

SOCIAL PROTECTION AND JOBS

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Redesigning the Payout Phase using Savings and Insurance

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Agenda

- Proposed Redesign of payout phase: Savings vs Insurance
- Issues to Consider in the design of the payout phase
- Country cases:
 - Example of El Salvador Pension Reform of 2017
 - Proposal for Kosovo
 - Proposal for Ukraine
- Conclusions

Savings and Insurance are tools with different objectives

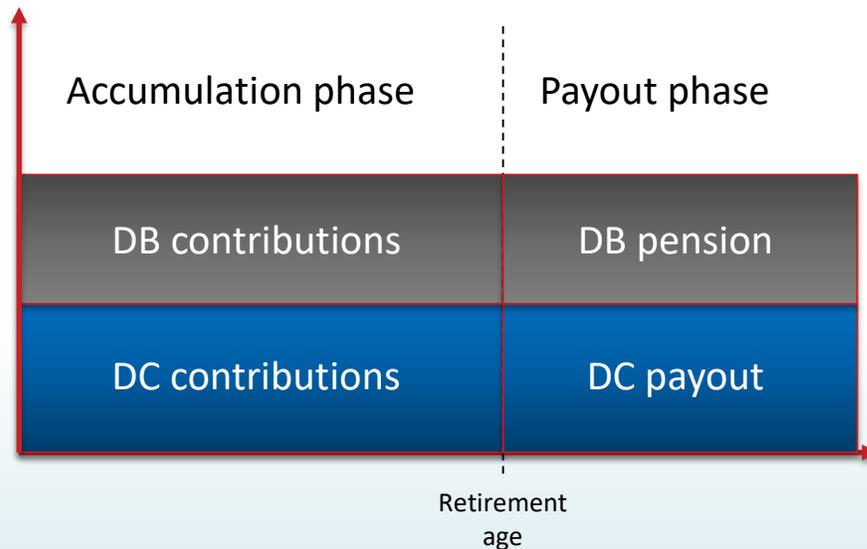
- Risk management principles teach us that there are different strategies to deal with risk depending on likelihood and consequences.

		Probability of Occurrence (Likelihood)	
		Low	High
Size of Loss (Consequence)	Low	<i>e.g. ankle sprain</i> <u>Coping,</u> <u>treatment</u>	<i>e.g. Cold, headache</i> <u>Prevention,</u> <u>coping</u>
	High	<i>e.g. catastrophic disease</i> <u>Insurance</u>	<i>e.g. College for kids</i> <u>Savings</u>

- Retirement is a high consequence event (loss of income)
- Reaching age 60-65 is increasingly looking more as a high likelihood event → Use savings
- While reaching age 80-85 still has relatively low probability. Risk is outliving savings. → Use insurance

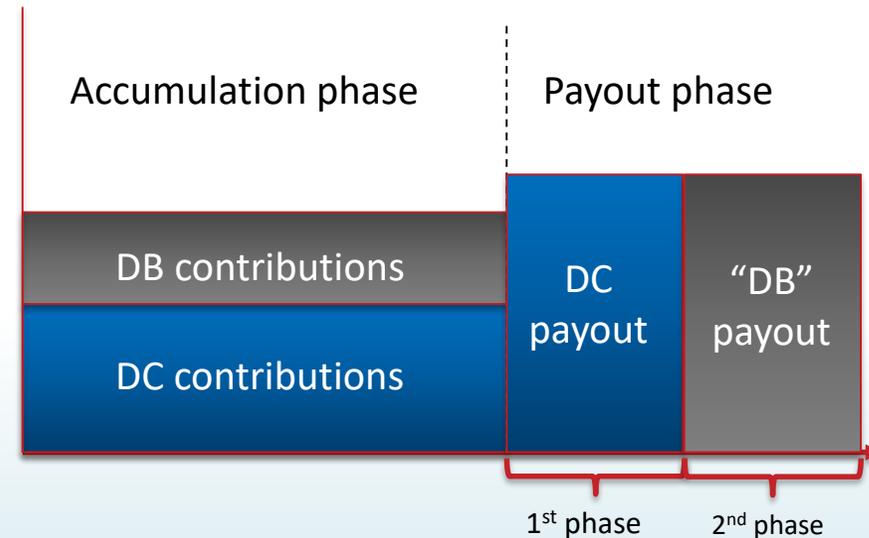
Restructuring payout phase in a multi-pillar system

Current framework in multi-pillar systems



- Defined benefit (DB) plans provide longevity insurance. Benefits almost always paid as life annuity
- For young DC schemes, annuity remains unattainable
- Why should defined contribution plans “automatically” provide benefits in the same format as DB plans?
- Shouldn't/couldn't the two portions of the pension system meet different needs and objectives?

