Fixing the US Retirement System

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Summary

Independent experts agree[1] that most Americans will not have enough retirement income to maintain their standard of living into old age. They agree that the next generation will do worse than their parents and grandparents; that more middle and lower income elderly will look for work to make ends meet; and that Social Security will become an even more important source of income to elderly households. The individual-directed, commercial, voluntary and tax subsidized employer system has not and will not become an important source of income for most older Americans. American workers need a tier of advanced-funded retirement accounts that have many features of the Social Security system. Americans need a mandatory, universal, advanced funded retirement account that is professionally managed, is appropriately tax-subsidized and pays out annuities.

The lobbying organization for the mutual fund companies, the Investment Company Institute, ICI claim that despite pessimistic research the ICI finds that retirees are doing better than their previous generations and that more retirees receive more income from private sector retirement plans and that $23 trillion earmarked for retirement are at record levels. They also claim government statistics undercount the income retirees receive from IRAs.

Current retirees are doing better than previous generations, we can’t overlook our success, but baby boomers will have less security than their parents and grandparents because they have more debt; need to look for work at advanced ages; have less secure retirement asserts; and the assets are skewed toward the very highest income retirees. Though IRA assets are growing the system is irrelevant for most people; the top 20% of baby boomers own 72% of all retirement assets.[2]

The current system of self directed, voluntary, commercial accounts subsidized by tax deductions

-- not tax credits -- that allow preretirement withdrawals is stacked against most workers for 4 major reasons:

1. Middle income and below are more likely rationally take loans from their 401(k) or withdraw monies from their 401 (k) or IRA. The federal government collected 37% more from early withdrawals than it did in 2003. Low income workers early withdraw at twice the rate high income IRA and 401(k) holders do.[3] Younger workers cash-out rate more. 40% of workers aged 20-39 years old cash out to a large loss -- a 30-year-old who cashes out a $16,000 account will be losing an estimated $471 a month at age 67. [4]

2. Tax breaks are higher for high earners so middle and high income workers saving the maximum are treated differently. The high earner gets a higher after tax rate of return.

3. Middle and below income savers rationally have more conservative portfolios which earn less;

4. Middle income and below savers pay higher fees proportionately because they don't receive the best advice and because their accounts are smaller;

This means the wealthiest savers receive a higher rate of return just because of the structure of the system. The built-in increase in the net of tax and fees rate of return after just a few years yields huge gaps and even the same level of an account, by a minimum 15% difference.[5]

The government system should help people in like situations the same and not make wealth distributions more regressive. All workers need a supplemental retirement plan that invests their savings efficiently with low costs, earns a secure and sufficient rate of return, and preserves savings for retirement. Therefore, the policy challenge is to expand access to individual account-based retirement plans and to address the critical failures in the existing system by making a new retirement savings vehicle available that meets three key criteria for retirement income security:

- Helps workers make adequate retirement account contributions and prevents early withdrawals.
- Provides low-cost, quality investment vehicles that are professionally managed and helps shield individual workers from investment and market risks.
- Provides a lifetime guaranteed stream of income at retirement.

Creating a nationwide, individual retirement plan that incorporates the goals of adequate contributions, safe and appropriate investments, and lifetime income, would efficiently and practically solve the upcoming retirement crisis. But if the nation's policymakers won't act, each state can tailor a State Guaranteed Retirement Account plan—which meets all of the above criteria for an efficient and adequate retirement savings plan—to meet their unique needs and to secure retirement income for each state's workforce. 10 states are well on their way to creating such a system.[6]

Congress can do a lot better. Even with liberal tax breaks, enabling regulation, and vigorous and expensive marketing by the financial industry of IRAs and 401(k) plans, coverage in any kind of plan continues to erode. Only 53% of the workforce have a retirement plan at work, down from 60% ten years ago. The IRA/ 401(k) platform will not serve the needs of most retirees and workers.

How did Retirement Income Become Inadequate?

Let us take a victory lap and not lose sight of our successes. The poverty rate for American elderly has been cut by four fifths since the expansion of Social Security starting in the mid 1950s. One of the hallmarks of the American system of social insurance -- which include generous tax breaks, employer pension plans, disability insurance, early retirement plans and Social Security -- is that working people, rich and poor alike, can afford to retire. And, so far the people that have the shortest life spans can still retire at younger ages than those workers who tend to live longer and who control the pace and content of their work lives.

