www.ICA2014.org

LEARN
INTERACT
GROW

Safeguarding retirement in a world without guarantees

Stephan Waldstrøm

This presentation is meant to be a gentle wake up call. It does not present complex theoretical issues or brand new products. Rather, it is an attempt to remind ourselves that we

1. have an obligation to provide financial security
2. are moving in the wrong direction in this respect
3. can get a long way with simple, existing products.

Peace of mind is our raison d'être

- Retirement plans and insurance can provide financial security and ultimately *peace of mind*
- Longer lifespans, low interest rates and financial crises have scared us away from old guarantees… and virtues
- Consumers are left undercovered and un(der)informed
- With simple solutions we can again provide peace of mind without repeating previous mistakes.

Retirement planning and insurance provide financial security for consumers and their families, when they might not be able to provide for themselves. Perhaps more importantly, it has the capacity to give peace of mind and allow consumers to spend their time thinking about something else.

This means that we have the possibility of providing more than just cash flows and hard numbers; we can ensure that consumers are well-informed and advised on what they can expect. This may be an exercise in communications, psychology, sociology and more but actuaries have a key role in making the core information available and understandable.

We can do a lot better, both in terms of actual coverage and clear information. I also suggest that this might not be as difficult as it seems.

What risks do consumers face?

- Mortality – **10 %** risk of dying before retirement
- Disability – **20 %** risk of losing ability to work
- Investment – global pension assets fell by **20 %** in 2008
- Longevity – **15 %** “risk” of outliving average by 10 years
- Mobility – **20 %** of US workers quit their jobs in 2012
- Planning - only **46 %** of US workers have tried to calculate their retirement needs.

I have chosen to focus on a few of the major economic risks facing consumers. I have left out health insurance and tax issues because of the significant differences between countries in this regard.

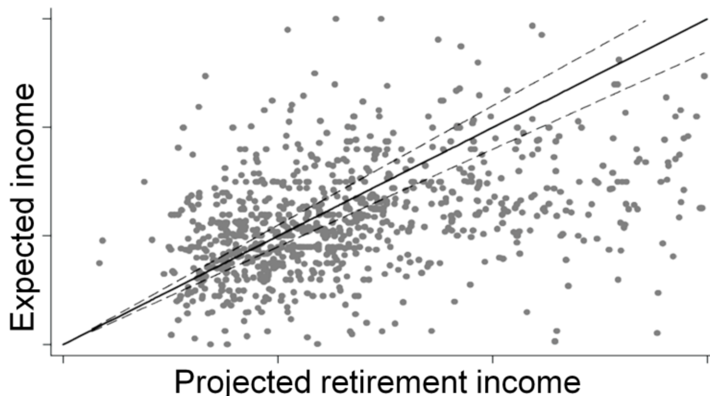
Investment risk often gets the lion’s share of attention, even more so after the latest financial crisis [1]. There are many reasons for this, including that investments are (perceived to be) easier to understand, that many people dabble in it, and that many others make money on it. However, one mustn’t forget that there are other significant risks that face consumers.

Mortality and especially disability risk are often overlooked, despite how many are actually affected and how severe the financial consequences can be.

Longevity risk can be more important than investment risk in terms of their effect on possible annual consumption for retirees. In fact, after a certain age it will be (see e.g. [2]). Adding to the seriousness of this risk, the lack of knowledge of remaining time makes planning very difficult. Options like self-annuitization are not ideal and often expensive. Job mobility (chosen or not) is a risk insofar as many retirement plans still don’t allow employees to keep or transfer their accrued benefits on termination [3]. All of these risks are exacerbated by the lack of planning and available financial advice [4].

What you don't know won't hurt you

- Clear information and advice has never been more important, yet most consumers are in the dark
- This might be the biggest challenge facing consumers.



Source: Danish Social Research Institue – study from 2005 with 968 people aged 51 and up

In the ongoing debate, one forgotten advantage of DB and similar plans is that the consumers know what to expect (as long as the plan is sufficiently funded, of course). Unfortunately, with many newer retirement plans there is a reluctance to provide prognoses or concrete advice despite it being ever more important. Most consumers have no way to know what kind of retirement they are on track for. This makes it almost impossible for ordinary consumers to plan for the future while there is still time. At a macro-level this could prove disastrous for the general economy.