Proposed Solution: **DC savings** pay 1st phase, **DB longevity insurance** finances 2nd phase in retirement



- Proposed solution (following savings vs. insurance argument):
- The DC plan is a savings program and finances protection for the first 10-15 years following retirement (period certain annuity or periodic withdrawals)
- The DB plan (longevity fund) is a social insurance program and provides protection against living longer than average following retirement

Proposed Solution: New pay-out strategy

- DC benefit higher because balance is “annuitized” over shorter time period → (+) Adequacy
- Required contributions for the DB portion (longevity fund) will be much lower since benefits will be paid to far fewer participants and for a shorter time period → (+) Sustainability
- DB benefit could be continuation of the DC amount to encourage DC plan compliance (*proposal for Kosovo*), could be separate formula, or DC could be paid out under DB formula (*proposal for Ukraine*)
- Period certain annuity could be provided from private insurer or through longevity fund by transferring DC assets at retirement

A Policy Tool that is applicable on multiple contexts

- To provide bridge pensions, or pensions to “privileged groups”
- To facilitate discussions around increasing retirement age
- To re-introduce a 1st pillar in a sustainable manner
- To provide adequacy and longevity coverage in 2nd pillar payouts.

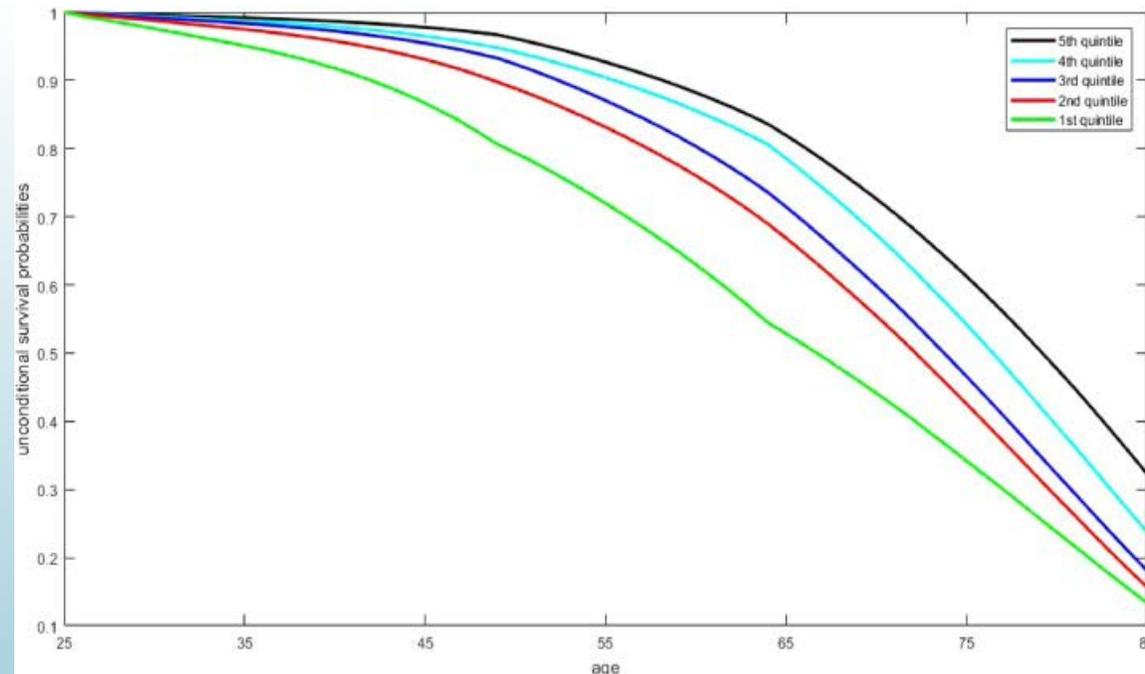
Issues for further analysis: Design

- How much coverage?
 - Should “2nd phase pension” be equal to self financed pension, higher? Have cap? Have “deductible”?
- Should provision be private or public.
 - Similar technical issues that affect annuity markets would likely affect longevity insurance. Role for public provision in principle, but open to discussion on pros and cons.
- How flexible can we be with retirement ages, eligibility, etc.
 - One advantage of DC plans is their incentive compatibility (e.g. if you postpone retirement your pension increases by your accumulated returns and reduced retirement period)
 - If length of first phase is fixed, it undermines incentive to postpone retirement (only postpones longevity insurance). If LI eligibility is fixed, potential moral hazard problem (depending on coverage).