Indeed that workers – middle class, low income, and high paid can have a healthy period of old-age leisure is the success of a civilized society.

Yet, there is a sea change in retirement security and the public know it.

Worry about the upcoming retirement crises may be one of several areas where "the people" are ahead of the politicians. Polls – for instance McKinsey & Company[7] and Gallup [8]) find people want government to help guarantee retirement income more than they want government job guarantees. Women,[9] higher income individuals, and whites are more anxious about their retirement future and fear "things" are going to get worse than were men, lower income people or minorities. All income classes have retirement worries, higher income and white professionals fear the most losses and experience relatively more insecurity.

Worry is justified. Experts agree that almost all middle-class workers working now won't have adequate retirement income even if they try and work well into their late 60s. (The average age of mostly permanent withdrawal from the labor force retirement is about 63). Low and middle income workers have a greater chance of being old and poor than they had in the past and high income workers have worries particular to "living too long" – paying for high end of life health costs and their money not lasting as long as their lives.

And Baby Boomers will do worse than their parents and grandchildren in terms of lifetime leisure. Most retirees are getting less income from retirement assets and more from work.

Income Source	Point Change from 2000 - 2010	Share of total income coming from each source for households with members over age 65	
		2010	2000
Social Security	+1	37%	38%
Assets: 401(k) and IRAs	-7	11%	18%
Pensions: DB plans	-3	15%	18%
Labor earnings	+29	30%	1%

http://www.ssa.gov/policy/docs/statcomps/income_pop55/2010/sect10.html

What do people need to retire comfortably?

How much should workers have in their IRAs and 401(k)s? "I am 45 now and have about $40,000 in my IRA, will that be enough? I am asked a version of that question all the time. And face to face it's psychologically hard to answer truthfully because they want to hear only one answer. Yes, you have enough. (When doctors tell their patients to lose weight people would answer, I am big boned. The BMI takes care of excuses. We need an equivalent index like the BMI to answer the queries about retirement readiness.) Below are rules of thumb for judging whether Americans are on track for an adequate retirement.

At retirement people need about 15 times their salary to live comfortably.[10] Social Security and Medicare gives the average worker about 5 times their salary so an average income worker needs about 10 times their salary, or $50,000 times 10 is $500,000, in a retirement account (the amount varies by what rate of return net of tax is assumed). (A DB plan can provide the bulk of that asset, but fewer people will have life-long DB plans.) This account balance will provide a retirement income of a target 60% to 89% of preretirement income.[11] However, there is an emerging consensus that middle and high income people need 95% to 100% of pre-retirement income to maintain living standards because more elderly are in debt[12] -- still paying mortgages -- and that health care costs are increasing.[13]

Americans are way off the mark to having anywhere near a half a million in their retirement account.

Most Americans have no retirement assets including workers who earn top salaries. One out of five workers in the top 25% of all earners have no retirement assts. (The latest numbers from the federal government show that over three – fourths of low income individuals -- 66% of people in the second quartile, 41% of the third quartile, and a quite large 22% of the top quartile have zero retirement account balances.) Individuals in the top quartile earn on average earn over $100,000 per year so they need over a million dollars in their retirement accounts at retirement, but, on average, they have only $140,000. [14] These balances convert to about $5,000 a year – a dinner and movie once a month.

What do people at all income levels have to save to reach target replacement rates?

Aon Consulting -- the AON Consulting Group has been analyzing the needs of retirees since its first report for the President's Commission on Pension Policy in 1980 -- has provided that answer in terms of what deduction is required for a worker to achieve a sufficient account balance at retirement. If people start saving 5% in their 20s and keep that contribution rate constant, do not withdraw or take loans against it, and have it well invested they will have enough.

