



REFERENCE LIST October 2009

Social security

“**Strengthening Social Security for Vulnerable Groups**”, Virginia P. Reno and Joni Lavery, (2009), National Academy of Social Insurance (NASI),

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1466062

Summary: Declining home values, lost savings, and corporate pressures to cut pension costs are undermining retirement security for seniors. At the same time, job losses, pay cuts, and mortgage foreclosures are jeopardizing workers' dreams of a secure retirement. In light of the current financial crisis, Social Security is more important than ever. Hidden in the shadows of the unemployment and home foreclosure figures of the Great Depression were elderly parents dependent on their adult children for support. When those children lost their jobs, seniors lost this support. When those children lost their homes, so did their parents who generally resided with them. Thanks to Social Security, this is one problem the country does not now face. By exposing the profound vulnerability of rank and file Americans to the risks of a market economy, the financial crisis points to the need to address the adequacy of Social Security to help retirees and families offset losses elsewhere. A window exists to shape public policy to strengthen Social Security to better meet the needs of elders, people with disabilities, and working families in the 21st century.

“**Means Testing, Universalism, and the Formation of Social Preferences**”, Lester, Gillian L. L. (2009), University of California, Berkeley - School of Law,

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1461098

Summary: This article explores the conditions under which citizens are likely to support social programs that redistribute resources to the poor. Specifically, I analyze and compare a system that aims to redistribute by targeting benefits at low-income individuals through an income or means test, versus one that emphasizes 'universal' allocation of benefits, not conditioned on poverty. I argue notwithstanding that we should expect universal provision (by definition) to achieve less redistribution than means testing, universalist policies ultimately may be more effective in achieving this goal because they are likely to be more politically durable, and - more intriguingly - to create social conditions that could increase toleration for redistribution.

“**Social Security and Life Satisfaction - Empirical Findings (Soziale Sicherheit Und Lebenszufriedenheit - Empirische Ergebnisse)**”, Uhde, Nicole (2009), Center of Applied Economic Research Muenster, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1462071

Summary: Life satisfaction in Germany has decreased, contrary to the fact of increasing material prosperity. This paper provides evidence that publicly and privately provided social security has a positive impact on personal life satisfaction by estimating an Ordered Logit Model. The analysis is based

on survey data of the Socio-Economic Panel (SOEP) for the period from 1991-2007 and for more than 40,000 respondents. The results offer practical benefits for economic policy, indicating a deterioration of perceived social security despite the fact that social benefits per inhabitant continued to rise. As a result of the globalization and inequality of the personal income distribution, respondents express considerable concerns about job security and their personal economic situation. The decline of perceived social security can help to explain the constant decrease of life satisfaction, both of East- and West-German respondents.

“Immigration and Social Security in Spain”, Gonzalez, Clara I., Ignacio Conde-Ruiz, J. and Boldrin, Michele (2009), FEDEA Working Paper No. 2009-26, <http://ssrn.com/abstract=1443319>

Summary: The objective of this paper is to understand the impact of immigration on the Spanish pension system during the next fifty years by building a quantitative theoretical framework. In order to carry out the exercise of projection of revenues and expenditures in the Spanish pension system, we have developed an Overlapping Generation Model where individuals differ by age, gender, skill and nationality. The Cohort Component Population Projection Method is used for the demographic projections, and for the labor market scenario we have simulated the full labor history of all of our different workers for the period 2008-2050 taking into account the future evolution of the educational levels and five possible situations during their labor history (employed, self-employed, unemployed, disabled and inactive). In a first baseline scenario the system will be in deficit around year 2023 according to the latest official estimates. The arrival of a large number of foreign workers is offering the Social Security System roughly five years of additional time to correct its important underlying unbalances. However after this period, the structural problems will come back and may be even magnified by the presence of an additional number of retired immigrants. Even if immigration reaches its total assimilation in the labor market it will not be sufficient to avoid that the pension system will be in deficit. However, immigration is allowing us to obtain very valuable additional time in order to carry out the necessary reforms.

