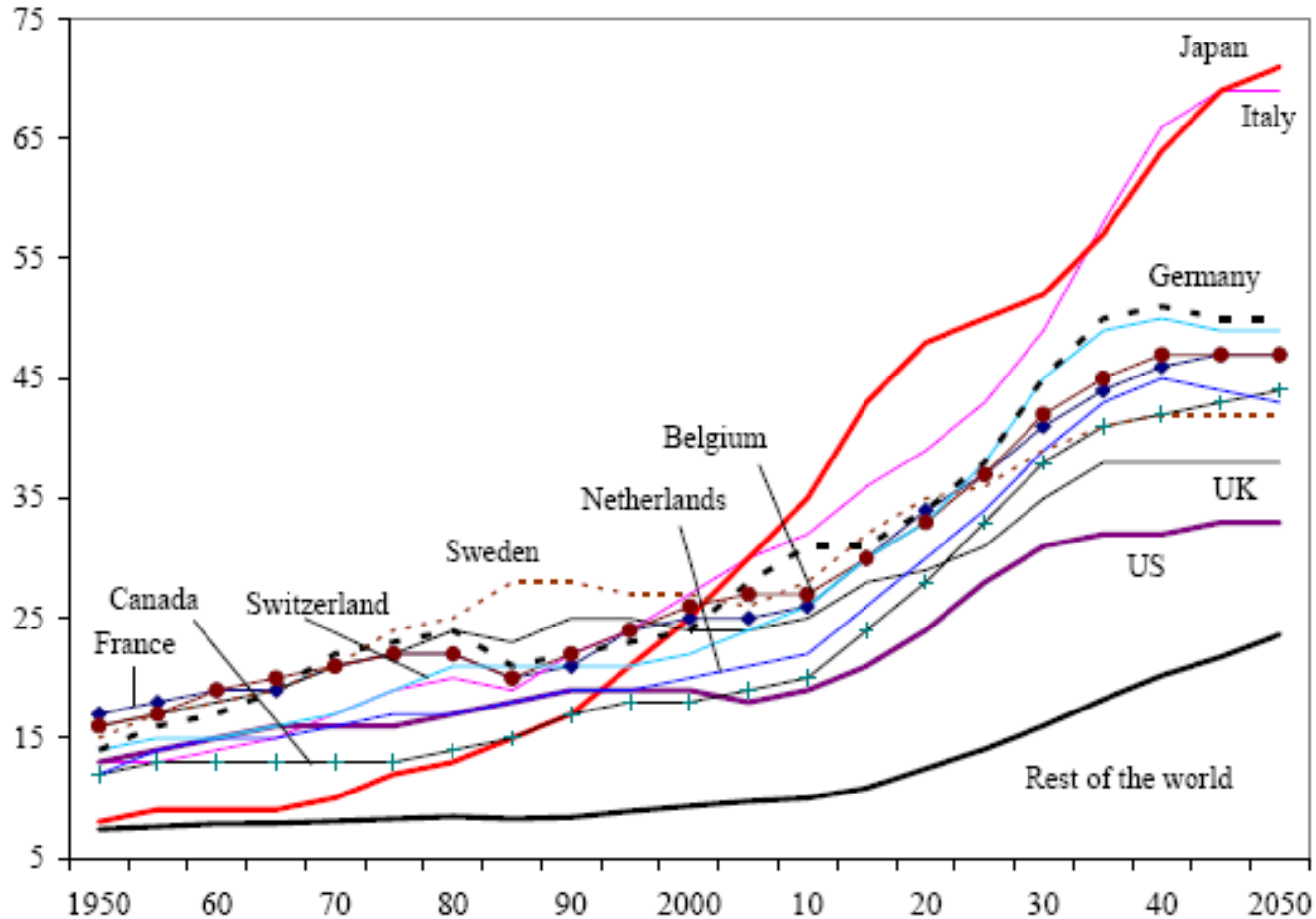
## Growing concern for income security in old age

*The higher risk aversion of the elderly is a reason to provide more income security to them than to the rest of society*  
(Shiller 1998)

Although rather general, this seems a good principle for organizing the payout phase, calling for the capacity of both the government and the market to provide efficient risk management instruments

# Old-age dependency ratios

*(% ratio of the population aged 65 years or over to the population aged 15-64)*



Source: Visco (2006)

# The microeconomic perspective: financing an ever increasing retirement period?

The rise in longevity has not been accompanied by a corresponding increase in retirement age; on the contrary, in many European countries retirement ages have declined up to the early '90 (Gruber and Wise, 1999)

From a micro perspective, organizing the pay out phase consists of helping people finance an increasingly important (both quantitatively and qualitatively) segment of their life cycle, by appropriately dealing with retirement risks

For example, in the age bracket 65-69, i.e. was between 13-14 in France, Italy and Japan in 1960; between 16-17 in 1980 and between 19-20 in 2000

And the trend is accelerating

# Pension reforms

*In Europe* challenges have been serious enough to determine the downsizing of pension promises:

- *retirement ages have been raised*
- *replacement rates have been reduced*
- *benefits have been de-indexed from wages to prices*
- *the link between benefits and contributions has been strengthened*

Over time, reforms will

reduce the relative importance of the first PAYGO pillar as a source of retirement income

strengthen the role of supplementary (private) pillars, consisting of occupational and personal pension plans

