REFERENCE LIST
January 2015/December 2014

Communicating the Financial Health of Public Pension Plans

January 2015- Society of Actuaries

The Society of Actuaries' Social Insurance and Public Finance Section is pleased to make available the results of a research project that has developed prototype reports intended to provide useful information to a variety of stakeholders on the financial health and prospects of state and municipal plans. The material includes prototype reports on two example state pension systems. The prototype reports include a narrative portion and a dashboard that provides quantitative indicators and a summary of the structure of benefits and actuarial assumptions. The material was authored by George (Sandy) Mackenzie.

https://www.soa.org/Files/Research/Projects/2014-pension-research-report.pdf

The Impact of Long-Term Care Costs on Retirement Wealth Needs

January 2015- Society of Actuaries

This paper provides an overview of the risks and costs of long-term care (LTC), including a discussion of who bears the risk, and the advantages and disadvantages of various funding mechanisms for long-term support and services. A summary of recent simulation studies provides evidence regarding the size of the risk and the impact on household financial well-being. We conclude that advance planning for LTC risk is critical for low- to middle-income households. For other than the wealthiest households, the cost at the retirement date of any LTC financing strategy will likely be prohibitive and may deplete household emergency funds. For those with greater wealth and income, paying for LTC costs as they are incurred may be a workable option.

https://www.soa.org/Library/Monographs/Retirement-Systems/managing-impact-ltc/2014/mono-2014-ltc-manage-bajtelsmit.pdf

Financing Future LTSS and Long Life Through More Flexible 401(k)s and IRAs

January 2015- Society of Actuaries

This paper proposes and evaluates changing 401(k) and individual retirement account (IRA) rules to help address two major risks facing participants in defined-contribution (DC) retirement accounts: 1) the risk of outliving one's savings; and 2) the risk of having to pay substantial amounts for long-term services and supports (LTSS). The proposal would allow retirees to invest a portion of their DC retirement savings in a special retirement account for longer without penalty than under current tax rules and could provide additional tax incentives for money drawn from the accounts used to pay for LTSS or long-term care insurance (LTCI).

https://www.soa.org/Library/Monographs/Retirement-Systems/managing-impact-ltc/2014/mono-2014-ltc-manage-polzer.pdf

Economic and financial approaches to valuing pension liabilities

January 2015- Journal of Pension Economics and Finance

Financial economics holds that payment streams should be valued using discount rates that reflect the cash flows' risks. In the case of pension liabilities, the appropriate discount rate for a pension fund's liabilities is the expected rate of return on a portfolio that would be held under a liability-driven investment policy. The valuation of defined benefit pension obligations involves choices revolving around deciding: (1) what future benefit payments to recognize today (i.e., which liability concept to use); and (2) from whose point of view to value the liabilities. Moving towards modeling, the distribution of future liabilities using a 'risk-neutral' framework, would allow for calculating the present value of the future liabilities more accurately. This would provide policymakers with information more relevant for the decision-making, and it would also permit easier communication of the risks facing the Pension Benefit Guaranty Corporation's PIMS model via a single univariate statistic.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9539814&fulltextType=RA&fileId=S1474747214000468

401(k) participant behavior in a volatile economy

January 2015- Journal of Pension Economics and Finance

The booms and busts of the late 1990s and 2000s have taken 401(k) plan participants on a rollercoaster ride. Using data from administrative tax records and household surveys, this paper examines how participants responded to these periods of economic expansions and contractions by documenting changes in 401(k) participation, contributions, and contribution rates from 1990 to 2009. Controlling for earnings, job changes, and other household factors, we find that workers reduce their 401(k) participation and contributions during recessions – suggesting that they may be responding to changes in their expectations about the economy and stock market. We estimate that changes in participant behavior during the Great Recession, in particular, could lower 401(k) assets of the typical 30-year-old by as much as 8% at age 62.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9332797&fulltextType=RA&fileId=S1474747214000250

Pricing of a resettable guarantee of a salary-connected individual pension account

January 2015- Journal of Pension Economics and Finance

The present paper numerically prices a resettable guarantee of a salary-connected individual pension account (IPA). The results indicate that a principal guarantee without a reset feature is not worth much unless the volatility of assets in the IPA is huge, while the death benefit contributes a very small proportion to the guarantee value. Deferred proportional funding is an alternative to reducing problems from the difficulty in modeling salary behavior, because the required deferred proportional cost is impacted less by the salary behavior. Moreover, if the lapse from a guarantee is possible, then the guarantee is not necessarily more valuable for a younger individual.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9542750&fulltextType=RA&fileId=S1474747214000481

