Ryan ALM, inc.

Asset/Liability Management

The Solutions Company

Ronald Ryan, CEO, CFA

The Ryan Letter

September 30, 2010

Index	Returns YTD 2010	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	21.80 %	100 %
FAS 158 (AA Corporates)	19.03	
PPA (3 Segment)	9.94	
PPA (Spot Rates)	14.44	
GASB /ASOP (8% ROA)	6.06	
Assets :		
Ryan Cash	0.34 %	5 %
Barclay's Aggregate	7.95	30
S&P 500	3.89	60
MSCI EAFE Int'l	1.59	5
Asset Allocation Model	5.21 %	100 %
Assets – Liabilities		
Market	-16.59%	
FAS 158	-13.83	
PPA (3 Segment)	-4.73	
PPA (Spot Rates)	-9.23	
GASB/ASOP (8% ROA)	-0.85	

Using the Asset Allocation above in 2010, pension asset growth difference vs. liabilities was: **-16.59%** (market valuation STRIPS); **-13.83%** (FAS 158); **-4.73%** (PPA rules-AA Corporate rates) and **-9.23%** (PPA-Spot Rates); **-0.85%** (GASB/ ASOP). Such valuations show the significant difference in not using proper *market* valuations. Most pension funds enjoyed a funded ratio surplus in 1999 but **have underperformed liabilities by about -150.18% since 1999** on a compounded index basis starting at 100 on 12/31/99! (see **Pension Scoreboard**)

Total Returns

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Assets	-2.50	-5.40	-11.41	20.04	8.92	4.43	12.25	6.82	-24.47	19.43	5.21
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	33.93	-19.52	21.80
Difference:											
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-58.40	38.95	-16.59
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-181.57	-106.94	-150.18

What is the appropriate Discount Rate to value Pension Liabilities?

This hotly debated topic is well documented in the June issue brief of the Center for State & Local Government Excellence which presents the work of Alicia Munnell, Richard Kopecke and Jean Pierre Aubrey. The debate is whether to use the GASB accounting and actuarial model of the ROA (@8%) or the economists' approach of using the riskless rate (@5%) as the proper discount rate. The economists' model produces a much higher (30% to 45%) liability present value. The authors suggest: "And adopting a riskless rate has clear advantages; it would accurately reflect the guaranteed nature of public sector benefits; it would increase the credibility of public sector accounting with private sector analysts; and it could well forestall unwise benefit increases when the stock market soars."

The authors go on to conclude: "The argument is compelling that the liabilities of public pension plans, which are guaranteed under state law, should be discounted by a rate that reflects the riskless nature. Such a change would produce a large number. Liabilities would rise from $3.5 trillion to $4.9 trillion, and with $2.7 trillion of assets on hand, unfunded liabilities would rise from $0.7 trillion to $2.2 trillion."

Elizabeth Kellar, President and CEO of the Center says it well in her cover letter.

"What caught my eye was the CalPERS pension history they cite. In 1997, CalPERS reported that assets equaled 111% of liabilities using the traditional actuarial model. That upbeat report led the California legislature to enhance the benefits of both current and future employees. The legislature reduced the retirement age, increased benefit accrual rates and shortened the salary base for benefits to the final year's salary. If CalPERS liabilities had been funded at the riskless rate in 1997, the plan would have been 76% funded. The authors suggest that a riskless rate of valuing liabilities would minimize the temptation for elected officials to become overly generous…"

Center for State & Local Government Excellence

The Center for State and Local Government Excellence helps state and local governments become knowledgeable and competitive employers so they can attract and retain a talented and committed workforce. The Center identifies best practices and conducts research on competitive employment practices, workforce development, pensions, retiree health security, and financial planning. The Center also brings state and local leaders together with respected researchers and features the latest demographic data on the aging work force, research studies, and news on health care, recruitment, and succession planning on its web site, www.slge.org. Of particular note, the Center has recently released the following research: "The Funding of State and Local Pensions: 2009-2013"; "Pension Obligation Bonds: Financial Crisis Exposes Risks"; "Valuing Liabilities in State and Local Plans"; and "The Crisis in State and Local Government Retiree Health Benefit Plans: Myths and Realities" If you are interested in learning more about the Center, receiving Center news, or partnering with the Center, please email info@slge.org or call (202) 682-6100