# The process entails:

## (i) changes in pension design

A common factor in shaping the role of private pensions has been a clear shift from **DB schemes**, in which pension benefits are determined by formulae based on past and current earnings, to **DC schemes**, based on financial accumulation and (possibly, but not necessarily) on actuarial equivalence

In countries with established private pension funds, such as the US and the UK, the shift to DC plans has been prompted by a number of challenges associated with the financing of DB plans (often with the need of winding up the scheme on the part of an insurance company taking on the scheme's pension liabilities)

In European countries, the DC model has been adopted as the basic framework for expanding the role of private pensions



## ..... (ii) a transfer of risks (and responsibility) from organizations to individuals

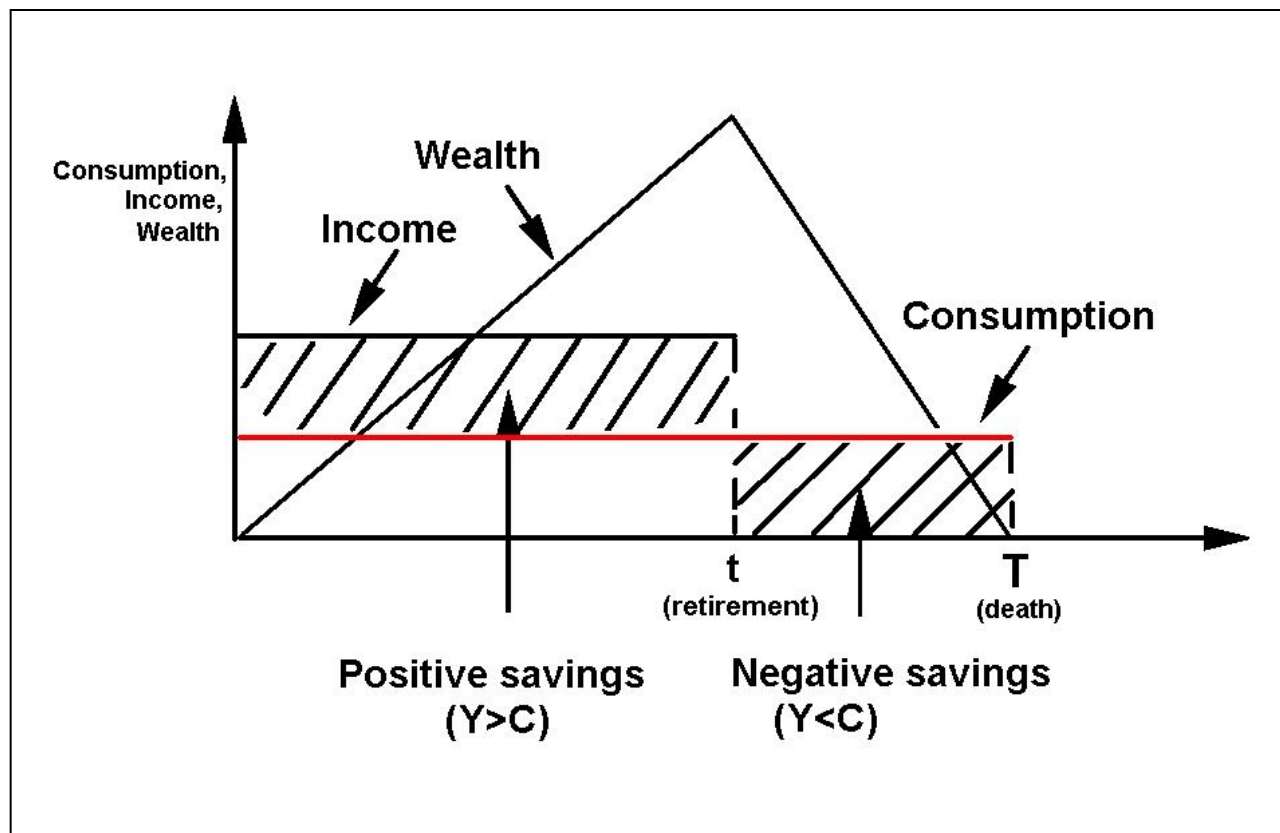
The widespread acceptance of DC plans has raised issues concerning:

- the shift of pension risks from the state, or the sponsor company, to individuals
- inadequate participation in DC plans
- the growing importance of plans that provide lump sums (401K) or phased withdrawals instead of annuities
- distributional implications of DC plans
- intergenerational inequality due to the variability of financial returns

This transfer of risks raises questions concerning:

- the ability of households to understand and manage these risks
- the scope for new products that could better suit households' needs
- the role of government regulation in promoting the development of plans and in designing rules or default options so as to meet the policy objectives of providing adequate and secure retirement income

... risks arise when departing from the “certainty” stylized version of the life cycle, not only in the accumulation but also in the decumulation phase



# Retirement risks are paramount

Risk analysis should thus be central to the organization of the payout phase of pension plans

When considering the retirement period:

the *earning risk* is already solved, so the main risks facing an individual (household) are:

- how long – and how – is she likely to live (longevity and health risks);
- will the public pension promises be maintained (political risks on social security wealth);
- what will be the (net) rate of return on her retirement wealth (financial risks).