Optimal Portfolio Choice in Retirement with Participating Life Annuities

January 2015- The Pension Research Council

This paper derives optimal consumption, investment, and annuitization patterns for retired households that have access to German-style participating payout life annuities (PLAs), allowing for capital market risks as well as idiosyncratic and systematic longevity risks. PLAs provide guaranteed minimum benefits in combination with participation in insurers' surpluses. Minimum benefits are calculated based on conservative assumptions regarding capital market and mortality developments, while surpluses distributed to annuitants bridge the gap between the insurers' actual investment and mortality experiences and the projections used in pricing. Through the participation scheme, systematic longevity risk is shared between insurers and annuitants, as unanticipated longevity shocks result in benefit adjustments via the surplus mechanism.

We show that the retiree draws substantial utility from access to PLAs, equivalent to 20 percent of initial wealth in the presence of systematic longevity risk. We also find that stochasticity in mortality rates only has minor impact on the appeal of PLAs to the retiree. Even if the interest rate guarantee is reduced to zero in adverse capital market environments, PLAs prove to provide substantial utility for retirees. Overall, the participating life annuity design produces substantial welfare gains over a no-annuity world, while being an efficient setup that helps providers to hedge long-term risks that are difficult to hedge otherwise, such as systematic longevity risks.

http://www.pensionresearchcouncil.org/publications/document.php?file=1209&download=1

Insights from Switzerland's Pension System

January 2015- The Pension Research Council

This chapter takes Switzerland's much praised three-pillar system to illustrate some of the challenges pension system reforms face in an aging society. It shows that policymakers are confronted by some individuals with behavioral anomalies, and by others who strategically exploit the system The trade-off between providing incentives and adequate retirement income limits policy options, especially if reformers do not want to impose too many restrictions on individual choice and avoid excessive burdens for the young generation. Pension reforms can also be seriously challenged by political constraints, in particular, when voters have a direct say on proposed changes.

http://www.pensionresearchcouncil.org/publications/document.php?file=1220&download=1

Cultivating Pension Plans

January 2015- The Pension Research Council

Federal law both cultivates and regulates employer-sponsored pension plans in the United States. Some believe that because employers have been migrating away from traditional defined benefit pension plans in the United States, the plan cultivation provisions of federal law have failed to encourage U.S. employers to offer pension benefits to their employees. However, Congress has allowed each employer to decide for itself whether to provide pension benefits to its employees and, if so, what kind of pension benefits to provide. Employers appear to have migrated away from traditional defined benefit plans primarily because employers have concluded that defined contribution plans and some hybrid plans are more compatible with their own interests and the interests of their employees than are traditional defined benefit plans.

http://www.pensionresearchcouncil.org/publications/document.php?file=1214&download=1

Will They Take the Money and Work? An Empirical Analysis of People's Willingness to Delay Claiming Social Security Benefits for a Lump Sum

January 2015- The Pension Research Council

This paper investigates whether exchanging the Social Security delayed retirement credit, currently paid as an increase in lifetime annuity benefits, for a lump sum would induce later claiming and additional work. We show that people would voluntarily claim about half a year later if the lump sum were paid for claiming any time after the Early Retirement Age, and about two-thirds of a year later if the lump sum were paid only for those claiming after their Full Retirement Age. Overall, people will work one-third to one-half of the additional months, compared to the *status quo*. Those who would currently claim at the youngest ages are likely to be most responsive to the offer of a lump sum benefit.

http://www.pensionresearchcouncil.org/publications/document.php?file=1217

How does aging affect financial decision making?