“Rising Tides and Retirement: The Aggregate and Distributional Effects of Differential Wage Growth on Social Security”, Melissa M. Favreault (2009),

CRR Boston WP 2009-7, http://crr.bc.edu/images/stories/Working_Papers/wp_2009-7.pdf

Summary: Recent growth in wage inequality has important implications for Social Security solvency and the distribution of benefits. Because only earnings below the taxable maximum are subject to Social Security payroll taxes, wage growth that is concentrated among very high earners will generate lower tax receipts than wage growth that is more evenly distributed. The progressivity of the Social Security benefit formula increases benefit payouts when the share of workers with low wages grows. This study uses a dynamic microsimulation model to examine the aggregate and distributional consequences of alternative scenarios about the distribution of future wage growth among workers. We find fairly marked changes in projected Social Security benefit distributions, poverty, and long-term financing status with relatively modest changes in assumptions about wage differentials.

Pension systems reform

“Which pension model holds the most promise for China: a funded defined contribution scheme, a notional defined contribution scheme or a universal social pension?”, Williamson, John B; Shen, Ce; Yang, Yinan (2009), *Benefits : a journal of poverty and social justice*, 17 (2): 101-111, <http://www2.bc.edu/~jbw/documents/whichpensionmodel1.pdf>

Summary: Faced with concerns about how to finance pensions for present and particularly future retirees, Chinese policy makers concluded that their traditional defined benefit pension scheme was not going to be sustainable. They, like pension policy makers around the world, have been looking for

alternatives and have tentatively decided to go with a multi-pillar scheme that includes a major funded defined contribution pillar. We question the wisdom of that choice and explore two alternatives, one for urban workers based on the notional defined contribution (NDC) model and one for rural workers based on the universal social pension model.

“Is defined contribution a panacea for defined benefit social security funding problems? Lessons from two countries”, Andrews, Doug; Brown, Robert L. (2009), North American Actuarial Journal (2009) 13 (2): 186-201, <http://www.soa.org/library/journals/north-american-actuarial-journal/2009/no-02/naaj-2009-vol13-no2-andrews.pdf>

Summary: Many countries are changing their social security retirement program from a defined benefit (DB) to a defined contribution (DC) basis. Other countries, such as the United States, are discussing the introduction of a DC component. The replacement of a DB social security retirement system by a DC system raises many important social and economic issues. Thoughtful consideration must be given to the choice of a criteria for prioritizing objectives and outcomes, as well as in weighing the advantages and disadvantages between different cohorts.

Focusing on the adoption of a funded DC social security retirement program in Chile and the adoption of a pay-as-you-go NDC social security retirement program by Sweden, this research identifies factors of financial markets, economics, and demographics necessary to enable a move to DC accounts. In addition, it identifies the characteristics of the financial markets necessary to support payments (wealth transfers) to retirees from a DC social security retirement program. The paper considers the question of social security funding and plan type (DB vs DC) and attempts to assess the suitability of certain reform options for the United States.

From the US Social Security Administration, advice from Alice Wade, Deputy Chief Actuary

Long-range financial estimates for many of the various options to change the Social Security program (such as changing the payroll tax rate or changing the way benefits are calculated) are now updated using the intermediate assumptions of the 2009 Trustees Report. These options have been proposed by various Congressional members and other policy makers. The internet link providing these estimates is: <http://www.ssa.gov/OACT/solvency/provisions/index.html>.

Please note that not every option available on our internet site has been updated. Due to the many requests for these updates, we have decided to release estimates for those categories of options that are complete. The following two categories of options have not been updated:

- (1) Provisions Affecting Retirement Age and
- (2) Provisions Affecting Coverage of Employment or Earnings.

We anticipate updating these two categories shortly. In addition, an updated version of the reoccurring actuarial note (number 2009.1) on unfunded obligation and transition cost for the OASDI program is now available. The internet link to this note is:

<http://www.ssa.gov/OACT/NOTES/ran1/index.html>.

Retirement savings

“Provisions for Old Age; Income Provisions and Retirement”, Mika, Tatjana C., Rehfeld, Uwe and Stegmann, Michael (2009), RatSWD_WP_112, http://www.ratswd.de/download/RatSWD_WP_2009/RatSWD_WP_112.pdf

Summary: Discusses sources of data for pensions research in the German context; likely to be relevant in other countries. Includes discussion on exchange of data between social security administration and tax administration.