How to Cheat a Retirement Fund

On September 10, the NY Times carried an op-ed written by Orin Kramer, the chairman of the New Jersey Investment Council with the title referenced above. I applaud Mr. Kramer and the NY Times for publishing this insightful article. This article is must reading for any public pension fund practioner… www.nytimes.com/2010/09/11/opinion/11kramer.html. There are many good nuggets of observations such as: "These rules (GASB) offer, at best, only the illusion of transparency, because they allow governments to base their budgets on economic fiction. Government accounting standards allow public pension systems to measure their assets based on average values looking back over a period of years. Public pension funds are also allowed to make assumptions about future investment returns that many of us would regard as overly optimistic. And since these assumed returns are incorporated into measurements of the fund's status, as if they had already been realized, states that come up with the most rosy market forecasts look, on paper, to be better financed. Accounting is inevitable an artificial language that can distort some economic truths. If you use corporate accounting standards to estimate the value of those public pensions, you come up with a shortfall… about $2.5 trillion. Employing a third approach as economists generally do, public pension underfunding is about $3.5 trillion. "

Woody (the Pension Pencil)… the Weapon of Mass Destruction in the U.S.

I have blamed accounting rules and schemes as a major villain for the pension crisis. When I testified before the ERISA committee on pensions in 2003, I brought in a five foot pencil (***Woody***) which I proclaimed as the weapon of mass destruction among U.S. pensions. I showed how the pension accounting pencil is used to enhance the EPS of corporations, enhance the Funded Ratio of pensions, reduce Contributions and reduce the size of pension liabilities. Instead of using market values, the pension accounting rules smooth assets over 2 years (PPA) and 5 years (GASB) while using *hypothetical* corporate bonds (PPA) and the ROA (GASB) as the discount rates. In the last 10 years this has led to an overvaluation of assets and a large undervaluation of liabilities which together create a significantly *overvalued* Funded Ratio. Such erroneous valuations misled most pensions into the wrong Asset Allocation, Benefit and Contribution decisions. My conclusion and recommendation was: **To validate any discount rates used… it must be purchasable such that the pension plan could settle or defease the liabilities if it so chooses!** It should be a yield curve of discount rates such that every liability benefit payment has a distinct discount rate valuation. This is identical to how the bond market functions where every maturity is a separate and distinct yield. If you cannot buy the discount rates…they are *hypothetical rates* or financial lies and should not be used. After Enron and World Com, financial America should make sure that we never tolerate financial lies anymore.

Credit Suisse releases "Pension Headwinds" report on September 21

David Zion and his team at Credit Suisse are the best private pension accounting watchdogs and translators in America that I have read. Their new report "Pension Headwinds" is full of timely and useful analysis. As always, I applaud their work. Some of their highlights include:

"Using our updated Pension Forecast Model we estimate the funded status of the S&P 500 companies' pension plans (354 have defined benefit plans) may have dropped by $134 billion this year and are now $402 billion underfunded (75% funded), as of March 01, 2010."

"The deterioration in the health of defined benefit plans during 2008 drove aggregate pension costs for the S&P 500 companies higher in 2009 to $39 billion up from $19 billion in 2008. Even with the health of the plans improving last year, we expected pension costs to move up slightly in 2010 to $40 billion in the aggregate as the pension losses from 2008 continue to work their way into the income statement. Assuming the pension plans were to end the year where we estimate they stand today, pension costs in 2011 for the S&P 500 companies could increase by 33% to $53 billion. In fact we project that aggregate pension costs could continue to be more than $50 billion each year through 2013."

Milliman 2010 Pension Funding Study of 100 largest corporate pensions

The Milliman study of pension funds is based on public companies with the largest defined benefit assets whose 2009 annual reports were released by April 7, 2010. Milliman is certainly one of the best actuarial firms in the world today. Highlights of this study were:

"The funded status of the Milliman 100 pension plans increased slightly during 2009 reaching 81.7%. The aggregate pension deficit decreased by $10.6 billion… producing an aggregate pension shortfall of $243 billion for the 100 companies as of the end of their 2009 fiscal years. The favorable investment returns during 2009 were almost entirely offset by the increase in liabilities generated by the decrease in discount rates used to measure pension plan liability."

"Contributions to these 100 pension plans increased significantly in 2009 ($54.5 billion vs. $29.5 billion in 2008). By comparison, contributions averaged $38.7 billion for the five prior years. The losses in funded status during 2008, coupled with the new funding requirements under the Pension Protection Act (PPA), are projected to increase required contributions in future years. Since the end of 1999, the 100 plans have earned, on average, an annual investment return of only 4.3% (compared to an ROA, on average of 8.59%)."

