



CYPEN & CYPEN
NEWSLETTER
for
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Never Forget September 11, 2001
and
Always Remember May 2, 2011

1. ECONOMIC IMPACT OF DEFINED BENEFIT PENSION EXPENDITURES: National Institute on Retirement Security has issued Pensionomics 2016. Defined benefit pension benefits not only provide a secure source of income for many retired Americans, they also contribute substantially to local, state, and national economies.

DB pensions play a vital role in sustaining consumer demand that ultimately supports millions of jobs. Virtually every state and local economy across the country benefits from the spending of pension checks. For example, when a retired nurse residing in the state of Wisconsin receives a pension benefit payment, he spends the pension check on goods and services in the local community. He purchases food, clothing, and medicine at local stores, pays housing costs, and may even make larger purchases like a car or laptop computer. These purchases, combined with those of other retirees with pensions, create a steady economic ripple effect. In short, pension spending supports the economy and jobs where retirees reside and spend their benefits. Pension expenditures may be especially vital to small or rural communities, where other steady sources of income may not be readily found if the local economy lacks diversity. Given that not having enough money for retirement has consistently topped the list of American's money worries, according to the Gallup financial worry metric, reliable pension income can be especially important in providing retirees with peace of mind. In addition, steady income from DB pension plans plays a key role in stabilizing local economies during economic downturns. Retirees with DB pensions know they will receive a monthly check despite economic conditions. In contrast, other retirees may be reluctant to spend out of their 401(k)-type accounts if their savings are negatively impacted by market downturns. To the extent that DB pensions provide retirees with steady income available for spending regardless of fluctuations in the stock market, DB pensions may play a stabilizing

role in the economy, similar to Social Security. This study analyzes data on DB pension plans in both the public and private sectors to assess the overall national economic impact of benefits paid by these plans to retirees. For state and local government pension plans, the report also analyzes these impacts at the state level for each of the 50 states and the District of Columbia. The economic gains attributed to DB pension expenditures are considerable. This study finds that, in 2014:

- Nearly \$519.7 billion in pension benefits were paid to 24.3 million retired Americans, including:
- \$253 billion paid to some 9.6 million retired employees of state and local governments and their beneficiaries (typically surviving spouses);
- \$78.8 billion paid to some 2.6 million federal government retirees and beneficiaries; and
- \$187.9 billion paid to some 12.1 million private sector retirees and beneficiaries.
- Expenditures made out of those payments collectively supported:
- 7.1 million American jobs that paid \$354.8 billion in labor income;
- \$1.2 trillion in total economic output nationwide;
- \$627.4 billion in value added (GDP); and \$189.7 billion in federal, state, and local tax revenue.
- DB pension expenditures have large multiplier effects:

- Each dollar paid out in pension benefits supported \$2.21 in total economic output nationally.
- Each taxpayer dollar contributed to state and local pensions supported \$9.19 in total output nationally. This represents the financial value of robust long-term investment returns and the shared funding responsibility by employers and employees.

For specific data on Florida, see next item.

2. IMPACT ON FLORIDA OF DB PENSION EXPENDITURES:

Benefits paid by state and local pension plans support a significant amount of economic activity in the state of Florida. Pension benefits received by retirees are spent in the local community. This spending ripples through the economy, as one person's spending becomes another person's income, creating a multiplier effect. In 2014, expenditures stemming from state and local pensions supported:

- 108,370 jobs, which paid \$4.8 billion in wages and salaries.
- \$15.5 billion in total economic output.
- \$2.4 billion in federal, state, and local tax revenues.

Each dollar paid out in pension benefits supported \$1.67 in total economic activity in Florida. Each dollar "invested" by Florida taxpayers in these plans supported \$6.15 in total economic activity in the state.

3. AN EXAMINATION OF STATE PENSION PERFORMANCE: 2006

TO 2015: Alternative consultants Cliffwater, LLC, has issued a new research report entitled “*An Examination of State Pension Performance: 2006 to 2015.*” The research report found that most state pensions are under intense public scrutiny due to budgetary pressures from large and growing contributions necessary to correct underfunding. The causes and cures for pension underfunding are multidimensional and often contested. The report focuses on the management of state pension assets, an important but not well understood aspect of pension funding. While capital markets largely drove returns for state pensions, we find a wide range of 10-year return outcomes among state pensions, most of which is attributable to implementation (fund/manager selection) rather than differences in asset allocation. Cliffwater found that fund/manager selection by state pensions, in aggregate, has been accretive to return over the study period. It concluded that the role of investments in helping solve pension underfunding will largely be determined by the future health of the capital markets, particularly for equity securities. The report shows that, overall, state pensions continue to take advantage of what the capital markets offer in returns, and the importance of individual state policy and manager decisions that can significantly contribute to return outcomes. Here are some of the key findings:

- State pensions collectively earned a 6.8% median annualized return over the 10 years ended June 30, 2015, but underperformed their 8.0% median actuarial interest rate assumption for the same period.