## (i) Longevity risk

Deviations of the number of deaths from their expected values are both *accidental* and *systematic* and cause:

- differentiation of mortality among individuals (**individual risk**)
- uncertainty of the average length of life of a generation as a whole (**collective risk**)

*The individual risk* can be pooled and insured by buying life insurance (against early death) or an annuity (against a later death); it is thus diversifiable within the generation, provided the insurer knows the generation's average life and not too severe adverse selection effects

*The collective risk* has to be shared across cohorts, typically through public insurance programs and variations of national debt. Private markets can also provide risk sharing through longevity bonds (Blake, 1999)

*A general trend* in HIC implies:

- an increasing concentration of death around the mode, at older ages, which reduces the variance of the distribution, and the related risk;
- an expansion of the curve to the right (a move of the mode towards very old ages), which, together with an acceleration of mortality decline at old ages, increases the risk

These variations highlight the importance of accurate longevity projections, as a prerequisite to managing risks.

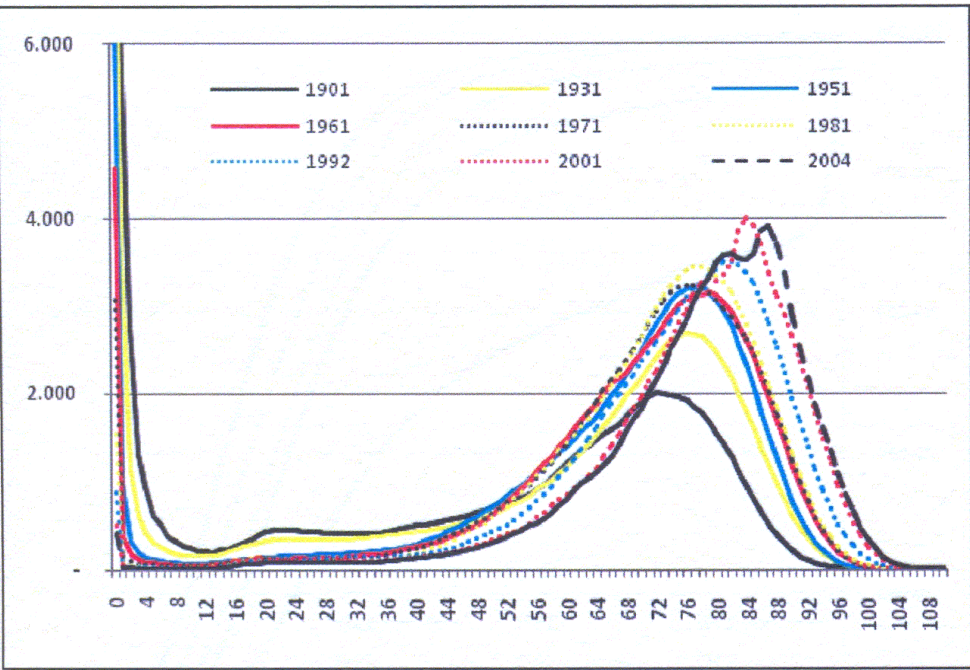


Figure 1 – Italy - Death curve - various years

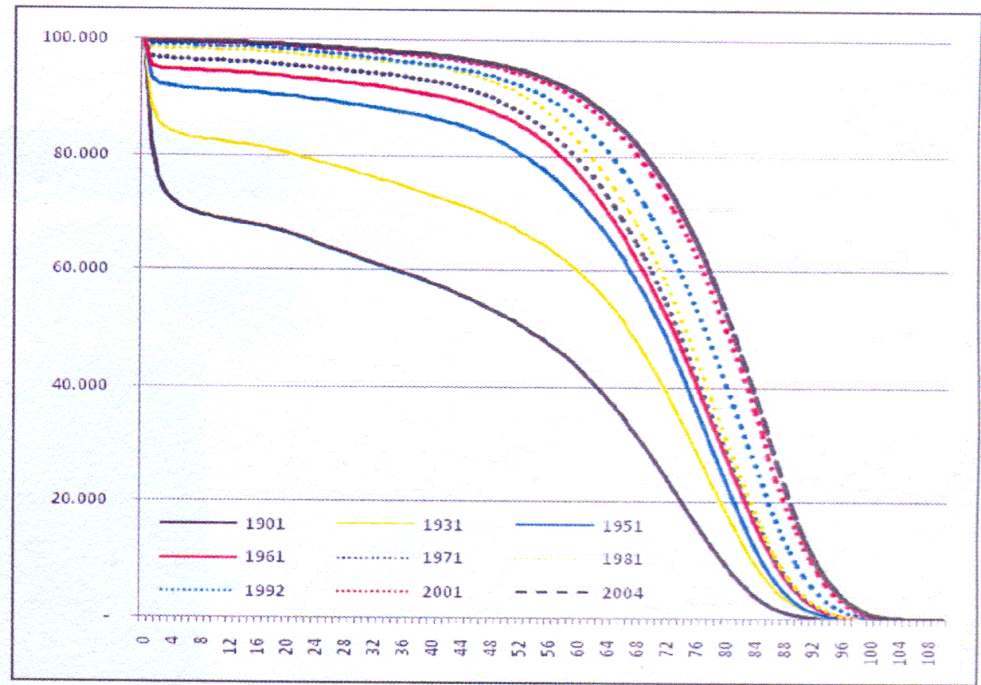


Figure 2 – Italy - Survival function - various years

## (ii) Financial risks

Financial risks exhibit various degree of diversification. Valdes-Prieto (1998) separates:

- **capital**, a risk which is substantial with respect to equities and real estates; variations in bond yields however also contribute to large variations in annuity payouts over time
- **reinvestment**, arising from maturity mismatching, when some portion of the assets have to be reinvested in the future
- **inflation**, whose effects depend very much on the nature of inflation
- **timing risks**, when exposure to any of the previous risks change unfavourably at a fixed date

Guarantees can be bought in the market and/or provided by the state, but they are always imperfect, incomplete and costly

### **(iii) Health and LTC risks**

Health and long term care expenses also have insurable and uninsurable components

The potential need to pay for nursing home expenses or unexpected medical care provides a rationale for preferring lump sums to annuities (Kifmann, 2008)

There are important differences across countries in the public coverage of health and long term care needs in old age (OECD, 2006), and thus differences in the amount of precautionary savings accumulated to face unforeseen medical expenses, as well as in the importance of intra family informal insurance arrangements (with consequences on women's participation in the labor market)

With regard to Europe, for example, it is usual to contrast the “Nordic” and the “Mediterranean” models, the latter being characterised, among other things, by a higher reliance on interfamily exchanges as a substitute for both public intervention and market solutions

# Charting the elderly consumption profiles

The empirical literature has highlighted a consumption fall at retirement, with estimates in the 5-20% range (partly due to heterogeneity of data and definitions); the drop is larger for households in the lowest part of the income and wealth distributions (Bernheim et al., 2003)

The drop is potentially inconsistent with the standard LC-PIH which implies that the marginal utility, and consumption itself, should be smoothed; as long as the timing of retirement and pension benefits are correctly foreseen, the marginal utility of consumption should not change discontinuously at retirement

Models have been extended to include uncertainty over earnings and mortality, leisure choice and bequest, but the key prediction of consumption smoothing remains

For most households, the drop does not seem to be a consequence of inadequate savings (Scholz et al., 2006); savings at retirement have been reckoned as adequate for the majority of the population, although not for the least wealthy/least educated households.



# The importance of wealth composition at retirement

Individuals enter retirement not only with very different levels of household financial positions but also with different composition of wealth and degrees of pre-existing annuitization

Housing, in particular, is an attractive investment because:

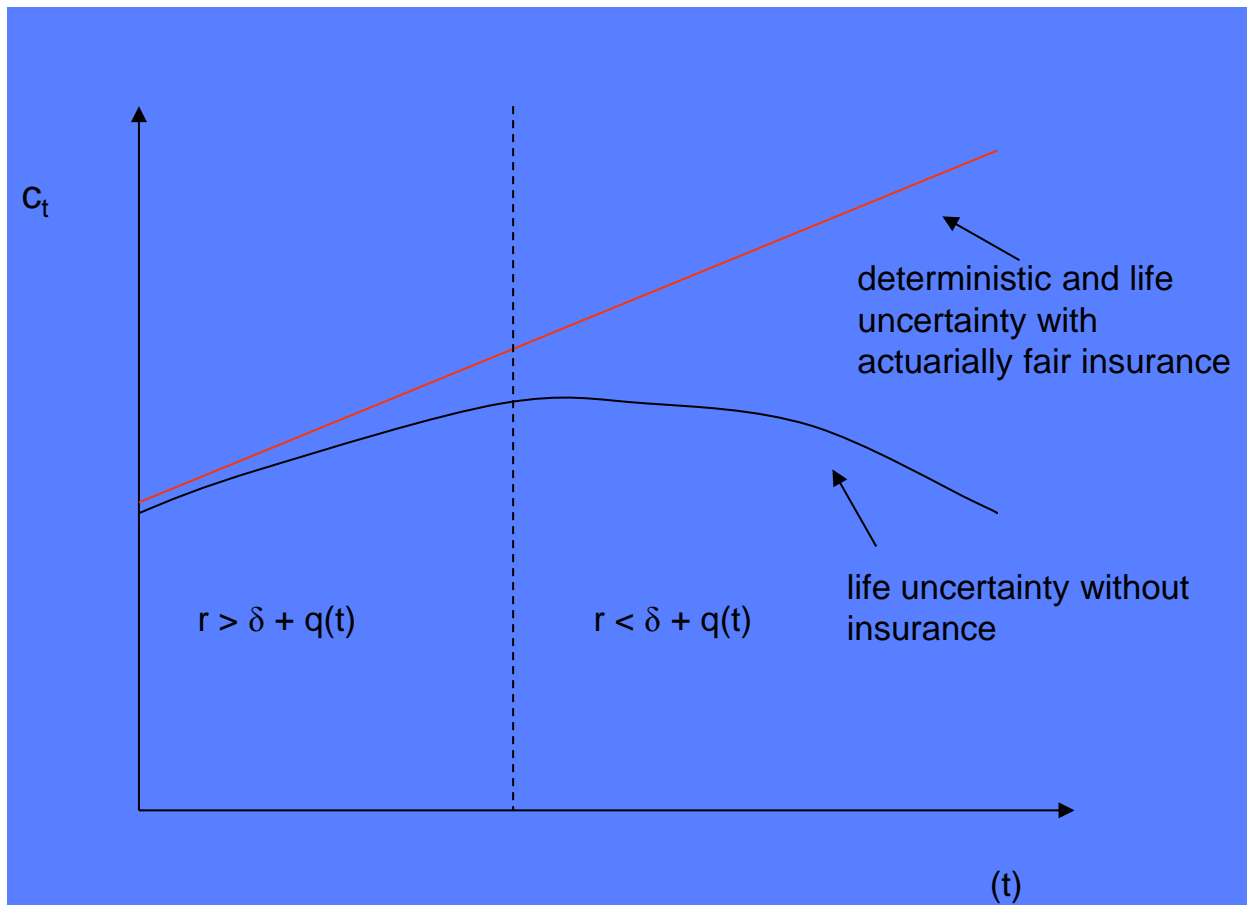
- it combines a flow of services with an investment good
- it allows a gradual accumulation over the household life cycle
- it provides scope for portfolio diversification given the low correlation between housing value and financial investments

