



Mortality and Longevity



Aging and Retirement

2020 Living to 100 Discussant Comments 5B: Pensions and Longevity Risk



Discussant Comments Session 5B: Pensions and Longevity Risk

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Fully Funded Pensions for Centenarians – Jonathan Barry Forman, J. D., University of Oklahoma

We will start with J. Forman’s paper.

This work was carefully done--well researched and documented. (I did not check the arithmetic).

But I had some issues.

Issue #1: 70% Gross Replacement Rate (GRR)

While the Gross Replacement Rate (a comparison at a point-in-time of gross earnings) has been used widely, it has fallen into disrepute. There is now a lot of literature on this.

As an alternative, Canadian actuaries, Fred Vettese and Malcolm Hamilton have looked at achieving consistent consumable income over all of life. That means after tax and after all deductions. They found a GRR of around 50% is correct in their model.

Why is a 50% GRR Enough?

- No more deductions for Social Security, Unemployment Insurance, Workers Comp.
- No more saving for retirement
- Lower income taxes in a progressive system
- Kids are gone
- Now debt free (hopefully)

Note that this does not require any attachment to Home Equity to supplement income.

Bonnie-Jeanne MacDonald (with SOA support) has done research on this topic.

She finds that a single-point GRR does not predict living standards continuity in retirement very well at all. Her model shows a correlation between the GRR and actual living standards of 0.11.

She defines a Living Standards Replacement Rate (LSRR) that is a measure of consumable income adjusted for family size. Her goal is to achieve a LSRR between 80% and 120%. She finds that for those with a GRR of 65 to 75% (Forman’s goal) some 80% have a LSRR > 120%. But the range of results is very wide. Among those with a GRR of 65 to 75%, only 22.5% actually achieved a LSRR of 80-120% .

ISSUE #2: The Annuity Factor of 10

Your model determines retirement income using an annuity factor of 10. I cannot replicate such a value. The non-profit pension plan for Ontario Colleges of Applied Arts and Technology has an age 65 annuity factor of 12.5 (with a five-year guarantee). The best annuity factor on Cannex (A private sector annuity quotation platform) is 15.5 (with a 5-year guarantee).

If the cost of an Annuity is 15.5, then your contribution rate of 7.27% goes to 11.27%. And if you add on an Annuity Adjustment Factor, to partially cover Inflation, that adds another 1.67% (using your data) for a total contribution rate of 12.94%.

ISSUE #3: Fully Pre-fund Social Security

To do this will cost \$13.9 Trillion (your data). My question is: “How can you do this without imposing significant inter-generational inequities?” Then one must ask, where can you invest this amount of money? If invested in U.S. Government bonds, you are still 100% PAYG.

Does Pre-Funding Provide Greater Security for OASDI?

The Answer is “No”.

Francisco Bayo (1988) Deputy Chief Actuary of OASDI said:

“For Social Security, you cannot accumulate assets; that is, claims from somebody else’s production. If we have a large amount of money in the Social Security trust funds, we have a claim on ourselves, which does not have much meaning. The truth is, whatever is going to be consumed—be it a product that you can get a physical hold of, or services that are very difficult to hold—those products cannot be stockpiled. They have to be provided at the time of consumption. No matter what kind of financing we are going to have in our Social Security program, you will find that the benefits that will be obtained by the beneficiary in the year 2050 will have to be produced by the workers in the year 2050, or just a few years earlier.”

Nicholas Barr (1993) says it even more strongly:

“The widely held (but false) view that funded schemes are inherently ‘safer’ than PAY-AS-YOU-GO is an example of the fallacy of composition. For individuals the economic function of a pension scheme is to transfer consumption over time. But (ruling out the case where current output is stored in holes in people’s gardens) this is not possible for society as a whole; the consumption of pensioners as a group is produced by the next generation of workers. From an aggregate viewpoint, the economic function of pension schemes is to divide total production between workers and pensioners, i.e. to reduce the consumption of workers so that sufficient output remains for pensioners. Once this point is understood it becomes clear why PAY-AS-YOU-GO and funded schemes, which are simply ways of dividing output between workers and pensioners, should not fare very differently in the face of demographic change.”

How Amending Older Age Security Would Improve the State of Canadian Women Living in the Alone Stage of Retirement – Lori J. Curtis, Ph.D., Douglas W. Andrews, FSA, FCIA, Ph.D., University of Waterloo

While the paper seems to focus on Canadian women living in the Alone Stage of Retirement (ASR), the recommendations for amendments apply to both males and females since the poverty gap is very similar.

Poverty in Retirement: Canada

- Resources Needs are “U” shaped:
 - High Early On (65-74) when Seniors are Active
 - Lower in Middle (75-84) when at home but not in need of extensive health care
 - Higher at advanced age (85+) when Active Daily Living (ADL) is a challenge.

We would note that the Life Expectancy gap between men and women is narrowing and that the rate of Life Expectancy Improvement is slowing.

Government Sources of Retirement Income in Canada

- The Canada/Quebec Pension Plan (C/QPP): an earnings-related contributory scheme
- The Guaranteed Income Supplement (GIS): a means-tested benefit
- Old Age Security (OAS): a flat-rate residence-based benefit

If we look at the GIS Payments to Individuals, the beneficiaries are 72.5% Female.

If we look at beneficiaries receiving a full GIS, then 77.8% are female.

By age 80, 25% of females and 70% of males live in couples. This is important because the proportion of those living alone considered low income is close to 10 times that of couples. The number of females living in poverty is close to double that of males in the early stage, triple in the middle stage and quadruple that of males in the late stage of ASR.

However, the mean gap by poverty measure (MBM and ATLIM) does not vary significantly by gender.

Policy Alternatives: A Basic Income Guarantee (BIG)

Recent Experiments in Ontario and Finland were curtailed when a “right-of-center” government was elected. The Canadian Parliamentary Budget Office says BIG would cost \$23B.

Liberals like it since it alleviates poverty and income inequality. Conservatives like it if it eliminates all other welfare programs (the U.S. has 126 separate welfare programs).

The present system is not strong enough to support people, but it is strong enough to entangle people.

Nixon tried to introduce a Basic Income Guarantee in the 1960’s but the proposal lost in the Senate.

Swiss voters rejected BIG 77% to 23% in a referendum (2016).

Policy Alternatives: Increase Old Age Security

- A \$290 increase to Seniors living in poverty would cost \$1.2B and would alleviate poverty even in the largest poverty gap
- A \$217 increase would cost \$875 million and would alleviate poverty in the Alone Stage of Retirement

Policy Alternatives: Questions/Comments

I think you should do this through the GIS system. If you use the GIS program, then all systems to check other income are already in place.

Should there also be an asset test? Should this extra payment go to those living in homes with no mortgage who could turn to Home Equity Lines of Credit or Reverse Mortgages?

Why the emphasis on females when your solution is non-gender specific?

Policy Alternatives: Will It Float

I believe that Ottawa is not interested in expanding OAS. It would rather let it die as the economy grows faster than COLA increases in OAS benefits.

I would strongly recommend the GIS route

But: Good Work and Good Luck

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