If a worker starts at age 40 they would have to save over 25.8% of their gross income per year until age 65 to achieve an 80% replacement rate. If workers lose all of their retirement accounts and have to start fresh at age 50 they would have had to contribute half of their earnings. No OECD, rich, country outside of the United States leaves workers without a mandatory and universal system providing early and consistent retirement savings. We do not have appropriately safe and secure retirement account institutions in place that allow Americans to save enough to achieve adequate replacement rates. [15]

Institutions do Not Help Workers Save Enough

Source Aon. 2008

	Required Savings (Percent of pay that needs to be saved each year until age 65, if saving starts at age 25 (this assumes a whopping 7.7% return)	
Annual Income	If savings starts at age 25	If savings starts at age 55
$30,000	4.2%	32.8%
$50,000	4.1%	31.9%
$90,000	5.8%	44.9%

People with DB plans and Social Security have adequate retirement income and a small chance of being poor or near poor adults.[16]

In summary, the average working American age 55-64 earns $48,542 per year, and has accumulated a net worth (including home equity) of $263,167, five times earnings. They need about twice that amount (target range $388,336- $485,420).

Why Doesn't The Current System Help Most Workers Accumulate More?

Our system does not treat people equally and creates inequality. Much of the unequal treatment is unintentional. According to conservative public finance practices every tax and government spending program should strive for vertical and horizontally fairness. People in like situations should be treated the same and everyone up and down the wealth and income scale should make approximately equal sacrifices for equal return.

But lower income earners saving the maximum they can in a tax qualified account are not treated the same as a high earner saving the maximum they can in a tax qualified account. [17] This happens for four reasons: 1.) the tax code gives a higher rate of return to the high earner even if everything about the portfolio is the same; 2.) Because of self direction lower income workers rationally choose safer, lower earning assets; and 3.) Lower income workers pay higher fees for the same effort. 4.) Because of the uniquely American feature that workers can take tax qualified retirement savings out before retirement, low income workers are more likely to take out costly loans, cash out, and by liquid assets.

Low income workers, have of course, less in their accounts than high income workers. They have, on average, $15,000 in 401(k) savings by their 30s which grew to just under $49,000 in their 60s. High earners,[18] have on average $80,000 saved in their 30s and $200,000 in their 60s. The disparity in 401(k) balances is not only a function of salary. Higher income earners tend to allocate more of their 401(k) funds to be invested in equity funds.[19] Due to this apparent risk aversion, lower income workers will tend to lag the return performance of their higher paid counterparts over the long-run.[20] This gap arises because the current system leaves all investment choices up to the individual savers.

Differential use of loans taken out against 401(k) account assets creates retirement: a full 25% of low-income earners reported having a loan outstanding with an average loan size of 17% of the account balance. Only 19% of higher income earners had loans, in the size of 12% of account balance (see Urban Institute work and new work by Robbie Hiltonsmith). [21] Leakages are only an issue because the system allows savers to borrow against their accumulated balances.

Moreover, the current tax break is top heavy; it helps only the higher income, the best-off workers, saves for retirement. 80% of the tax breaks for retirement savings go to the top 20% of older workers. High income workers get up to $7000 in tax breaks while low income workers get zero, even if they save the maximum. Because higher income workers get better returns and more tax breaks, and because they are less likely to withdraw from their retirement savings, the wealth gap between rich and poor explodes just because of the way the system is structured.

For 30 years Congress expanded subsidies to the 401(k) and IRA form of pensions because they held much promise. But, despite the tax subsidies, a huge amount of advertising, increased financial literacy and growing concern about Social Security, 401(k) plans cover fewer people than they ever did before.

Solutions for Inadequacy: More Savings in a Good Pension System

So how do we help Americans save for retirement in a way that is fair and universal? The answer is based on two social norms and standards. One: that most people want to and should be able to preserve preretirement living standards into retirement; and, two: that income and wealth gaps should not be encouraged to grow after retirement.[22] Only if people saved continuously starting at age 25 only the highest income earners come close to saving enough for retirement.

There is very little “definition” to “defined contribution” plans. Employers stop and start contributions and vary the matches. Also benefit disbursements from defined contribution (DC) plans fluctuate along with the stock market and are very erratic. For these and other reasons, 401(k) plans are implicated in the decline of retirement income security for middle income workers. Firms who handle 401(k) plans assets admit there business models focus on the top earners. If the tax breaks for 401(k) and IRA were reduced or eliminated the top 1% would shoulder 48% of the subsidy loss and general revenues would increase by over $100 billion to spend on more retirement plans, or youth programs or bridges to somewhere.[23]

The solution to the upcoming retirement crisis in the short run is an expanded Social Security system and the creation of appropriate savings vehicles like a “Guaranteed Retirement Account” or Secure Choice Accounts now being established in 5 states and being considered by 5 more. The GRA plan would supplement Social Security income for every worker in an effective and efficient way.