- Two-thirds of state pension returns exceeded a 6.5% return for a passive 65/35 mix of stock and bond index funds.
- The 6.8% median state pension return fell within a wide 4.8% to 8.4% range of individual state returns, with the top performing state plan outperforming the bottom performing state plan by a cumulative 63.8% over 10 years, demonstrating the potential for significant financial consequences underlying investment policy and implementation decisions.
- State pension returns were volatile year to year, with a median standard deviation of return equal to 12.7%. Standard deviations for individual state pensions ranged from a low of 9.9% to a high of 15.6%. By comparison, standard deviations for global equities and U.S. bonds were 18.7% and 3.5%, respectively.
- The report found that differences in 10-year state pension returns had only a small relationship to risk taking, as measured by standard deviation, with a 0.14 correlation and accounting for only 0.3% of the 3.6% range in 10 year state pension returns. This implies that 3.3% of the 3.6% 10 year return range was attributable to implementation decisions of individual state pensions.
- Aggregate asset allocation remained unchanged from the prior year, with state pension assets averaging 50% to public equities, 26% to fixed income (including cash), and 24% to alternative investments. The last two fiscal years reflect stability in asset allocation that had seen public equity allocations

decline from 61% in 2006.

- Private equity continues its history of providing the highest asset class returns, with an 11.9% median return over the 10-year study period.
- State pension real estate returns vary widely over the 10-year study period with a 6.6% median return falling below the 6.8% median state pension total fund return. Differences in how state pensions allocate within real estate explain the wide 5.8% range in individual state pension real estate outcomes over the 10-year study period and should be an area of greater attention by allocators.
- Risk-adjusted returns for state pensions were largely neutral with respect to hedge fund allocations. State pensions with hedge fund allocations experienced, on average, lower return and lower risk over the 10 year period.
- State pensions outperform professionally managed defined contribution plan returns by 0.8% annually over the last 10 years.

To read the entire report visit: <https://www.cliffwater.com/research>.
(September 6, 2016).

4. CONTRIBUTIONS, ROLLOVERS, WITHDRAWALS, AND ASSET

ALLOCATION: This Issue Brief is the sixth annual cross-sectional analysis update of the EBRI IRA Database. It includes results on the distribution of individual retirement account types and account

balances, contributions, rollovers, withdrawals, and asset allocation in IRAs for 2014, the latest data available. The EBRI IRA Database is an ongoing project of the Employee Benefit Research Institute that collects data from IRA-plan administrators across the nation. For year-end 2014, it contains information on 26.7 million accounts owned by 21.1 million unique individuals, with total assets of \$2.69 trillion. For accounts in the database, the IRA type, account balance, contributions made, rollovers transferred, and withdrawals taken during the year, the asset allocation, and certain demographic characteristics of the account owner are included. This update shows the importance of being able to measure not only the unique IRA account balances, but also the combination of all IRAs an individual owns to determine the potential total retirement savings the individual has by aggregating their multiple IRA accounts. Indeed, the overall, cumulative IRA average balance per individual is 27% larger than the IRA balance per account. Thus, databases that are not able to link separate accounts owned by the same individual within and across data providers are likely to understate the total IRA assets owned by individuals, and thus the total retirement accumulations held by individuals. Here are the key findings in this annual update:

- The average IRA account balance in the database was slightly more than \$100,000 and the average IRA individual balance was \$127,583, but the balances varied significantly by the IRA type: Roth IRAs had the lowest average balance, while traditional IRAs had the highest average balance.

- Just less than 12% of all accounts in the database received a contribution in 2014, but Roth IRAs were more likely to receive a contribution than traditional IRAs (25.9% vs. 6.4%).
- Rollovers in 2014 amounted to 15 times more than the total contributions in the database, with the average and median rollover to a Traditional IRA in 2014 being \$97,174 and \$25,827, respectively.
- Almost 24% of individuals owning a traditional or Roth IRA took a withdrawal in 2014, including 27.2% of traditional IRA owners.
- The overall IRA withdrawal percentage was largely driven by activity among individuals ages 70½ or older owning a traditional IRA -- the group required to make withdrawals under the required minimum distribution rules. In contrast, among owners under age 60, fewer than 12% of any age group had a withdrawal.
- One-quarter of owners ages 71 or older was found to have withdrawn an amount from their traditional IRA in excess of their RMD.
- More than half of all IRA assets were allocated to equities, although this varied with owner age, account balance, and IRA type. There were minimal differences in asset allocations trends by gender.
- Those older or owning a traditional IRA had, on average, lower allocations to equities. Individuals with the largest balances had the lowest combined exposure to equities (including the equity share of balanced funds added to the pure equity funds).

