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Addressing America's Pension "Crisis"

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An analysis of the U.S. pension system in light of its essential goal and purpose: to make promised payments on time and in full to retirees.

There is a pension crisis in America, or so we are told. Corporate, municipal, and union plans are grossly underfunded on an accounting basis. However, the divergence between accounting representation and underlying economic reality has distorted the one true goal of pension management: Making all promised payments, in full and on time, to retirees.

Background

The first corporate pension plan in the United States was established by The American Express Company over 140 years ago (1875). By 1970, nearly half of all private sector workers were covered by a

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pension plan. [*https://www.ebri.org/publications/facts/index.cfm?fa=0398afact*]

Following the high-profile failure of several plans in the mid-20th century, the Employee Retirement Income Security Act of 1974 (ERISA) was passed to protect the retirement benefits of the nearly 40 million workers in over 100,000 pension plans across the country. [*http://www.workforce.com/2012/01/24/the-rise-and-fall-of-employer-sponsored-pension-plans/*]

The total number of pension plans peaked in the mid-1980s at over 163,000 but has fallen precipitously to less than 45,000 today. [Bureau of Labor Statistics] Although the total number of pension plans has fallen by over 70 percent, the number of participants in those plans remains steady. How can pension plans keep their promise to pay benefits to 40 million Americans if over 90 percent of them are not "fully funded"? We assert that the answer requires (1) an understanding of the difference between accounting representation and economic reality, and (2) a fresh approach to investing the plan assets.

Defining the Pension Crisis

Despite an historic recovery in asset prices after the Great Financial Crisis (GFC) of 2008-09 and healthy average returns in the 21st century, pension plans are generally not well situated in terms of the resources available to make the payments promised to retirees. According to a recent article in Bloomberg, 186 out of the 200 largest *corporate pension plans* in the S&P 500 are not "fully funded." It's not for lack of their assets working for them. In 2017 alone, the MSCI All Country World Index (ACWI) Index returned nearly 24 percent, while the Vanguard Balanced Index, which is invested in approximately 60 percent equity and 40 percent fixed income (similar to many pension plans), has a cumulative gain of over 100 percent over the past 10 years . . . including the market crash of 2008-09. Despite these strong asset returns, the aggregate funded status of the pensions at the S&P 500 companies is less than 82 percent according to Aon Hewitt. [*https://www.plansponsor.com/markets-push-pension-funded-status-higher-2017/*]

As to *state and municipal pensions*, first-responders', state employees', and teachers' plans are widely portrayed as vastly underfunded on the whole—even under more lenient government accounting standards. Many states (Illinois and New Jersey are poster children) are caught between the Scylla of bankruptcy-like accommodations (*e.g.*, Detroit, MI/Stockton, CA) and the Charybdis of funding gaps that their tax bases cannot ultimately shoulder.

Finally, *collectively bargained labor union (Taft-Hartley) plans* are in full-blown crisis, many classified as being in "critical and declining status" (*i.e.*, without any realistic hope of making all expected payments without some sort of *deus ex machina*, legislative/regulatory/funding assistance).

The Mortgage Metaphor

We believe that all parties involved—plan sponsors, their investment professionals, accounting and actuarial advisers, government regulators, etc.—do their part for the pension cause with noble intentions and extreme professionalism. But a dispassionate assessment of financial condition does not reflect favorably on the likelihood that most plans will succeed in their sole reason for being: *making all promised payments, in full and on time, to the retirees on whose behalf the dollars have been set aside*.

Allow us to help illustrate the pension situation (perhaps a crisis) in America today, by way of a metaphor familiar to most people: the home mortgage. If someone asked, "How much is your mortgage?," most people will answer with the monthly payment they make, not the total amount borrowed, or remaining balance of the loan. They view that obligation as a series of future payments to be made on a monthly basis, with interest to compensate the lender. They aren't taking the principal due and comparing it to the current dollar amount in their checkbook.

Mortgages are not "callable" by the bank; Wells Fargo cannot send you a demand notice for the full amount due because of concerns that you are only 9 percent "funded" when comparing your combined savings to the outstanding mortgage balance. Instead, both borrower and lender view the mortgage relationship as a series of payments to be made in the future, and both parties are happy with the arrangement when all payments are made in a timely fashion. In our view, the hardworking fiduciaries responsible for pension funds in America, as well as their professional advisors and the employees and retirees they serve, would feel dramatically better if pensions were viewed more like a mortgage, where the focus is on making payments on time and as expected.