It can be used as a source of liquidity and consumption through *mortgage equity withdrawals*. In some countries (Anglo-Saxon) flexible refinancing practices and a wide range of *reverse mortgage* products, offering a variety of cash flow profiles, have enhanced households' ability to manage their financial position and interest rate exposure, or to extract equity from their home

These instruments, however, are still scarcely used and typically the housing wealth is not consumed in retirement

# What the theory tells us

The basic result: whatever their amount of retirement savings, individuals should annuitize (Yaary, 1965) as annuities remove the risk of outliving one's resources (as well as the opposite risk of leaving unintended bequests); because of the mortality premium - an arbitrage type of gain - they dominate the (risk free) financial asset



# What the theory tell us: extensions

Different scenarios for partial/delayed annuitization have been investigated:

- availability of already annuitized wealth and, in particular, of public pensions, which tend to crowd out the demand for annuities
- the presence of a bequest motive (Bernheim 1991), which reduces the demand for annuities, but does not eliminate it
- actuarially unfair prices due to mortality heterogeneity (Brown, 2003)
- risk pooling within couple/family, which decreases the value of annuitization for married couples (Brown & Poterba 2000, Dushi & Webb 2004)
- uninsured medical expenses (Turra & Mitchell 2004; Sinclair & Smetters 2004)
- uncertainty about asset returns (Milevsky and Young 2002)
- a (sufficiently high) return of the risky asset, conducive to advantages in delaying the purchase of an annuity (Gerrard, Haberman and Vigna, 2006)

# What the theory tell us: extensions (continued)

Davidoff *et al* (2003) analyse circumstances in which agents may not want to smooth consumption in different market settings:

- *complete markets*, full annuitization is optimal and requires neither exponential discounting nor actuarial fair price
- *incomplete markets*, the arbitrage-like dominance argument does not hold and full annuitization is no longer optimal

Uninsurable risks may add to or subtract from the optimal fraction of annuitized wealth, depending on the nature of the risk

The general theory is insufficient to answer questions about the optimal fraction of AW; simulations show that annuities are quite valuable to agents even when *optimal consumption trajectories differ substantially from the time paths of annuity payout*

*Psychological factors* i.e. a preference for lump sums and other form of “irrational” or bounded rational behavior (*hyperbolic discounting*) could be at work; however, relaxing additive separability and assuming “internal habit” does not solve the puzzle: even with habits, in incomplete markets it is still optimal to annuitize a relatively high fraction of wealth

# Measuring the utility value of annuities

The **utility value of an annuity** is computed by the **Equivalent Wealth Measure** (B, M & P 2001), i.e. the additional wealth a person would require if she had no access to annuities to attain the same utility as with ann.

The approach starts from the optimal consumption path  $\{C_t\}$  from 0 to the max lifespan, which maximizes the individual expected utility function, given the time preference  $\rho$  and a vector of cumulative survival prob  $\{P_t\}$

*Without annuities*, the PV of consumption, discounted using the risk less interest rate  $r$ , must equal initial wealth:

$$W = \sum \{C_t / (1 + r)^t\}$$

*With fair annuities*, it is expected future consumption that equals initial wealth:

$$W = \sum \{P_t C_t / (1 + r)^t\}$$

The indirect function  $V(\cdot)$  corresponding to the budget constraint allows calculating the maximum utility the individual can attain by following the optimal path. The **AEW** is found by solving for  $\alpha$  such that:

$$V_0(\alpha W_0)^{\text{no annuities}} = V_0(W_0)^{\text{annuities}}$$

(A different strand of literature measures the “**probability of shortfall**”, i.e. the prob of exhausting assets prior to death)

# Table 1 – Comparison of annuity values: AEW

*Annuity equivalent wealth values: US male age 65*

	(I)			(II)		
	<i>Annuity equivalent wealth for real and nominal annuities</i>					
Coefficient of relative risk aversion (CRRA)	Consumer with no pre-existing annuity wealth			Consumer with half of initial wealth in pre-existing real annuity		
	Real annuity	Nominal annuity: i.i.d. inflation	Nominal annuity: persistent inflation	Real annuity	Nominal annuity: i.i.d. inflation	Nominal annuity: persistent inflation
<b>1</b>	<b>1.502</b>	<b>1.451</b>	<b>1.424</b>	<b>1.330</b>	<b>1.304</b>	<b>1.286</b>
<b>2</b>	<b>1.650</b>	<b>1.553</b>	<b>1.501</b>	<b>1.441</b>	<b>1.403</b>	<b>1.366</b>
<b>5</b>	<b>1.855</b>	<b>1.616</b>	<b>1.487</b>	<b>1.623</b>	<b>1.515</b>	<b>1.450</b>
<b>10</b>	<b>2.004</b>	<b>1.592</b>	<b>1.346</b>	<b>1.815</b>	<b>1.577</b>	<b>1.451</b>

*Note:* The annuity equivalent wealth calculation for the nominal annuity assumes inflation takes one of six possible values, roughly capturing the distribution of inflation outcomes over the 1926–97 period. Inflation shocks are assumed independent across periods in the i.i.d. case and follow a stylized AR(1) process in the persistent inflation case.