The guaranteed retirement account would have everyone accumulating in a retirement fund as they do in many other countries like Australia. The plan would provide a safe, secure and effective low fee investment vehicle like many in United States have; for instance, my own pension plan, TIAA-CREF, and many other defined-benefit plans across the country. GRAs would disallow pre-retirement withdrawals. Only partial withdrawals would be allowed. We are the only country that allows people to take tax preferred money for retirement before retirement.

There are a few common elements experts say efficient, effective, sustainable, and fair retirement pension systems should have. Compared to 401(k) plans in the private sector high performance retirement plans have these characteristics:

- every worker is covered;
- employees steadily contribute as they are working;
- the contribution rates are high enough to yield an adequate retirement supplement;
- assets are managed professionally;
- No withdrawals before retirement
- money management is pooled so that the fees are low and the investment decisions are professional;
- government subsidies go to the people who need it most;
- Payout is in the form of annuities and at retirement – only a partial lump sum should be possible;
- a person’s pension savings are not lost when changing jobs.

Employers’ needs are often bypassed when discussing retirement plans. But, I can’t emphasize this point enough; the pension systems sponsored by employers must meet employer’s needs. In the public sector the employer are the taxpayers. A change in pension design will likely increase savings rates, stabilize employer relations, and reduce inequality and deprivation among American elderly.

Conclusion

One of the biggest hurdles to spurring retirement savings is that half of workers don't have access to a retirement account through their employer. Many work for small businesses, which often lack resources to navigate the relevant regulations. To help these workers, the federal government should provide "off-the-shelf" options that businesses can offer to workers with limited regulatory burdens. Another form of help would be to require more pensions savings as public sector pensions do.

A popular reform proposal is to require that workplace retirement plans should also enroll workers automatically but let them opt out. Though auto-enrollment increasing participation in employer-sponsored plans as high as 95 percent the contribution rates savings rates are insufficient for retirement adequacy.[24] There is also evidence that people may accommodate increased savings at work by taking on more debt somewhere else in their portfolio or save less in other ways.

Ironically not mandating retirement savings is expensive and ineffective.[25] Policymakers have been incenting individuals to save in inadequate retirement savings vehicles and the incentives are expensive and targeted incorrectly. A $50 billion savers' tax credit is a good idea but more state governments and the Obama administration should followup on their conclusion that $170 billion in just federal tax subsidies for 401(k), IRA and other retirement accounts are lopsided and don't increase savings appreciatively by turning the deduction to a credit which would give every workers $600. If states with income taxes also did the same, every American would have a retirement account and every account would have more -- except for those at the very top who get the largest tax subsidies. Policy changes to improve workplace pensions would be a mandate savings rate of 5%. A GAO report[26] laid out four alternatives on these lines. There are 4 good solutions to improve the financial security of middle class working Americans.

Retirement needs and expectations are based on social norms and practical considerations. No modern nation has found it practical to rely on individuals saving enough for retirement in voluntary, commercial, individual-directed accounts with distorting tax treatments. The consequences of no change is an underperforming retirement income security system that will result in an increase in elderly poverty rates and a continuing decline in living standards for older Americans, many who have worked 40 or more years.

Appendix: **What Not To Do: Don't Rely on Increasing the Retirement Age**

Americans work longer than most other people in rich nations and die sooner. There is some policy attempts to change norms in the US about retirement age and time. The hope is that people working more will save money for pension systems, the economy will grow, and people will like the work. But hope about working longer confuses longevity with working ability, ignores facts that employers hire workers and match them to jobs according to profitability motives not public policy motives, and that improved longevity and wellness in old age is not distributed equally. Higher income white males have enjoyed the largest increases in longevity:

the use of statin drugs and reductions in cigarette smoking are key factors. White men and black men in 1950 at age 65 remarkably were projected to live the same number of years after retirement. Now white men at 65 with live 2 more years or 15% longer than black men. See the table below.