- Overall, 27.0% of IRAs had less than 10% in equities and 27.9% had more than 90% in equities, so called “extreme allocations” in a particular asset category. Furthermore, just short of 1-in-5 IRAs (17.2%) had more than 90% of their assets in bonds and money funds.

EBRI Issue Brief No. 424 (August 2016).

5. NOISY LOBBYISTS ARE SHOUTING THAT THE PENSION SKY

IS FALLING: In an article published in the *Financial Times*, written by John Ralfe, an independent pension consultant, says some commentators are warning that the Bank of England’s extraordinary monetary actions to kick-start the UK economy are undermining the whole system of companies’ defined benefit pensions. They claim that the latest round of quantitative easing, the move to push long-term interest rates even lower, means bigger pension deficits and bigger deficit contributions, which forces perfectly good companies into bankruptcy. Calls for the government to urgently “do something” seem to boil down to allowing companies to break their pension promises, by giving lower annual inflation increases or no increases at all. Although companies can, rightly, change the terms of future pension promises, it is a crucial principle that they must meet their past promises. And it is not clear why scheme members should take a haircut while nothing changes for shareholders and lenders. It is just scaremongering to shout that the pension sky is falling. There is no crisis in DB pensions, so there is no need for crisis measures. Those

companies that have chosen not to de-risk their pensions in recent years by moving from equities to bonds, but continue betting on financial markets, will see their deficits increase. And, yes, they will have to increase the size of their annual cash payments, which the UK pension regulator should enforce properly. But most of the 6,000 companies with DB schemes will be able to increase their deficit contributions, either by borrowing to refinance their pension debt, or by cutting dividends to shareholders. If a company is on the brink of going bust it can apply to the regulator to reduce its pension promises, using a tried and tested legal mechanism that is currently happening for Halcrow, the engineering consultancy with 3,300 pension scheme members. Any company with liabilities greater than its assets, and which cannot raise money from shareholders, is surely insolvent, and should enter the process of administration. A good business will be bought from administration and, freed of pensions, will flourish, with no job losses or hit to the real economy. If the business is not viable even without pensions, it will be liquidated, just like BHS, the UK retailer. Pension scheme members will be picked up by the Pension Protection Fund lifeboat, and receive compensation at a lower level than their full pension promise. Since it opened in 2006, the PPF has taken on more than 800 schemes and 220,000 people, paid for by levies charged to all DB pension schemes. The good news is that the regulatory system requiring companies to fund their schemes to pay all pension promises, with compensation for members if they cannot, is working pretty much as it was intended to. The UK would face a pension crisis only if the PPF risked being swamped by big schemes

with big deficits it could not fund through increasing levies. But the PPF's 2016 annual report shows a healthy £4bn surplus and it expects to be self-sufficient by 2030. Crucially, the UK parliament set up the PPF with a built-in safety valve to handle the risk of being overwhelmed. In extremis, it can cut the compensation it pays to balance its books, freezing pension increases and, if necessary, going further and cutting nominal compensation paid. If compensation were cut, the pain would be borne by everyone in the PPF in a coordinated and consistent way, rather than individual companies making *ad hoc* changes. The noisy lobbyists warning about QE and pensions should look at the bigger picture. Without QE, company borrowing costs would be much higher and share prices much lower. More companies would already have gone bust, and the UK economy could be in serious recession -- a real, not an imagined, crisis.

6. PUBLIC PENSIONS WORK -- AND THESE THREE SYSTEMS

PROVE IT: A new report published by the National Public Pension Coalition says that defined benefit pensions remain the most secure and reliable retirement plan for working families. The evidence continues to mount that defined contribution plans, like 401(k)s, do not provide an adequate retirement for anyone other than wealthy corporate executives. Pensions keep working families out of poverty during retirement because they provide a steady, monthly income that is guaranteed for life. For public employees in particular, defined benefit pensions are a valued job benefit and that is why states and cities are sticking with public pensions. While some corporate special

interests have been spreading mistruths about the state of America's public pension funds, the reality is that most public pension systems are reasonably well-funded and provide an adequate retirement benefit to teachers, firefighters, nurses, and other public employees after their careers serving the public. This report will examine three of the most successful public pension systems in the country. These three pension plans offer a roadmap to success for other pension systems looking to provide a secure retirement for their public employees. While each is unique, their common commitment to sound funding practices and responsible management ensures that the retirees of these systems can enjoy the dignified retirement they deserve.