Source: McCarthy and Mitchell (2005).

# Money's worth measures (MW)

Despite (theoretical) annuities' high value, markets are thin

Researchers have tried to understand why by calculating **MWR** of annuities

**MWR**: ratio of the expected present value of the future payment stream associated with an annuity to its purchase price. If **MWR** equals one then annuity is priced at the actuarial fair price. Calculated **MWR** are typically less than one

**MWR** is widely used for comparing annuities *over times or across countries*

Although attractive because of its (apparent) simplicity, **MWR** has weaknesses which mainly reflect *cumbersome data requirements*

- premium payment and benefit flows; prices of annuities, discount rates, typically derived from the term structure of government bond yields;
- *mortality tables* must take into account not only the projection of the past trend toward longer lifetimes, but also national peculiarities and the effect of adverse selection leading to greater longevity among annuitants than in the whole population; a country may be compelled to adopt the tables of a different one, using ad hoc adjusting procedures; cross country variations in mortality assumptions by pension schemes seem to be too great to be justified by the difference in the profiles of their members (Visco, 2006)

# Many kinds of annuity products, with different MW

Annuities are *flexible products*

The core of the product is longevity insurance, but it can accommodate different insurance needs:

- single/ joint life survivorship
- payout certain, with 5/10 guaranteed years
- immediate/deferred

as well as different preferences and degree of risk aversion/tolerance allowing for various kind of indexation and/or escalating factor

- front or back loaded annuities
- inflation protected
- capital protected
- with profit annuities
- CREFF annuities
- impaired life annuities

Design diversity matters for valuation

The institutional structures of annuity markets, which differ across nations, also affect the MWR



# Adverse selection effects

Research has sought to separate and evaluate the two elements of costs

**Selection effects** are estimated by the difference between **MWR** calculated from annuitant mortality tables (with the further distinction between *voluntary* and *compulsory* annuitization) and from population wide mortality: people who buy annuities have lower mortality rates and thus have a higher **MWR**; s.e. are higher for voluntary annuitants and for weighted (“*amounts*”) mortality tables

**Administrative costs** are calculated as the price of the annuity less the **MWR** for the annuitant population

An open issue is whether s.e. are primarily the result of private information about risks factors on the part of individuals or of a correlation between characteristics of annuitants and underlying mortality risks, even if they are unaware of this correlation. Finklestein and Poterba (2000) make the distinction between *active* versus *passive* selection: while “private” information about longevity can lead to differential mortality among annuitants and population, a correlation between wealth, longevity and preferences for annuities may also be at work (*passive selection*)

S.e. cause a wedge between the *producer's* and the *consumer's* perspectives

Under the insurer's perspective - using the mortality tables of annuitants - **MWR** is not far from one and selection effects account for more than 80 per cent of the disparity between the actuarially fair benchmark and valuation under the consumer's perspectives, i.e. using population mortality (Poterba)

Mitchell research also support very favorable **MWR**, around 90 per cent, as do Cannon and Tonks (2004) for UK and over a rather long period (1957-02), who report values in the range 90 -110.

On the whole, empirical evidence seems to rule out the "*expensiveness*" argument for the limited demand of annuities, and to downplay insurance companies' high administrative charges as the main responsible factor

## Table 2 – Comparison of annuity values

*Money's worth of nominal annuity payouts: single premium nominal life annuities offered to 65-year-olds across countries*

	UK		Australia		Canada		Switzerland		US		Italy	
	<i>Pop</i>	<i>Ann</i>	<i>Pop</i>	<i>Ann</i>	<i>Pop</i>	<i>Ann</i>	<i>Pop</i>	<i>Ann</i>	<i>Pop</i>	<i>Ann</i>	<i>Pop</i>	<i>Ann</i>
Men	<b>0.897</b>	<b>0.966</b>	<b>0.914</b>	<b>0.986</b>	<b>0.925</b>	<b>1.014</b>	<b>0.965</b>	NA	<b>0.814</b>	<b>0.927</b>	NA	<b>0.958</b>
Women	<b>0.910</b>	<b>0.957</b>	<b>0.910</b>	<b>0.970</b>	<b>0.937</b>	<b>1.015</b>	<b>1.115</b>	NA	<b>0.852</b>	<b>0.927</b>	NA	<b>0.965</b>

*Note:* Computations use country Treasury yield curve. *Pop* refers to population mortality table while *Ann* refers to annuitant mortality table.

Source: McCarthy and Mitchell (2005).

### Table 3 – MWR for different annuity products

Population mortality (65-year-olds, May 2000)

A.s. affects differently the different product types: it is higher in voluntary than in mandatory markets; it is also higher for nominal payouts than for inflation indexed annuities (Finklestein and Poterba 2002, for UK). Since the latter are back loaded relative to the payouts of a fixed nominal annuity, it's likely that they are bought by annuitants who expect to live longer

	Annuity Product		
	Nominal Annuities	Index-Linked Annuities	5 Percent Escalating Annuities
Men – Voluntary Market	0.844	0.806	0.802
Men – Compulsory Market	0.908	0.814	0.866
Women – Voluntary Market	0.857	0.824	0.820
Women – Compulsory Market	0.929	0.825	0.897

Source: Poterba (2001).