Fiscal Year:	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
ROA	**9.4%**	**9.4%**	**9.2%**	**8.5%**	**8.4%**	**8.3%**	**8.3%**	**8.2%**	**8.1%**	**8.1%**
Actual	**4.3%**	**(6.3%)**	**(8.7%)**	**19.3%**	**12.4%**	**11.3%**	**12.9%**	**9.9%**	**(18.9%)**	**14.1%**

"Pension expense increased by $15 billion during 2009, producing an aggregate pension expense of $25.7 billion. Both pension expense and employer contributions are expected to remain high during 2010".

Delphi Retirees Sue PBGC

On Sept. 24, Judge Arthur Tarnow ruled that the lawsuit filed by the salaried retires of Delphi against the PBGC may move forward. This verdict means that the judge felt there was a case to be heard in an upcoming trial that would determine if the government, and PBGC, should have taken over the salaried retiree pension plan at the same time the hourly workers were moved to GM. Retirees who are suing have obtained court documents showing that White House officials hatched a plan to dump nonunion workers' pensions on the federally-run Pension Benefit Guaranty Corp. which immediately proceeded to slash their promised benefits. The PBGC puts a cap on pension benefits at around $54,000. At the same time the administration earmarked GM and TARP bailout money to *fully* cover the pensions of UAW hourly workers. Sworn depositions of White House auto task force and Treasury officials show that they considered the UAW pension liabilities more politically sensitive than those of nonunion workers." The Delphi workers sued the feds presenting in court that the very scheme used to top up the union workers pensions with taxpayer subsidies was challenged by the federal government and ruled illegal by the Supreme Court in the 1990s.

========================== Press Release ===========================

Invesco PowerShares Announces Shift to Fundamental Index® Approach for High Yield Corporate Bond Portfolio (PHB)

August 2, 2010 9:10 AM ET
Source: Invesco PowerShares

CHICAGO, IL -- Invesco PowerShares, a leading provider of exchange-traded funds (ETFs), announced that effective Aug. 2, 2010, the PowerShares High Yield Corporate Bond Portfolio (PHB) began tracking the RAFI® High Yield Bond Index and was renamed the PowerShares Fundamental High Yield® Corporate Bond Portfolio. PHB is the first fixed-income ETF to use Research Affiliates' Fundamental Index methodology.

"We are very pleased to expand our relationship with Research Affiliates and offer investors another industry first with the introduction of an innovative fixed-income index strategy that incorporates the Fundamental Index methodology," said Ben Fulton, Invesco PowerShares managing director of global ETFs. Invesco PowerShares already offers eight equity ETFs based on FTSE RAFI indexes, which also make use of the Fundamental Index methodology.

Traditional bond indices give the largest weights to the biggest debtors, potentially exposing investors to greater risks of default. In contrast, Research Affiliates' Fundamental Index methodology uses fundamental measures of company size, including book value, sales, dividends and cash flow, to set constituent weights.

"By weighting companies based on fundamental measures of their resources available to service debt, we believe the PowerShares Fundamental High Yield Corporate Bond Portfolio represents a compelling alternative to market-cap-weighted fixed-income portfolios and provides investors the potential for improved risk-adjusted returns," Mr. Fulton added.

"Traditional bond indexes are flawed. Why would you want to give the biggest portion of assets to those companies that are the biggest debtors?" said Rob Arnott, chairman and founder of Research Affiliates, LLC, which developed the new index in conjunction with Ryan ALM, Inc. "The RAFI High Yield Bond Index offers a compelling alternative to traditional high-yield bond indexes." Ron Ryan, CEO of Ryan ALM, adds, "We believe the index rules that we designed and maintain for the RAFI Index provide the highest liquidity, creditworthiness, investability and interest rate risk balance for a high-yield index today."

PHB will normally invest at least 80% of its total assets in high-yield bonds that comprise the Index. The Index measures potential returns of a theoretical portfolio of high yield, U.S. dollar denominated corporate bonds registered for sale in the United States whose issuers are public companies listed on a major U.S. stock exchange.

The underlying index is rebalanced at the end of every month based on the index rules and weighted according to a composite RAFI weight that is calculated for each eligible company. Composite RAFI weights are calculated using the following four factors: current book value of assets as well as gross sales, gross dividends and cash flow, each based on five-year averages. The target RAFI weights are reconstituted annually.

The Fund previously tracked the WellsFargo® High Yield Bond Index. The fund continues to be offered on the NYSE Arca under the existing ticker symbol PHB.