January 2015 – Center for Retirement Research at Boston College

The *brief's* key findings are:

- With the shift from traditional pensions to 401(k) plans, the welfare of retirees depends increasingly on their ability to make sound financial decisions.
- Using a dataset that follows a group of older individuals in the Chicago area, the analysis examines how aging affects financial decision making.
- Participants who suffer cognitive decline experience a reduction in their financial literacy but no change in their confidence in managing their money.
- Perhaps not surprisingly then, while they are more likely to get help with financial decisions, more than half retain primary responsibility for managing their money.

http://crr.bc.edu/wp-content/uploads/2015/01/IB_15-1-508.pdf

NRRI update shows half still falling short

January 2015- Center for Retirement Research at Boston College

The brief's key findings are:

- Between 2010 and 2013, the National Retirement Risk Index improved only slightly, dropping from 53 percent to 52 percent of working-age households.
- This result may seem surprising given that the stock market was up and housing prices had begun to rebound.
- But other factors – Social Security's rising "Full Retirement Age," declining interest rates, and changes in reverse mortgage rules – acted as counterweights.
- The bottom line is that retirement security remains a serious challenge; Americans need to save more and/or work longer.

http://crr.bc.edu/wp-content/uploads/2014/12/IB_14-20-508.pdf

Do Tax Incentives Increase 401(k) Retirement Saving? Evidence from the Adoption of Catch-Up Contributions

January 2015- Center for Retirement Research at Boston College

The U.S. government subsidizes retirement saving through 401(k) plans with $61.4 billion in tax expenditures annually, but the question of whether these tax incentives are effective in increasing saving remains unanswered. Using longitudinal U.S. Social Security Administration data on tax-deferred earnings linked to the Survey of Income and Program Participation, the project examines whether the "catch-up provision," which was enacted in 2001 and allows workers over age 50 to contribute more to their 401(k) plans, has been effective in increasing earnings deferrals. Compared with similar workers under age 50, the study finds that contributions increased by $540 more among age-50-plus individuals who had approached the 401(k) tax-deferral limits prior to turning 50, suggesting that the older individuals respond to the expanded tax incentives. For this group, the elasticity of retirement savings to the tax incentive is quite high: a one-dollar increase in the tax-deferred limit leads to an immediate 49-cent increase in 401(k) contributions.

http://crr.bc.edu/wp-content/uploads/2014/11/wp_2014-17.pdf

How Did State/Local Plans Become Underfunded?

January 2015- Center for Retirement Research at Boston College

The brief's key findings are:

- A new analytical tool tells a clear story of why unfunded liabilities rose during 2001-2013.
- The primary factor was investment returns that fell short of expectations due to the two financial crises.
- A secondary factor was that many plans failed to make adequate contributions, a more serious problem among the worst-funded plans
- This type of analysis should be added to every plan's annual actuarial valuation.

http://crr.bc.edu/wp-content/uploads/2015/01/slp_42.pdf

Winging It in Retirement?

January 2015 – Center for Retirement Research at Boston College

Only a minority of people planning their retirement take into account these important financial issues:

- Tax considerations (29 percent of older Americans have considered this factor, according to the survey);
- Risks that could "undermine" their retirement (29 percent);
- The financial consequences if their spouse dies (34 percent);
- How they will deal with changing health and long-term care issues raised by aging (37 percent);
- What their household budget will look like (39 percent);
- The best way to withdraw income from their investments (39 percent);
- How much income their investments will produce over time (40 percent).

http://squaredawayblog.bc.edu/squared-away/winging-it-in-retirement/

Retirement Saving: Excuses and Regrets

January 2015- Center for Retirement Research at Boston College

U.S. workers have a long list of reasons, many of them legitimate, for why they can't come up with the money for a retirement savings plan. But here is the rub: we live in a 401(k) world. Workers who aren't convinced of the urgency of saving should listen to people who have already retired. Even though many current retirees have defined-benefit pensions, they have become largely unavailable to most people still working today. And these retirees say they've learned the hard way that saving is key.

http://squaredawayblog.bc.edu/squared-away/retirement-saving-excuses-and-regrets/

Evaluating a Pension Buyout Offer

January 2015- Center for Retirement Research at Boston College

My 17-year employment as a Boston Globe reporter entitles me to a $1,762 monthly pension for life, starting at age 65. I'm 57 now. But a few weeks ago, the company put two alternatives on the table: take a smaller pension that starts now or trade my pension for a lump sum of $170,000 in cash. The deadline for accepting the new offer: the day after Christmas.
The New York Times Co., which used to own the Globe, has no doubt made this offer to employees for the same reason most companies do: to reduce burdensome pension liabilities and create financial certainty. But what's in it for me? And how should other boomers think about similar offers coming over the transom?

