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## The Ryan Letter

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Index	Returns YTD 2010	Estimated Weights
<b>Liabilities :</b>		
Market (Tsy STRIPS)	10.13 %	100 %
FAS 158 (AA Corporates)	20.53	
PPA (3 Segment)	15.94	
PPA (Spot Rates)	11.00	
GASB /ASOP (8% ROA)	8.16	
<b>Assets :</b>		
Ryan Cash	0.37 %	5 %
Lehman Aggregate	6.54	30
S&P 500	15.08	60
MSCI EAFE Int'l	8.44	5
<b>Asset Allocation Model</b>	<b>11.89 %</b>	<b>100 %</b>
<b>Assets – Liabilities</b>		
Market	1.76%	
FAS 158	-8.64	
PPA (3 Segment)	-4.05	
PPA (Spot Rates)	0.89	
GASB/ASOP (8% ROA)	3.83	

Using the Asset Allocation above, the difference in asset growth vs. liabilities in 2010 was: **1.76%** (market valuation STRIPS); **-8.64%** (FAS 158); **-4.05%** (PPA rules-AA Corporate rates) and **0.89%** (PPA-Spot Rates); **3.83%** (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 **pension asset growth has underperformed liabilities by about -115.67% since 1999** on a compounded index basis starting at 100 on 12/31/99!

(see Pension Scoreboard on page 7)

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	11.89
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	33.93	-19.52	10.13
Difference:											
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-58.40	38.95	1.76
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-181.57	-106.94	-115.67

### Pension Year 2010: Good Year or Bad Year?

The table on page one shows that on a market valuation basis in 2010, pension asset growth was slightly higher than pension liability growth (**11.89% vs. 10.13% = 1.76% Alpha**). If calculated as two indexes starting at 100.00 on 12/31/99, the cumulative growth difference had grown so large that 2010 actually experienced a negative widening of this cumulative difference gap from **-106.94% in 2009 to -115.67% in 2010 (34.44% asset growth vs. 150.11% liability growth)** causing the Funded Ratio of most pensions to erode by **-53.75%** in the last 11 years. Note in the table on page one that if liabilities were valued under FAS 158 and the PPA (three segment rates) they would have grown at **20.53%** and **15.94%** such that pension assets would have *underperformed* by **-8.64%** and **-4.06%** respectively. On the other hand if liabilities were valued at the PPA (spot rates) and GASB, liabilities would have grown at **11.00%** and **8.16%** such that pension assets would have *outperformed* by **0.89%** and **3.73%** respectively. Such confusion in valuations shows the significant differences in not using proper *market* valuations. Note that all these calculations are *before* benefit increases which would swell the pension deficit even more. This has led to spiking Contribution costs which led to sizeable and, perhaps, unsustainable budget deficits. Indeed, the pension crisis of the last 11 years is a budget crisis!

### Cities and States Face Major Budget Deficits...due to Spiking Pension Contribution Costs

Will America face a rash of municipal bankruptcies? To see a ranking of our worst city/ state budget deficits go to... [www.Business Insider.com/Americas/most-bankrupt-cities-2010-12](http://www.BusinessInsider.com/Americas/most-bankrupt-cities-2010-12). According to Business Insider, states are worse off than most cities as a % of budget deficits. The cause of most of these huge budget deficits is the rising contribution costs of pensions. As I cited several times in previous newsletters, New York City contribution costs for employees went from \$68,619,745 in fiscal year ending 06/30/00 to \$2,150,438,042 in fiscal year ending 06/30/09... an increase of 30.3 xs. This is just one of five NYC pensions. NYC budget deficit is estimated to be \$2 billion thru 06/30/12 suggesting that pension contribution costs are over 100% of the budget deficit. Solution: fix the pension deficit and you fix the budget deficit.