Invesco PowerShares Capital Management LLC is leading the Intelligent ETF Revolution® through its family of more than 120 domestic and international exchange-traded funds, which seek to outperform traditional benchmark indexes while providing advisors and investors access to an innovative array of focused investment opportunities. With franchise assets over $44 billion as of June 30, 2010, PowerShares ETFs trade on both U.S. stock exchanges. For more information, please visit us at **www.invescopowershares.com.**

Invesco PowerShares is part of Invesco Ltd., a leading independent global investment manager, dedicated to helping investors worldwide achieve their financial objectives. By delivering the combined power of our distinctive investment management capabilities, Invesco provides a wide range of investment strategies and vehicles to our retail, institutional and high net worth clients around the world. Operating in 20 countries, the company is listed on the New York Stock Exchange under the symbol IVZ. Additional information is available at **www.invesco.com.**

There are risks involved with investing in ETFs including possible loss of money. Shares are not actively managed and are subject to risks similar to those of stocks. For a description of the risks of investing in the Funds, please see the Funds' prospectuses. Ordinary brokerage commissions apply.

High-yield securities have additional risks, including interest-rate changes, decreased market liquidity and a larger amount of outstanding debt than investment-grade securities.

Foreign securities have additional risks, including exchange-rate changes, decreased market liquidity, political instability and taxation by foreign governments.

The Fund's underlying securities may be subject to call risk, which may result in having to reinvest the proceeds at lower interest rates, resulting in a decline in the Fund's income.

The Fund may invest in illiquid securities, resulting in a decline of the Fund's returns. The Fund is considered non-diversified and may be subject to greater risks than a diversified fund.

Not FDIC Insured | May Lose Value | No Bank Guarantee

Note: Not all products available through all firms.

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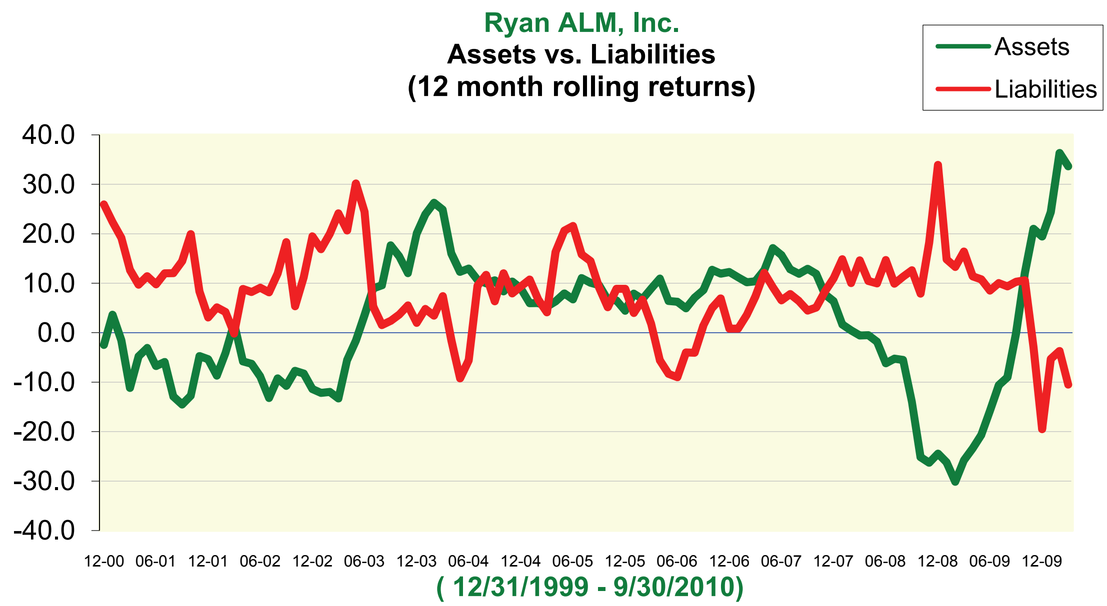
Shares are not individually redeemable and owners of the Shares may acquire those Shares from the Funds and tender those Shares for redemption to the Funds in Creation Unit aggregations only, typically consisting of 100,000 Shares.