http://squaredawayblog.bc.edu/squared-away/evaluating-a-pension-buyout-offer/

Illinois Introduces Automatic Retirement Saving Program, a First for the Nation

January 2015- The New York Times

Starting 2017 in Illinois employees will be automatically enrolled in individual retirement accounts; participation will be voluntary but workers who don´t what to save will need to opt out manually. The participation is 3 percent of the employees wage, but they can also increase that contribution manually. A data analysis of the participation of the American households in pension plans shows that just 52 percent of them aged 55 to 64 had a 401(k) account, and that a payroll deduction changes the participation from basically zero to over 50 percent.
The plan is paid by the savers, who will be charged up to .75 percent of their balances.
There are still some critics about the program, named Secure Choice, because employers with fewer than 25 employees do not have to participate.

http://www.nytimes.com/2015/01/06/upshot/illinois-introduces-automatic-retirement-savings-program-a-first-for-the-nation.html?emc=eta1&abt=0002&abg=1

Average 401(k) Balance Hits record $91300

January 2015- CNN Money

At Fidelity, the average 401(k) balance hit $91300 by the end of 2014, that increase is in part because the stock market saw the S&P 500 climb more than 10% last year; but also workers and their employers contributed up 4% from the year before. On average, employees socked away 8.1% of their salary, which are the highest savings rate recorded by Fidelity since 2011.
Financial planners recommend saving 10% to 15% of your salary, and in 2014 workers saved around 12%. Despite the good year in retirement savings, people need far more than the average balance of $248,000 for a comfortable retirement. In a statement, Fidelity said: "Commitment to a long-term savings and investing strategy will put individuals in the best position".

http://money.cnn.com/2015/01/29/retirement/401k-balances/index.html

OECD Pensions Outlook 2014

December 2014 – Organization for Economic Cooperation and Development

This 2014 edition of the *OECD Pensions Outlook* examines the ever-changing pension's landscape. It looks at pension reform, the role of private pensions and retirement savings. Population ageing and longevity risk is examined as are the means of increasing coverage and providing automatic enrolment. The volume is rounded out by a chapter on default retirement strategies.

http://www.oecd.org/els/oecd-pensions-outlook-23137649.htm

Actuarial Fairness and Solidarity in Pooled Annuity Funds

December 2014 – ASTIN Bulletin

Various types of structures that enable a group of individuals to pool their mortality risk have been proposed in the literature. Collectively, the structures are called pooled annuity funds. Since the pooled annuity funds propose different methods of pooling mortality risk, we investigate the connections between them and find that they are genuinely different for a finite heterogeneous membership profile. We discuss the importance of actuarial fairness, defined as the expected benefits equalling the contributions for each member, in the context of pooling mortality risk and comment on whether actuarial unfairness can be seen as solidarity between members. We show that, with a finite number of members in the fund, the group self-annuitization scheme is not actuarially fair: some members subsidize the other members. The implication is that the members who are subsidizing the others may obtain a higher expected benefit by joining a fund with a more favourable membership profile. However, we find that the subsidies are financially significant only for very small or highly heterogeneous membership profiles.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9479601&fileId=S051503611400018X&utm_source=Issue_Alert&utm_medium=Email&utm_campaign=ASB

Role of the Pension Protection Fund in Financial Risk Management of UK defined benefit pension sector: a multi-period economic capital study

December 2014 – Annals of Actuarial Science

With the advent of formal regulatory requirements for rigorous risk-based, or economic, capital quantification for the financial risk management of banking and insurance sectors, regulators and policy-makers are turning their attention to the pension sector, the other integral player in the financial markets. In this paper, we analyze the impact of applying economic capital techniques to defined benefit pension schemes in the United Kingdom. We propose two alternative economic capital quantification approaches, first, for individual defined benefit pension schemes on a stand-alone basis and then for the pension sector as a whole by quantifying economic capital of the UK's Pension Protection Fund, which takes over eligible schemes with deficit, in the event of sponsor insolvency. We find that economic capital requirements for individual schemes are significantly high. However, we show that sharing risks through the Pension Protection Fund reduces the aggregate economic capital requirement of the entire sector.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9456768&fileId=S1748499514000256&utm_source=First_View&utm_medium=Email&utm_campaign=AAS