‘Measuring the Performance Of Life-Cycle Asset Allocation’, Post, Thomas and Schmit, Joan T. (2009), <http://ssrn.com/abstract=1458898>

Summary: The United States' aging population puts pressure on the public pension system. Pension reforms consider putting more weight on individually managed retirement savings. Public policy, being concerned with households making good asset allocation decisions, needs measures to evaluate individual investment performance. In this contribution, we illustrate two measures for the evaluation of asset allocation performance: a preference-free measure and a preference-based measure. We compare the suitability of both measures along several dimensions. Not surprisingly, the choice of the measure turns out to be important for the ranking of the performance of asset allocation decisions, and thus great care should be used when deciding on public policy aimed at improving asset allocation behavior. Finally, we show that some classical rules of thumb used to mimic optimal life-cycle asset allocation strategies do not necessarily improve investment performance.

“The Effect of Uncertain Labor Income and Social Security on Life-Cycle Portfolios”, Maurer, Raimond, Mitchell, Olivia S. and Rogalla, Ralph (2009), Pension Research Council WP 2009-06, <http://www.pensionresearchcouncil.org/publications/document.php?file=798>

Summary: This paper examines how labor income volatility and social security benefits influence life-cycle household portfolios. We examine how much the individual saves, and where, taking into account liquid financial wealth and annuities, and stocks versus bonds. Higher labor income uncertainty and lower old-age benefits boost demand for stable income in retirement, but also when young. In addition, a declining equity glide path with age is appropriate for the worker with low income uncertainty but for the high income risk worker, equity exposure rises until retirement. We also evaluate how changes in social security benefits influence retirement risk management.

“Competition and Asset Allocation Challenges for Mandatory DC Pensions: New Policy Directions”, Impavido, Gregorio, Lasagabaster, Esperanza and Garcia-Huitron, Manuel (2009), World Bank, <http://ssrn.com/abstract=1355993>

Summary: The low performance of mandatory DC pensions exposes these industries to reversal risk as it has recently happened in Argentina. This report claims that the design of industrial organizational forms and default investment options are crucial to exploit behavioral biases stemming from consumer inertia and to reduce administrative fees and increase expected gross rates of returns. This report investigates the tradeoffs of policies aimed at offsetting consumer inertia and increasing net rates of returns of mandatory DC plan managers. Finally, this report puts forward policy recommendations to improve the design of industrial organizational forms and the design of default investment options.

“The National Retirement Risk Index: After The Crash”, Alicia H. Munnell, Anthony Webb, and Francesca Golub-Sass (2009), CRR Boston IB#9-22, http://crr.bc.edu/images/stories/Briefs/ib_9-22.pdf

Summary: The National Retirement Risk Index (NRRI) shows the percent of USA households 'at risk' of failing to maintain their standard of living in retirement.

The *brief's* key findings are:

- The NRRI jumped from 44 percent to 51 percent today due to:
 - the bursting of the housing bubble;
 - the stock market crash; and
 - the ongoing rise in Social Security's Full Retirement Age.
- Clearly, Americans need more retirement saving.

Longevity and life expectancy

“Mortality Regimes and Pricing”, Cox, Samuel H., Lin, Yijia and Milidonis, Andreas, (2009, <http://ssrn.com/abstract=1418514>

Summary: Mortality dynamics are characterized by changes in mortality regimes. This paper describes a Markov regime switching model which incorporates mortality state switches into mortality dynamics. Using the 1901-2005 US population mortality data, we illustrate that regime switching models perform better than well-known models in the literature. Furthermore, we extend the Lee-Carter (1992) model in such a way that the error term of the time-series common factor has distinct mortality regimes with different means and volatilities. Finally, we show how to price mortality securities with this model.