 - Is this figure compatible with indexing retirement age to longevity?

Issues for further analysis: Distributional Impact

- Regressivity of design:
 - No redistribution at first retirement phase.
 - Redistribution at advanced ages from those who live less to those who live more.
 - But longevity is positively correlated with income! → Hence regressivity!
 - Potential way around: Progressive contributions!

Unconditional survival probability by income (US)



Issues for further analysis: Administrative arrangements

- How is the payout phase organized?
 - Do DC pension funds pay the first phase and a separate longevity insurance the 2nd phase or
 - Does the DC plan transfer the full account balance and the longevity insurance pays both phases
- Should we link longevity insurance with long-term care insurance?
 - Should we allow alternate recipients in case of impossibility of the beneficiary to receive the payment

EXAMPLE:

EL SALVADOR 2017 REFORM

Context

- El Salvador introduced in 1996 a second pillar fully funded DC pension system
- 3 groups:
 - <10 years from retirement: remained in old system (DB)
 - >35 up to 10 yrs before retirement: option to switch or remain
 - <35 years old & new entrants: mandated in new system (DC)
- Government subsequently introduced changes that undermined reform:
 - By decree, pensions for switchers made equal to DB pension, government pays difference between account balance and pension → Huge transition costs.

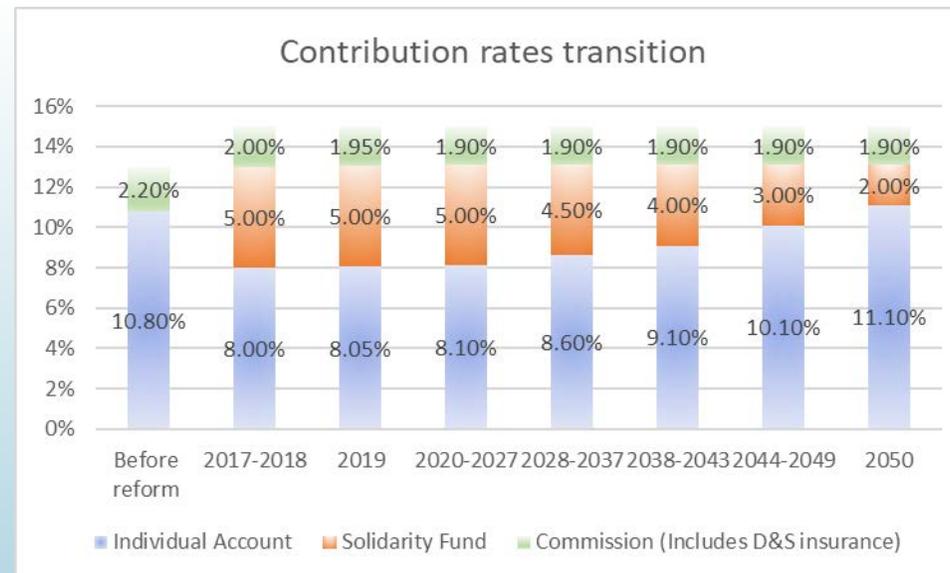
Sustainability

- Convoluted financing mechanism mandating pension funds to buy low yield government securities → Low pension fund returns.

Adequacy

2017 Reform

- Need to address low adequacy, intergenerational disparities, high costs and high debt.
- Among a series of measures, the government introduced a “longevity insurance” scheme.
 - Before reform: 10.8% contribution rate to individual accounts.
 - After reform (in regimen): 11.1% to individual account and 2% to solidarity fund
- Solidarity fund finances longevity benefit, but also minimum pensions and a series of transition costs, liberating pension fund investments. → transition period
- Solidarity fund is managed by AFPs, but government is ultimate guarantor of the fund.