Intergenerational Risk-Sharing Through Funded Pensions and Public Debt

December 2014 – Journal of Pension Economic and Finance

We explore the benefits of intergenerational risk-sharing through both private funded pensions and via the public debt. We use a multi-period overlapping generation model with a pay-as-you-go pension pillar, a funded pension pillar and a government. Shocks are smoothed via the public debt and variations in the indexation of pension entitlements and pension contributions. The intensity of these adjustments increases when the pension funding ratio or public debt gets closer to their boundaries. The best-performing pension arrangement is a hybrid funded scheme in which both contributions and entitlement indexation are simultaneously deployed as stabilization instruments. We find that contribution and indexation adjustment policies are substitutes and the same is the case for contribution and tax adjustment policies. By contrast, indexation and tax adjustment policies are complements. We compare different taxation regimes and conclude that a regime in which pension benefits are taxed, while contributions are paid before taxes, is preferred to a regime in which contributions are paid after taxes, but benefits are untaxed.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9450363&fileId=S1474747214000365&utm_source=First_View&utm_medium=Email&utm_campaign=PEF

Integrated Risk Management for Defined Benefit Pensions: Models and Metrics

December 2014 – Journal of Pension Economic and Finance

The Pension Benefit Guaranty Corporation (PBGC) insures private sector defined benefit (DB) pension plans, when an employer becomes insolvent and is unable to pay the pension liabilities. In principle, the insurance premiums collected by PBGC should be sufficient to cover potential losses; this would ensure that PBGC could pay the insured benefits of terminated pension plan without additional external funding (e.g., from taxpayers). Therefore, the risk exposure of the PBGC from insuring DB pension plans arises from the probability of the employer insolvencies; and the terminating plans' funding status (the excess of the value of the insured plan liabilities over the plan assets). Here we explore only the second component, namely the impact of plan underfunding for the operation of the PBGC. When a DB plan is fully funded, the PBGC's risk exposure for an on-going plan is low even if the plan sponsor becomes insolvent. Thus the questions most pertinent to the PBGC are: what key risk factors can produce underfunding in a DB plan, and how can these risk factors be quantified? We discuss the key risk factors that produce DB pension underfunding, namely, investment risk and liability risk. These are interrelated and must be considered simultaneously in order to quantify the risk exposure of a DB pension plan. We propose that an integrated risk management model (an Integrated Asset/Liability Model) can help better understand DB pension plan funding risk. We also examine the Pension Insurance Modelling System developed by the PBGC in terms of its own use of some of the building blocks of an integrated risk management model.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9487446&fileId=S1474747214000456&utm_source=First_View&utm_medium=Email&utm_campaign=PEF

Do Census Data Understate Retirement Income?

December 2014 – Center for Retirement Research at Boston College

The brief's key findings are:

- Some claim that retirees are better off than many think, because Census's Current Population Survey (CPS) does not capture most 401(k)/IRA income.
- Indeed, the CPS dramatically under-reports 401(k)/IRA income, a serious problem given the shift from defined benefit to defined contribution plans.
- Interestingly, though, the problem is largely concentrated among upper-income households, which hold most of the 401(k)/IRA wealth.
- As a result, the CPS currently provides a reasonably good measure of retirement income for the typical middle-income household.
- Moreover, Census is currently testing ways to improve the CPS survey design to better incorporate all sources of retirement income.

http://crr.bc.edu/wp-content/uploads/2014/11/IB_14-19.pdf

Falling Short: The Coming Retirement Crisis

December 2014 – Center for Retirement Research at Boston College

The book's key findings are:

- Today's workers face a major retirement income gap because they will need morebut can expect less from traditional sources.
- The solutions are to save more and work longer.
- Save more: shore up Social Security; make all 401(k)s fully automatic; extend coverage to those without a retirement plan; and tap home equity.
- Work longer: encourage people to retire later, which boosts monthly Social Security benefits, adds to 401(k)s, and reduces the retirement span.
- These solutions are conceptually simple and eminently feasible as they build on our nation's existing retirement systems.

http://crr.bc.edu/special-projects/books/falling-short-the-coming-retirement-crisis-and-what-to-do-about-it/