- **DISTRICT OF COLUMBIA RETIREMENT BOARD.** Public pension funds do not just spring into existence fully formed. They grow and develop over time, just like the people they serve. The pension funds managed by the District of Columbia Retirement Board (DCRB) are relatively “young” funds and provide a good example of how pension systems change as they mature and add more members. Due to the unique political situation of the District of Columbia, the pensions of DC police officers and firefighters were originally paid for by the federal government. The pension benefits for these public servants were paid directly from the U.S. Treasury on a “pay-as-you-go” basis and the benefits were not pre-funded according to actuarial methods. Following passage of the Retirement Reform

Act in 1979, the DCRB was created and the federal government began pre-funding the pension benefits of DC police officers and firefighters. When the DCRB was created, the federal government transferred all of the pension liability to the DC government; however, it did not also contribute the funds needed to pay for benefits that had already accrued. This caused the District of Columbia's unfunded pension liability to balloon. It was not until 1997 and passage of the Revitalization Act, followed in 1998 by the Replacement Plan Act, that the District of Columbia assumed responsibility for paying the pension benefits of the city's police officers and firefighters. The federal government assumed all responsibility for pension benefits earned before June 30, 1997. The DC government began covering all pension benefits beginning on or after July 1, 1997. This means the pension funds managed by DCRB are less than two decades old. Early in the "life" of a pension fund, contributions of employers and employees make up a greater percentage of the revenues of the fund. As the fund matures, the earnings on investments managed by the fund will begin to represent a greater portion of plan revenues. In part, this is because as pension systems grow and the number of members in the plan increase, there will also be an increase in the number of retired members who begin claiming benefits. This reduces the ratio of active workers to retired workers. Additionally, though, it takes a while for the plan's investments to start earning consistent returns. As these investments

develop, their returns will account for a greater portion of plan revenues. The District of Columbia Police Officers and Firefighters' Retirement Plan is a well-funded pension system with a current funding ratio of 107.3%. The DC government pays its full annual required contribution to the pension fund each year. If the DC government maintains its commitment to its pension fund, then its public safety officers can expect to continue enjoying a secure and reliable retirement.

- **ILLONIS MUNICIPAL RETIREMENT FUND.** One example of a strong statewide public pension system is the Illinois Municipal Retirement Fund (IMRF). Many of Illinois' public pensions are notoriously underfunded, the result of decades of neglect by the state's political leaders. However, the IMRF is an exception and for one good reason: municipalities are required by law to make their annual contributions. This year IMRF celebrates its 75th anniversary of providing retirement security to municipal employees throughout the Land of Lincoln. Though created by the state, the IMRF is independent of the other statewide public pension systems in Illinois and is not funded by the state legislature. Rather, the IMRF receives annual contributions from the counties, cities, and towns that participate in it. The first five municipalities to join IMRF were: the city of Evanston; the village of Riverside; the city of Galesburg; the city of Rockford; and the Rockford Park District. Now, IMRF serves 2,976 employers across the state. A recent economic analysis of

IMRF found that it generates over \$2 billion in economic activity in Illinois each year. In part, this is because 85% of IMRF retirees live in Illinois. In 2015, IMRF paid out \$1.49 billion in benefits to 112,762 benefit recipients. The average annual benefit was \$21,492 in 2015- a modest amount, but enough to guarantee a secure retirement.

- **NORTH CAROLINA PENSION SYSTEMS.** The state of North Carolina has a robust public pension system for its teachers, firefighters, police officers, and other state employees. The North Carolina treasurer oversees four statewide defined benefit pension systems. The Local Governmental Employees' Retirement System; the Teachers' and State Employees' Retirement System; the Consolidated Judicial Retirement System; and the Legislative Retirement System. The treasurer's office also manages several other funds and defined contribution plans. In this report, however, we are going to focus on the first two of the pension systems: the Local plan and the State plan. One reason North Carolina's pensions are so noteworthy is not only that they are comprehensive -- they cover 1-in-8 working North Carolinians -- but they are also all well-funded. In fact, the state is known for its commitment to funding its pensions. This point cannot be emphasized enough: adequately funding pensions each and every year is the single most important thing a state can do to properly manage its pensions and ensure a secure retirement for its public servants.