White Men's Longevity Improvements Are Increasing Faster than All Other Groups

Years of life expected for those age 65

	white men	white women	black men	black women
1950	12.8	15.1	12.9	14.9
2009	17.7	20.1	15.8	19.3
Improvement 1950 – 2009	38.3%	34.4%	22.5%	29.5%

(source: National Vital Statistics Reports: January 2014 http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_07.pdf)

Compared to established OECD nations, American work more hours per year and more after age 65. American longevity for seniors is shorter than most established OECD nations. Overall longevity for 65 year olds has increased approximately 25% -- though the improvements are greater for white men since 1950; the economy (GDP per capita) has increased 244%. Overall time spent in retirement has increased to be sure as employer pensions and Social Security expanded. Society has chosen to use the increases in prosperity to increase retirement time.

REFERENCES

A note on references: the following is a list of studies concerning retirement income adequacy not cited in the endnotes.

Calculating adequacy rates:

Palmer, Bruce A. 2008. "2008 GSU/AON RETIRE Project Report." Research Report Series No. 08-1 (June). Atlanta, GA: J. Mack Robinson College of Business, Georgia State University.

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AonHewitt. 2012. "The Real Deal: 2012 Retirement Income Adequacy at Large Companies."

Greninger, Sue, Alexander Hampton, Vickie L. Hampton, Karrol A. Kitt, and Susan Jacquet. 2000. Retirement planning guidelines: A Delphi study of financial planners and educators. Financial Services Review 9: 231–245.

Teachers Insurance and Annuity Association—College Retirement Equities Fund. 2002. Planning your retirement with TIAA-CREF: An overview of the issues. New York, NY: TIAA-CREF.

Ibbetson/Morningstar - National Savings Rate Guidelines for Individuals by Roger Ibbotson, PhD; James Xiong, Ph.D., CFA; Robert P. Kreitler, CFP®; Charles F. Kreitler; and Peng Chen, Ph.D., CFA

2012 EBRI/ICI 401(k) database)

ENDNOTES

[1] Urban Institute shows inadequacy is growing by birth cohort. http://www.urban.org/UploadedPDF/412490-boomers-retirement-income-prospects.pdf. See reporter Steve Greenhouse's New York Times article interviewing experts from all political perspectives agreeing..

[2] One of the best written essays on why the retirement crises is overstated is from Sly Schieber mountain<http://www.towerswatson.com/en-US/Insights/Newsletters/Americas/insider/2013/employer-pensions-individual-retirement-savings-and-retirement-income-provision>" but the data is questionable. Monique Morrissey <http://www.epi.org/blog/retirement-crisis-mirage/#_note1> addresses Syl Schieber's claim that the retirement crises is overstated. She notes that aggregate assets in retirement accounts are large and growing but extremely concentrated at the top of the income distribution. They will not provide significant retirement income for the vast majority of Americans. John Turner, David McCarthy and Norman Stein<http://www.iijournals.com/doi/abs/10.3905/jor.2014.1.3.113#sthash.exTFWtjy.dpbs> show there are 165,000 retirement plans with average account balances greater than $3 million, though some may not qualify for tax benefits. This includes one 401(k) plan with three participants and an average balance of $240,000,000. Similarly, 1% of households had more than $1.3 million saved in retirement accounts, and households in the top fifth of the income distribution accounted for 72% of assets in these accounts.

There is enormous wealth in 401(k) and IRAs. But the existence of outsize account balances has no bearing on whether ordinary workers can rely on savings in these accounts to finance a decent retirement, and the billions missing from the CPS data don't amount to much for most workers. The inequality of retirement asset distribution can be seen by the difference between the median and average disbursement. Very few high values can drive up the average but the mean describes what the annual retirement income that half of retirees get less of and half get more. The median disbursement was zero, 81% of retirees get nothing from IRAs. For households in the peak saving years (55-64), the median account balance in 2010 was $12,000<http://www.nirsonline.org/storage/nirs/documents/Retirement%20Savings%20Crisis/ret

irementsavingscrisis_final.pdf>, too small to make a meaningful difference in retirement. Though the median balance for households with savings in retirement accounts was $100,000<http://www.federalreserve.gov/pubs/bulletin/2012/pdf/scf12.pdf>, this not only represents the 70th percentile for this age group as a whole, it also translates into an annuity worth less than $5,000 a year. Another way to see how average values distort the health of retirement savings can by seen by the