#### **Worst Cities / States Budget Deficits as a % of Budget**

City	\$ Deficit	% of Budget	State	\$ Deficit	% of Budget
Detroit, MI	\$ 85 m	5.5%	Illinois	\$15.0 b	46.2%
Newark, NJ	\$ 30 m	4.5%	New Jersey	\$10.5 b	37.5%
Wash. DC	\$600 m	4.4%	Nevada	\$ 1.3 b	36.7%
Los Angeles, CA	\$438 m	4.4%	California	\$25.0 b	30.2%
San Francisco, CA	\$380 m	3.9%	Mississippi	\$ 1.2 b	27.6%
Honolulu, HI	\$100 m	3.7%	South Carolina	\$ 1.3 b	26.1%
Cincinnati, OH	\$ 60 m	2.4%	Minnesota	\$ 3.8 b	25.0%
New York, NY	\$2.0 b	2.1%	Texas	\$10.0 b	22.3%
San Diego, CA	\$ 73 m	1.7%	Connecticut	\$ 3.8 b	26.6%

Source: [www.BusinessInsider.com](http://www.BusinessInsider.com)

### State Most Likely To Default... Illinois

Based on the cost of credit-default insurance, Illinois is the highest cost at \$330,000 to protect \$10 million of debt. California was at an average of \$291,000 in December although it is rated A- by S&P while Illinois is rated A+. By comparison, Texas rated AA+ is at \$102,000.

### **Warning! ... or Model to Municipal Pension Plans from Pritchard, AL Pension System**

This small city outside Mobile, AL just made a dramatic decision... it stopped paying pension benefits! This city has sought bankruptcy protection twice in its history. If a city cannot afford its pension costs what should it do? Pritchard decided to stop benefit payments. This act has caught the attention of bankruptcy lawyers, labor leaders, municipal credit analysts and local officials from across America. They want to see if this creates a legal precedent and whether distressed cities can legally cut or reduce their pensions. Most Pritchard retirees had to work to pay for their standard of living or even survival. Pritchard's pension plan was generous not so much in dollars of benefits but in that employees could retire young (in their 50s) with escalating benefits over time. By 2003 their Funded Ratio had dropped to 33%. In 2004 Pritchard hired an actuary who reported that they would run out of pension assets by 2009 forcing the city's operating budget to fund all benefits. The city had once declared bankruptcy back in 1999. The city paid off its creditors by 2007 but never complied with an order from the bankruptcy court to pay \$16.5 million into the pension to reduce its shortfall. Workers paid 9.5% of their salaries into the pension fund and the city paid 10.5%. The pension fund paid out more than it took in contributions and by September 2009 was no longer able to send out the \$150,000 in monthly pension benefit checks. The retirees, who were not unionized, sued. The city tried to block their suit by declaring bankruptcy but a judge denied the city's request. The city has appealed. The retirees then filed another suit demanding a payment of partial benefits. A mediation effort is expected soon.

### **Is TARP II coming for Public Pension Funds?**

My perception is that, similar to corporations, if you declare bankruptcy then and only then can you restructure or even renege on your pension obligations. Since most cities and states face this pension plague, we could have a rash of public bankruptcies (if allowed) forcing the Government to take action. My belief is that the Pension Benefit Guaranty Corp (PBGC) is the Government model for a pension bailout. This would suggest that all municipal employees would pay for such insurance not just the endangered plans. Moreover, just like the PBGC, it puts a cap on the maximum a pension beneficiary can collect (currently around \$54,000 for corporations). This will give the Federal Government some insurance funds to work with (in addition to the takeover of pension assets) as a bailout fund plus the authority to takeover public pension plans and place a maximum cap on benefits. Would the Government turn over such bankrupt pensions to the PBGC or to a newly created agency? I bet on a new agency.

### **San Diego Mayor Jerry Sanders Proposes Defined Contribution Plan**

Mayor Jerry Sanders proposes creating a Defined Contribution plan for all new municipal employees suggesting this will save budget costs. Marcia Fritz, president of the California Foundation for Fiscal Responsibility, pointed out the horrid outcomes for public employees in selected states that substituted 401(k) retirement plans for traditional defined benefit plans. Fritz urged the city instead to consider pension costs by preventing abuses of the rules for calculating pension benefits. I believe Ms. Fritz is on the right track. Over the long term DB plans should be less costly than 401(k) plans. What went wrong was mainly due to bad accounting rules that overstated the Funded Ratio (by as much as 40%) causing Trustees to believe they could afford benefit increases and/or contribution cuts... and bad internal pension rules that can increase benefits at any time. Similar to the PPA, benefits should not be allowed to increase if the plan has a deficit (when marked to market) or will have a deficit if new benefit increases are passed.