No investments in alternative assets or cuts in benefits can make up for poor funding practices, especially if that inadequate funding occurs over a long period of time. North Carolina teaches us this lesson better than any other state. The Local plan in North Carolina is similar in many ways to the Illinois Municipal Retirement Fund. It covers employees of counties, cities, and towns throughout the state. It includes police officers and firefighters as well as non-safety personnel. One of the benefits of plans like this is economies of scale and efficiency. Having all of the cities, towns, and counties in a state join together in one large system is more economically efficient than having each of those municipalities manage and administer their own plan.

North Carolina Improved Pensions During The Recession: The state government has historically made its annual required contributions each year and this allowed North Carolina to avoid making benefit cuts for pensioners during the recession. In fact, North Carolina had passed a law increasing the vesting period for pensions from five years to ten years, but changed it back to five years when they realized it didn't actually save them much money and it harmed the retirement security of their public employees. This happened during the recovery from the financial crisis. North Carolina also uses a 12 year amortization period to pay off its unfunded liability for its pensions. An amortization period is the amount of time granted to pay off debt. Twelve years is an unusually short period. Many states use

25-30 year amortization periods. Using this shorter period requires a commitment from the state government to paying off the debt quickly and making the annual required contributions, but it also keeps the unfunded liability low and the pensions well-funded. North Carolina's pensions are some of the strongest in the country, but that has not stopped anti-pension ideologues from attacking them. In recent years, these ideologues have proposed moving North Carolina's public employees into a risky and inadequate defined contribution system, not because North Carolina's pension plans are underfunded, but simply because they are ideologically opposed to defined benefit pensions. As has happened in other states like West Virginia and Michigan, converting from a defined benefit pension plan to a defined contribution plan creates enormous transition costs. It also dramatically increases the unfunded liability of the pension system and severely weakens the retirement security of public employees. Without new employees paying into the system, the fund will have to start investing much more conservatively over time just to maintain its current risk profile. North Carolina should not squander the well-managed and well-funded pension system it has spent decades creating for its public employees. The most important lesson from these successful pension systems is the importance of making the full required pension payment each year. Last year the National Association of State Retirement Administrators published a report on states and their commitment to making their annual required contributions to their pension systems. The report found that most states paid most of their ARC each year. The few states that did not

are extreme outliers and drag down the averages for all states. A similar report released this year finds that states paid, on average, 91% of their required annual contribution in FY 2015. What this tells us is that most states are committed to funding their pensions each year and, as we have seen, proper funding is key to the success of a public pension plan. The states where pensions are severely underfunded are well-known. In each of these states, there are unique historical reasons for the underfunding. Most often, the reason has been neglect by the state's elected officials of proper funding levels. There is nothing inherent in the design of defined benefit pensions that causes underfunding. Public employees contribute a portion of each paycheck toward their pension. So long as the government, as an employer, also makes its full contribution each year, then the pension will be sustainable over the long-term. Certainly there will be periods when investment returns will be low, but there will also be periods when investment returns will outperform their targets. What has harmed states like New Jersey and Kentucky is that elected officials neglected making anywhere close to the full ARC payment for years on end. In the case of a state like Connecticut, the state did not pre-fund its pensions for decades and the current system is still carrying that enormous legacy cost. How states ensure funding discipline varies, but the IMRF model is a good one: payments are required by law so that irresponsible politicians cannot shirk their responsibilities. The financial crisis in 2008 hurt all public pension systems, but the ones that received adequate funding from the state are recovering well from the worst of the recession. The pension

systems that were already in bad shape before the recession are in worse shape after it. Another important lesson has to do with economic efficiency and economies of scale. Pension systems like IMRF and the North Carolina Local Plan are successful in part because they utilize one system for the entire state. All of the counties, cities, and towns pay into one system, with one management structure, one investment team, etc. In these states, one small town with only a few hundred public employees does not have to manage an entire pension system all on its own. Additionally, North Carolina has used a conservative investment strategy and a short amortization period to avoid making benefit cuts, even during the midst of a severe recession. It takes political will to utilize a short amortization period and keep unfunded liabilities low, but that has certainly contributed to the success of the North Carolina systems. Investment strategy is a tricky subject, but states should examine whether high-cost investments like hedge funds are delivering worthwhile results. For over a hundred years now, cities and states have used defined benefit pensions to provide a secure and reliable retirement for their public employees. While there are some states with severely underfunded public pension systems, these states are the exceptions. Most states properly fund their pensions each year and, therefore, have reasonably well-funded public pensions. A few public pension systems are particularly strong because of unique design features and a history of commitment to the pension fund on behalf of the state government. These systems offer lessons for other states as they seek to strengthen their pensions and guarantee a

secure retirement for their public employees.

