



# Ryan ALM, inc.

## Asset/Liability Management

*The Solutions Company*



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## The Ryan Letter

August 2006

Index	Returns YTD 2006	Estimated Weights
<b>Liabilities :</b>		
Market (Tsy STRIPS)	- 1.92 %	100 %
IRS (Corporates)	3.69	
ROA (8% constant rate)	5.33	
<b>Assets :</b>		
Ryan Cash	3.17 %	5 %
Lehman Aggregate	2.15	30
S&P 500	5.80	60
MSCI EAFE Int'l	14.71	5
Asset Allocation Model	5.02 %	100 %
<b>Assets – Liabilities</b>		
Market	6.94 %	
IRS	1.33	
ROA	- 0.31	

The month of August produced high growth in Assets, **2.05%**, and Liability growth **3.40%**. For the year, Asset growth is still well ahead of Liability growth based on market value but not on the IRS and ASOP 27 rules. This demonstrates the **tremendous error in pricing liabilities at any discount rate except the market rates**. Pension assets are up vs. liabilities for the year by about **6.94%** using market valuations (i.e. STRIPS); up only **1.33%** under the IRS Contribution rules (using Corporate rates); and down **-0.31%** using the ASOP 27 methodology of a constant ROA (i.e. 8.00%). Most pension funds enjoyed a funded ratio surplus in 1999. However, this **funded ratio has been reduced by about -67% since 1999** when you compound asset growth and liability growth (see table below and GRAPHS at end).

Total Returns							
	2000	2001	2002	2003	2004	2005	2006
Assets	- 2.50	- 5.40	-11.41	20.04	8.92	4.43	5.02
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	- 1.92
Difference	-28.46	- 8.48	-30.89	18.08	-0.43	-4.44	6.94
Cumulative		-37.60	-73.40	- 60.08	-66.13	-76.75	-67.52

**God Bless Pension America !**

Ryan ALM, Inc. - The Solutions Company  
www.ryanalm.com

## **President Signs New Pension Bill**

On August 17, President signed into law H.R. 4 – the Pension Protection Act of 2006 (PPA). This 900-page behemoth has many features but some of the key ones are:

### **1. Smoothing**

Smoothing of assets has been reduced from five years to two and the discount rate used to price liabilities has been reduced from a four-year moving average to two. Why smooth at all is still a confusing issue but at least we are moving toward a better solution. Interestingly, today's yields are higher than a two-year moving average so the PPA will price liabilities at a higher valuation than the actual economic valuation. Same is true on the asset side as smoothing will lower the valuation of assets versus the actual market valuation. The act also reduces the smoothing corridor from 80% - 120% of assets market value to 90% - 110% of market value.

### **2. Discount Rates**

The PPA provides for a permanent interest rate basis beginning in 2008. At that time, plan sponsors must use either a modified yield curve of three segmented interest rates from a portfolio of **hypothetical zero-coupon investment grade corporate bonds or real spot rates**. These three rates apply to projected benefits payable within 0-5, 5-20 and 20-years +. Plan sponsors have the option to phase in this yield curve over five years beginning in 2008. In the meantime, pensions must go back to the investment grade corporate bond yield curve used during the Pension Act that expired on December 2005 (note corporate rates used in table on page 1). Once again, legislation does not seem to like economic reality by promoting interest rates (discount rates) you can not buy or hedge. A rule should be passed that says ... **“If you can buy it (discount rates) you can use it”**.

### **3. Funding Targets**

Pension plans will have to become fully funded (100%). Funding shortfalls will be amortized over seven years except airlines who get 17 years and use of an 8.85% ROA on their asset growth assumption. The PPA provides a phase-in period whereby the funding target will be 92% in 2008, 94% in 2009, 96% in 2010 and 100% thereafter. Should a pension plan miss one target year, its funding target jumps to 100% immediately.

### **4. Contributions**

The PPA increases the maximum deductible contribution. Beginning in 2008, employers may deduct up to the greater of the sum of : 1) the plan's funding target, 2) the target normal cost for the year, 3) a funding cushion = 50% of the funding target + future pay increases.

### **5. Credit Balances**

Credit balances are contributions in excess of the required minimum contributions. The plan sponsor can then use the credit balance to offset its minimum pension contribution in a future year. After 2007, plan sponsors must adjust their credit balances every year to reflect investment gains and losses.

### **6. PBGC Premiums**

The PPA eliminates the current full-funding limit exemption and requires that all underfunded plans pay a risk-based premium regardless of their funded status in prior plan years. In 2008

and beyond, the PBGC premium will be determined using the new three segment discount rates on liabilities without any 24-month averaging. Assets will also be valued at fair market value and not smoothed over 24-months.