Social Security Administration report that found <http://www.ssa.gov/policy/docs/ssb/v73n2/v73n2p77.html> that while the average disbursement for senior households receiving IRA disbursements was $8,121 in 2009, only 19% of senior households received any disbursements at all. Taking into account seniors that received nothing means the overall average disbursement received among all senior households was only —$1,543 per year. These are total disbursements as measured in the Survey of Income and Program Participation (SIPP) which is a more complete data set, more complete than the CPS Sly Schiber uses. Morrissey argues, that unequal distribution of IRAs and 401(k) plans is lending support to those who, like Michael Lind and President Obama<http://www.pionline.com/article/20130415/PRINT/304159965/obama-budget-to-cap-retirement-deductions>, want to restructure <http://www.offthechartsblog.org/author/huang/> tax subsidies to better target them to low- and middle-income households. <http://www.epi.org/blog/retirement-crisis-mirage/#_ref1>

(The annuity values calculated in this endnote uses the Thrift Savings Plan Retirement Income Calculator<https://www.tsp.gov/planningtools/retirementcalculator/retirementCalculator.shtml> based on the following assumptions: the annuity starts when a couple are both aged 65, the interest rate is the current TSP annuity rate of 3%, and the annuity provides a 50% survivor benefit with rising payments to offset inflation. A 20-year annuity at the 3% interest rate translates into a $6,700 annual payment but loses value with inflation and offers no longevity protection.)

[3] Barbara A. Butrica, Sheila R. Zedlewski, and Philip Issa, 2010 “Understanding Early Withdrawals from Retirement Accounts,” Butrica, et.al. Urban Institute, May

[4] http://www.napa-net.org/news/managing-a-practice/industry-trends-and-research/withdrawals-from-401k-plans-may-be-replacing-home-equity-loans/?id=65852&tkn=21471348605335fd2dc3116&mqsc=E3772376&utm_source=WhatCountsEmail&utm_medium=NAPA_List+Napa-Net%20Daily&utm_campaign=NAPA%20Net%20Daily

[5] Adam Hayes, graduate student in the Economics Department at the New School for Social Research, helped calculate how much the built-in difference affects workers’ savings. The difference in expected rate of return after just a 10-year period just because of an asset portfolio difference yields huge gaps in accounts that started at the same level and accepts the same level of contributions. Two accounts, identical in every way except for the income of the contributor will be treated differently in our system. A $40,000 (real terms) a year worker who saves $5,000 a year and workers earning $100,000 per year saves might save the same amount, say $5,000 a year, and allocates it like a typical high income earner -- the higher income worker would have earned an estimated 6.23% rate of return and a $40,000 per year worker an estimated 5.86%). If extrapolated over a 40 year career, that mere difference in allocation would result in the higher

income earner's nominal return being over 14.5% larger than his low income counterpart. For plans that include company stock, the gap becomes even larger. Of course with the lower risk aversion comes higher risk and the potential for larger losses during an economic downturn. However, the rate of return benchmarks used in the above calculation are for the past 10 years, inclusive of the great recession. Also these rates of return are gross rates, I did not estimate typical fees given different kinds of accounts, but in a 401(k) structure I believe that they may be similar across strategies.

The asset allocation mix is found in the EBRI/ICI 401(k) database.

benchmarks are:
Source: Vanguard Inc.
10-Yr Annualized
Benchmarks: Return
MSCI US Broad Stock Index 8.20%
Barclays Aggregate Bond Index 4.79%
Balanced Fund* 7.02%
Money Market 0.99%
Target Retirement (2035) 5.34%

*Balanced Fund performance is computed from: Weighted 60% Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) and 40% Lehman Brothers U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Barclays U.S. Aggregate Float Adjusted Index thereafter.

[6] http://www.pionline.com/article/20140512/PRINT/305129971/states-pushing-to-offer-retirement-accounts-to-private-sector
[7] ttp://www.mckinsey.com/clientservice/financialservices/pdf/Winning_the_Retirement_Race.pdf

[8] Gallup poll April 22, 2014 retirement security. The April 22, 2014 Gallup Poll listed retirement security as the key worry of middle class families “not having enough money for retirement” received more responses than “Not being able to pay medical costs, not being able to pay off debt, monthly bills, etc.”

[9] http://www.iwpr.org/publications/pubs/why-americans-worry-about-retirement-security-and-why-women-worry-more-than-men

[10] Adequacy -- simply the ability of a retiree to sustain a customary quality of life without the fear of running out of money – is measured by the ability of a worker to achieve a certain replacement rate, post-retirement income as a percentage of pre-tax income before retirement.