7. INTEREST RATES REMAIN THE SAME FOR THE FOURTH

QUARTER OF 2016: The Internal Revenue Service has announced that interest rates will remain the same for the calendar quarter beginning October 1, 2016. The rates will be:

- four percent (4%) for overpayments (three percent (3%) in the case of a corporation);
- one and one-half percent (1½%) for the portion of a corporate overpayment exceeding \$10,000;
- four percent (4%) for underpayments; and
- six percent (6%) for large corporate underpayments.

Under the Internal Revenue Code, the rate of interest is determined on a quarterly basis. For taxpayers other than corporations, the overpayment and underpayment rate is the federal short-term rate plus 3 percentage points. Generally, in the case of a corporation, the underpayment rate is the federal short-term rate plus 3 percentage points and the overpayment rate is the federal short-term rate plus 2 percentage points. The rate for large corporate underpayments is the federal short-term rate plus 5 percentage points. The rate on the portion of a corporate overpayment of tax exceeding \$10,000 for a taxable period is the federal short-term rate plus one-half (0.5) of a percentage point. The interest rates announced today are computed from the federal short-term rate determined during July 2016 to take effect August 1, 2016, based on daily compounding. Internal Revenue

Bulletin 2016-39 (September 26, 2016.)

8. FINANCIAL ECONOMICS PRINCIPLES APPLIED TO PUBLIC

PENSION PLANS: The purpose of this new research brief from the Society of Actuaries and the American Academy of Actuaries, entitled *Financial Economics Principles Applied to Public Pension Plans* is to state explicitly how financial economics applies to public pension plans, serving to extend the Pension Actuary's Guide to Financial Economics (Pension Finance Task Force, 2006) ("the Guide"). Unlike the Guide, this document is less a tutorial and more a declaration of principles. Explanatory materials are cited as references; first among them is the Guide. Although the Guide did not directly address public plans, many of the same financial principles apply to both corporate and public pension plans. Beyond pensions, the principles and tools of financial economics are the underlying basis on which trillions of dollars of financial instruments are traded and valued. Financial economics applies to both traded and non-traded financial instruments. Value is assessed for a non-traded instrument by relating it to observed market prices for a traded "comparator" instrument (or portfolio) similar in terms of cash flow (amount, timing, and risk). Financial economics' uses include: determining fair market value; hedging, managing, and measuring risk; and assessing value relative to other financial opportunities for trading and investment. Financial economics valuation is applied to both financial assets and liabilities, since every financial liability is another party's financial asset; and it is applied as well to instruments that have characteristics of both (e.g.

swaps). Pension plans are financial instruments with cash flows that can be estimated (in terms of amount, timing, and risk). While it is widely accepted by pension actuaries that defined benefit pension obligations are financial liabilities of their sponsors, it is less widely accepted that they should be valued using the same tools of financial economics that are routinely applied to bonds, loans, swaps, options, and other financial instruments. And it is even less widely accepted that pensions should be so valued when the sponsor is a government or other public-sector entity, without shareholders. What objections, then, do some pension actuaries raise to applying financial economics to pensions generally, and to public sector pensions in particular? It is argued that because pensions are complex, long-term instruments with significant idiosyncratic risks (e.g., longevity), there are no valid comparators.

- It is argued that because pension plans, especially public plans, are investors with an extremely long-term horizon, they are able to realize the equity risk premium (or something close) with a high degree of certainty, riding out any intermittent market volatility.
- With regard to public-sector pensions, it is argued that governments are different from corporations. Governments pursue social welfare, not profits, and are accountable to voters, not shareholders. So how does financial economics answer these objections?
- On the first point, complex risks do not invalidate financial

economics valuation; they just make it less precise. Financial economics provides the tools to estimate the additional cost (and it's always a cost) of a complex risk. It applies in valuing short term and long-term instruments.

- On the second point, the equity risk premium is indeed a premium for risk, not for patience; and risk does not decrease with time, rather, it increases.
- On the third point, even governments focused exclusively on maximizing social welfare should aim to deliver services to constituents cost effectively. To assess the costs associated with compensation programs, including pensions, they need accurate economic measurements of those costs.
- The rest of the document includes the following sections which, paralleling the Guide, begin with general principles of economics. This is followed by principles of financial economics and public finance, and then by specific applications to public pension plans:

Economic principles. These principles describe how economic actors behave, and the conditions necessary for optimal economic outcomes. These principles apply well beyond public or private pension plans.