Benefit schedule

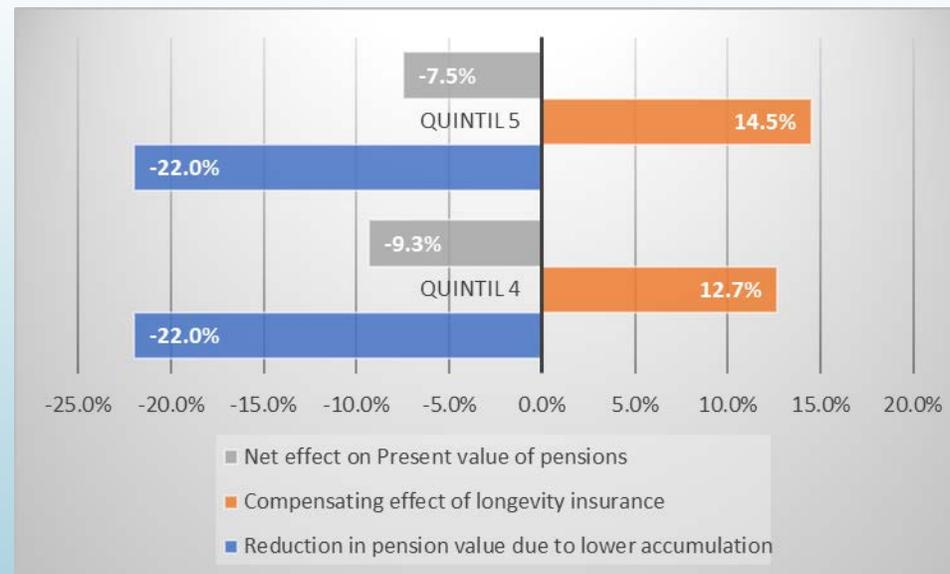
Before Reform	After Reform
Programmed withdrawals or lifetime Annuities	Individual account balance is converted into a fixed term 20 year annuity payment
	After 20 years, individual receives longevity insurance equal to the pension amount received in the first 20 years (with a cap)

- Contributions are returned for people with less than 20 years of contributions (do not qualify for pension).
- → Pooling only among those who qualify for pensions

Longevity insurance has stronger impact on high income group & people who live longer

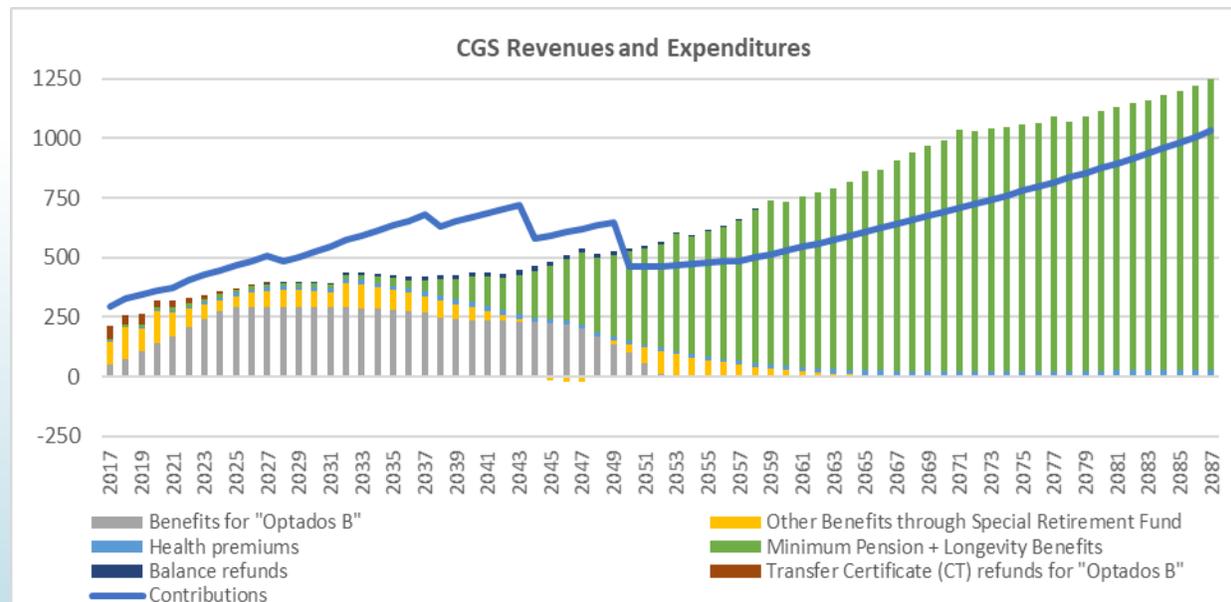
- Net effect on pensions a result of lower contribution rates (-), new benefit schedule (+) and higher expected returns (due to liberalization of investment regime; +).
- We simulate only first two and assume same returns with and without reform.
- Negligible effect in lower income quintiles due to high incidence of minimum pensions.
- Simulate benefits for cohort of 25 year olds today.