[11] A number of researchers have come up with guidelines for what an appropriate replacement rate (aggregated from all income sources) should be for a married couple earning more than $50,000/yr before retirement: The RETIRE Project at Georgia State University estimates that number should be 80%. AON Hewitt Consulting in 2012 recommended a target of 85%, and a comprehensive survey of financial planners and educators found that a replacement rate of 70

percent to 89 percent of previous earnings was deemed appropriate, with mean and median recommendations of 74 percent and 75 percent respectively. TIAA-CREF meanwhile suggests a target replacement rate ranging anywhere from 60-80%. The adequate replacement rate varies with preretirement income because higher income workers pay a higher percentage of preretirement income in work related expenses – especially in taxes and saving for retirement. So that high income individuals – defined here as the top 20% -- need a lower replacement rate than lower income workers (defined as the bottom 40%). For middle class workers 80% of preretirement income is the standard. It is also assumed that since people have more time in retirement, it is assumed that they will replace expensive activities with time intensive activities (more home meals etc.) However, the presumption that people need less income in retirement has been challenged by the fact uninsured health costs are higher in retirement and over half of the elderly are retiring with mortgage.

[12] Loonin, Deanne; Renuart, Elizabet. 2007. “Life and Debt Cycle: The Growing Debt Burdens of Older Consumers and Related Policy Recommendations,” 44 Harv. J. on Legis. 167

[13] Reno, Virginia P. and Joni Lavery. 2007

[14] Based on the 2010 Survey of Consumer Finances, adjusted for wage inflation. If we take into account other assets owned, 30 percent of U.S. households near retirement age (ages 55-64) have less than $10,000 in liquid assets— i.e. they have virtually no financial assets to annuitize. The next 24 percent - those who have assets between $10,000 and $99,999 – also have very little to annuitize (annuitizing $50,000 for a single male age 65 in 2013 yields $68 per week, while for a married couple where both members are age 65 in 2013, they would receive $56 per week). In other words, 54 percent of near retirement households in U.S. have too little in retirement accounts and will rely almost exclusively on Social Security and any defined benefit pensions they may be eligible for to fund their retirement years.

[15] According to the Bureau of Economic Analysis, the personal savings rate in the United States in 2010 was 4.8%, and that is projected to decline to only 2.7% by the year 2020.

[16] We have done detailed analysis of poverty projections of near retiree households by plan type. The New York City and California data are published. http://www.economicpolicyresearch.org/images/docs/SCEPA_blog/guaranteeing_retirement_income/Downward_Mobility_Amongst_New_Yorkers_FINAL.pdf

[17] Salary range of $20,000-$40,000/yr, using 2011 data

[18] Salary range of $80,000-$100,000/yr, 2011 data

[19] 49.2% allocation vs. 40.4% allocation. For plans that included company stock, high earners allocated a total of 55.7% of funds to be invested between equity funds and company stock while low income earners allocated 45.1%.

[20] Using data from the 2012 EBRI/ICI, we determined that a low-income worker, merely due to her or his choice of investments earns on average around 30 basis points less than if he invested the way a high-income earner does (5.85% CAGR vs. 6.16%). If extrapolated over a period of 40 years, the low-income earner has approximately 15% less in retirement funds than the same worker would had she or he invested more aggressively.

[21] See Urban Institute paper cited above and New School graduate student Robbie Hiltonsmith)

[22] Low income workers need more income in retirement than while they were working because their preretirement income was at the poverty level. Low income workers should have replacement rates higher than 100% of preretirement pay. There is some support to raise incomes of the very poor and very old – this group is among the most “deserving poor” – but the responsibility for this group is generally out of the hands of employer pensions.

[23] Burman et. Al. 2004, 2009

[24] GAO 2009 “Automatic Enrollment Shows Promise for Some Workers, but Proposals to Broaden Retirement Savings for Other Workers Could Face Challenges”, October

[25] Bubb, Ryan and Richard H. Pildes. Forthcoming 2014. “How Behavioral Economics Trims Its Sails And Why’ Harvard Law Review.

[26] Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs. GAO-09-642: Published: Jul 24, 2009. Publicly Released: Aug 24, 2009. http://www.gao.gov/products/GAO-09-642