## Table 4 - International evidence on MW and selection effects in annuity markets

Study	Data period	Type of annuity	UK		US		Canada		Australia		Switzerland		Germany	
			Pop	Ann	Pop	Ann	Pop	Ann	Pop	Ann	Pop	Ann	Pop	Ann
<b>Panel A: 65-year old males</b>														
Cannon-Tonks (2004a)	1972-2002	Level + 5YG	95,6	98,5										
Finkelstein-Poterba (2002)	1998	Level	86,5	98,8										
	1998	Escalating (five per cent)	80,4	97,2										
	1998	Compulsory annuities	90,0	96,2										
Mitchell et al. (1999)	1985	After-tax level			76,4	86,5								
	1990	After-tax level			81,2	92,6								
	1995	After-tax level			81,4	92,7								
	1995	After-tax joint			86,8	92,9								
James-Song (2001)	1999	Level	91,2	98,3	85,8	97,4	91,4	98,1	91,1	101,0	91,6	108,2		
	1999	Level + 10YG	94,4	99,3			92,8	97,4	91,5	99,6	94,5	108,0		
	1999	Joint	93,3	98,8	86,4	95,1	93,9	98,0	86,7	93,6				
	1999	Escalating (three per cent)	91,8	100,6										
	1999	Real level	81,7	89,4										
von Gaudecker-Weber (2004)		Level											88,7	96,8

Study	Data period	Type of annuity	UK		US		Canada		Australia		Switzerland		Germany	
			Pop	Ann	Pop	Ann	Pop	Ann	Pop	Ann	Pop	Ann	Pop	Ann
<b>Panel B: 65-year old females</b>														
Finkelstein-Poterba (2002)	1998	Level	85.3	93.9										
	1998	Escalating (five per cent)	79.3	91.1										
	1998	Compulsory annuities	90.4	94.5										
Mitchell et al. (1999)	1995	After-tax level			85.4	92.7								
James-Song (2001)	1999	Level	92.6	97.4	87.1	95.4	95.0	97.6	91.5	98.4	96.9	105.7		
	1999	Level + 10YG	94.9	98.7			95.5	97.3	91.2	97.2	98.2	105.7		
	1999	Escalating (three per cent)	92.5	98.8										
	1999	Real level	81.3	86.7										
von Gaudecker-Weber (2004)													93.9	101.3

Source: Cannon and Tonks (2006).

Considering the *time trend*, a decade long decline in MW has been observed in both the UK and the US as a reflection of declining interest rates, leading to concerns about return risks and contributing to the perception that annuities are “poor value for money”.

## Margins for individual choice: *when to start drawing down*

While buying *any kind* of annuity is *always* possible in the voluntary market, margins for individual choice in the payout phase are more restricted in tax favoured pension funds

The issue is connected both to the freedom allowed in the accumulation phase and to the design of the public system (including provisions for health and LTC expenditures)

In public systems, the retirement choice was typically distorted by pension formulae that implicitly taxed later retirement (one of the causes of the low employment rate among the older workforce in EU countries); the situation has been (or is being) corrected by reforms which, by relying on *actuarial neutrality*, will eliminate distortions and change retirement patterns, also allowing for partial retirement and a greater separation of the decisions to retire and to cash benefits

Flexibility is a good thing, because it gives workers an additional adjustment margin, as well as precautionary savings, but it comes at a cost

In actuarially neutral systems, the cost can be a perverse redistribution: if mortality is inversely correlated with wealth (Attanasio and Hoynes, 2000), redistribution can occur from the poor to the rich

In private DC plans:

*retirement distortions* are absent (and there is evidence that workers covered by DC plans tend to retire later)

*retiring and cashing* are often separated decisions, so the question is *when to annuitize*, whether at retirement or later.

Annuitization delay:

implies keeping the option between a lump sum and an annuity to a later date and is possible with *phased retirement* or *income draw down*; in the UK it is possible to delay up to age 75, provided between 35 and 100% of the amount that would be obtained at retirement from a single life, nominal annuity is withdrawn

it can be advantageous, if higher (but riskier) returns from investing money are expected (Milevsky and Young 2002, Blake et al 2003); it seems less important in cases where the annuitant has a choice among a large array of annuities products

S.e. can however be exacerbated (except in case where the individual locks part of her wealth into a deferred annuity)

Potential annuitants who believe they face a higher than average mortality risk will choose to delay their annuitization, implying a bias towards longer lives in those annuitizing at younger ages



## Margins of individual choice: *how to draw down*

Lump sums or phased withdrawals give more freedom as to decumulation, at the expense, however, of longevity insurance

***Compulsory annuitization*** would be a *short cut* to providing insurance more efficiently (by reducing the disparity between annuitant and population mortality)

It would also reduce utility for some individuals: in a compulsory environment, the *time profile* of the payouts may differ substantially from the individual optimal path, who will either suffer the rigidity or try to undo a pre-tailored annuity