Effect on Present Value of pension benefit for a person that retires at 60 and lives up to 85



Financial Sustainability of Longevity Fund

- The fund starts paying out transition benefits mostly.
- Accumulates assets up to 2050.
- First longevity payments 20 years after reform.
- Long term equilibrium contribution rate appears to be higher than 2% (closer to 3%).





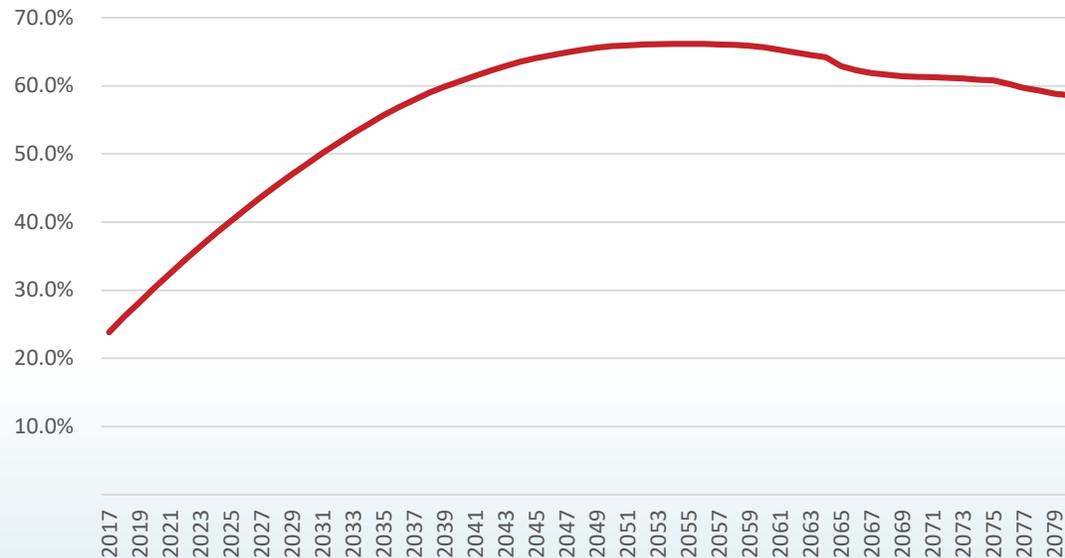
**Country Cases:
Proposals under discussion**