### **Will Build America Bonds Become Dinosaurs?**

An extension of the Build America Bond program (BABs) did not make it into the compromise that President Obama and Republican leaders recently reached on income tax rates thus threatening the survival of this program. BABs have become quite successful with more than \$178 billion issued since the program was signed into law February 17, 2009 under Section 1531 of Title I of Division B of the American Recovery and Reinvestment Act. These bonds enabled municipalities to finance their budgets and infrastructures at lower costs. According to the Dept. of Treasury, the savings for a 10 year bond is estimated at 31 basis points and a 30-year as much as 112 basis points. There are two types of BABs: Direct Payment BABs that provide a federal subsidy of 35% of the interest paid; Tax Credit BABs provide a federal subsidy directly to the bondholders.

### **EU Leaders to Create a Permanent Crisis-Management Fund**

European Union leaders met in Brussels recently and endorsed a plan to create a new fund whose mission is to rescue over indebted euro-zone countries. The debt crisis of the weaker governments seems to be becoming more evident and alarming. On December 16<sup>th</sup>, Spain was forced to offer significantly higher interest rates at their debt auction than it paid just a month ago. Bond markets fell and interest rates arose all across Europe. Earlier that same day, the head of the IMF said he's concerned that European officials are too much behind the curve in comparison with the speed at which markets are moving. "The risk is always to act only at the last minute," said IMF Managing Director Dominique Strauss-Kahn. He urged that Europe must press urgently ahead with developing a far reaching crisis-management plan. The European Central Bank said it will double its capital base. The added capital comes through a transfer of assets from each of the 16 central banks in the euro-zone. Analysts see this move as a signal to government leaders that the central banks purchases of government bonds of the region's weaker economies comes at a risk.

### **Moody's Downgrades Ireland but Sees No Europe Defaults**

In a report released on December 21, Moody's said that it doesn't foresee defaults on euro-area debt because the region will support weaker members and reiterated that Portugal will stay investment grade. "Moody's base case scenario remains that over the medium-term, no euro-zone country will suffer a payment default or otherwise impose losses on private sector lenders through maturity extensions or other forms of distressed exchange. The collective willingness of the euro-zone to support weaker members through the provision of liquidity will remain an important element of investor protection." In sharp contrast to this report, Moody's cut Ireland's credit rating from Aa2 to Baa1 and warned that further downgrades could follow. "Ireland's sovereign creditworthiness has suffered from the repeated crystallization of bank-related contingent liabilities on the government's balance sheet," said Dietmar Hornung, Moody's vp and senior credit officer.

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

I have blamed accounting rules and schemes as the major villain causing 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 significantly higher than market rates (GASB = ROA) as the discount rates. In the last 10 years this has led to an *overvaluation* of assets and a large *undervaluation* of liabilities (as much as 40% to 60% using GASB) which together created 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 with the discount rates used!** 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 then they are *hypothetical rates* or financial lies and should not be used as financial valuations. After Enron and World Com, financial America should make sure that **we never tolerate financial lies anymore.**

### **Oil Hits \$90 a Barrel... Blame China**

In late summer 2010, the Chinese government announced that it wanted domestic industries to become more efficient (i.e. reduce) in their use of electricity. Most of China's electricity comes from polluting coal-fired plants. The Chinese government enforced this edict by pulling the switches on the power grid and blacking out entire industrial areas. Chinese factories reacted by switching to diesel generators. The result was... there was an instant surge in demand for diesel fuel across China starting in August and a surge in oil prices across the world.