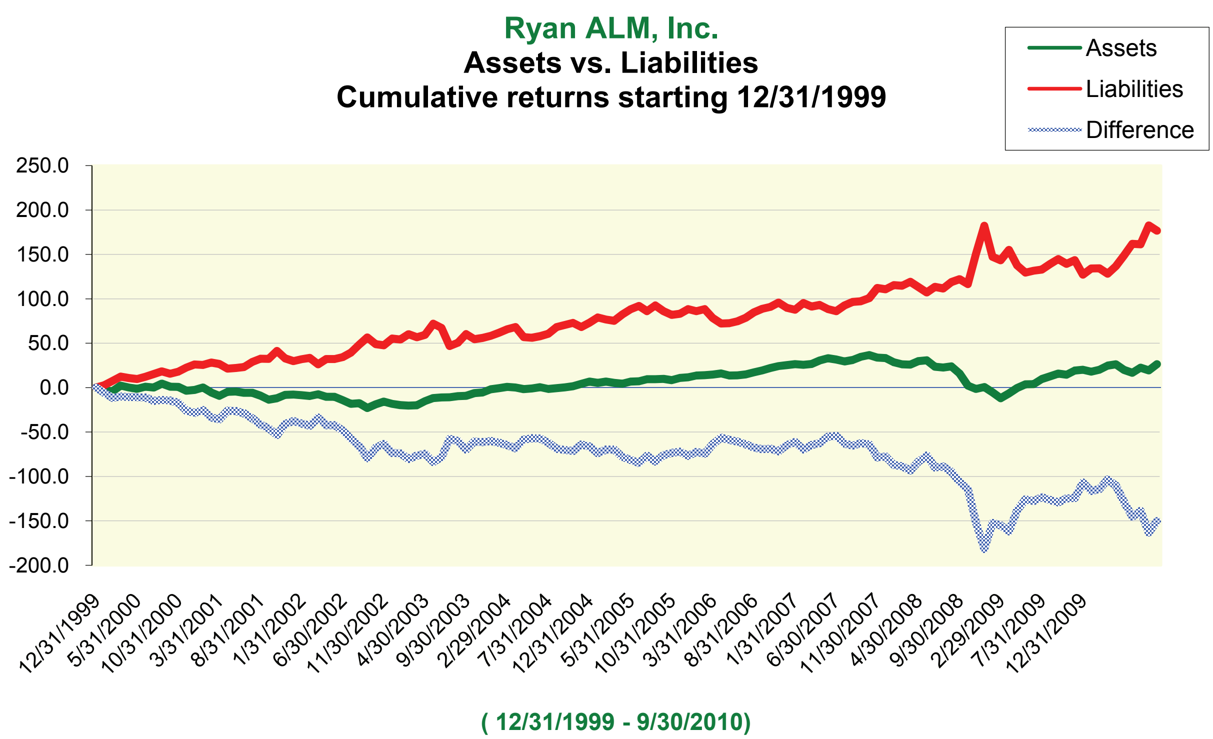
Invesco Distributors, Inc. is the distributor of the PowerShares Exchange-Traded Fund Trust II.

An investor should consider the Fund's investment objective, risks, charges and expenses. For this and more complete information about the Fund, call 800 983 0903 or visit invescopowershares.com for a prospectus. Please read the prospectus carefully before investing.

Pension Scoreboard

The graphs below show asset vs. liability rolling 12 month and cumulative growth since 1999. The cumulative growth difference is **–150.18% suggesting any pension Funded Ratio below 218.79% in 1999 has a deficit today!**





The World of Ryan Indexes

Custom Liability Indexes … (Patent Pending)
The best way to price (discount rate) and understand the interest rate sensitivity of liabilities is the **Ryan Treasury STRIPS yield curve indexes** as a **LIABILITY INDEX BENCHMARK.** In March 1985, when STRIPS were born, the Ryan Financial Strategy Group (RFSG) created the **1st STRIPS Index.** Based upon these Ryan STRIPS indexes we created the **1st Liability Index in 1991** as the proper liability Benchmark for liability driven objectives. Since 1991, the Ryan team has developed hundreds of Custom Liability Indexes (CLI). Similar to snowflakes, no two pension funds are alike in that they each have unique benefit payment schedules due to different labor forces, mortality and plan amendments. Until a CLI is installed as the benchmark, the asset side is in jeopardy of managing vs. the wrong objective (generic market indexes). **If you outperform generic market indexes, but lose to the CLI … the plan loses !**

Ryan Treasury Yield Curve Indexes (*Constant Maturity / Duration* series)
In March 1983, the Ryan Financial Strategy Group (RFSG) created the **1st Daily bond Indexes (the Ryan Index)** as a *Treasury Yield Curve constant maturity* index series for each auction maturity series (from Bills to Bonds). In March 1985, the day after Treasury STRIPS were born RFSG created the **1st Treasury STRIPS indexes** as a *Treasury Yield Curve constant duration* series of 1-30 year maturities. The best way to measure interest rate risk is to use the Ryan Treasury Yield Curve Index series.