The graph above shows the result of a Danish study conducted by the Social Research Institute [5]. 958 people aged 51 and up were asked about their expectations of their retirement income. These were compared to thoroughly calculated projections for each. The result shows that even at relatively close to retirement, people have a vague idea of their actual income.

Part of the reluctance to give prognoses comes from the great level of uncertainty and the fear of giving “wrong” advice. Yet we are better equipped than anyone to provide that essential information and guidance.

Have we forgotten why we're here?

- The tendency is that risk is shifting to consumers
  - although we should have learned to manage guarantees better
- Many new retirement plans are unguaranteed
  - E.g., 60 % of US retirement assets are now in DC-type plans
- Few consumers have life annuities in retirement
  - not mandatory in the US to annuitize part of income
  - lump sum conversion offers lure even more people away
- From a strategic viewpoint, eschewing risk opens up competition to banks, asset managers etc.

As a profession we are painfully aware of the difficulties faced by old guaranteed retirement products: increasing lifespans, low interest rates, financial crises etc. In many countries, risk management is only slowly catching up. The financial stability of insurers is of utmost importance, however I would posit that risk management has come a long way and new guarantees should be manageable. In fact there are very sensible guaranteed products already out there.

The reaction has been a dramatic move away from guarantees and long-term obligations. DB plans worldwide are critically underfunded and often closed to new business and life annuities are not purchased as much as they should. In the US, the proportion of pension assets in DC plans has increased from approximately 35 to 60 % over the last 20 years. In Denmark, traditional guaranteed products are almost closed for business.

Hence, we are moving towards less financial security and away from the core values that we should provide.

From a strategic viewpoint this development has also made the life and pensions industry vulnerable to competition from banks and asset managers. Simply said, anyone can provide unguaranteed products.

Investing safely for retirement

- Most consumers need help with their investments
  - Decreasing risk profiles over time have many advantages
  - Risk profile should depend on consumer's economic situation
- Invest as if there were guaranteed benefits
  - Could be lower limit of consumer's acceptable retirement goal
  - Collectively or individually, e.g., CPPI-strategies
  - Consider trying to control inflation risk
- Make it possible to transfer contributions or retain benefits on termination of employment
  - Benefits should be linked directly to contributions.

Most consumers have a limited understanding and interest in investment risk. For example, studies (e.g., by ICI [6]) show that few consumers actively manage the investments in their DC plans. The vast majority of consumers would do best with an automatic investment strategy.

A decreasing risk profile has several advantages. First, it decreases timing risk at retirement. Second, it allows time to make corrective actions after the early, high-risk years. A sound economic model will yield the decreasing risk profile of savings by setting a *constant* risk exposure of the consumer's *total* retirement savings, i.e., including future savings.

It is possible to incorporate *pseudo-guarantees* in several ways; here is an example. Set a guarantee level either by default or with the consumer's input. Hedge this like a real guarantee, e.g., with an individual CPPI-strategy, which is very effective particularly in a plan with a regular premiums. The consumer should be left with negligible tail risk at a lower cost than regulatory capital requirements would lead to.

Lastly, unless one feels strongly that actively managed fund are worth the fees, ETF's are a sensible choice if nothing else for the easy-to-convey message of low fees.

The good old days – life annuities

- Insurers' longevity risk is primarily systematic, while consumers' is unsystematic/idiosyncratic
- Offer annuities where benefits vary with the longevity experience/expectation of a given population
  - E.g., pooled annuity funds
- Annuitants are left with (acceptable) systematic risk
- Insurers are left with little or no longevity risk
- Note that retirees seldom need full annuitization.

For the individual, systematic risk is much less important than unsystematic (idiosyncratic) risk. For insurers, the opposite is true. Several types of annuities exist, which can help both groups. One variety is called *pooled annuity funds** [7]

The idea is that benefits are determined, e.g., annually, by the individual annuitant's fund value and a best-estimate fair value of a life annuity. Mortality credit* awarded to survivors is set so that the pool shares the funds of the deceased annuitants. This has the following very appealing characteristics:

- Consumers are left with only systematic risk
- Insurers are left with little or no risk
- Consumers are free to invest as they please.