Case 1: Kosovo Pension system

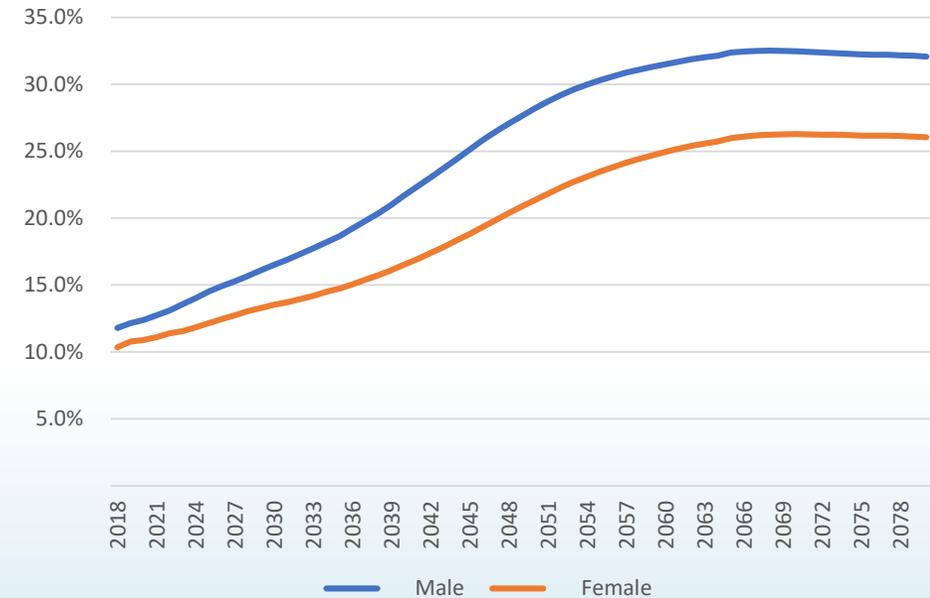
- In 2002, Kosovo introduced a fully funded DC pension system
- It was implemented from scratch, after the military conflict, replacing the old Yugoslav system that was in place before the war
- **Key features:** 10% contribution rate, pension fund managed by an independent governing body (KPST) with low management costs and passive investment strategy
- **Universal basic pension** introduced in parallel as a main retirement income benefit for new retirees
- Subsequent introduction of categorical pensions and an “ex-contributory” unfunded scheme.

Kosovo DC scheme needs time to mature

Total value of Pension Fund as % of GDP

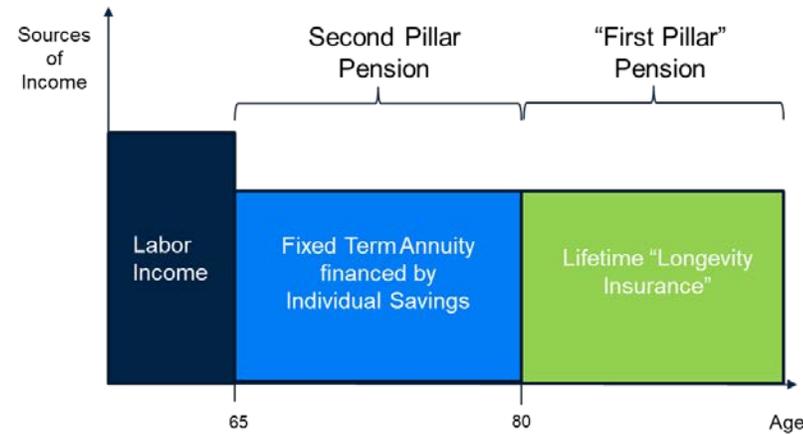


Average replacement rates



- Current benefit is a stream of fixed payments (€200 per month) until balance is exhausted → No longevity risk coverage.
- People have not accumulated enough balance in their accounts to receive meaningful lifetime pensions. As the system matures, balances will increase and pensions will be more relevant.
- Still 10% is a relatively low contribution to achieve substantial replacement rates.