RAFI Fundamental Weighted High Yield and Investment Grade Index Series (PowerShares ETF)
In January 2010, Research Affiliates announced the creation of a series of bond indexes based on the RAFI fundamental Weights. These include a short, intermediate long and composite Investment grade series and a short and intermediate High Yield series. Ryan ALM was honored and chosen as the index designer and maintenance. In August the RAFI high Yield Index was launched as a **PowerShares ETF**. For more info on this ETF and index, please go to:

www. Powershares.com (click on fixed income portfolios)

Ryan/Mergent 1-30 year Treasury Maturity Ladder (PowerShares ETF)
On October 11, 2007 PowerShares launched a fixed income ETF based upon the Ryan/Mergent 1-30 year Treasury Maturity Ladder index. This index is an equal-weighted diversified portfolio of 30 distinct maturities. For more info on this ETF and index, please go to:

www. Powershares.com (click on fixed income portfolios)

Ryan ESG Bond Index Series (U.S. version)
On August 7, 2008 Ryan ALM launched the 1st ESG corporate bond index series based upon the KLD 1st quartile ESG ranking and the Mergent corporate bond prices for U.S. companies. This index series includes a 1-3 year, 1-5 year, 1-10 year and 1-30+ year indexes.

To view all Ryan Indexes data go to : www.RyanIndex.com

Ryan Index is a Registered Trademark of Ryan ALM, Inc.

Note: In October 2005, Ron Ryan terminated his license agreement with Ryan Labs to distribute and calculate the Ryan Indexes and Ryan STRIPS Indexes. Ron Ryan and Ryan ALM have no affiliation with Ryan Labs. Any use of the formulas, methodologies and data of any of the Ryan Indexes without Ron Ryan's written permission is prohibited.

Given the Wrong Index … you will get the Wrong Risk/Reward
Confucius

Pension Solutions:
Custom Liability Index and Liability Beta Portfolio

Ryan ALM offers a turnkey system of CLI + Liability Beta portfolio as a pension solution:

Custom Liability Index - The first step in prudent pension management is to understand, measure and monitor the liability objective frequently and accurately. Until liabilities are packaged as a **Custom Liability Index (CLI)** the asset side is in jeopardy of managing to the wrong objectives (i.e. market indexes). Only a CLI best represents the unique liability schedule of pensions. Just like snowflakes, no two pension liability schedules are alike due to different labor forces, salaries, mortality and plan amendments. How could a *generic market index* ever properly represent such a diverse array of pension liabilities? Once the CLI is installed the pension will now know the true **economic Funded Ratio** which should dictate the appropriate Asset Allocation, Asset Management and Performance Measurement. Ryan ALM is a leader in CLI as Ron Ryan was the inventor of the *first Liability Index* in 1991. In 2006, Ron won the *William F. Sharpe Index Lifetime Achievement Award* !

Liability Beta Portfolio (Patent Pending) – The value added in bonds is small as every performance ranking study proves (1st quartile vs. median difference). **The best value in bonds is to match and fund liabilities** as Dedication, Immunization and Defeasance have proven for decades. Since liabilities are dynamic calculations they need a CLI to monitor their risk/reward behavior. The *core* or Beta portfolio for a pension should be in high quality bonds that match and fund liabilities. A Beta portfolio is defined as the portfolio that matches the objective. If the true objective is liability driven then, by definition, the proper beta portfolio for any liability objective must be … a **Liability Index Fund or Liability Beta Portfolio**. This requires a Custom Liability Index in order to be executed.

The Ryan ALM Beta portfolio system will invest only in high quality securities that match the CLI. This provides our clients with the ***lowest cost and lowest risk portfolio***. It is the lowest risk portfolio since it has:

No Interest Rate Risk (matches CLI)
No Liquidity Risk
No Credit Risk
No Event Risk
No Prepay Risk

The Ryan ALM Beta portfolio is the lowest cost portfolio since we will always out yield liabilities by more than our low fee thereby guarantying each client **No Net Fee** to maturity (liability benefit payment dates). Moreover, the Beta portfolio is a matching liability portfolio that fully funds liabilities so no extra contributions are needed in this space reducing the volatility of contributions.