For practical reasons, the insurer may choose to use an index (e.g., larger pool) to set mortality credit, leaving some unsystematic risk. Note that retirees rarely need to place all savings in life annuities.

* Mortality credit is adjusted by the observed ratio of deceased annuitants' funds to survivors' funds compared to the expected ratio.

Flexible insurance coverage

- The importance of life and disability insurance if often neglected, especially for younger people
- Our needs change with various life events and insurance must adjust accordingly or even automatically
- If insurance coverage is inadequate, there is no way to correct later – as opposed to saving for retirement
- Disability insurance should cover two phases of life
  - income until planned retirement
  - income after retirement, e.g., waiver of premium.

Disability insurance may be the most important risk reducer for young people, as they have little savings, and it is too late to correct for it if disaster strikes. It is worth noting that many US employee benefit plans don't include LTD.

While most consumers have life and disability insurance, the covers are often not updated adequately. They may be set initially at the time of entering into a retirement plan, but life events have a big effect on the need for insurance. When getting married, having children or buying real estate these needs change drastically.

It is difficult to create individual products that adjust in a timely fashion. A true and tested solution are group products, but these are decreasingly popular in part because they are seen as being unfair, e.g., to people without children. An other way to solve this is to contact consumers at regular intervals to check up on needs, for example through automated questionnaires.

For disability insurance, it is important to remember that a loss of earning capacity has two consequences. In addition to decreasing income now, it also adversely affects retirements contributions. This should be remembered in setting coverage levels.

Clear information and guidance

- Build an income model which takes into account social benefits, the consumers' other means etc.
- With select pieces of data we are able to advise on
  - Required level of contributions
  - Investment profile (highest sensible risk)
  - Possible age of retirement
  - Need for life annuities (proportion of savings)
  - Death and disability insurance covers
- Simple advice is much better than no advice
  - and much cheaper than complicated advice.

The importance of clear information and advice has already been stressed. We can't predict the future but we can probably make a better estimate than most. It is important to realize that an educated guess is better than no guess. The goal should not be to hit the bull's eye with our prognoses, but to get reasonably close. As retirement approaches our guesses will get better and better.

The key is to find the right balance between keeping it simple and taking more information in. Each added piece of data will make the advice process more complicated, confusing consumers and increasing costs.

With select data like age, income, wealth, retirement savings, marital status, age of children etc. it is possible to build a prognosis model that can advise on the above elements in a way that will be adequate for all but the most complicated consumers.

The model needs to include projections of social benefits, retirement plan benefits, savings other than retirement savings and real estate. Each of these carry different investment risks and some of them will cover longevity while others won't; both will affect the advice given.

The complete package

- Clear information and advice about expected benefits
- Decreasing investment risk profile, with possible hedging of "guarantee" (real or pretend)
- Annuities with only systematic risk left to annuitants
- Death and disability coverage adjusted over time
- Possibility of keeping benefits or transferring.

References
[1] Towers Watson *Global Pension Assets Study 2013*

[2] Ezra, D. 2011. "How Should Retirees Manage Investment and Longevity Risk in a Defined Contribution World?" *Rotman International Journal of Pension Management 4 (1): 62–67. http://dx.doi.org/10.3138/rijpm.4.1.62*

[3] Bureau of Labor Statistics *Job Openings and Labor Turnover, January 2013*

[4] Helman, R., Adams, N., Copeland, C., VanDerhei, J. 2013 *The 2013 Retirement Confidence Survey: Perceived Savings Needs Outspace Reality for Many, ebri.org March 2013.*

[5] Amilon, A. 2008. "Danskernes Forventning til Pension" *SFI 08:01*

[6] Holden, S., and Schrass, D. 2012. "Defined Contribution Plan Participants' Activities, 2011." *ICI Research Report (April). Available at www.ici.org/pdf/ppr_12_rec_survey-q2.pdf.*

[7] Donnely, C., Montserrat, G. and Perch Nielsen, J. 2012. "Exchanging uncertain mortality for a cost" *Insurance: Mathematics and Economics, vol. 52, issue 1: 65-76*