### **7. Benefit Restrictions**

Plans that are less than 80% funded may not increase benefits. Moreover, the plan sponsor must contribute enough to bring funding up to 80% immediately. We applaud the PPA on this rule. Public Plans need this discipline and rule enacted immediately to avoid their mounting contribution budget explosions (i.e. the San Diego fiasco).

### **8. Extra**

As always, politicians attach riders to Bills that stand a good chance of becoming law. Senator Max Baucus, D-Mont., attached a \$50 million Going-To-The-Sun road project to the PPA. I hope the PPA moves in the same direction as the senator's road project.

The Congressional Budget Office said the pension act would initially raise federal tax receipts, but then decline as provisions encouraging the use of tax-deferred 401(k) retirement savings plans and IRAs kick in. **Over 10 years the PPA would increase the U.S. budget deficit by \$66.4 billion, the CBO estimates.** The Pension Rights Center believes there will be an increased move towards freezing pensions which will weaken the pension system. Given the new PPA and the accounting trends starting the end of this year whereby FASB requires disclosure emphasizing the use of a PBO liability instead of an ABO, I concur with the Pension Rights Center.

### **Pension Watch ... San Diego**

San Diego's audit committee released a 266-page report on its investigation into the city's retirement system. The publication is supposed to be the final act in a little drama that has gone on since 2004, when the city's auditors said they couldn't complete their work because the city's financial information was a mess. The report is supposed to answer every possible question behind why the city is now looking at a **\$1.4 billion deficit** in its pension system. The most quoted sentence of this report is found in the executive summary: **"The evidence suggests that at root San Diego officials fell prey to the same type of corruption of financial management and reporting that afflicted municipalities such as Orange County and such private sector companies as Enron, HealthSouth and any number of other public companies."** S&P suspended its rating on San Diego pending release of the city's 2003 audited financial statements, which have yet to be released.

A big question left unanswered is: Is San Diego alone? We believe strongly NO! ... that this is a trend due to bad public pension rules that: price liabilities at a discount rate equal to the ROA assumption (which significantly undervalues liabilities by 20% to 50%); that value assets on a five-year smoothing basis (which overstated assets in 2002 thru 2005 by 8% to 20%); that then causes the reported funded ratio to be greatly exaggerated (overstated by over 25%). Many municipalities believing that they were fully funded or sound then decided to increase benefits and/or reduce contributions at a time they could least afford to do so.

### **Heard as Pension Solution !?**

Here is a novel idea (joke): Companies should require all new employees to give advance notice as to the date of when they will retire and when they will die. This way companies can properly invest for their employees' pension plan package.

### **Ryan Indexes**

In March 1983, my index team and I at the Ryan Financial Strategy Group (RFSG) created the **1<sup>st</sup> Daily bond Index ... Ryan Index**. The best way to understand the interest rate behavior of bonds is to use the Ryan Treasury constant maturity series for each Treasury *auction* series with two composite indexes ... **Ryan Cash and Ryan Index**.

The best way to price and understand the interest rate sensitivity of liabilities is the Treasury STRIPS yield curve. In March 1985, when STRIPS were born, my team and I at the Ryan Financial Strategy Group (RFSG) created the **1st STRIPS Index**.

To view all Ryan Indexes data go to : [www.RyanIndex.com](http://www.RyanIndex.com)

*Given the Wrong Index ... you will get the Wrong Risk/Reward  
Confucius*



In order to closely watch the ever evolving tragedy of the Pension Crisis, we have designed the **Pension Monitor**. This web based site is a chronology of press clippings and research reports on what's happening with pensions throughout the world. Currently, there are over 2,000 press articles going back to 2002 (click on Pension Archive). We believe that this is the most comprehensive site for pension articles in the world today. To view, please go to :

<http://www.pensionmonitor.com/>

### **Assets vs. Liabilities Graphs !**

In an effort to more clearly demonstrate the volatility of pensions funded ratios the following graphs chart the return or growth behavior of pension assets vs. pension liabilities since 1999 when most pensions enjoyed a surplus. The top graph shows cumulative growth (returns) patterns. The red line clearly charts that liabilities (based on the Ryan Liability Index with an average duration of 15.5 years) has grown about 85% in present value since 1999. Meanwhile, assets (based on a static asset allocation of 5% Ryan Cash Index, 30% Lehman Aggregate, 60% S&P 500 and 5% EAFE) has grown less than 20% cumulative resulting in a -67% difference.

The second graph shows a rolling 12-month return history since 1999 revealing the great volatility of both asset growth and liability growth. Currently, asset growth is ahead for the last 12 months.