Financial economics principles. These principles describe the functioning of capital markets, e.g., how financial markets price future cash flows.

Public finance principles. Intergenerational equity is discussed and applied. This principle applies almost exclusively to the governmental arena, creating an important distinction vis-a-vis private corporations.

Measurement of liabilities and costs. This section addresses actuarial measurements driven by the principles above.

Funding. The economic purpose is discussed, as is the sharing of deficit payment among generations of taxpayers. A distinction is made between actuarial and political processes.

Investment. Economic principles are applied to the investment of assets held by the pension trust.

Financial reporting. The purpose and elements of financial reporting necessary to satisfy the above principles are discussed.

Benefit design. Elements of the benefit promise desirable for economic efficiency are discussed.

Risk sharing. Benefit design elements to facilitate the sharing of risk are discussed.

To read this paper in its entirety please visit The Society of Actuaries link below. <https://www.soa.org/Files/Sections/financial-economics->

[public-pension-plans.xls](#)

9. DB SPONSORS FOCUSED ON GOVERNANCE HAVE BETTER

OUTCOMES: A study by State Street shows that a commitment to improved governance standards can have wider benefits for pension plans. The study identified a group of “Governance Leaders” among defined benefit plan sponsors who will upgrade four or more aspects of their governance over the next year. According to the research report, leading pension funds may be able to enhance long-term outcomes for their members by upgrading their risk management capabilities and governance frameworks to support potentially value-added investment opportunities including allocations to more complex assets. Improving governance is clearly a top priority for all pension funds in the study. More than nine-in-10 (92%) will upgrade at least one aspect of their governance approach in 2016. Here are seven steps for becoming a governance leader:

- Optimizing balance of responsibilities -- board vs. management;
- Increasing training / education opportunities;
- Changing board member recruitment;
- Revising incentive models;
- Increasing transparency to members;
- Increasing reporting frequency to board; and
- Increasing autonomy of investment function.

Governance Leaders are focusing on pursuing new investment strategies, prioritizing risk management capabilities, hiring more risk

talent and expanding internal investment capabilities, enhancing their board's effectiveness, and improving funding levels. Governance Leaders expect to eliminate their DB plan deficits more quickly than other pension funds in the survey -- perhaps a sign of their ability and readiness to put effective measures in place. They invest in governance improvements and prioritize diverse risk management expertise across their fund. They also adapted their investment strategies to help manage any funding shortfalls and to balance assets and liabilities. According to the survey, Governance Leaders' governing fiduciaries have above-average general investment literacy, and better understanding of the risks facing their fund. They have strong capabilities and strategic vision compared with other respondents. Governance Leaders are also significantly more likely to increase their exposure to alternative asset classes than other pension funds in the survey, and they show a greater appetite for environmental, social and governance (ESG) investing. Governance Leaders give higher priority to a broad range of risks -- including longevity, liquidity and investment risks -- than other pension funds. State Street believes this may help them to achieve stronger, more wide-ranging risk frameworks than other pension funds.

10. GEORGIA STATE TROOPERS TO FINALLY RECEIVE PAY RAISE THEY DESERVE: According to leoaffairs.com, the Georgia governor held a news conference announcing a pay raise for all Georgia law enforcement officers -- including the underpaid Georgia Patrol, which has the lowest starting pay in the nation. Governor Deal

announced a 20% pay raise for state officers, giving them the highest base salary of any law enforcement agency in the state. The \$79 million in pay raises are part of Deal's law enforcement reform, something Georgia Bureau of Investigations agent Cynthia Jackson says is long overdue. In addition to the raises, the governor proposed new training for law enforcement. "We are increasing the number of courses that are required under the police legitimacy procedural justice and community racial relations curriculum," Deal said. An additional four hours will be added to the 11-week training program, adding courses involving such topics as use of force and de-escalation options, fostering positive community relations and introduction to cultural competency in policing.

11. BANKRATE SURVEY: 70% WILL WORK AS LONG THEY CAN:

Seventy percent of people say they want to work as long as possible, a new Bankrate Money Pulse survey finds. Early retirement is no longer the goal it once was. Just 13% of non-retired respondents said they hope to retire in their 50s, down from 27% when the question was asked in 2007. One thousand respondents participated in the survey, 26% said they will work as long as possible because they like the work; 25% said they will work as long as possible because they need the money; and 19% said they will work as long as possible because they like the work and need the money.