Moreover, a mandate to annuitize when only *fixed* annuities are allowed is equivalent to forcing people to purchase demographic and investment guarantees; on the other hand, *forcing* people to take risky products can be unconstitutional

The issue can hardly be solved by recourse to a general optimal rule. Of the two arguments used to advocate prohibition of lump-sums (Valdes, 1998) – avoid the “Samaritan dilemma” and increase national saving – the first can be dealt with in the public system; the second is more relevant for the accumulation phase

*Pragmatism and balancing* would suggest differential fiscal treatment and “*mild compulsion*”, default options obliging people to take action not to take an annuity; a fraction of the sum should be allowed as a lump sum (the whole in case of small fund)

# Margins of individual choice: *what type of annuity*

Different annuities imply different risks and payout time paths

- *immediate* annuities are either fixed in nominal terms or offer a predetermined nominal increase (i.e. 5% p.y.)
- *variable annuities* link the payout to the performance of the underlying portfolio, by transferring the investment risk to the worker
- *CREFF annuities* are also participating, although with the actual mortality experience for the class of investors
- *constant real annuities* are indexed to a consumer price index

Arguments for limiting the set of product options stress the financial illiteracy of workers, aggressive selling strategies by insurance companies, enticing people to products with both high margins for the company and a higher risk exposure for the annuitant

Evaluation of these arguments would require estimates of s.e. in different markets, but the evidence is still too scanty for general conclusions

On the other hand, granting complete freedom may create moral hazard problems and increase costs

# Possible way outs of the “annuity conundrum”

(Partial) annuitization should be either made compulsory at the normal retirement age or become the default options (surveys suggest that workers prefer enrolment and annuitization be made automatic)

The choice should reflect a good integration between the public system (including LTC insurance) and the private DC schemes

Workers’ high degree of *inertia* (Madrian and Shea, 2001) should be exploited in order to set default options in a way that will likely minimize the costs of workers/investors mistakes; framing effects should also be exploited to the same objectives

Delaying should be possible, but with compulsory annuitization at a later date

A joint survivor plan should be chosen as the default options for married couple

Group annuities rather than individual products should be encouraged

Inflation indexed annuity should be set as the standard annuity

Risks borne by the retiree should be spelled out and made transparent

Costs of guarantees should also be made more transparent

# What role for the government?

To encourage retirement savings and longevity insurance, the annuity should be made as *cheap, easy* and *safe* as possible (Munnell and Sunden, 2004)

The government could try and solve many of the problems that make individual annuities *redundant, expensive, complex and risky*:

- reduce its own role in providing annuities
- specify a standard type of annuity, possibly inflation indexed
- cap administrative costs and increase transparency, for example by setting a synthetic indicator of costs
- promote transparent disclosure of mortality projections and ask actuaries to determine the extent to which these projections reflect actual plan experience and how they model it
- promote transparent disclosure of information so that risks can be assessed and understood
- encourage the insurance industry to invest in designing products that respond to concerns that people have for their retirement period (such as LTC, where private/public partnership is sensible)
- encourage the provision of data sets specific on the elderly (like Share and Elsa in EU and HRS, Ahead, Cams in the US)

# Improving financial education

Empirical evidence points to inadequate preparation for retirement (Lusardi, 2007)

Financial illiteracy is becoming a very relevant issue:

people seem to lack the basic notions concerning savings and risk management

The problem is particularly acute among specific demographic groups

Financial education programs are being implemented to improve the trade off between individual freedom and responsibility, on the one hand, and state (or firm) paternalism, on the other

Much more can be done to increase effectiveness of these programs

# Conclusions

The problem of organizing the payout phase cannot be tackled in isolation  
Rather it is part of the design and implementation of a good - if not an  
ideal - pension system

Within the good system a pension plan would provide secure retirement  
benefits to all workers as a significant complement to social security  
benefits (Munnell and Sunden 04)

To achieve this goal, all workers should be covered, possibly with  
automatic participation

The pattern of benefits accrual should neither hinder mobility, nor should  
include distortions in favor of early retirement

Investment risks should be minimized

Benefits would (ultimately) be paid as a (joint survivor) annuity and  
adjusted for inflation

As Mervin King observed “*policymakers (and, we could add, pension providers)*  
*should resist the temptation to communicate a false sense of certainty*”:  
transparency about what is known and what is uncertain helps to build trust  
and confidence in both policy making and in the market

# An Italian story:

## workers' resistance to divert their severance pay (TFR) to a DC pension fund

TFR: a lump sum built through annual contributions (7% of gross earnings) to be paid at job termination; legally determined interest rate 1.5% plus  $\frac{3}{4}$  of the inflation rate

For continuous careers, a sizable amount of money

Target resource to finance the development of Italian pension funds

Workers participation in pension funds is voluntary; annuitization of at least half the accumulated sum

Until 2004 workers had to sign up in order to enroll

In 2007 the default option was changed (in a rather complicated way), by which silence implicitly meant assent to diversion of the worker's annual severance pay flow

A campaign was launched, to raise workers awareness

Results: the majority of workers signed to maintain their TFR within firms

Reasons? Many: still high public pensions; lack of confidence in private pensions; lack of confidence in financial markets (Parmalat scandal is still fresh memory to Italian savers), uncertainties and lack of guarantees

However, making participation compulsory when workers contribute 33% of their gross wage to the public pension system is problematic

Increasing workers' awareness and confidence in the market seems the most sensible solution

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