Regulation

“Dutch Pension Funds in Underfunding: Solving Generational Dilemmas”, Kortleve, Niels and Ponds, Eduard (2009). <http://ssrn.com/abstract=1436984>

Summary: Pension funds in the Netherlands face the second solvency crisis within a period of six years. As most Dutch pension funds effectively are arrangements of intergenerational risk sharing, especially the larger sector pension funds, the necessary recovery process implies various generational dilemmas. We distinguish various policy options, among them contribution rate increases and benefit cuts, and compare them on the aspect of intergenerational redistribution. Most pension funds in the Netherlands stem from the 1950s and the current pension plan setting still reflects standards of that period. This practice is currently at stake. The introduction of a new regulatory framework built upon fair-value accounting and risk-based solvency supervision forces pension funds to reconsider their pension plan design and funding process. We discuss a number of reform proposals that currently are in debate.

“Improving the Investment Performance of Public Pension Funds: Lessons for the Social Insurance Fund of Cyprus from the Experience of Four OECD Countries”, Impavido, Gregorio, O'Connor, Ronan and Vittas, Dimitri (2008), Cyprus Economic Policy Review, Vol. 2, No. 2, pp. 3-35, <http://ssrn.com/abstract=1444553>

Summary: Public pension funds have the potential to benefit from low operating costs because they enjoy economies of scale and avoid large marketing costs. But this important advantage has in most countries been dissipated by poor investment performance. The latter has been attributed to a weak governance structure, lack of independence from government interference, and a low level of transparency and public accountability. Recent years have witnessed the creation of new public pension funds in several countries, and the modernization of existing ones in others, with special emphasis placed on upgrading their investment policy framework and strengthening their governance structure. This paper focuses on the experience of four new public pension funds that have been created in Norway, Canada, Ireland and New Zealand. The paper discusses the safeguards that have been introduced to ensure their independence and their insulation from political pressures. It also reviews their performance and their evolving investment strategies. All four funds started with the romantic idea of operating as 'managers of managers' and focusing on external passive management but their strategies have progressively evolved to embrace internal active management and significant investments in alternative asset classes. The paper draws lessons for other countries that wish to modernize their public pension funds.

Other

“Making Your Nest Egg Last a Lifetime”, Anthony Webb (2009), CRR Boston IB#9-20, http://crr.bc.edu/images/stories/Briefs/ib_9-20.pdf

Summary: Media attention on retirement security generally focuses on the need to save enough to enjoy a comfortable retirement. However, accumulating a nest egg is no longer the only significant challenge – the other is managing one’s nest egg in retirement. In contrast to previous birth cohorts who often

received a lifetime income from a defined benefit pension plan, in today's 401(k) world retirees must choose how to convert their accumulated savings into a monthly paycheck.

One straightforward solution to the drawdown challenge is an immediate annuity, which turns a lump sum of income into a lifelong payment stream. However, for various reasons, such annuities have not proven broadly popular. Therefore, this brief examines several alternatives. All such strategies involve a trade-off between maximizing consumption and minimizing the risk of running out of money. Calculating the optimal strategy is really hard – maybe impossible. But, despite the complexity of the problem, some strategies are clearly superior to others...

OECD Pensions Markets in Focus # 6

This is now available from the OECD. It reports that funded pension arrangements are recovering gradually from the financial crisis. While the investment losses suffered in 2008 are still far from being fully recouped, two key variables monitored by policymakers, investment returns and funding ratios in defined benefit plans, have shown a marked improvement in the first half of 2009. Official figures for the third quarter of 2009 are still not available for most OECD countries, but the recent market rally points to a further improvement in pension fund performance. For the full brief the URL is: <http://www.oecd.org/dataoecd/30/40/43943964.pdf>

International Social Security Association 16th International Conference of Social Security Actuaries and Statisticians

This conference (magnificently organised by Jean-Claude Menard and his team) took place in Ottawa 16-18th September and the papers are currently available if one has access to the ISSA extranet. If not, we hope to get them more widely available for PBSS members shortly – watch this space. See report on the meeting at [http://www.actuaries.org/PBSS/Documents/0910-Report ISSA Ottawa.pdf](http://www.actuaries.org/PBSS/Documents/0910-Report%20ISSA%20Ottawa.pdf)

PBSS 4th Colloquium, Tokyo

This conference (also magnificently organised by our hosts, the Japanese Society of Certified Pension Actuaries) also gave rise to a number of papers worth taking a look at on the IAA website. Refer the full [report](#) accompanying this list.