12. PRE-, POST- OR EX-NUPTIAL: MAKING THE MOST OUT OF SOCIAL SECURITY: Onwallstreet.com says these strategies are

worthy for maximizing government retirement income for married couples -- even ones headed for divorce.

- **Delay Filing.** Follow the golden rule for Social Security planning: Delay filing for benefits. This helps protect against one of the greatest risks to retirement income -- living longer than anticipated. Longevity risk has become a major concern for planners as life expectancies continue to rise. Consider a married couple where both spouses are 65. There is now a 50% chance one will live till 92, and a 25% chance one will make it to 97. Historically low interest rates make delaying a better deal than ever. With 10-year Treasuries paying barely over 1%, the guaranteed 8% increase for each year delayed in monthly Social Security payments for life is hard to beat.
- **Couples' Strategies.** Last year, Congress did away with the popular file and suspend strategy. However, other features that benefit married couples remain a pillar of Social Security. The most basic is the spousal benefit. It provides 50% of the worker's benefit to the spouse, who is at least 66 years old, even if that spouse never had a single day of Social Security-eligible earnings. The restricted filing strategy remains available for anyone born before January 1, 1954. This approach works best when each spouse has a significant work history. Restricted filing allows a person at least 66 years old to claim spousal benefits while simultaneously allowing benefits based on his or her own work history to continue to accrue delayed

retirement credits until age 70. At that point, he or she switches to his or her own, higher, benefit.

- **Plan For Surviving Spouse.** One important goal of retirement planning is to maximize income for the surviving spouse. When one spouse dies, household income can immediately drop significantly, while there may only be a modest decrease in expenses. The survivor benefits provide the surviving spouse with the higher of either their own benefit, or 100% of their deceased spouse's benefit. Best planning typically entails delaying filing for benefits of the highest wage earner as long as possible until age 70.
- **Remember The Ex.** If a client is divorced from a marriage of at least 10 years and not remarried, he or she is eligible to claim spousal or even survivor benefits based on the work history of the ex-spouse. The ex-spouse need not even have filed for benefits, and it is not necessary to notify the ex-spouse. Surprisingly, if your client remarries after his or her 60th birthday, he or she can still collect survivor benefits based on the ex-spouse.

13. FPPTA TRUSTEES SCHOOL: The Florida Public Pension

Trustees Association's Trustee School will take place on September 25 through September 28, 2016 at the Hyatt Regency Coconut Point in Bonita Springs, Florida. A link on FPPTA's web site, will take you to the Hyatt Regency Coconut Point website to make your room

reservations. You may access information and updates about the Conference at FPPTA's website. All police officer, firefighter and general employee plan participants, board of trustee members, plan sponsors and anyone interested in the administration and operation of the Chapters 112, 175 and 185 pension plans should take advantage of this unique, insightful and informative program.

14. 46TH ANNUAL POLICE OFFICERS' AND FIREFIGHTERS' PENSION TRUSTEES' SCHOOL: The 46th Annual Police Officers' & Firefighters' Pension Trustees' School will take place November 2 through 4, 2016. You may access information and updates about the Conference, including area maps, a copy of the program when completed and links to register at the Radisson Resort, Celebration, (Orlando) Florida Please continue to check the FRS website for updates regarding the program at www.myflorida.com/frs/mpf. All police officer and firefighter plan participants, board of trustee members, plan sponsors and anyone interested in the administration and operation of the Chapters 175 and 185 pension plans should take advantage of this unique, insightful and informative program.

15. SIGNS TO GET YOU THROUGH THE DAY: Between two evils, I always pick the one I have never tried.

16. PARAPROSDOKIAN: I am great at multi-tasking -- I can waste time, be unproductive, and procrastinate all at once.

17. TODAY IN HISTORY: In 1904, Wilbur Wright makes his 1st airplane flight.

18. KEEP THOSE CARDS AND LETTERS COMING: Several readers regularly supply us with suggestions or tips for newsletter items. Please feel free to send us or point us to matters you think would be of interest to our readers. Subject to editorial discretion, we may print them. Rest assured that we will not publish any names as referring sources.

19. PLEASE SHARE OUR NEWSLETTER: Our newsletter readership is not limited to the number of people who choose to enter a free subscription. Many pension board administrators provide hard copies in their meeting agenda. Other administrators forward the newsletter electronically to trustees. In any event, please tell those you feel may be interested that they can subscribe to their own free copy of the newsletter at <http://www.cypen.com/subscribe.htm>.

20. REMEMBER, YOU CAN NEVER OUTLIVE YOUR DEFINED RETIREMENT BENEFIT.