### **Proposed 28<sup>th</sup> Amendment to the Constitution**

Governors of 35 states have filed suit against the Federal Government for imposing unlawful burdens upon them. It takes 38 states to convene a Constitutional Convention. Given our sad fiscal affairs and a Congress who pass laws they don't read, that exempt themselves from such rules, and who can retire with full pay after one term... here is the proposed 28<sup>th</sup> amendment to the Constitution:

**“Congress shall make no law that applies to citizens of the United States that does not apply equally to the Senators and/or Representatives; and, Congress shall make no law that applies to the Senators and/or Representatives that does not apply equally to the citizens of the United States.”**

### **Congratulations! ETFs Pass \$1 Trillion in Assets**

U.S. listed exchange traded funds just passed through the \$1 trillion in assets threshold for the first time. There are now 894 ETFs in the U.S.. Ryan ALM is proud to have two ETFs based on indexes we designed with close to \$700 million in assets:

**PLW = PowerShares 1-30 year Treasury Maturity Ladder**

**PHB = PowerShares High Yield 1-10 year (based on RAFI Fundamental Weights)**

## **Invesco PowerShares Announces Shift to Fundamental Index® Approach for its High Yield Corporate Bond Portfolio Exchange Traded Fund (PHB)**

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.**

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," says Ben Fulton, CEO, of PowerShares.

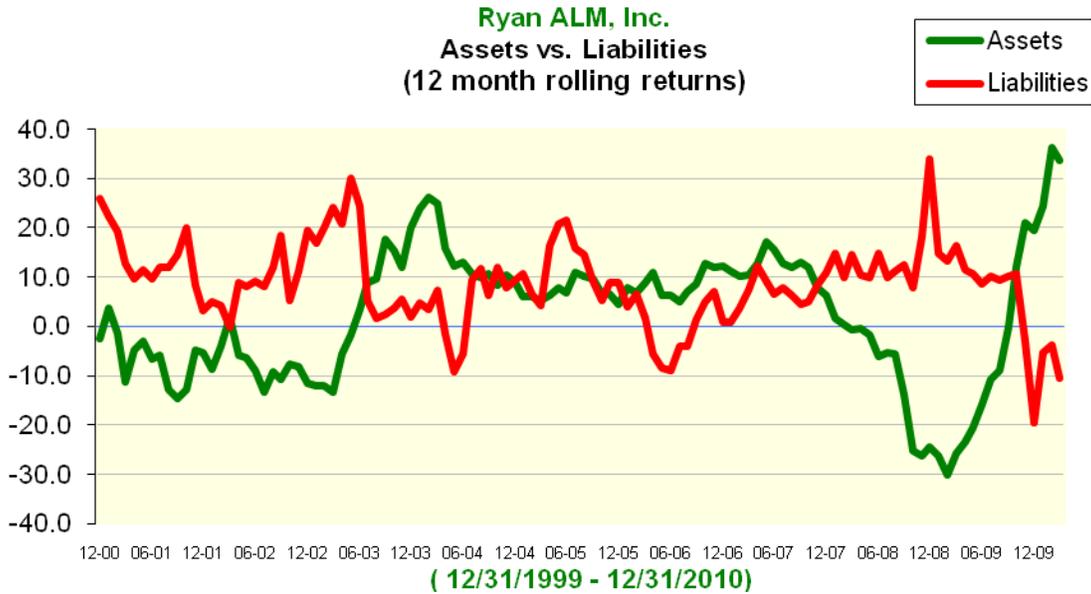
"Traditional bond indexes are flawed. Why would you want to give the biggest portion of assets to those companies that are the biggest debtors?" said Rob Arnott, chairman and founder of Research Affiliates, LLC, which developed the new index in conjunction with Ryan ALM, Inc.. "The RAFI High Yield Bond 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 any high-yield index today."

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.

**For more information, go to [www.invescopowershares.com](http://www.invescopowershares.com)**

## Pension Scoreboard

The graphs below show asset vs. liability rolling 12 month and cumulative growth since 1999. The cumulative growth difference is **-115.67%** suggesting any pension **Funded Ratio below 186.04% in 1999 has a deficit today!**



## 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 2010 the RAFI high Yield Index was launched as a **PowerShares ETF (PHB)**. For more info on this ETF and index, please go to:

[www.Powershares.com](http://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 (**PLW**) 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](http://www.Powershares.com) (click on fixed income portfolios)

### Ryan ESG Bond Index Series (U.S. version)

On August 7, 2008 Ryan ALM launched the 1<sup>st</sup> ESG corporate bond index series based upon the KLD 1<sup>st</sup> 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](http://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**

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*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 (1<sup>st</sup> 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.