Income and Disparate Death Rates

December 2014 – Center for Retirement Research at Boston College

The differences in Americans' longevity, depending on one's income level, are striking.
The annual death rates for 50- to 74-year-old men and women with the lowest earnings are more than double what they are for high earners. This gap in life spans, which is well-documented in the research literature, has been growing with each new generation. A recent study digs deeper to uncover specific ailments, such as heart disease, that may be driving the growing disparity. Brookings Institution researchers Barry Bosworth, Gary Burtless, and Kan Zhang used data from a nationally representative sample of almost 32,000 older Americans that included the causes of individual deaths occurring between 1992 and 2010. The survey contains detailed information about the cause and timing of the deaths, as well as interviews with family of the survey participants after they die.

http://squaredawayblog.bc.edu/squared-away/income-explains-disparate-death-rates/

Alzheimer's: A Financial Plan Revamped

December 2014 – Center for Retirement Research at Boston College

Ken Sullivan's diagnosis of Alzheimer's disease at age 47 unleashed a torrent of feelings: shock, isolation, fear. It's probably why he lost his demanding job at a large financial company.
The diagnosis was also emotionally devastating for his wife, Michelle Palomera. But for both of them, it was a rude awakening to the myriad financial preparations required for Alzheimer's. Even though both are financial professionals, they had no idea how complex it would be to revise their existing financial plan, how hard it would be to find professionals with the specific legal and financial expertise to help them, or how long this project would take – 17 months and counting.

http://squaredawayblog.bc.edu/squared-away/alzheimer%E2%80%99s-a-financial-plan-revamped/

Risk Sharing Pension Plans: The Canadian Experience

December 2014 – Pensions Policy Institute

This briefing note draws on the experience of running "defined ambition" style pension plans in Canada. The individual provinces in Canada are responsible for setting their own pensions legislation, and there are a number of existing pension plans already in operation that could fit within the legislative framework that the UK Government is establishing through the Pension Schemes Bill currently before Parliament. Therefore Canada provides an informative case study of how these plans could operate in practice.
There are a wide range of structures in place across the different provinces, but also across industries, sectors and by types of employer, with newer plans predominantly being set up in the public sector. In some cases rights in existing defined benefit (DB) plans are being converted across to different forms of shared-risk or target benefit plan structures, or new plans are being set up to replace existing DB plans (see page 4), while in other cases "specified" multi-employer plans (see page 12) have been in operation for decades under their own sections of the legislation.

http://www.pensionspolicyinstitute.org.uk/uploaded/documents/20141003%20PR%20for%20BN69%20RSPP%20The%20Canadian%20Experience%20Final.pdf

Risk Sharing Pension Plans: The Dutch Experience

December 2014 – Pensions Policy Institute

This technical briefing note draws on the experience of running "Defined Ambition" style pension plans in the Netherlands. Since the early 2000s, the Dutch pension system has seen a shift away from Defined Benefit (DB) pension plans based on a final salary structure in favor of career average structures where annual indexation is subject to the levels of funding within the plan, and where benefits may be reduced if necessary in order to agree a recovery plan.
However, since the Global Financial Crisis in 2008 and the associated low interest rates and funding deficits that arose (see pages 4-6), there has been a lively national debate in the Netherlands around the long-term sustainability of these collective plans and, linked to that, the transparency of the existing contractual arrangements and members' individual property rights.
http://www.pensionspolicyinstitute.org.uk/uploaded/documents/20141028%20Netherlands.pdf

How to fix America's Pension System

December 2014 – The Economist

Americans are living longer but retiring earlier than they did 50 years ago. Their workplace pensions have become less generous, as has Social Security, and their medical expenses have risen. Given this, they have not saved nearly enough to provide for their old age.

It all adds up to a budding crisis, as a new book from Charles Ellis, Alicia Munnell and Andrew Eschtruth explains. There are only three solutions. Retired people must live on less, they must work longer or they must save more during their working lives. The last two options may be preferable, but they are not easy. First, the problem: The average period in retirement has risen from 13 years in the 1960s to 20 today. There is a 50% chance that one member of a retiring couple will live to 92. The average age of retirement is 64, lower than it was in the 1960s. For most people, the main source of their retirement income will be Social Security, the government pension. This was originally designed on the insurance principle: what workers took out was related to what they paid in. But the principle was soon broken for early retirees, who received far more than they contributed. As presently constituted, the fund into which Social Security payments go will run out of money in 2033. The system is essentially "pay-as-you-go".

http://www.economist.com/news/finance-and-economics/21635023-how-fix-americas-pension-system-work-save-move?frsc=dg%7Ca