Accounting vs. Reality

If we had to name one of the biggest culprits in the so-called pension crisis, it is this: There is an understandable but unfortunate disconnect between the public *accounting representation* for long-lived assets and liabilities (inherent in pension plans) on one side and their underlying *economic reality* on the other. In our view, it is to the detriment of plans' ultimate wellness that their accounting and actuarial treatment has dominated the economic reality of pension funding. After all, if (as we've granted) everyone involved in pension finance is well-intentioned, professionally skilled, and highly competent, and investment results have largely been healthy, what seems to be the problem? Why is it so difficult to put pension plans on solid financial footing? One central challenge lies in divergent and sometimes competing aims and objectives: *What is success for Defined Benefit plans? What is solid financial footing?*

Accounting rules prescribe that a decades-long series of *future* payments—think a very long movie—be represented by a sum of single point *current* estimates that is more like a snapshot. While entirely consistent with accounting principles, the difference between these "snapshot" and "movie" aspects of pension finance distracts and sometimes distorts the long-term economic reality. For example, in recent years, historically low interest rates have ballooned the *present* value (snapshot) of these future expected payments (movie), as discounting works its cruel opposite arithmetic, with falling rates resulting in growing projections of the value of future payments.

The Limitations of "Funded Status"

The most prominent statistic in the pension financial ecosystem is a plan's "funded status," the ratio of its *current market value* of plan assets compared to one or more *estimates* of the current "value" of its future liabilities (all of the payments to be made to current and eventual retirees). The areas of emphasis above are intentional, as we think they are the fulcrum upon which much pension plan misery turns. Historically low interest rates have been wreaking havoc on present value calculations for several years now by reducing forward return assumptions. But such low rates may prove temporary rather than permanent (making some level of reported underfunding … dare we say, "fake news?").

But note also that current market value of a plan's existing assets is an easily obtainable, readily observable dollar figure. It is clearly subject to some level of ongoing volatility as assets reprice, but its value can be ascertained with a high degree of confidence. Not so for the sole reason those assets exist: the *estimated* amounts to be paid out to eligible employees over decades to come.

Deriving ongoing amounts to be paid according to the plan's formula involves a veritable cornucopia of uncertain variables, including but not limited to: (1) workforce growth and attrition rates, (2) wage growth over working lifetimes, (3) retirement age, (4) how long employees live, (5) the degree to which they choose lifetime incomes or lump-sum payments, and, we think, maybe even (6) a partridge, and (7) a pear tree. (Okay, we made up those last two.)

Knowing the market value of a plan's current assets is like standing on a scale every morning: That's how much you weigh (like it or not). Making an estimate of a series of future payments across an employee population might be thought of more like a carnival barker guessing weight at a fair, but with this added twist: He must guess your average weight over decades to come.

In fairness, the future payments are often calculated over a widely diverse population and use actuarial calculations that are periodically adjusted based on empirical evidence. They are estimates, but not wild guesses, of future payments, and those estimates change over time, but slowly. For example, the past few years have seen upward adjustments in expected payout calculations based on observed increasing longevity—people live longer in retirement and, therefore, draw more income over their lives. Good for Joe and Jane retiree, less so for the assets funding their golden years.

The real challenge comes when we take that series of (variable) cash flows and apply a *single* discount rate to represent the singular present value of the liability stream in comparison to assets. Isn't the goal to pay a *series* of future payments to retirees as promised?

The Contribution Conundrum

Accounting is largely a craft of representing the past as an indication of current financial condition, and as such, it is a necessary, but ultimately insufficient, tool for making long-term forward-looking projections. One example: While many plans have budgeted for significant ongoing cash contributions, exactly *zero* of those dollars (in the future and uncertain as they must necessarily be deemed) are allowed consideration in *current* statements of financial condition. To return to our home mortgage straw-man, how nervous might banks be about making such loans if they acted as if borrowers were **never** in the future going to earn ongoing income to help support the payments? Even though everyone knows that each new year brings new accrued benefits (and even new beneficiaries for the few open plans left), and further that the assets will be invested for decades and earn returns, the current accounting nature of the snapshot of pension health does not and cannot recognize either anticipated future contributions or any returns on those added dollars going forward.