Kosovo Proposal: payout phase reform

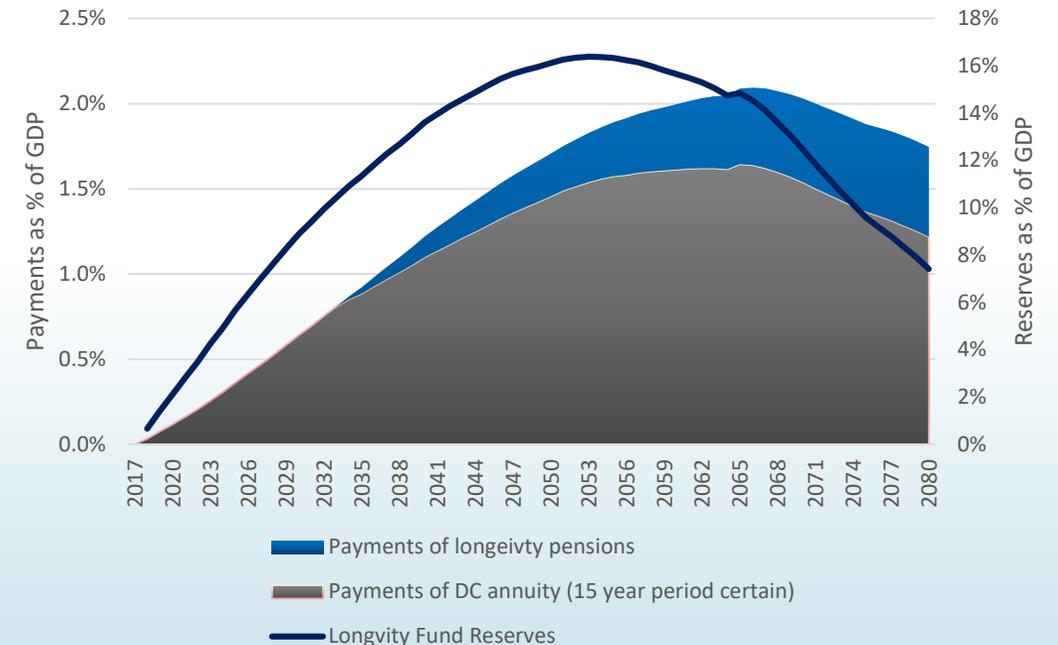


- DC balances annuitized at retirement age (65) as inflation indexed period-certain annuity over 15 years; makes pension payments to age 80.
- Longevity insurance fund:
 - - Receives lump sums from the DC plan at retirement and longevity insurance contributions from active participants.
 - - Makes required period-certain annuity payments financed from DC balances from the longevity fund (in charge of 2nd pillar pension payments)
 - - Longevity fund covers gains/losses due to actual experience different from assumptions underlying annuity conversion factors (investment earnings, inflation indexing)
 - - Longevity fund continues payments in same amount as DC benefit (with indexing) to those who are still alive beyond the DC annuitization period.

Kosovo Proposal: initial results of simulations

(1)	Starting Reserves
	Income
(2)	Transfers from DC plan (DC retiree acct balances)
(3)	Contributions to solidarity fund
(4)	Investment income
(5)	Total: (2) + (3) + (4)
	Expenditures
(6)	Payment of DC annuity (15 year period certain)
(7)	Payment of longevity pension to those 80+
(8)	Total benefit payments: (6) + (7)
(9)	Administrative expenses
(10)	Investment expenses
(11)	Total expenditures: (8) + (9) + (10)
(12)	Surplus/Deficit: (5) – (11)
(13)	Ending Reserves: (1) – (12)

Longevity Fund Expenditures and balances
(1% contribution rate)



*Specific parametrization of the proposal still work in progress

Case 2: Ukrainian pension system

- A typical post-Soviet DB; 10% of GDP; (recently reduced) 22% contribution; 57/60 retirement; around 33% average replacement; 1/2 w & 1/3 m retired with pension less than subsistence minimum.
- The 2017 reform introduced: a link of retirement age to service; lower accrual coefficient; regular benefit indexation; a new complementary “funded” scheme (2d pillar).
- Challenges of weak regulations and underdeveloped financial markets
- The new scheme will likely be too small (2-5%) to generate a decent annuity
- A proposal to rationalize the payout phase using two different funding sources

Ukraine Proposal: outline

- At retirement, the benefit is calculated with DB formula but is initially paid from the “funded” account (effectively a pre-funded DB)
- The benefit is paid as long as funds are available (can remain invested)
- Public PAYG funds kick in when individual account is depleted
- The PAYG DB benefit is recalculated following the same formula, plus(!) regular actuarial adjustment for deferred retirement, - effectively a DB bonus for participation in the “funded scheme”
- Implications: “funded” scheme can produce immediate and lasting impact on benefit level (no need for lump-sums); no major changes in rules or institutions; retirement age in PAYG effectively increases (PAYG is pushed out by the “funded” component); PAYG retirement age is individual for each member and so is the DB bonus; individual account remains inheritable until it is depleted.

Conclusions

- Savings and insurance can be combined more efficiently to provide lifetime income during retirement.
- Separating retirement phase into a higher probability event covered by savings and a lower probability one covered by insurance applies first principles in risk management.
- Several issues to decide in implementation:
 - Management and governance of longevity fund
 - Design of benefits: amounts, length, age, etc.
 - Regressivity of scheme: compensatory measures, caps, progressive contributions, other benefits (e.g. survival)?
- Further issues: long term care, health insurance, etc.