There is also a natural tension between full *immediate* funding and the *very long time period* over which that state needs to be achieved. Few would argue that a more secure (albeit costly) approach to funding benefits would involve immediate and up-front contributions to fully fund the plan. However, is that a practical, or even advisable, strategy? Plan sponsors understandably try to minimize their cash cost of providing benefits, and it is rational for them to assume that their contributions will earn compounding investment returns over many years prior to anticipated distributions. Additionally, overfunding of pension plans is a "heads beneficiaries win, tails plan sponsors lose" exercise—courtesy of related regulations limiting recapture of any surplus—making sponsors extremely leery about accidentally being overly aggressive and ultimately overly generous with cash contributions. Additionally, measures of "over" funding, however temporary, have in the past invited calls for *expansion* of benefits, making the pension exercise even more difficult.

So What's the Answer?

Hopefully by now, we have sufficiently articulated the challenge of reconciling the accounting representation of pensions in America with their economic reality. Next, we will describe the two most common approaches to managing pension plans, and why we think there is a better way forward.

Approach #1: Asset-Focused Investment Management

In the authors' combined 50 years of experience in this business, we continue to see far too many pension plans managed in a fashion where investment return seeking is ruler of the roost, and the proper goal of funding the liabilities plays second fiddle. These plan sponsors hire several talented portfolio managers to invest the pension assets and measure the success (or failure) of the managers and the combined allocation based on conventional market benchmarks. There is nothing wrong with this exercise per se; we do it ourselves for a variety of client portfolios, and it serves a useful purpose *as far as it goes*.

The problem is that either the exercise doesn't go far enough or that perhaps it goes too far. By which we mean that it is likely disconnected from a proper economic reckoning of the liabilities *for which the assets exist in the first place*. As such, the investment portfolio and structure, starting with asset allocation, does *not go far enough* and may be suboptimal at best or at worst bears no resemblance or any rational link to the purpose for which it exists. *It goes too far* in measuring how many basis points individual funds or the plan in aggregate may be ahead or behind an ASSET benchmark (*e.g.*, S&P 500), while the real goal—ensuring that money is available to pay a unique LIABILITY as needed—is treated as an afterthought.

With no two expected payment streams for pensions alike, why are so many of them investing assets in a similar, generic fashion, often completely mimicking asset benchmarks via passive management? What do asset benchmarks have to do with the goal (remember: one goal; one thing: paying benefits)? Asset allocation should be informed and, in fact, driven by the specific expected benefit payments for the plan, of which no two are alike. If those determining investment strategy are not regularly and systematically talking to the actuaries, asking the right questions, and digging into the details of expected cash flows and their timing, they will likely devolve into generic investment market-based benchmarks. You might think such a detailed liability explication and analysis of and focus on liabilities is common sense and, therefore, common practice in pension management and administration; in our experience, you would be wrong.

Approach #2: Traditional Liability-Driven Investing

One approach that at least considers liabilities in structuring an investment portfolio is represented by the traditional approach to liability-driven investing (LDI). Keeping a complex topic simple, one of the most significant (accounting) risks for pensions is that changes in interest rates cause both sides of their balance sheet to vary, but at potentially very different rates. If the projected liability stream has a duration of 14, then, all else being equal, a one percent drop in interest rates will cause a 14 percent **increase** in liabilities. Because few plans own assets with such long duration (long maturity bonds), they risk asset-liability mismatches (*e.g.*, in the illustration above, they get less than a 14 percent investment gain to offset that 14 percent increase in liabilities).

A standard marketplace response has been what we'll call "traditional" LDI, which, at least on its face, gives a nod to the assets' purpose. Plan sponsors buy long-maturity bonds with enough assets to help create a portfolio duration such that interest rate changes have at least some offsetting impact on accounting measures of funded status (*i.e.*, any losses or gains in the present value of liabilities are offset by corresponding gains or losses on the bond assets). This is the so-called duration matching or portfolio "immunization" approach, which in our view works to a degree and under more limited circumstances than the many situations where it is applied. To the degree the matching does its job, **an** objective has been achieved, that of minimizing the difference between the accounting representation of assets and the *present value* of liabilities (remember: an *estimate* into which are packed many diverse assumptions and variables). For what it's worth, at least "performance" can now be measured by how well the assets track the liabilities instead of arbitrary market benchmarks.

Where possible, who wouldn't want to immunize the portfolio and eliminate the need for higher Pension Benefit Guaranty Corporation (PBGC) premiums and large contributions? A version of that description certainly reflects our **end-state** objective for pension fund clients. But we would prefer that the term "structure" (distribution across future years) of assets should be synched up with that of liabilities—to the degree possible, year by year—across time rather than just on average. (We are reminded of the "normal" average temperature of the patient with head in an oven and feet in a block of ice).

Bucketed LDI – A Fresh Approach

Our consulting approach has always been grounded on one simple question: What is the money there for? For a defined benefit pension plan, the answer is: *Making all promised payments, in full and on time, to the retirees on whose behalf the dollars have been set aside*.

With this goal firmly in mind, we often pursue for pension clients an enhancement on the liability-driven label that we call "*Bucketed*" LDI. We think it is a both/and, rather than either/or, method of approaching the investment challenge of pension plans.

In order to recognize the primacy of the liability payments, we seek excruciatingly granular detail from the plan's actuary about the projected progression of liability payments under the multiple assumption rules governing their calculation. In essence, we are looking for the best estimates of the actual series of future payments likely to be made to retirees based on currently knowable information. This is the starting point for developing the investment strategy for the assets.

We then pursue an investment strategy that will invest a portion of plan assets in high-quality bonds with interest payments and maturities structured to create cash "just-in-time" for expected benefit payments. This "bucket" of low-risk investments would ideally fund at least eight years of cash-matched liability payments. Of course, the number of years that could be cash-matched would depend on (1) the current funded status, (2) affordable and realistic future cash contributions expected, (3) current interest rates and spreads, (4) assessment of market cycle positioning, and (5) decision-maker risk tolerance, among other unique factors. As a simple example, if benefit payments of $5 million will be made next year, a one-year bond could be purchased and held to maturity. If in two years $4.5 million is due, a two-year bond would be purchased and held to maturity. This process continues to cover at least the first eight years of benefit payments such that as bonds mature and make interest payments, cash becomes available to pay benefits.

For additional plan assets beyond those funding earlier payments, we recommend a "bucket" of diversified risk-seeking (largely equity) investments. This bucket is designed to grow those assets (plus additional capital contributions) in order to be available to establish future years in the lower risk bucket. Eight years was selected as the optimal minimum time buffer as our research has indicated that most risky investments have the highest likelihood of earning their *average* expected returns over this period (or longer). Excess returns can be "poured" from the higher risk "bucket" to the low risk "bucket" as funded status improves, thus locking down additional years of benefit payments over time.

This approach of (1) bucketing low-risk assets that cash-match the near-term expected benefit payments and (2) bucketing higher risk assets (plus future contributions) to fund longer-term expected benefit payments directs plan sponsors toward a simple, logical approach: to *fund their actual, unique expected liability payments at a predictable, affordable cash cost with less risk*. In the words of the eminent philosophers and respected investment experts at Van Halen, we think that represents "The Best of Both Worlds."

Conclusion

We have suggested in this article that a distraction from primary mission is the main impediment to more successful and, we think, less risky pension management. We have no interest in quarreling with the entire accounting and actuarial professions and, in fact, are among their chief admirers. It was the investment community that agitated for some current reckoning of a then almost unknowable future liability to which sponsors were responsible to retirees in the future, spawning FASB 87, precursor to today's ASC 715, introducing the fine but formerly *completely* opaque work of actuaries into the clear light of financial statements for analysts to wrestle with.

We are as big a fan of pronouncements, guidelines, and standards as the next guy. Yet it remains our contention that accounting estimates are less than sufficient representations of the underlying economics of pension funding. As such, they inevitably invite a diffusion of focus from the main goal: Making cash payments, on time and in full, according to the formula promised to employees when they retire.

Unfortunately, return on assets relative to asset-based benchmarks has become the primary focus of many plan sponsors and professionals and bears no relation whatsoever to each plan's unique liabilities. In our view, any attempt to manage pensions solely in an asset-focused investment strategy is inevitably distracted and unlikely to be successful, as it is disconnected from the true goal.

We close with appeals to the most recognizable professorial integrity. We know how complicated pension management is and agree with Albert Einstein's purported maxim that "everything should be made as simple as possible*, but not more so*" (emphasis added). In response, we've developed a straightforward investment solution that is informed and driven by the liabilities. It represents a partnership between the plan sponsors, actuaries, and investment professionals that, if executed with excellence, can positively impact America's pension "crisis." ■